

Appendix A.
Wyoming Basins Ecoregion
Important Vascular Plant Conservation Sites

Key: Site: Name of the site, including state, and Biological Significance Rank (Brank), if known. Major features: contains a brief summary of the vegetation and other pertinent facts about each site. Elements: contains a list of plant taxa known to occur within the site. The number following a species name indicates the number of occurrences known from that site (if greater than 1). Species in **bold** receive formal protection within all or part of the site. Management status: lists the land ownership for the site (if known). For general information on many Wyoming sites, consult Wyoming Natural Diversity Database (1996).

Bighorn Basin and adjacent foothills (MT/WY)

Note: foothills sites are mostly outside the ecoregion in the adjacent Utah/Wyoming Rocky Mountains ecoregion.

Site	Major Features	Elements	Management Status
Pryor Mountains (MT) (B1)	Mix of juniper woodlands, cushion plant, conifer forest, and badlands on limestone and other sedimentary substrates. Contains world population of <i>Lesquerella lesicii</i> and many Montana state rare species (including a large suite of G4/G5-S1 peripherals). See Lesica (1998) and Lesica and Achuff (1992) for additional information.	<i>Eriogonum brevicaule</i> var. canum <i>Lesquerella lesicii</i> <i>Penstemon caryi</i> <i>Shoshonea pulvinata</i> <i>Stanleya tomentosa</i> var. tomentosa <i>Sullivantia hapemanii</i> var. hapemanii	Bighorn Canyon NRA (in part)
N Bighorn Basin (MT) (B3/B4)	Mix of desert steppe, sand dune, sagebrush, and clay barren communities with a high density of MT state rare plants (mostly G4/G5-S1 peripherals) and rare communities. Many of these species are "coarse filter" targets in WY. See Lesica (1998) for more details.	<i>Astragalus grayi</i> Unusually high concentration of S1 peripheral species representative of the Bighorn Basin and WBE flora.	BLM Private State
NE Beartooth Foothills (MT) (B3)	<i>Artemisia nova</i> grasslands and dry desert steppe vegetation. Technically not in WBE, but ought to be due to ecological similarities. Contains suite of calceophilic endemics and spring-fed wetlands in middle of sagebrush. See Lesica (1998) for more details.	<i>Haplopappus</i> <i>carthamoides</i> var. <i>subsquarrosus</i> <i>Shoshonea pulvinata</i>	
Bighorn Canyon and Yellowtail Reservoir (WY) (B3)	Cushion plant and juniper woodland communities on limestone/dolomite ridges and barren redbed slopes. Also includes reservoir banks (habitat for <i>Rorippa calycina</i>). Site contains a large number of regional endemic plants and species considered rare in neighboring Montana (see Lichvar et al. 1985 for complete list of the flora and Knight et al. 1987 for vegetation information).	<i>Erigeron alloctus</i> -2 <i>Eriogonum brevicaule</i> var. canum -2 <i>Rorippa calycina</i> <i>Stanleya tomentosa</i> var. tomentosa -2	Bighorn Canyon NRA Worland BLM Private

Little Mountain/E Bighorn Canyon (WY) (B3)	Cushion plant and juniper woodland communities on limestone/dolomite ridges and barren redbed slopes.	<i>Erigeron allocotus</i> –2 <i>Eriogonum brevicaulis</i> var. <i>canum</i> <i>Musineon vaginatum</i> <i>Penstemon caryi</i> <i>Stanleya tomentosa</i> var. <i>tomentosa</i>	Little Mountain ACEC (in part) Cody BLM Private State
Trapper Canyon (WY) (B3)	Cushion plant and juniper woodland communities on limestone/dolomite ridges and barren redbed slopes. Also includes deep, shady limestone canyons. For more information, see Marriott and Jones (1989)	<i>Erigeron allocotus</i> <i>Penstemon caryi</i> <i>Sullivantia hapemanii</i> var. <i>hapemanii</i>	Spanish Point Karst ACEC (in part) Worland BLM Trapper Creek WSA Private
Dry Medicine Creek (WY) (B3)	Cushion plant and juniper woodland communities on limestone/dolomite ridges and barren redbed slopes. Also includes deep, shady limestone canyons. For more information, see Marriott and Jones (1989)	<i>Erigeron allocotus</i> –2 <i>Penstemon caryi</i> <i>Sullivantia hapemanii</i> var. <i>hapemanii</i>	Medicine Lodge WHMA Medicine Lodge WSA
Military Creek (WY) (B1)	Chugwater redbed barrens and badlands dominated by cushion plant communities within matrix of sagebrush grasslands. World's only known occurrence of <i>Astragalus jejunus</i> var. <i>articulatus</i> . For more information, see Fertig (1999 a).	<i>Astragalus jejunus</i> var. <i>articulatus</i> <i>Erigeron allocotus</i> <i>Stanleya tomentosa</i> var. <i>tomentosa</i>	Worland BLM Private State
Canyon Creek Canyon (WY) (B3)	Lower elevation areas have mix of sagebrush grassland, Utah and Rocky Mountain juniper, dolomite barrens, and deep limestone canyons (higher elevation forests are outside of the ecoregion boundaries). Additional montane rare plants are present (see Fertig 1999 a), but these are not WBE targets.	<i>Erigeron allocotus</i> <i>Penstemon caryi</i> <i>Sullivantia hapemanii</i> var. <i>hapemanii</i>	TNC Ten Sleep Preserve State
Hillberry Rim (WY) (B3)	Rocky sandstone and shale ridges dominated by limber pine and Rocky Mountain juniper and big sagebrush grasslands.	<i>Cymopterus evertii</i> <i>Stanleya tomentosa</i> var. <i>tomentosa</i>	Worland BLM State Private
Enos Creek (WY) (B3)	Rocky sandstone and shale ridges dominated by limber pine and Rocky Mountain juniper and big sagebrush grasslands.	<i>Cymopterus evertii</i> –2 <i>Physaria saximontana</i> var. <i>saximontana</i> –2	Worland BLM State Private

Bridger/Owl Creek Mountains (WY)

