

West Horsetooth Field Botanical Surveys



October 2018

CNHP's mission is to advance the conservation of Colorado's native species and ecosystems through science, planning, and education for the benefit of current and future generations.

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Recommended Citation:
Panjabi, S. 2018. West Horsetooth Field Botanical Surveys. Colorado Natural Heritage Program,
Colorado State University, Fort Collins, Colorado.

Front Cover: Andrea Schuhmann and Amy Gilboy looking for rare ferns. © Susan Panjabi

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ACKNOWLEDGEMENTS

Funding for this project was provided by the Larimer County Natural Resources Parks and Open Space Department. Special recognition goes to Zac Wiebe, Natural Resources Specialist, for his guidance and support. Thanks also to Zac, Amy Gilboy, Restoration and Stewardship Specialist with the Larimer County Natural Resources Parks and Open Space Department, Debbie Eley, Open Lands Specialist with the City of Loveland Parks and Recreation Department, and Andrea Schuhmann, CNHP Ecologist for their assistance in the field. Pam Smith, CNHP Botanist provided critical assistance with plant identification.

TABLE OF CONTENTS

Acknowledgements	i
Summary of Services.....	1
Plants	1
Map 1. Newly acquired Larimer County parcels west of Horsetooth Rock.....	2
List of plants documented on the West Horsetooth properties.....	3
Plant communities	13
Birds	14
Mammals.....	14
Recommendations/Further research needs	15
References	15
Appendix.....	16

SUMMARY OF SERVICES

We visited the parcels recently obtained by Larimer County to the west of Horsetooth Rock (**Map 1**) on June 13 (Susan Panjabi, Zac Wiebe, John Sovell), July 2 (Susan and Zac), July 10 (Susan and Debbie Eley), and September 10 (Susan, Andrea Schuhmann and Amy Gilboy) of 2018 to identify significant botanical resources present in the area. We also sought to identify management issues as well as opportunities and constraints for the use of the new parcels. Our intent is for this information to support an upcoming management plan update for Horsetooth Mountain Open Space in 2019.

Plants

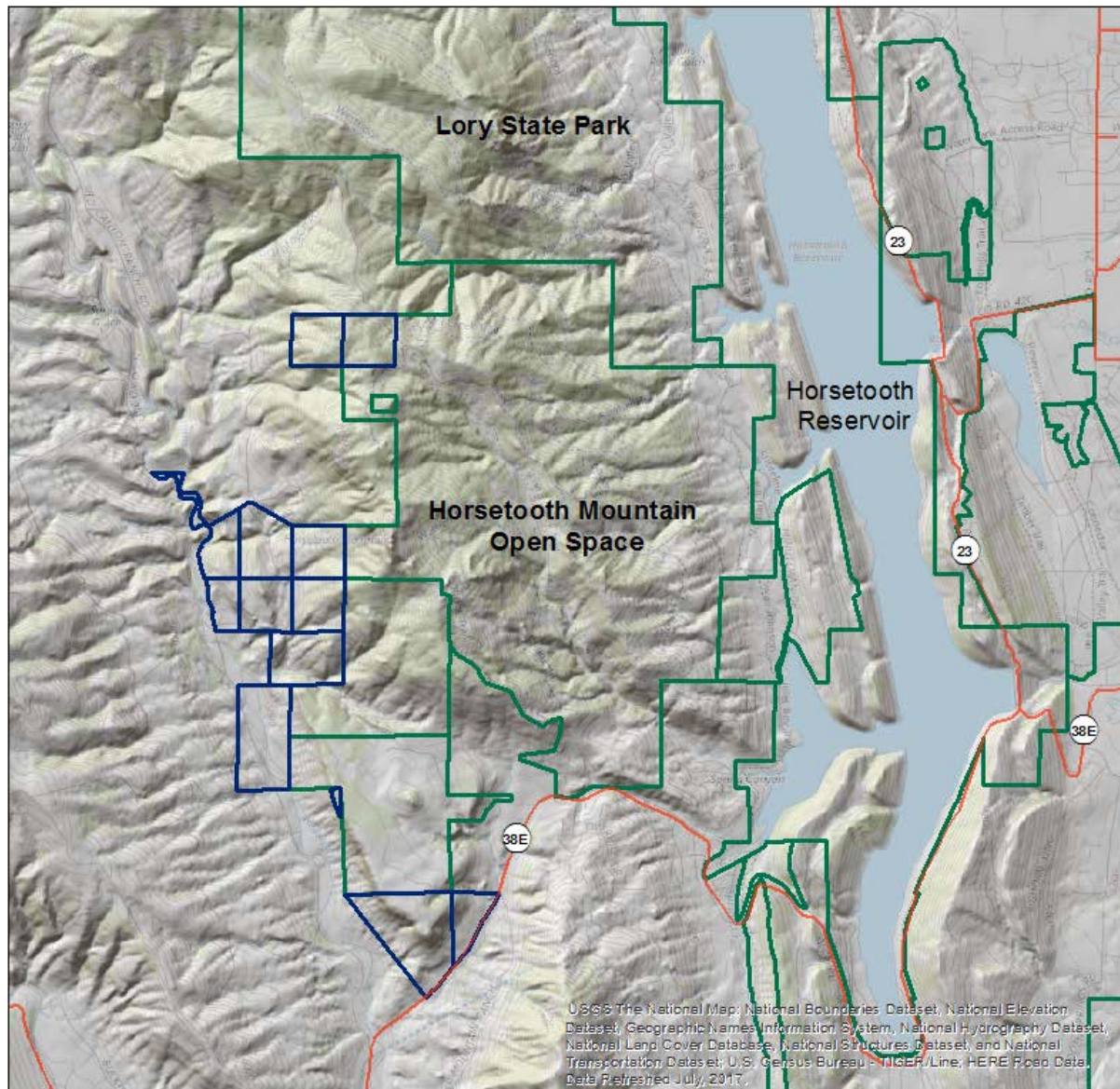
Prior to conducting fieldwork we developed a target list of plants that might be present and of conservation interest. We referred to a long list of potential plants of interest for the area (192 plant taxa) provided by Crystal Strouse, City of Fort Collins Botanist (**Appendix 1**), and especially targeted species known from the area that are tracked by the Colorado Natural Heritage Program (CNHP) including: Bell's twinpod (*Physaria bellii*), Forked three-awn grass (*Aristida basiramea*), Slim-pod Venus looking glass (*Triodanis leptocarpa*), Slimleaf milkweed (*Asclepia stenophylla*), Rocky Mountain phacelia (*Phacelia denticulata*), Prairie goldenrod (*Unamia alba*=*Solidago ptarmicoides*), and Rocky Mountain polypody (*Polypodium saximontanum*). Further, we targeted all non-native plants that were evident on the dates of our visits, especially noxious weeds, because of their potential management concerns.

In total, we identified 138 plant taxa known from over 50 (53) plant families. For rare plants, we found new locations of Bell's twinpod (*Physaria bellii*, G2S2, tracked by CNHP), and Herbaceous greenbrier (*Smilax lasioneura*, G5S3, watchlisted by CNHP). Other noteworthy species include Slender lip fern (*Cheilanthes feei*), New Mexico feathergrass (*Hesperostipa neomexicana*), Fringed loosestrife (*Lysimachia ciliata*), and Roadside argemoney (*Agrimonia striata*), (not tracked by CNHP but uncommon). We documented a total of 30 plants not native to Colorado; 13 of these are listed on the state noxious weed list. Please see **Table 1** for a complete list of all taxa found. We provided a confidential map showing some of the noteworthy locations, and more details on the Bell's twinpod location, to Larimer County as separate documents.

Additional information about Bell's twinpod, including photos, distribution map, and an illustration, can be found on-line in the Colorado Rare Plant Guide (Colorado Natural Heritage Program 1997+).

Herbaceous greenbrier is known from six counties in CO (USDA NRCS 2018, Ackerfield 2015), is uncommon in the outer foothills along the Front Range (Ackerfield 2015 and Weber and Wittmann 2012), and is the only representative of the Smilacaceae or Catbrier Family in Colorado.

Map 1. Newly acquired Larimer County parcels west of Horsetooth Rock.



- Major Road
- HTMOS New Ownership
- Public Open Space

Map Date: 10/10/2018

0 0.25 0.5 1 Miles

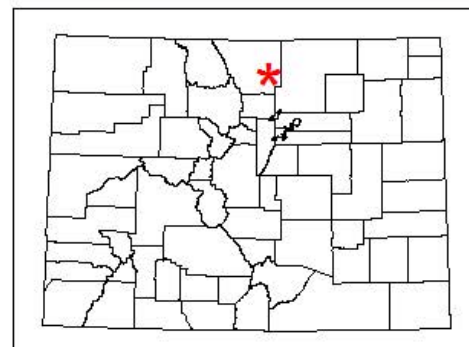


Table 1. List of plants documented on Larimer County's West Horsetooth properties on four days (June 13, July 2, July 10, and September 10, 2018). Plants are presented in alphabetical order by family and then genus. Dominant/very common plants are listed in **bold**. Additional taxa are sure to be found with additional surveys.

Plant Family	Scientific Name	Common Name	Non-native * State listed Noxious Weed **	Grasslands, shrublands in lower parcels	Ponerosa pine, upper parcels, and upper end of lower parcels	Side drainages	Redstone Creek riparian area	Comments
Aceraceae or Sapindaceae	<i>Acer glabrum</i>	Rocky Mountain Maple				x	x	
Agavaceae	<i>Yucca glauca</i>	Great Plains yucca; Soapweed		x				
Alsinaceae	<i>Cerastium strictum</i>	Chickweed			x			
Anacardiaceae	<i>Rhus trilobata</i>	Skunkbrush sumac		x			x	
Apiaceae	<i>Conium maculatum</i>	Poison hemlock	**C list			x		
Apiaceae	<i>Heracleum maximum</i>	Common cowparsnip					x	
Asclepiadaceae	<i>Asclepias speciosa</i>	Showy milkweed					x	
Asparagaceae	<i>Asparagus officinalis</i>	Asparagus					x	
Asteraceae	<i>Achillea millefolium</i> or <i>lanulosa</i>	Common yarrow				x	x	
Asteraceae	<i>Anaphalis margaritacea</i>	Pearly everlasting			x			
Asteraceae	<i>Antennaria</i> sp.	Pussy-toes			x			
Asteraceae	<i>Artemisia frigida</i>	Fringed sagebrush		x	x		x	

Plant Family	Scientific Name	Common Name	Non-native * State listed Noxious Weed **	Grasslands, shrublands in lower parcels	Ponerosa pine, upper parcels, and upper end of lower parcels	Side drainages	Redstone Creek riparian area	Comments
Asteraceae	<i>Artemisia ludoviciana</i>	White sagebrush, or Louisiana sagewort		x				
Asteraceae	<i>Artemisia tridentata</i>	Big or common sagebrush		x				
Asteraceae	<i>Aster</i> sp.	Aster		x				
Asteraceae	<i>Carduus nutans</i>	Musk thistle	**B list	x	x		x	
Asteraceae	<i>Centaurea</i> sp.	Knapweed	**B list				x	
Asteraceae	<i>Cichorium intybus</i>	Common chicory	**C list				x	
Asteraceae	<i>Cirsium arvensis</i>	Canada thistle	**B list				x	
Asteraceae	<i>Cirsium undulatum</i>	Wavyleaf thistle		x				
Asteraceae	<i>Ericameria nauseosus</i>	Rubber rabbitbrush		x			x	
Asteraceae	<i>Erigeron</i> sp.	Fleabane					x	
Asteraceae	<i>Gutierrezia sarothrae</i>	Broom snakeweed		x				
Asteraceae	<i>Helianthus pumilus</i>	Little sunflower		x				
Asteraceae	<i>Heterotheca villosa</i>	Hairy false goldenaster		x			x	
Asteraceae	<i>Lactuca serriola</i>	Prickly lettuce	*		x			
Asteraceae	<i>Lygodesmia juncea</i>	Rush skeletonweed		x				
Asteraceae	<i>Ratibida columnifera</i>	Prairie coneflower		x			x	
Asteraceae	<i>Rudbeckia laciniata</i> var. <i>ampla</i>	Cutleaf coneflower					x	

Plant Family	Scientific Name	Common Name	Non-native * State listed Noxious Weed **	Grasslands, shrublands in lower parcels	Ponerosa pine, upper parcels, and upper end of lower parcels	Side drainages	Redstone Creek riparian area	Comments
Asteraceae	<i>Senecio spartioides</i>	Narrowleaved butterweed		x				
Asteraceae	<i>Solidago canadensis</i>	Canada goldenrod			x		x	
Asteraceae	<i>Thelesperma megapotamicum</i>	Hopi tea, green thread					x	
Asteraceae	<i>Townsendia</i> sp.	Easter/Townsend daisy		x				
Asteraceae	<i>Tragopogon dubius</i>	Western salsify	*	x			x	
Asteraceae	<i>Xanthium strumarium</i>	Cocklebur	*			x		
Betulaceae	<i>Betula occidentalis</i>	Water birch or River birch					x	
Boraginaceae	<i>Cynoglossum officinale</i>	Hound's tongue; Gypsyflower	**B list			x	x	
Brassicaceae	<i>Physaria bellii</i>	Bell's twinpod		x				Globally imperiled tracked by CNHP. See element occurrence record and Colorado Rare Plant Guide.
Brassicaceae	<i>Thlaspi arvense</i>	Field pennycress	*	x			x	
Cactaceae	<i>Echinocereus viridiflorus</i>	Green-flowered or Nylon hedgehog cactus		x				
Cactaceae	<i>Opuntia</i> spp.	Prickly pear cactus		x			x	