Site	Major Features	Elements	Management Status
Boysen Reservoir/ Cedar Ridge (B1)	Gypsum clay barrens and limey sandstone ridges dominated by cushion plant communities and granitic desert mountains. Includes nearly the entire global range of <i>Cryptantha subcapitata</i> . See Fertig	<i>Artemisia porteri</i> –2 <i>Cryptantha subcapitata</i> –2 <i>Stanleya tomentosa</i> var. <i>tomentosa</i> –3	Lander BLM WSA??

	and Jones (1997) for discussion of communities and rare plants in the "Copper Mountain Ecosystem".		
Cottonwood Creek (B3)	Exposed mud flats on shores of Boysen Reservoir. May also be an important waterfowl area.	<i>Rorippa calycina</i>	Wind River IR Boysen State Park

Wind River Basin (WY)

Site	Major Features	Elements	Management Status
Dubois Badlands	Cushion plant communities on multi-colored badlands slopes and rims. Primary concentration of occurrences of <i>Astragalus gilviflorus</i> var. <i>purpureus</i> .	<i>Astragalus gilviflorus</i> var. <i>purpureus</i> -3 <i>Astragalus simplicifolius</i> <i>Oxytropis nana</i>	Lander BLM Private State WY Game and Fish TNC easements
Oil Mountain	Cushion plant communities on clays and Eocene-Miocene volcanic deposits on barren ridgecrests.	<i>Artemisia porteri</i> <i>Astragalus nelsonii</i> ? <i>Phlox pungens</i> (typical morph)	Lander BLM Private State

Sweetwater River Plateau (WY)

Site	Major Features	Elements	Management Status
Beaver Rim/ Cedar Rim (B1)	Cushion plant communities on Eocene-Miocene volcanic deposits on barren ridgecrests and depressions. Includes world's only population of <i>Yermo xanthocephalus</i> and suite of WBE regional endemics. For more information, see Jones (1989).	<i>Astragalus simplicifolius</i> <i>Cirsium aridum</i> <i>Lesquerella fremontii</i> <i>Oxytropis besseyi</i> var. <i>obnapiformis</i> <i>Oxytropis nana</i> <i>Penstemon paysoniorum</i> <i>Phlox pungens</i> (typical morph) <i>Physaria eburniflora</i> <i>Physaria saximontana</i> var. <i>saximontana</i> <i>Yermo xanthocephalus</i>	Beaver Rim ACEC (in part) Lander BLM Private
Sheep Mountain (B2)	Cushion plant, sagebrush, and juniper communities on ridges of redbed shales, Miocene volcanic ash, and other sedimentary deposits. May contain new populations of <i>Trifolium barnebyi</i> (G1). Also contains several riparian narrowleaf cottonwood and willow communities.	<i>Phlox pungens</i> -2 <i>Physaria saximontana</i> var. <i>saximontana</i> -2 <i>Trifolium barnebyi</i> ?	Lander BLM Private State
Lewiston Lake (B3)	Subirrigated tributary streams of Sweetwater River dominated by graminoids and surrounded by matrix of upland dry sagebrush vegetation.	<i>Antennaria arcuata</i>	TNC Sweetwater Preserve (small part - none with <i>A. arcuata</i>) Private Lander BLM

Harris Slough (B2)	Subirrigated tributary streams of Sweetwater River dominated by graminoids and surrounded by matrix of upland dry sagebrush vegetation.	<i>Antennaria arcuata</i>	TNC Sweetwater Preserve (in part) Lander BLM Private
Buffalo Creek (B2)	Subirrigated tributary streams of Sweetwater River dominated by graminoids and surrounded by matrix of upland dry sagebrush vegetation.	<i>Antennaria arcuata</i>	Lander BLM State
Beaver Divide East (B3)	Cushion plant communities on Eocene-Miocene volcanic deposits on barren ridgecrests.	<i>Astragalus simplicifolius</i> <i>Oxytropis besseyi</i> var. <i>obnapiformis</i> <i>Penstemon paysoniorum</i> <i>Physaria saximontana</i> var. <i>saximontana</i>	Lander BLM Private State
Red Canyon (B1)	Foothill slopes of the Wind River Range consisting of Chugwater redbed, Phosphoria, and Nugget Sandstone ridges surrounding a narrow riparian valley. Site includes cushion plant communities with numerous endemic rare plants (including most of the world population of <i>Trifolium barnebyi</i> , G1), juniper woodlands, and mountain big sagebrush grasslands.	<i>Lesquerella fremontii</i> <i>Penstemon paysoniorum</i> <i>Phlox pungens</i> (typical form) <i>Physaria saximontana</i> var. <i>saximontana</i> <i>Rorippa calycina</i> <i>Trifolium barnebyi</i>	Wyoming TNC Red Canyon Ranch preserve BLM Red Canyon ACEC State

Central Wyoming Mountains (WY)

Site	Major Features	Elements	Management Status
Green Mountains (B3)	Coniferous forests and montane meadows in granite-cored low mountains rising above surrounding sagebrush-grassland. Includes desert-like foothills ridges.	<i>Cryptantha stricta</i> -2 <i>Physaria eburniflora</i>	Lander BLM Private State
Granite Mountains (and Sweetwater Rocks) (B3)	Rounded granite outcrops with sparse limber pine woods and cushion plant communities. Includes surrounding lowlands with patches of stream vegetation and sagebrush meadows.	<i>Oxytropis nana</i> 2-3 <i>Physaria eburniflora</i> -2	Lander BLM Private State
Ferris Mountains (B3)	Limestone and sandstone mountain range with steep ridges of conifer forests and lower foothills and plains of sagebrush meadows and gravelly cushion plant communities. Important site for <i>Physaria eburniflora</i> (G3 endemic) and mountain plover.	<i>Arabis pendulina</i> var. <i>russeola</i> <i>Astragalus simplicifolius</i> <i>Cirsium aridum</i> ? <i>Cryptantha stricta</i> -4 <i>Oxytropis nana</i> -2 <i>Physaria eburniflora</i> -4	Rawlins BLM State Private
Shirley Mountains (B2)	Also includes barren exposures of limestone and sandstone with unusual cushion plant assemblages. Contains a large population of <i>Sphaeromeria simplex</i> .	<i>Arabis pendulina</i> var. <i>russeola</i> <i>Sphaeromeria simplex</i>	Rawlins BLM Private State