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Campanulaceae	<i>Campanula rotundifolia</i>	Bluebells of Scotland; Harebell			x			
Cannabaceae	<i>Celtis reticulata</i>	Netleaf hackberry		x				May have been planted.
Capperaceae	<i>Cleome serrulata</i>	Rocky Mountain beeplant				x	x	
Caprifoliaceae	<i>Symphoricarpos</i> sp.	Snowberry			x		x	
Caryophyllaceae	<i>Saponaria officinalis</i>	Bouncing bet	**B list				x	
Convolvulaceae	<i>Convolvulus arvensis</i>	Field bindweed	**C list			x	x	
Crassulaceae	<i>Sedum (Amerosedum) lanceolatum</i>	Spearleaf stonecrop			x			
Cupressaceae	<i>Juniperus communis</i> var. <i>depressa</i>	Common juniper		x	x			
Cupressaceae	<i>Juniperus scopulorum</i>	Rocky Mountain juniper		x	x		x	
Cyperaceae	<i>Carex bebbii</i>	Bebb's sedge					x	
Dipsacaceae	<i>Dipsacus fullonum</i>	Common teasel	**B list				x	
Dryopteridaceae	<i>Woodsia oregana</i>	Oregon cliff fern			x			
Equisetaceae	<i>Equisetum arvense</i>	Field horsetail					x	
Euphorbiaceae	<i>Euphorbia (Tithymalus) esula</i>	Leafy spurge	**B list				x	
Fabaceae	<i>Astragalus drummondii</i>	Drummond's milkvetch		x				
Fabaceae	<i>Astragalus</i> spp.	Milkvetch			x			

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Fabaceae	<i>Dalea purpurea</i>	Purple prairie clover		x				
Fabaceae	<i>Lupinus argenteus</i>	Silvery lupine			x			
Fabaceae	<i>Medicago lupulina</i>	Black medica					x	
Fabaceae	<i>Medicago sativa</i>	Alfalfa	*	x			x	
Fabaceae	<i>Melilotus alba</i>	White sweet clover	*				x	
Fabaceae	<i>Thermopsis rhombifolia</i> var. <i>divaricarpa</i>	Golden banner					x	
Fabaceae	<i>Trifolium pratense</i>	Purple clover	*				x	
Fabaceae	<i>Trifolium repens</i>	White clover	*				x	
Fabaceae	<i>Vicia americana</i>	American vetch					x	
Geraniaceae	<i>Erodium cicutarium</i>	Redstem filaree	**C list				x	
Geraniaceae	<i>Geranium caespitosum</i>	Rocky Mountain geranium		x	x			
Grossulariaceae	<i>Ribes</i> sp.	Currant; Gooseberry			x		x	
Helleboraceae	<i>Delphinium</i> sp.	Larkspur		x			x	
Hydrangeaceae	<i>Jamesia americana</i>	Fivepetal cliffbush			x		x	
Hydrophyllaceae	<i>Phacelia</i> sp.	Phacelia			x			
Juncaceae	<i>Juncus compressa</i>	Roundfruit rush					x	
Juncaceae	<i>Juncus interior</i>	Inland rush					x	
Juncaceae	<i>Juncus torreyi</i>	Torrey's rush					x	
Lamiaceae	<i>Mentha arvensis</i>	Field mint					x	

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Lamiaceae	<i>Monarda fistulosa</i> var. <i>menthifolia</i>	Wild bergamont		x				
Lamiaceae	<i>Prunella vulgaris</i>	Heal-all					x	
Liliaceae	<i>Calochortus</i> <i>gunnisonii</i>	Sego lily; Gunnison's mariposa lily		x				
Nyctaginaceae	<i>Mirabilis (Oxybaphus)</i> <i>nyctaginea</i>	Heartleaf four o'clock					x	
Onagraceae	<i>Oenothera</i> <i>caespitosa</i>	Tufted evening primrose					x	
Onagraceae	<i>Oenothera villosa</i>	Hairy evening primrose					x	
Papaveraceae	<i>Argemone</i> <i>polyanthemus</i>	Crested prickly poppy				x	x	
Pinaceae	<i>Pinus ponderosa</i>	Ponderosa pine		x	x			
Pinaceae	<i>Pseudotsuga</i> <i>menzezii</i>	Douglas fir			x			
Plantaginaceae	<i>Linaria dalmatica</i>	Dalmatian toadflax	**B list	x			x	
Plantaginaceae	<i>Penstemon</i> spp	Beardtongue or Penstemon		x				
Plantaginaceae	<i>Penstemon virens</i>	Front Range beardtongue			x			
Plantaginaceae	<i>Veronica anagallis-</i> <i>aquatica (catenata)</i>	Water speedwell						

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Poaceae	<i>Agropyron cristatum</i>	Crested wheatgrass	*	x	x			
Poaceae	<i>Agrostis gigantea</i>	Redtop bentgrass	*				x	
Poaceae	<i>Agrostis stolonifera</i>	Creeping bentgrass	*				x	
Poaceae	<i>Andropogon gerardii</i>	Big bluestem		x				
Poaceae	<i>Aristida purpurea</i>	Purple three-awn		x				
Poaceae	<i>Arrhenatherum elatius</i>	Falseoat grass	*				x	
Poaceae	<i>Bouteloua curtipendula</i>	Sideoats gramma		x				
Poaceae	<i>Bromus inermis</i>	Smooth brome	*	x	x		x	
Poaceae	<i>Bromus tectorum</i>	Cheatgrass	*	x	x		x	
Poaceae	<i>Dactylis glomerata</i>	Orchard grass	*				x	
Poaceae	<i>Elymus elymoides</i>	Squirreltail		x				
Poaceae	<i>Festuca idahoensis</i>	Idaho fescue			x			Appears to have been seeded?
Poaceae	<i>Hesperostipa comata</i>	Needle and thread grass		x			x	
Poaceae	<i>Heterostipa neomexicana</i>	New Mexcio feathergrass		x				uncommon
Poaceae	<i>Koeleria micrantha</i>	Prairie junegrass		x	x			
Poaceae	<i>Leucopoa kingii</i>	Spike-fescue			x			
Poaceae	<i>Nassella viridula</i>	Green needlegrass		x	x			
Poaceae	<i>Phleum pratense</i>	Timothy	*				x	