Great Divide Basin (WY)

Site	Major Features	Elements	Management Status
Bush Rim/ Oregon Buttes (Includes parts of WYNDD's Jack Morrow Hills site). (B2)	Clay badlands, rocky cushion plant rims, WY sagebrush semi-barren grasslands, and scattered springs and shrub thickets support a cross-section of WBE wildlife and endemic plants. This site is the core of the range of <i>Lesquerella macrocarpa</i> (G2 endemic) and has important mountain plover, pygmy rabbit, and ungulate winter habitat. For more information, consult Jones and Fertig (1996) and Fertig et al. (1998).	<i>Antennaria arcuata</i> <i>Astragalus nelsonianus</i> <i>Elymus simplex</i> <i>Eriogonum acaule</i> <i>Ipomopsis crebrifolia</i> -3 <i>Lesquerella macrocarpa</i> -5 <i>Penstemon paysoniorum</i> 2 <i>Phacelia demissa</i> -2 <i>Phacelia salina</i>	Rock Springs BLM State
Killpecker Dunes/ Steamboat Mountain (B1 - for communities) (Includes part of WYNDD's Jack Morrow Hills site).	Montane shrub and stabilized sand dune communities. Site includes a G1 community (<i>Artemisia tridentata</i> var. <i>tridentata</i> / <i>Psoralidium lanceolatum</i>) and important ungulate winter range. See Jones and Fertig (1996) and Fertig et al. (1998) for more information.	<i>Arabis pendulina</i> var. <i>russeola</i> <i>Astragalus nelsonianus</i> <i>Ipomopsis crebrifolia</i>	Rock Springs BLM
Chain Lakes (B4)	Greasewood, bulrush, and Baltic rush wetland communities on alkaline clays and mud volcanoes at lowest point in Great Divide Basin. May be more important as a wildlife area than a botanical site.	No rare plants, but an unusual community.	Rawlins BLM WY Game and Fish?
Ferris Dunes (B1)	Gently undulating terrain of active sand dunes. Includes state's only population of <i>Penstemon haydenii</i> (WY's only listed Endangered plant)	<i>Penstemon haydenii</i>	Rawlins BLM State Private

Laramie/Shirley/Hanna basins and North Platte River Valley (WY)

Site	Major Features	Elements	Management Status
Bates Hole/ Chalk Mountain (B2)	Cushion plant communities on wind-blasted chalky limestone/sandstone rims and gravelly threetip, black, and WY big sagebrush grasslands.	<i>Arabis pendulina</i> var. <i>russeola</i> <i>Cryptantha caespitosa</i> <i>Eriogonum acaule</i> <i>Oxytropis nana</i> <i>Parthenium alpinum</i> <i>Physaria eburniflora</i> -2 <i>Sphaeromeria simplex</i> -2	Rawlins BLM Private State
Shirley Basin/ Muddy Creek	Black sagebrush, WY big sagebrush, and greasewood plains and playas with scattered exposures of gumbo	<i>Eriogonum exilifolium</i> <i>Haplopappus wardii</i>	Rawlins BLM Private State

(B3)	slicks. Large white-tailed prairie dog complex supports numerous rare animals.		TNC easement??
Medicine Bow River (B3/B4)	Clay and shale ridges, roadcuts, and banks of river and surrounding uplands with a mix of greasewood, sagebrush and gumbo slicks vegetation.	<i>Haplopappus wardii</i> <i>Rorippa calycina</i>	Rawlins BLM Private State
W Foothills Laramie Range (B2)	Sandstone and limestone foothill ridges and hogbacks on W side of Laramie Range (much of this area is just outside the WBE). Contains core of the range of <i>Sphaeromeria simplex</i> (G2 endemic).	<i>Astragalus simplicifolius</i> <i>Sphaeromeria simplex</i>	Casper BLM Rawlins BLM Private State
Seminole Reservoir (B3)	Exposed mud and clay banks of fluctuating reservoir margin (important waterfowl and <i>Rorippa calycina</i> habitat) and adjacent upland stabilized sand dunes and sandstone/shale ridges.	<i>Rorippa calycina</i> -4	Rawlins BLM Seminole State Park (in part)
Steamboat Lakes (B3)	Large complex of natural alkali-influenced basin lakes with state's only known colony of <i>Cleome multicaulis</i> (G2G3). Mix of hardstem and Nevada bulrush and greasewood vegetation. Also an important waterfowl congregation area.	<i>Cleome multicaulis</i>	Pathfinder NWR (in part) Casper BLM
Sheep Mountain (B1)	Mountain mahogany community on pale ashy soils with sandstone slabs on steep slopes and cushion plant communities dominated by <i>Astragalus simplicifolius</i> & <i>Sphaeromeria capitata</i> on wind-blasted rims. Site contains 1 of only 5 known populations of <i>Penstemon gibbensii</i> in world, as well as a suite of WBE endemics.	<i>Astragalus simplicifolius</i> <i>Cryptantha caespitosa</i> <i>Eriogonum acaule</i> <i>Penstemon gibbensii</i>	WY-TNC State Rawlins BLM Private
Laramie Quarry (B3)	Outcrops of limey sandstone in matrix of sagebrush and mountain mahogany grassland. Only 20 acres of site is protected under easement – remainder is part of an active limestone quarry and includes reclaimed lands. See Fertig (1995 b) for more details.	<i>Sphaeromeria simplex</i>	WY-TNC easement (in part) private
Laramie Plains Lakes (B3)	Alkali-influenced playa and permanent lakes scattered throughout southern Laramie Basin in matrix of greasewood and low grassland communities (most of which is in agricultural production). Only known habitat for the Wyoming toad (listed Endangered) and an important colonial nesting waterbird area, as well as home to some Great Plains	<i>Haplopappus wardii</i> -2 <i>Sisyrinchium pallidum</i> - 1/7	Private Hutton Lake NWR (in part) Mortenson Lake NWR (in part) Bamforth Lake NWR (in part) State

	endemic upland birds and a few rare plants.		
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Rock Springs Uplift (WY)

Site	Major Features	Elements	Management Status
Deadman Wash (B1)	Ephemeral clay playa basins surrounded by sandstone/shale low ridges. Only known, confirmed site for <i>Artemisia biennis</i> var. <i>diffusa</i> . Permanent wetlands in area are important bird areas but have been impacted by pollution from nearby power plant	<i>Artemisia biennis</i> var. <i>Diffusa</i>	Rock Springs BLM Private
Pine Butte (B1)	Isolated sandstone butte with Douglas-fir and aspen woods on steep north slopes, sagebrush grasslands, and rugged talus cliffs that provide habitat for <i>Descurainia torulosa</i> (G1 endemic). See Fertig et al. (1998) for more information.	<i>Descurainia torulosa</i>	Rock Springs BLM Special Status Plant ACEC (in part)

Green River Basin (WY, UT)

Site	Major Features	Elements	Management Status
Marsh Creek Potholes (WY) (B3)	Part of a larger, Upper Green River site, this site contains a suite of small, glacial lakes within a broad basin of sagebrush grassland. Pothole lakes contain potential habitat for a number of boreal disjunct plant species (all with ranks of G4-G5), known from several wetland sites just outside the WBE boundary on Bridger-Teton NF. Area may also be important for rare animals (whooping crane, trumpeter swan, long-billed curlew). See Fertig et al. (1998) for more information.	Unusual mix of S1 disjunct boreal plant species.	Pinedale BLM Private State TNC easements?
Hay Gulch (WY) (B2)	Seasonally flooded depression with hummocky wet meadows within matrix of sagebrush grassland on morainal deposits. Site includes several state rare plants in addition to the only known Green River Basin colony of <i>Antennaria arcuata</i> . See Fertig et al. (1998) for more data.	<i>Antennaria arcuata</i>	Pinedale BLM Soda Lake WHMA (WY Game and Fish Dept) – in part
Green River Badlands (WY) (B3)	Limey sandstone and clay barren ridges and mesas of the Green River Formation.	<i>Astragalus drabelliformis</i> <i>Ipomopsis crebrifolia</i>	Pinedale BLM Private State

Rim of "The Mesa" (WY) (B3)	Limey sandstone and clay barren ridges and mesas of the Green River Formation. Includes shrub and steep grassland communities that provide habitat for sage grouse and wintering ungulates.	<i>Astragalus drabelliformis</i> -3 <i>Ipomopsis crebrifolia</i> <i>Phacelia salina</i> <i>Phlox pungens</i> (Ross Butte morph) -2	Pinedale BLM State Private
Big Piney Rims (WY) (B3)	Limey sandstone and clay barren ridges and mesas of the Green River Formation. Includes shrub and grassland habitats of sage grouse and wintering ungulates.	<i>Astragalus drabelliformis</i> -2 <i>Ipomopsis crebrifolia</i> <i>Oryzopsis swallenii</i> <i>Phlox opalensis</i>	Pinedale BLM State Private
Ross Butte (WY) (B2)	Limey sandstone and clay barren ridges and mesas of the Green River Formation. Cushion plan or sparse bunchgrass grasslands within WY big sagebrush or Gardner saltbush matrix. For more information, see Fertig (1998 a).	<i>Astragalus drabelliformis</i> <i>Astragalus jejunus</i> var. <i>jejunus</i> <i>Cryptantha caespitosa</i> <i>Eriogonum acaule</i> <i>Ipomopsis crebrifolia</i> <i>Lesquerella macrocarpa</i> <i>Oryzopsis swallenii</i> <i>Penstemon paysoniorum</i> <i>Phacelia glandulosa</i> var. "deserta" <i>Phacelia salina</i> <i>Phlox pungens</i> (Ross Butte morph) -2 <i>Phlox opalensis</i> -2	Pinedale BLM State Private
Pine Creek (WY) (B1)	Granite pegmatite outcrops in rolling sagebrush grassland bordering willow-lined creek. Contains world's only population of <i>Arabis pusilla</i> (G1). See Fertig et al. (1998) for more information.	<i>Antennaria arcuata</i> <i>Arabis pendulina</i> var. <i>russeola</i> <i>Arabis pusilla</i>	Rock Springs BLM Special Status Plant ACEC (in part) State
Flaming Gorge (WY) (B1 - due to rare fish)	Rocky slopes, beds, and ridges of the Green River Formation along the canyon of the Green River with communities of Utah juniper, desert shrub, cushion plants, and riparian vegetation. Site includes important wetland habitats for a suite of endangered fish and cliff and juniper woodland habitats for a large number of state rare Great Basin rodents, herptiles, and juniper obligate songbirds. Also contains habitat for high concentration of state rare (but peripheral) vascular plants. This contains the Black's Fork site identified by Fertig et al. (1998).	<i>Phacelia glandulosa</i> var. <i>deserta</i> <i>Phacelia incana</i> <i>Rorippa calycina</i>	Ashley NF (Flaming Gorge NRA) State Private
Currant Creek Ridge (WY) (B3)	New site that contains the Currant Creek Ridge system, between the east side of Flaming Gorge Reservoir and the north end of Big Ridge and Little Mountain. Site includes Utah juniper woodlands, mountain big sagebrush-Purshia grasslands, and mountain big sagebrush/serviceberry	<i>Cirsium ownbeyi</i> -2 <i>Draba juniperina</i> <i>Penstemon paysoniorum</i> <i>Penstemon scariosus</i> var. <i>garrettii</i>	Currant Creek ACEC (in part) Sage Creek ACEC (in part) Rock Springs BLM Private State