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Poaceae	<i>Poa interior</i>	Inland bluegrass					x	
Poaceae	<i>Pseudoregnaria spicata</i>	Bluebunch wheatgrass		x	x			
Poaceae	<i>Schizachyrium scoparium</i>	Little bluestem		x				
Poaceae	<i>Thinopyrum intermedium</i>	Intermediate wheatgrass	*					
Polygonaceae	<i>Eriogonum alatum</i>	Winged buckwheat		x				
Polygonaceae	<i>Eriogonum umbellatum</i>	Sulphur flower		x				
Polygonaceae	<i>Rumex crispus</i>	Curly dock	*				x	
Primulaceae	<i>Lysimachia ciliata</i>	Fringed loosestrife					x	Species of interest. Relict (Weber and Wittmann 2012).
Pteridaceae	<i>Cheilanthes feei</i>	Slender lip fern		x				
Ranunculaceae	<i>Clematis ligusticifolia</i>	Western white virgin's bower				x	x	
Ranunculaceae	<i>Thalictrum dasycarpum</i>	Purple meadowrue					x	
Rhamnaceae	<i>Ceanothus fendleri</i>	Fendler's ceanthus,: Buckbrush			x			
Rosaceae	<i>Agrimonia striata</i>	Roadside agrimony					x	rare at West Horsetooth properties
Rosaceae	<i>Crataegus</i> sp.	Hawthorne				x		

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Roseaceae	<i>Cercocarpus montana</i>	Mountain mahogany		x			x	
Roseaceae	<i>Physocarpus monogynus</i>	Mountain ninebark					x	
Roseaceae	<i>Prunus americana</i>	Wild plum				x		
Roseaceae	<i>Prunus virginiana</i> var. <i>melanocarpa</i>	Chokecherry				x	x	
Roseaceae	<i>Rosa blanda</i> (woodsii)	Smooth rose or Wood's rose		x			x	
Salicaceae	<i>Populus angustifolia</i>	Narrowleaf cottonwood					x	
Salicaceae	<i>Populus deltoides</i>	Cottonwood					x	
Salicaceae	<i>Populus x acuminata</i>	Lanceleaf cottonwood					x	hybrid between <i>P. angustifolia</i> and <i>P. deltoides</i>
Salicaceae	<i>Salix amygdaloides</i>	Peachleaf willow				x		
Salicaceae	<i>Salix exigua</i>	Coyote willow				x		
Salicaceae	<i>Salix irrorata</i>	Bluestem willow					x	
Saxifragaceae	<i>Heuchera bracteata</i> or <i>parviflora</i>	Alumroot			x			
Scrophulariaceae	<i>Verbascum thapsus</i>	Common mullein	**C list	x			x	
Smilacaceae	<i>Smilax lasioneuron</i>	Blue Ridge carrionflower		x				uncommon in the outer foothills along the Front Range. On CNHP watchlist

Plant Family	Scientific Name	Common Name	Non-native * State listed Noxious Weed **	Grasslands, shrublands in lower parcels	Ponerosa pine, upper parcels, and upper end of lower parcels	Side drainages	Redstone Creek riparian area	Comments
Ulmaceae	<i>Ulmus pumila</i>	Siberian/ Chinese elm	*				x	
Urticaceae	<i>Urtica dioica</i> ssp. <i>gracilis</i>	Stinging nettle				x		
Vitaceae	<i>Vitis riparia</i>	River bank grape					x	

Plant communities

The new West Horsetooth parcels are characterized by a mosaic of grasslands, shrublands, rock outcrops, woodlands, and riparian areas. The parcels support several plant communities that may be of local and even global conservation interest. However, additional research is needed to determine how the West Horsetooth examples compare to the range wide distribution of these plant communities, and how these communities are connected to communities of the same types in the broader landscape surrounding the properties.

The new parcels may support significant examples of the following:

Grasslands dominated by Needle and thread grass (*Hesperostipa comata*), tracked by CNHP as Needle-and-Thread Colorado Front Range Grasslands (G2/S2, globally and state imperiled) may be of local and global interest. This association is restricted to Colorado. It is found at low elevations along the eastern slope of the Rocky Mountains or on rock outcrops in the northeastern part of the state. It is found in a narrow elevational range from 1555 to 1755 m (5100-5760 ft), on eastern and western "hogback" slopes and on rocky outcrops. It is restricted to soils derived from sandstone or limestone.

Shrublands dominated by Mountain mahogany (*Cercocarpus montanus*) and Needle and thread grass (*Hesperostipa comata*), tracked by CNHP as Mixed Foothill Shrublands (G2/S2, globally and state imperiled) may be of conservation interest. Stands of this association have been described from the eastern flank of the foothills of the northern Front Range in north-central Colorado from Douglas to Larimer counties. This association is found from 1750-2270 m (5700-7440 feet) elevation, on topographic features including hogbacks, ridges, mesas, canyons and slopes. Slopes vary from moderate to steep (up to 60%), and aspects are mostly southerly. Parent materials are primarily igneous and metamorphic residuum and colluvium. Most soils are classified as Entisols. They are poorly developed, well-drained, and coarse-textured, with much exposed bare ground and rock. This is an open-canopy shrubland dominated by the broad-leaved deciduous shrub *Cercocarpus montanus* (typically with 20-35% canopy cover), with *Rhus trilobata* always present in lower abundance. The succulent species *Opuntia polyacantha* is usually present, as well as the suffrutescent species *Artemisia frigida*, *Artemisia ludoviciana*, and *Eriogonum umbellatum*. The herbaceous layer is dominated by the perennial bunchgrass *Hesperostipa comata* (= *Stipa comata*), with 5-20% canopy cover. All of these species are represented in the shrublands of the new West Horsetooth properties.

Ponderosa pine (*Pinus ponderosa*) woodlands with King fescue (*Leucopoa kingii*) in the understory is tracked by CNHP as Foothill Ponderosa Savannas (G3/S3, globally and state vulnerable). This *Pinus ponderosa* woodland is known from the northern Front Range of Colorado and Wyoming from 1890 to 2800 m (6200-9200 feet) in elevation. It occurs on a variety of aspects, slopes and exposures, although it most typically occupies non-southerly aspects on gentle to moderate slopes (10-40%) with relatively deep, well-drained soils. This is one of the most mesic *Pinus ponderosa* associations in the Front Range. *Pinus ponderosa* dominates the tree layer, although *Pseudotsuga menziesii* and *Juniperus scopulorum* may be present in many stands. Shrub

species, such as *Ribes cereum*, commonly occur in the association but are rarely abundant. *Leucopoa kingii* dominates the herbaceous layer with generally 5-20% cover and is diagnostic for this association. As the tree canopy becomes more closed, the herbaceous cover is reduced. *Elymus albicans*, *Carex rossii*, *Potentilla fissa*, *Allium geyeri*, *Geranium caespitosum*, *Harbouria trachypleura*, *Packera fendleri*, *Artemisia frigida*, and *Artemisia ludoviciana* are additional understory species that occur frequently in small abundance. Needle litter and duff is often present and thick.

The Redstone Creek drainage is dominated by three Cottonwood taxa (*Populus angustifolia*, *P. deltoids*, and the hybrid *P. accuminata*) with Rocky Mountain juniper (*Juniperus scopulorum*). This may be of local and global interest. **CNHP ranks *Populus angustifolia-Juniperus scopulorum* as G3/S3 (globally and state rare), and tracks locations of this community type.** Further, it is rare to find streams in Colorado, especially those along the Front Range, without dams or other water alterations (e.g., irrigation systems, stock ponds) upstream, as is the case for Redstone Creek. There also appear to be some important ground water discharge systems (springs) given the occurrence of River birch (*Betula occidentalis*). Local animals depend on the creek and springs in the mostly dry landscape.

Birds

Along Redstone Creek we heard or saw: Song Sparrow, American Goldfinch, Rufus Hummingbird, Spotted Towhee, American Robin, Western Wood-Pee-wee, Yellow Breasted Chat, Broad-tailed Hummingbird, Vireo sp., White-crowned Sparrow, Canyon Wren, and Lesser Goldfinch

In the upland areas we hear or saw: Black-billed Magpie, Black-headed Grosbeak, Spotted Towhee, and White-breasted Nuthatch.

This was not a bird survey but incidental sightings we felt were worth mentioning.

Mammals

One of the side drainages flowing into Redstone Creek appeared to be an area that was commonly used by Black Bear. We noticed tracks, droppings, and what appeared to be an area where bears were bedding down. This concentration area is marked on a map provided separately to the County.

Recommendations/Further research needs

- Conduct further surveys, especially at additional times of year such as spring and early summer, to identify a more complete list of plants (and animals) present in the open space area. Additional species are sure to be found, and future surveys will likely identify locations of Forked three-awn grass (*Aristida basiramea*) which is known from the Horsetooth Falls area, and Prairie goldenrod (*Unamia alba*) known historically from “Horsetooth Mountain”. Some plants that could be significant were only identified to genus, for example, some Milkvetch species (*Astragalus spp.*), and a species of Hawthorne (*Crateagus sp.*). These could also be targeted in future surveys.
- Survey for aquatic insects to help elucidate the significance and condition of the ecological communities found along Redstone Creek.
- Apply a Floristic Quality Assessment (FQA) to the full species list to date to identify species and sites that may warrant extra conservation attention within the open space area. The FQA method is used to calculate various indices that reflect the condition of a site based on the plant species present. The core of the FQA method is the use of “coefficients of conservatism” (C-values), which are assigned to all native species in a flora following the methods described by Swink and Wilhelm (1994). C-values range from 0 to 10 and represent an estimated probability that a plant is likely to occur in a landscape relatively unaltered from pre-European settlement conditions. High C-values are assigned to species likely to occur in high-quality natural areas, while low C-values are assigned to species that tolerate human disturbance. C-values for Colorado species were assigned by a panel of botanical experts, as described in Rocchio (2007). FQA indices provide consistent, quantitative measures of floristic integrity that can be used in any plant community, do not require extensive sampling equipment, and can be applied to existing data sets. **An FQA will likely confirm the high quality of the parcels acquired.**
- Identify pollinators and other factors effecting the reproductive ecology and long-term viability of the rare and uncommon plants as well as those with a high floristic quality index.
- Identify and map plant communities present in the open space area and adjacent landscape.
- Survey proposed trail routes and any other development areas (e.g., parking lots) in more detail.
- Limit disturbance as much as possible. In particular, approach weed treatments with great caution. Monitor to see if weeds are a problem (i.e., are they expanding or stable). If necessary, spot treat and monitor to make sure the treatment is working. Please note that in some cases it is best to do nothing, especially when water quality or native species and soils could be threatened with the use of herbicides. Weed treatments in sensitive areas should include minimal and precise herbicide application and immediate follow-up replanting of native species if bare soil areas are created (Smith et al. 2015).

- Create local field guides specific to the Horsetooth Mountain Open Space including natural history information to help visitors connect with and appreciate plants and other elements of biodiversity.

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Appendix 1. List of 192 potential plant species of interest developed by Crystal Strouse, City of Fort Collins Botanist. We kept an eye out for all of these plants during our surveys.

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Asplenium septentrionale</i> (L.) Hoffm.	forked spleenwort	Aspleniaceae	G5 S3S4	9	FAC
<i>Asplenium trichomanes-ramosum</i> L.	green spleenwort	Aspleniaceae	G4 S1	10	FACU
<i>Dryopteris filix-mas</i> (L.) Schott.	male fern	Dryopteridaceae		9	FACU
<i>Equisetum variegatum</i> Schleich. Ex F. Weber & D. Mohr var. <i>variegatum</i>	variegated scouringrush	Equisetaceae	G5 S1	5	FACW
<i>Marsilea vestita</i> Hook. & Grev.	hairy waterclover	Marsileaceae		7	OBL
<i>Polypodium saximontanum</i> Windham	Rocky Mountain polypody	Polypodiaceae	G3? S3	9	FAC
<i>Argyrochosma fendleri</i> (Kunze) Windham	Fendler's false cloak fern	Pteridaceae	G3 S3	7	FACU
<i>Cheilanthes eatonii</i> Baker	Eaton's lipfern	Pteridaceae	G5? S1S2	9	FACU
<i>Cheilanthes feei</i> T. Moore	slender lipfern	Pteridaceae		9	FAC
<i>Cheilanthes fendleri</i> Hook.	Fendler's lipfern	Pteridaceae		9	FAC
<i>Pellaea atropurpurea</i> (L.) Link	purple cliffbrake	Pteridaceae		9	FAC
<i>Pellaea gastonyi</i> Windham	Gastony's cliff-brake	Pteridaceae		9	FAC

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Pellaea glabella</i> Mett. Ex Kuhn ssp. <i>occidentalis</i> (E.E. Nelson) Windham	western dwarf cliffbrake	Pteridaceae		9	FAC
<i>Pellaea glabella</i> Mett. Ex. Kuhn ssp. <i>simplex</i> (Butters) Á. Löve & D. Löve	smooth cliffbrake	Pteridaceae	G5T4? S2	9	FAC
<i>Acorus calamus</i> L.	sweetflag	Acoraceae	G4? S1	5	OBL
<i>Sagittaria brevirostra</i> Mack.& Bush	shortbeak arrowhead	Alismataceae		8	OBL
<i>Aletes humilis</i> J.M. Coult. & Rose	Colorado aletes	Apiaceae	G2G3 S2S3	7	UPL
<i>Musineon tenuifolium</i> (Nutt. Ex Torr. & A. Gray) J.M. Coult. & Rose	slender wildparsley	Apiaceae	G4 S2	7	UPL
<i>Osmorhiza longistylis</i> (Torr.) DC.	sweet -cicely	Apiaceae		8	FAC/FACU
<i>Sanicula marilandica</i> L.	Maryland sanicle	Apiaceae		8	FACU/FAC
<i>Sium suave</i> Walter	water parsley	Apiaceae		6	OBL
<i>Aralia nudicaulis</i> L.	wild sarsaparilla	Araliaceae		9	FACU
<i>Asclepias stenophylla</i> A. Gray	slimleaf milkweed	Asclepiadaceae	G4G5 S2	7	UPL
<i>Antennaria howellii</i> Greene	Howell's pussytoes	Asteraceae		5	UPL