	grasslands on limey-slate ridges and slopes. Contains a suite of regional endemic rare plants, including several large colonies of <i>Cirsium ownbeyi</i> and <i>Draba juniperina</i> . For more data, see Fertig (1999 b).		
Seedskaadee/ Granger (WY) (a misnomer – as site is not near Granger) (B3?)	Clay and sandstone buttes and bluffs bordering the Green River and riparian cottonwood, wet meadows, and gravel barrens. May include only WBE location for <i>Asclepias uncialis</i> (but record is vague and historical). Also an important wildlife area, especially for migrant birds.	<i>Asclepias uncialis</i> ? <i>Cryptantha rollinsii</i> ? <i>Cymopterus lapidosus</i> <i>Phlox opalensis</i> –2	Seedskaadee NWR (in part) Kemmerer BLM
Little Colorado Desert (WY) (Includes La Barge site from Fertig et al. 1998). (B3)	Deep canyons and steep slopes of mudstone, sandstone, and shales of the Wasatch and Green River formations with desert sagebrush grasslands, patches of limber pine, and cushion plant communities. For more information, see Knight et al. (1976) and Fertig et al (1998).	<i>Astragalus drabelliformis</i> <i>Oryzopsis swallenii</i> <i>Phlox pungens</i> (Ross Butte morph) <i>Physaria condensata</i>	Pinedale BLM Private
Logan Draw/ Wilkins Peak (WY) (B1)	Low mesa-like ridges of whitish shale-clay of the Green River Formation on the west side of the Green River (below the city of Green River) and Wilkins Peak and adjacent ridges of Green River slate on the east side of the Green River. Includes semi-barren sagebrush and <i>Elymus salinus</i> communities, wind-blasted cushion plant rims, and bottomland cottonwood communities. Site contains the Logan Draw site from Fertig et al. (1998), but has been expanded to include all of Wilkins Peak. Includes entire range of <i>Thelesperma caespitosum</i> (G1) in Wyoming and an unusually high concentration of other regional endemic plants.	<i>Astragalus jejunus</i> var. <i>jejunus</i> <i>Cryptantha caespitosa</i> <i>Cymopterus lapidosus</i> <i>Eriogonum acaule</i> <i>Phacelia glandulosa</i> var. <i>deserta</i> –2 <i>Phacelia incana</i> <i>Thelesperma caespitosum</i> –2	FMC Park (City of Green River – in part) Rock Springs BLM State Private
White Mountain (WY) (B3)	Lower foothill slopes of white Green River slate, upper slopes and rims of sandstone gravel, and N-facing slopes of dense montane shrubs. Important habitat for a mix of regional endemic plants and winter range for ungulates.	<i>Ipomopsis crebrifolia</i> <i>Penstemon paysoniorum</i> <i>Phacelia glandulosa</i> var. <i>deserta</i> –2	Rock Springs BLM State Private
Lion Bluffs (WY) (B1)	Sandstone cliffs at NE end of Quaking Asp Mountain with largest known population of <i>Descurainia torulosa</i> (G1 endemic) in WBE.	<i>Descurainia torulosa</i>	Special Status Plant ACEC (in part) Rock Springs BLM Private

Little Firehole Canyon (WY) (B2)	Shady canyon of undisturbed narrowleaf cottonwood supporting at least 9 state rare animal species and surrounding desert ridges with Utah juniper, sagebrush, and rare <i>Glossopetalon</i> community. Dense concentration of state and regional rare plants. See Fertig et al. (1998) for more data.	<i>Arabis selbyi</i> <i>Cirsium ownbeyi</i> <i>Cryptantha rollinsii</i> <i>Glossopetalon spinescens</i> var. <i>meionandrum</i> <i>Phacelia incana</i>	Rock Springs BLM Private
Firehole Canyon (WY) (B3)	Deep canyon bordered by steep slopes of Green River shale and sandstone. Site includes cottonwood and juniper woods along Firehole Canyon (habitat for juniper obligate birds such as juniper titmouse and Scott's oriole) and adjacent slopes of Chimney Rock (habitat for <i>Cirsium ownbeyi</i> and <i>Elymus salinus</i> community).	<i>Cirsium ownbeyi</i>	Ashley NF (Flaming Gorge NRA) Private Rock Springs BLM
Iron Mountain (WY) (Includes Minnies Gap site from Fertig et al. 1998) (B3)	Sandstone-limestone hogback (The Glades) along the Utah/WY state line dominated by dense shrub communities of pinyon pine, dwarf mountain mahogany, big sagebrush, black sagebrush, and Utah juniper. High concentration of WY state rare plants and animals (mostly peripherals) and a suite of regional endemics. For more information, see Fertig et al. (1998).	<i>Arabis crandallii</i> <i>Cryptantha stricta</i> <i>Draba juniperina</i> -2	Rock Springs BLM Ashley NF (Flaming Gorge NRA) Private State
Twin Buttes/ Black Mountain (WY) (B3)	Clay badlands with sparse grassland, sagebrush, greasewood, and <i>Zuckia</i> communities and cushion plant rims. Core of the range of <i>Phlox opalensis</i> (G3 WBE endemic)	<i>Cymopterus lapidosus</i> <i>Phlox opalensis</i>	Rock Springs BLM Devils Playground/Twin Buttes WSA State Private
Little Dry Creek (WY) (B3)	Clay badlands with sparse cushion plant communities and greasewood. Probably should be combined with Twin Buttes/Black Mountain site	<i>Cymopterus lapidosus</i> <i>Phlox opalensis</i>	Rock Springs BLM
N Cedar Mountain (WY) (B3)	Clay badlands with sparse grassland, sagebrush, and greasewood communities and cushion plant rims. Probably should be considered part of the Cedar Mountain site.	<i>Cymopterus lapidosus</i> <i>Phlox opalensis</i>	Rock Springs BLM State Private
Cedar Mountain (WY) (Includes a subsection of the Cedar Mountain/Lonetree site in Fertig et al 1998)	Flat, mesa-like mountain dominated by rolling sagebrush-bunchgrass grasslands and scattered pockets of mountain mahogany on the summit, wind-blasted cushion plant communities on the rim, and clay-shale or sandstone flanks with Utah juniper and Gardner saltbush communities. Contains populations of two G1 endemics (<i>Thelesperma</i>	<i>Arabis pendulina</i> var. <i>russeola</i> <i>Astragalus coltonii</i> var. <i>moabensis</i> <i>Cryptantha rollinsii</i> <i>Cryptantha stricta</i> <i>Cymopterus lapidosus</i> <i>Eriogonum acaule</i> <i>Lesquerella alpina</i> var. <i>parvula</i>	Special Status Plant ACEC (tiny part on rims) Rock Springs BLM State Private