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Cirsium flodmanii</i> (Rydb.) Arthur	Flodman's thistle	Asteraceae		3	FAC
<i>Erigeron canus</i> A. Gray	hoary fleabane	Asteraceae		6	UPL
<i>Erigeron nematophyllus</i> Rydb.	needleleaf fleabane	Asteraceae	G3 S2	6	UPL
<i>Erigeron strigosus</i> Muhl. Ex Willd. var. <i>strigosus</i>	prairie fleabane	Asteraceae		0	FACU
<i>Eutrochium maculatum</i> (L.) E.E. Lamont	spotted joepeyweed	Asteraceae		8	OBL
<i>Heliopsis helianthoides</i> (L.) Sweet var. <i>scabra</i> (Dunal) Fernald	smooth oxeye	Asteraceae		7	FACU
<i>Hieracium fendleri</i> Sch. Bip.	yellow hawkweed	Asteraceae		5	FAC
<i>Lactuca canadensis</i> L.	Canada lettuce	Asteraceae		5	FACU
<i>Lactuca ludoviciana</i> (Nutt.) Riddell	biannual lettuce	Asteraceae		3	FACU/FAC
<i>Liatris ligulistylis</i> (A. Nelson) K. Schum.	Rocky Mountain blazing star	Asteraceae	G5? S2	8	FAC
<i>Machaeranthera bigelovii</i> (A. Gray) Greene var. <i>bigelovii</i>	Bigelow's tansyaster	Asteraceae		5	FACW

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Packera pseud aurea</i> (Rydb.) W.A. Weber & Á. Löve	falsegold groundsel	Asteraceae		7	FACW
<i>Shinnersoseris rostrata</i> (A. Gray) S. Tomb.	beaked skeletonweed	Asteraceae		7	UPL
<i>Solidago nemoralis</i> Ait. var. <i>decemflora</i> (DC.) Brammall ex semple	gray goldenrod	Asteraceae		5	FACU
<i>Solidago ptarmicoides</i> (Nees) Boivin	Prairie goldenrod	Asteraceae	G5 S1	9	FAC
<i>Solidago speciosa</i> Nutt. var. <i>pallida</i> Porter	showy goldenrod	Asteraceae		6	FACU
<i>Stephanomeria runcinata</i> Nutt.	desert wirelettuce	Asteraceae		5	UPL
<i>Symphyotrichum boreale</i> (Torr. & A. Gray) Á. Löve & D. Löve	northern bog aster	Asteraceae		7	OBL
<i>Symphyotrichum novae-angliae</i> (L.) G.L. Nesom	New England aster	Asteraceae	G5 S1	5	FACW
<i>Corylus cornuta</i> Marshall	beaked hazelnut	Betulaceae		8	UPL/FACU
<i>Mertensia humilis</i> Rydb.	Rocky Mountain bluebells	Boraginaceae	G2 S1	6	UPL
<i>Oreocarya celosioides</i> Eastw.	buttecandle	Boraginaceae		6	UPL
<i>Arabis pycnocarpa</i> M. Hopkins var. <i>pycnocarpa</i>	hairy rockcress	Brassicaceae		3	FACU

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Cardamine breweri</i> S. Watson	Brewer's bittercress	Brassicaceae		6	FACW
<i>Physaria bellii</i> G.A. Mulligan	Bell's twinpod	Brassicaceae	G2G3 S2S3	4	UPL
<i>Physaria vitulifera</i> Rydb.	fiddleleaf twinpod	Brassicaceae	G3 S3	6	UPL
<i>Stanleya pinnata</i> (Pursh) Britton var. <i>bipinnata</i> (Greene) Rollins	bipinnate princesplume	Brassicaceae		6	UPL
<i>Thelypodium paniculatum</i> A. Nelson	northwestern thelypody	Brassicaceae	G2 SH	6	FACW
<i>Opuntia phaeacantha</i> Engelm.	tulip prickly pear	Cactaceae		5	UPL
<i>Callitriche heterophylla</i> Pursh ssp. <i>heterophylla</i>	twoheaded water starwort	Callitrichaceae	G5 S1	6	OBL
<i>Campanula parryi</i> A. Gray var. <i>parryi</i>	Parry's bellflower	Campanulaceae		7	FAC
<i>Lobelia siphilitica</i> L. var. <i>ludoviciana</i> A. DC.	big blue lobelia	Campanulaceae		7	OBL
<i>Triodanis leptocarpa</i> (Nutt.) Nieuwl.	slimpod Venus' lookingglass	Campanulaceae	G5? S1	3	FACU
<i>Triodanis perfoliata</i> (Nutt.) Nieuwl.	clasping Venus' looking-glass	Campanulaceae		0	FAC/UPL

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Humulus lupulus</i> L. var. <i>neomexicanus</i> A. Nelson & Cockerell	wild hops	Cannabaceae		5	FACU
<i>Cerastium brachypodum</i> (Engelm. ex A. Gray) B.L. Rob.	shortstalk chickweed	Caryophyllaceae		5	FACU/FAC
<i>Stellaria borealis</i> Bigelow ssp. <i>borealis</i>	boreal starwort	Caryophyllaceae		7	FACW
<i>Chenopodium rubrum</i> L.	red goosefoot	Chenopodiaceae		2	OBL/FACW
<i>Chenopodium subglabrum</i> (S. Watson) A. Nelson	smooth goosefoot	Chenopodiaceae		5	UPL
<i>Suckleya suckleyana</i> (Torr.) Rydb.	poison suchleya	Chenopodiaceae		4	FACW
<i>Hypericum majus</i> (A.Gray) Britton	large St. Johnswort	Clusiaceae		6	FACW
<i>Calystegia macounii</i> (Greene) Brummitt	Macoun's false bindweed	Convolvulaceae		2	FAC
<i>Calystegia sepium</i> (L.) R. Br.	hedge false bindweed	Convolvulaceae		2	FAC
<i>Bolboschoenus fluviatilis</i> (Torr.) Soják	river bulrush	Cyperaceae		7	OBL