(B1)	<i>pubescens</i> and <i>Townsendia microcephala</i>) and a large suite of state rare and regionally endemic plants. Also some mountain plover habitat on flat summit. See Fertig et al. (1998) for more data.	<i>Thelesperma pubescens</i> <i>Townsendia microcephala</i>	
Hickey Mountain Badlands (WY) (B3)	Clay-shale badlands in valley between Hickey, Sage Creek, and Cedar mountains. Communities of sparse Gardner saltbush, sagebrush, greasewood, and bunchgrasses. Mix of regional and state rare plant species.	<i>Astragalus coltonii</i> var. <i>moabensis</i> <i>Cymopterus lapidosus</i> <i>Phlox opalensis</i>	Rock Springs BLM State Private
Hickey Mountain (WY) (B1)	Montane conifer and sagebrush grasslands with wind-blasted rocky cushion plant communities on rims. Includes large colony of <i>Thelesperma pubescens</i> (G1).	<i>Cryptantha stricta</i> <i>Penstemon paysoniorum</i> <i>Penstemon scariosus</i> var. <i>garrettii</i> <i>Thelesperma pubescens</i>	Rock Springs BLM Special Status Plant ACEC (tiny part on rims) Wasatch-Cache NF Private State
Sage Creek Mountain (WY) (B1)	Small, mesa-like mountain dominated by rolling sagebrush-bunchgrass grasslands and scattered pockets of mountain mahogany on the summit, wind-blasted cushion plant communities on the rim, and clay-shale or sandstone flanks with Utah juniper and Gardner saltbush communities. Contains populations of two G1 endemics (<i>Thelesperma pubescens</i> and <i>Townsendia microcephala</i>	<i>Thelesperma pubescens</i> <i>Townsendia microcephala</i>	Rock Springs BLM Special Status Plant ACEC (tiny part on rims) Private State
McKinnon (WY) (Called Henry's Fork at McKinnon site in Fertig et al. 1998). (B1)	Flat, mesa-like ridges paralleling both sides of the Henry's Fork River. Uplands contain cushion plant and sagebrush communities, while wetter valleys are a mix of hay meadows and narrowleaf cottonwood stands. Site contains entire global range of <i>Astragalus proimanthus</i> (G1) and a large proportion of the range of <i>Penstemon acaulis</i> var. <i>acaulis</i> (as well as many other regional endemic plants). See Fertig et al. (1998) for more information.	<i>Astragalus coltonii</i> var. <i>moabensis</i> <i>Astragalus nelsonianus</i> <i>Astragalus proimanthus</i> <i>Oxytropis besseyi</i> var. <i>obnapiformis</i> <i>Phlox opalensis</i> <i>Penstemon acaulis</i> var. <i>acaulis</i> <i>Penstemon paysoniorum</i>	Special Status Plant ACEC (in part) Rock Springs BLM Private State
Linwood Canyon (WY) (B3)	Rocky slopes and ridges of clay, shale, sandstone and conglomerate on banks of Flaming Gorge	<i>Arabis crandallii</i> <i>Arabis selbyi</i> <i>Astragalus nelsonianus</i> <i>Glossopetalon spinescens</i> var. <i>meionandrum</i> <i>Leptodactylon watsonii</i>	Ashley NF (Flaming Gorge NRA) Rock Springs BLM Private State
Green River	Moist grassy meadows along the	<i>Phlox opalensis</i>	BLM

(UT) *	Green River provide important habitat for <i>Spiranthes diluvialis</i> . Adjacent sandstone and clay ridges support sagebrush grassland vegetation.	<i>Spiranthes diluvialis</i> -3	Private
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* Not identified by Utah experts, but contains several occurrences of the Threatened *Spiranthes diluvialis* in a different part of the ecoregion.

Overthrust Belt (WY)

Site	Major Features	Elements	Management Status
Opal/ Chrisman Bench (B3)	Barren clay-shale badlands with sparse cushion plant communities and flats of sagebrush grasslands.	<i>Cymopterus lapidosus</i> <i>Oryzopsis swallenii</i> <i>Penstemon paysoniorum</i> - 2 <i>Phlox opalensis</i> -2	Kemmerer BLM State Private
Kemmerer Cushion Plant Community (B2)	Cushion plant communities on rims of limey-clay rolling hills within matrix of sagebrush grasslands. See Fertig et al. (1998) for more data.	<i>Astragalus jejunus</i> var. <i>jejunus</i> <i>Astragalus simplicifolius</i> <i>Cryptantha caespitosa</i> <i>Eriogonum acaule</i> <i>Ipomopsis crebrifolia</i> <i>Penstemon paysoniorum</i> <i>Physaria condensata</i>	Kemmerer BLM Kemmerer Cushion Plant NSO Area State Private
Fossil Butte (included with Fossil Butte South in Fossil site by Fertig et al. 1998). (B2)	Mesas of mudstone, sandstone, and limestone of the Wasatch and Green River formations dominated by desert shrub, cushion plant, and bunchgrass communities. Contains a high concentration of regional endemics and state rare plants and at least 7 rare vegetation types (Collins 1984, Jones 1993, Fertig et al. 1998).	<i>Eriogonum acaule</i> <i>Lepidium integrifolium</i> var. <i>integrifolium</i> <i>Lomatium triternatum</i> var. <i>anomalum</i> <i>Penstemon paysoniorum</i> <i>Physaria condensata</i> -2	Fossil Butte NM (in part) Kemmerer BLM State Private
Fossil Butte South (Included with Fossil Butte in Fossil site by Fertig et al. 1998). (B3)	Mesas of mudstone, sandstone, and limestone of the Wasatch and Green River formations dominated by desert shrub, cushion plant, and bunchgrass communities.	<i>Lesquerella prostrata</i> <i>Physaria condensata</i> -3	Kemmerer BLM State Private
Rock Creek Ridge (B1)	North-south ridge system of barren, loose calcareous shales. Communities of mountain mahogany, big sagebrush, black sagebrush, and bitterbrush with openings of barren gravel and cushion plants. Primary global population of <i>Physaria dornii</i> . For more information, consult Fertig et al. (1998).	<i>Physaria dornii</i>	Kemmerer BLM <i>P. dornii</i> NSO area (4 subpops) State Private
Ragan	Slopes and ridges of claystone, siltstone, and sandstone dominated	<i>Astragalus jejunus</i> var. <i>jejunus</i>	Kemmerer BLM Private