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Carex atherodes</i> Spreng.	wheat sedge	Cyperaceae		6	OBL
<i>Carex backii</i> Boott	Back's sedge	Cyperaceae		9	UPL
<i>Carex bebbii</i> Olney ex Fernald	Bebb's sedge	Cyperaceae		7	OBL
<i>Carex crawei</i> Dewey	Crawe's sedge	Cyperaceae	G5 S1	8	FACW
<i>Carex deweyana</i> Schwein.	Dewey's sedge	Cyperaceae		8	FACU/FAC
<i>Carex lasiocarpa</i> Ehrh.	woolyfruit sedge	Cyperaceae	G5 S1	8	OBL
<i>Carex lenticularis</i> Michx. var. <i>lipocarpa</i> (T. Holm) L.A. Standl.	Kellogg's sedge	Cyperaceae		9	OBL
<i>Carex peckii</i> Howe	Peck's sedge	Cyperaceae	G5 S1	10	FAC
<i>Carex saximontana</i> Mack.	Rocky Mountain sedge	Cyperaceae	G5 S1	10	FACU
<i>Carex sprengei</i> Dewey ex Spreng.	Sprengel's sedge	Cyperaceae	G5 S2	10	FACU/FAC
<i>Cyperus acuminatus</i> Torr. & Hook.	tapertip flatsedge	Cyperaceae		7	OBL

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Cyperus bipartitus</i> Torr.	slender flatsedge	Cyperaceae		10	FACW/OBL
<i>Cyperus lupulinus</i> (Spreng.) Marcks	Great Plains flatsedge	Cyperaceae		4	FACU/UPL
<i>Cyperus squarrosus</i> L.	bearded flatsedge	Cyperaceae		5	OBL
<i>Eleocharis atropurpurea</i> (Retz.) Kuntz	purple spikerush	Cyperaceae		9	FACW
<i>Lipocarpa aristulata</i> (Coville) G.C. Tucker	smallflower halfchaff sedge	Cyperaceae		8	FACW
<i>Shepherdia argentea</i> (Pursh) Nutt.	silver buffaloberry	Elaeagnaceae		7	UPL/FACU
<i>Pyrola minor</i> L.	snowline wintergreen	Ericaceae		8	FACU
<i>Euphorbia spathulata</i> Lam.	warty spurge	Euphorbiaceae		5	FACU
<i>Astragalus australis</i> (L.) Lam.	Indian milkvetch	Fabaceae		6	UPL

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Astragalus canadensis</i> L. var. <i>canadensis</i>	painted milkvetch	Fabaceae		5	FAC/FACW
<i>Astragalus leptaleus</i> A. Gray	park milkvetch	Fabaceae	G3G4 S2	8	OBL
<i>Dalea leporina</i> (Aiton) Bullock	foxtail prairie clover	Fabaceae		9	UPL
<i>Pedimelum esculentum</i> (Pursh) Rydb.	Indaian breadroot	Fabaceae		7	FAC
<i>Pedimelum hypogaeum</i> (Nutt.) Rydb.	subterranean Indian breadroot	Fabaceae		9	FAC
<i>Vicia ludoviciana</i> Nutt.	Louisiana vetch	Fabaceae		7	UPL
<i>Eustoma grandiflorum</i> (Raf.) Shinnars	prairie gentian	Gentianaceae	G5T5 S3S4	7	FACW
<i>Ribes americanum</i> Mill.	American black currant	Grossulariaceae	G5 S2	7	FACW/FAC
<i>Hippuris vulgaris</i> L.	Mare's tail	Hippuridaceae		6	OBL
<i>Phacelia denticulata</i> Osterh.	Rocky Mountain phacelia	Hydrophyllaceae	G3 SU	6	UPL
<i>Sisyrinchium pallidum</i> Cholewa & Douglass M. Hend.	pale blue-eyed grass	Iridaceae	G3 S2	7	FAC

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Juncus alpinoarticulatus</i> Chaix.	northern green rush	Juncaceae		9	OBL
<i>Juncus articulatus</i> L.	jointleaf rush	Juncaceae		0	OBL
<i>Juncus brachycephalus</i> (Engelm.) Buchenau	smallhead rush	Juncaceae	G5 S1	5	OBL
<i>Juncus hallii</i> Engelm.	Hall's rush	Juncaceae		5	FAC
<i>Juncus nevadensis</i> S. Watson	Sierra rush	Juncaceae		8	FACW
<i>Juncus tenuis</i> Willd.	poverty rush	Juncaceae		0	FAC
<i>Triglochin palustris</i> L.	marsh arrowgrass	Juncaginaceae		7	OBL
<i>Agastache foeniculum</i> (Pursh) Kuntze	blue giant hyssop	Lamiaceae	G5 S1	3	FACU
<i>Hedeoma hispida</i> Pursh	rough false pennyroyal	Lamiaceae		5	UPL

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Monarda pectinata</i> Nutt.	pony beebalm	Lamiaceae		5	UPL
<i>Lemna minuta</i> Kunth	least duckweed	Lemnaceae		5	OBL
<i>Spirodela polyrrhiza</i> (L.) Schleid.	common duckmeat	Lemnaceae		0	OBL
<i>Wolffia borealis</i> (Engelm. ex Hegelm.) Landolt ex Landolt & Wildi	northern watermeal	Lemnaceae		5	OBL
<i>Allium schoenoprasum</i> L.	wild chives	Liliaceae	G5T5 S1	7	FACU/FACW
<i>Lilium philadelphicum</i> L.	wood lily	Liliaceae	G5 S3S4	9	FACU/FAC
<i>Linum pratense</i> (J.B.S. Norton) Small	meadow flax	Linaceae		6	UPL
<i>Mentzelia dispersa</i> S. Watson	Nevada blazingstar	Loasaceae		5	UPL
<i>Mentzelia oligosperma</i> Nutt. ex Sims	chickenthief	Loasaceae		5	UPL
<i>Ammannia robusta</i> Heer & Regel	grand redstem	Lythraceae		7	OBL