(Called "The Boilers" site in Fertig et al. 1998). (B2)	by Utah juniper woodlands and desert shrubs.	<i>Lesquerella prostrata</i> <i>Physaria dornii</i> -2	State
Bridger Butte (B3)	Isolated butte of with a cap of resistant glacial outwash underlain by the Bridger Formation dominated by Desert shrub vegetation and cushion plant rims. See Fertig et al. (1998) for more information.	<i>Lesquerella prostrata</i> <i>Oxytropis besseyi</i> var. <i>obnapiformis</i> <i>Penstemon paysoniorum</i> <i>Physaria condensata</i>	Kemmerer BLM Private

Washakie Basin (WY)

Site	Major Features	Elements	Management Status
Flat Top Mountain (B1)	Barren ridges of sandstone shale with small <i>Penstemon gibbensii</i> (G1 endemic) colony and slopes of montane shrubs and <i>Zuckia</i> . Important big game winter range.	<i>Astragalus jejunus</i> var. <i>jejunus</i> <i>Penstemon gibbensii</i>	Rawlins BLM State
Cherokee Rim/Powder Rim (Includes separate Powder Rim site in Fertig et al. 1998) (B1)	Ridge and basin system with outcrops of sandstones, clays, and shales with mosaic of juniper woodland, Wyoming big sagebrush, bitterbrush, and cushion plant communities. Wetter valleys include Fremont cottonwood riparian communities of importance for migrant wildlife and native fish. Juniper woodlands are important for juniper obligate songbirds. Site includes two large occurrences of <i>Penstemon gibbensii</i> (G1). See Knight et al. (1976) and Fertig et al. (1998) for more data.	<i>Arabis selbyi</i> <i>Cryptantha stricta</i> <i>Erigeron consimilis</i> -2 <i>Penstemon gibbensii</i> - 2	Rawlins BLM State Private

Bear Lake Basin (ID, UT)

Site	Major Features	Elements	Management Status
Pegram Creek (ID)	Sparsely vegetated, shaley outcrops of Twin Creek Limestone Formation supporting scattered populations of <i>Astragalus jejunus</i> var. <i>jejunus</i> . The ridge of fractured shale at Pine Gap RNA has a population of <i>Cryptantha caespitosa</i> .	<i>Astragalus jejunus</i> var. <i>jejunus</i> <i>Cryptantha caespitosa</i>	BLM Private
Otter Creek * (UT)	Black sagebrush grasslands on red or white rocky or sandy clays.	<i>Astragalus jejunus</i> var. <i>jejunus</i> <i>Eriogonum brevicaulis</i> var. <i>loganum</i>	BLM
Walton Canyon *	Clayey ridges of sagebrush grassland	<i>Astragalus jejunus</i> var.	BLM

(UT)	between Woodruff and Huntsville.	<i>jejunus</i> <i>Eriogonum brevicaule</i> var. <i>loganum</i>	Private
Table Mountain * (UT)	Sagebrush/rabbitbrush grasslands on red clay sandstones.	<i>Astragalus jejunus</i> var. <i>jejunus</i> -4	Private

* Not identified by Utah experts, but selected here to improve representation for rare elements that are otherwise poorly represented in this portion of the ecoregion.

Uinta Basin (UT)

Site	Major Features	Elements	Management Status
North Myton Bench	Salt desert scrub community on fine textured soils of the Duchesne River Formation, often overlain with gravels. Contains the entire global range of <i>Penstemon flowersii</i> (G2).	<i>Arabis pulchra</i> var. <i>duchesnensis</i> <i>Penstemon duchesnensis</i> <i>Penstemon flowersii</i> <i>Spiranthes diluvialis</i>	Private Uintah and Ouray Indian Reservation
Maeser Bench	Scattered pinyon-juniper and salt desert scrub communities on semi-barren, low, gullied hills of the Duchesne River Formation. Site extends a little ways outside the WBE into the adjacent Utah/Wyoming Rocky Mountains Ecoregion.	<i>Astragalus hamiltonii</i> <i>Astragalus saurinus</i> <i>Hedysarum boreale</i> var. <i>gremiale</i> <i>Penstemon goodrichii</i> <i>Phacelia demissa</i> var. <i>minor</i>	Vernal BLM Uintah and Ouray Indian Reservation State
Benches of Lower Indian Canyon	Sparsely vegetated white shale barrens in pinyon-juniper woodland and sagebrush of the Duchesne River/Green River formations. Site contains world's only populations of <i>Lepidium barnebyanum</i> (G1) and a cluster of Uinta Basin endemics.	<i>Lepidium barnebyanum</i> <i>Penstemon duchesnensis</i> <i>Thelesperma caespitosum</i>	Uintah and Ouray Indian Reservation Private?
Pariette Bench	Salt desert scrub community on an area of barren eroded soils of the Uinta Formation overlying gravelly pediment.	<i>Sclerocactus brevispinus</i> <i>Sclerocactus glaucus</i> (in immediate vicinity)	Vernal BLM State
Horseshoe Bend	Mixed desert and salt desert scrub communities. Broad flats of the Duchesne River Formation overlain by river terrace sands and gravels, edged by sudden drop-offs and cut by gullies as the landscape descends to the Green River.	<i>Astragalus equisolensis</i> <i>Astragalus saurinus</i> <i>Yucca harrimaniae</i> var. <i>sterilis</i>	Vernal BLM State
*Fruitland Canyon	Only location for <i>Chrysothamnus nauseosus</i> var. <i>psilocarpus</i> in the WBE.	<i>Chrysothamnus nauseosus</i> var. <i>psilocarpus</i>	Private
* Rainbow Draw	Only location of <i>Cleomella palmeriana</i> var. <i>goodrichii</i> in WBE.	<i>Cleomella palmeriana</i> var. <i>goodrichii</i>	?

* Not identified by Utah experts, but potential sites for high-ranking and otherwise un-represented elements. More data are needed on site attributes and boundaries.

Yampa River Valley (CO)

Site	Major Features	Elements	Management Status
Raven Ridge (B1 or B2)	<i>Pinus edulis/Cercocarpus ledifolius</i> communities on rocky ridges of Mancos Shale support dense concentration of narrow endemic plants.	<i>Astragalus</i> <i>Cryptantha caespitosa</i> <i>Cryptantha rollinsii</i> -5 <i>Cymopterus duchesnensis</i> <i>Eriogonum ephedroides</i> -7 <i>Parthenium ligulatum</i> -3 <i>Penstemon grahamii</i> -9 <i>Penstemon scariosus</i> var. <i>albifluvis</i> -2	BLM
Calamity Ridge	Rocky ridges of the Uinta Formation with <i>Juniperus</i> , <i>Pinus</i> , and <i>Sarcobatus</i> .	<i>Astragalus detritalis</i> -6	BLM
Cross Mountain	Limestone talus supporting big sagebrush grasslands with scattered juniper in steep canyons.	<i>Cirsium ownbeyi</i> <i>Oxytropis besseyi</i> var. <i>obnapiformis</i> -2 <i>Penstemon acaulis</i> var. <i>yampaensis</i> -7	BLM
G Gap (B2)	Silty clay loam slopes with <i>Agropyron</i> , <i>Haplopappus</i> , & small colony of <i>Cymopterus duchesnensis</i> .	<i>Cymopterus duchesnensis</i>	BLM
G Gap SW (B3)	Flats of the Cathedral Bluffs tongue of the Green River Formation near Vermillion Creek.	<i>Cryptantha caespitosa</i> <i>Cymopterus duchesnensis</i>	BLM
Dry Creek at Irish Canyon (B2)	Small colony of <i>Cymopterus duchesnensis</i> on Cathedral Bluffs tongue.	<i>Cymopterus duchesnensis</i>	BLM
Irish Canyon (B2)	Outcrops of the Browns Park Formation, Weber Sandstone, and Moenkopi Formation on gently sloping hills. Large density of rare WBE and regional endemics.	<i>Cryptantha caespitosa</i> -2 <i>Eriogonum tumulosum</i> -2 <i>Parthenium ligulatum</i> -3 <i>Penstemon acaulis</i> var. <i>yampaensis</i> -3	BLM
N Vermillion Bluffs (B3)	Quaternary alluvium bluffs support large occurrences of <i>Astragalus detritalis</i> .	<i>Astragalus detritalis</i> -2	BLM
S Vermillion Bluffs (B3)	Outcrops of Laney member of Green River Formation with large populations (over 5000 individuals) of <i>Astragalus detritalis</i> .	<i>Astragalus detritalis</i>	BLM
Vermillion Bluffs (B3)	Slopes of Wasatch Formation- Cathedral Bluffs Tongue with large population of <i>Astragalus detritalis</i> .	<i>Astragalus detritalis</i> <i>Cryptantha caespitosa</i>	BLM
Vermillion Creek Falls (B2)	Sandy barren ridges of Juniper and Wyethia.	<i>Astragalus duchesnensis</i> <i>Oxytropis besseyi</i> var. <i>obnapiformis</i>	BLM
Hells Canyon (B3)	Gentle slopes of Tipton tongue of the Green River Formation supports a small colony of <i>Cryptantha caespitosa</i> .	<i>Cryptantha caespitosa</i>	BLM
Lookout Mountain (B3)	Laney member of the Green River Formation on flats at edge of Vermillion Bluffs.	<i>Cryptantha caespitosa</i>	BLM

Ace-in-the-Hole Draw (B3)	Sandy hillsides of Juniper. Only CO population of <i>Astragalus nelsonianus</i> in the WBE.	<i>Astragalus nelsonianus</i>	BLM
Middle Yampa River (B2)	Riparian communities along the banks of the Yampa River and adjacent pinyon-juniper ridges.	<i>Astragalus wetherillii</i> <i>Penstemon acaulis</i> var. <i>yampaensis</i> -2	Private?
Gates of the Lodore (B3)	Browns Park Formation on benches E of the Green River supporting Utah juniper/galleta/indian ricegrass communities.	<i>Eriogonum tumulosum</i> <i>Oxytropis besseyi</i> var. <i>obnapiformis</i>	BLM Private?
East Boone Draw (B5)	Sandy sagebrush slopes east of the Green River.	<i>Oxytropis besseyi</i> var. <i>obnapiformis</i>	Private?
West Boone Draw (B3)	No data provided.	<i>Oenothera acutissima</i>	BLM
Whiskey Springs East (B3)	No data provided.	<i>Oenothera acutissima</i> <i>Penstemon acaulis</i> var. <i>yampaensis</i>	BLM
Browns Draw (B3)	Silty-sand streambeds.	<i>Oenothera acutissima</i>	BLM
Little Snake River (B3)	Gravelly benches high above the Little Snake River support small population of <i>Penstemon acaulis</i> var. <i>yampaensis</i> .	<i>Penstemon acaulis</i> var. <i>yampaensis</i>	Private?
Spitzie Draw (includes Browns Park, UT) (B2)	Steep, white cliffs of the Browns Park Formation, containing only CO and UT populations of <i>Penstemon gibbensii</i> .	<i>Penstemon gibbensii</i>	BLM State Browns Park NWR
Juniper Mountain (B5)	No data provided.	<i>Penstemon acaulis</i> var. <i>yampaensis</i>	Private?
Sugarloaf Buttes South (B5)	Sagebrush community on flats 1.2 miles south of Sugarloaf Butte.	<i>Penstemon acaulis</i> var. <i>yampaensis</i>	Private?
Sugarloaf Buttes Southeast (B5)	Black sagebrush community on Browns Park Formation.	<i>Penstemon acaulis</i> var. <i>yampaensis</i>	Private?