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Callirhoe involucrata</i> (Torr. & A. Gray) A. Gray	purple poppymallow	Malvaceae		5	UPL
<i>Oenothera canescens</i> Torr. & Frém.	spotted evening primrose	Onagraceae		4	FAC
<i>Oenothera coloradensis</i> (Rydb.) W.L. Wagner & Hoch	Colorado butterflyweed	Onagraceae	G3T2 S1	8	FAC/FACW
<i>Corallorhiza striata</i> Lindl.	striped coralroot	Orchidaceae		7	UPL/FACU
<i>Corallorhiza wisteriana</i> Conrad.	spring coralroot	Orchidaceae		8	FACU/FAC
<i>Cypripedium parviflorum</i> Salisb. var. <i>pubescens</i> (Willd.) Knight	greater yellow lady's slipper	Orchidaceae		9	FACW
<i>Goodyera oblongifolia</i> Raf.	western rattlesnake plantain	Orchidaceae		9	FACU
<i>Platanthera stricta</i> Lindl.	slender bog orchid	Orchidaceae		8	FACW
<i>Spiranthes diluvialis</i> Sheviak	Ute Lady's tresses	Orchidaceae	G2G3 S2	7	FACW
<i>Spiranthes romanzoffiana</i> Cham.	hooded Lady's tresses	Orchidaceae		7	OBL/FACW
<i>Orobanche uniflora</i> L.	oneflowered broomrape	Orobanchaceae		6	UPL/FACU
<i>Parnassia fimbriata</i> Koenig.	fringed grass of Parnassus	Parnassiaceae		8	OBL
<i>Parnassia palustris</i> L. var. <i>montanensis</i> (Fernald & Rydb. ex Rydb.) C.L. Hitchc.	small flowered grass of Parnassus	Parnassiaceae		7	OBL

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Plantago elongata</i> Pursh	prairie plantain	Plantaginaceae		7	FACW
<i>Aristida basiramea</i> Engelm. ex Vasey	forked threeawn	Poaceae	G5 S1	7	UPL
<i>Aristida dichotoma</i> Michx.	churchmouse threeawn	Poaceae		5	FACU/UPL
<i>Aristida oligantha</i> Michx.	prairie threeawn	Poaceae		5	UPL
<i>Bromus pubescens</i> Muhl. ex Willd.	hairy woodland brome	Poaceae		6	FACU
<i>Danthonia spicata</i> (L.) P. Beauv. ex Roem. & Schult.	poverty oatgrass	Poaceae		7	UPL
<i>Dichanthelium acuminatum</i> (Sw.) Gould & C.A. Clark	hairy panicgrass	Poaceae		8	FAC
<i>Elymus glaucus</i> Buckley ssp. <i>glaucus</i>	blue wildrye	Poaceae		7	FACU
<i>Elymus virginicus</i> L.	Virginia wildrye	Poaceae		5	FAC/FACW
<i>Eragrostis hypnoides</i> (Lam.) Brit. et al	teal lovegrass	Poaceae		0	OBL

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Hesperostipa neomexicana</i> (Thurb.) Barkworth	New Mexico feathergrass	Poaceae		8	UPL
<i>Hesperostipa spartea</i> (Trin.) Barkworth	porcupinegrass	Poaceae		10	UPL
<i>Muhlenbergia mexicana</i> (L.) Trin.	Mexican muhly	Poaceae		8	FACW/FAC
<i>Muhlenbergia minutissima</i> (Steud.) Swallen	annual muhly	Poaceae		8	FAC
<i>Oryzopsis asperifolia</i> Michx.	roughleaf ricegrass	Poaceae		7	FAC
<i>Phragmites australis</i> (Cav.) Trin. ex Steud. ssp. <i>americanus</i> Saltonst., Peterson & Soreng	common reed	Poaceae		3	FACW
<i>Sorghastrum nutans</i> (L.) Nash	Indiangrass	Poaceae		10	FACU
<i>Sphenopholis intermedia</i> (Rydb.) Rydb	slender wedgescale	Poaceae		5	FAC
<i>Sphenopholis obtusata</i> (Michx.) Scribn.	prairie wedgescale	Poaceae		5	FAC
<i>Sporobolus heterolepis</i> (A. Gray) A. Gray	prairie dropseed	Poaceae		9	UPL/FACU
<i>Sporobolus nealleyi</i> Vasey	gyp dropseed	Poaceae		9	UPL

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Gilia sinuata</i> Douglas ex Benth.	rosy gilia	Polemoniaceae		8	UPL
<i>Polemonium occidentale</i> Greene ssp. <i>occidentale</i>	western polemonium	Polemoniaceae		8	FACW
<i>Eriogonum umbellatum</i> Torr. var. <i>ramulosum</i> Reveal	sulphur flower	Polygonaceae		7	UPL
<i>Fallopia scandens</i> (L.) Holub.	climbing false buckwheat	Polygonaceae		0	FACU
<i>Potamogeton diversifolius</i> Raf.	waterthread pondweed	Potamogetonaceae	G5 S1	5	OBL
<i>Stuckenia vaginata</i>	sheathed pondweed	Potamogetonaceae		5	OBL
<i>Anagallis minima</i> (L.) Krause	chaffweed	Primulaceae	G5 S1	5	FACW
<i>Androsace filiformis</i> Retz.	filiform rockjasmine	Primulaceae		8	FACW
<i>Glaux maritima</i> L.	sea milkwort	Primulaceae		7	OBL
<i>Lysimachia ciliata</i> L.	fringed loosestrife	Primulaceae		6	FACW

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Lysimachia thyrsiflora</i> L.	tufted loosestrife	Primulaceae	G5 S1	8	OBL
<i>Actaea rubra</i> (Aiton) Willd. ssp. <i>arguta</i> (Nutt.) Hultén	red baneberry	Ranunculaceae		9	FACU
<i>Ranunculus abortivus</i> L.	littleleaf buttercup	Ranunculaceae		8	FAC/FACW
<i>Ranunculus pensylvanicus</i> L. f.	Pennsylvania buttercup	Ranunculaceae		8	FACW
<i>Ranunculus ranunculinus</i> (Nutt.) Rydb.	tadpole buttercup	Ranunculaceae		7	FAC/FACU
<i>Ceanothus herbaceus</i> Raf.	Jersey tea	Rhamnaceae		7	FACU
<i>Agrimonia striata</i> Michx.	roadside agrimony	Rosaceae		7	FACU
<i>Amelanchier utahensis</i> Koehne	Utah serviceberry	Rosaceae		6	FAC/UPL
<i>Crataegus chrysocarpa</i> Ashe	fireberry hawthorn	Rosaceae	G5 S1	5	FAC/FACU
<i>Crataegus erythropoda</i> Ashe	cerro hawthorn	Rosaceae		6	FAC/FACU
<i>Crataegus succulenta</i>	fleshy hawthorn	Rosaceae		5	FAC/FACU
<i>Potentilla arguta</i> Pursh	tall cinquefoil	Rosaceae		7	FAC

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<i>Potentilla rupincola</i> Osterh.	rock cinquefoil	Rosaceae	G2 S2	7	UPL
<i>Prunus pensylvanica</i> L.f.	pin cherry	Rosaceae		6	FACU/UPL
<i>Prunus pumila</i> L. var. <i>besseyi</i> (L.H. Baily) Gleason	sandcherry	Rosaceae		10	UPL
<i>Ruppia cirrhosa</i> (Petagna) Grande	spiral ditchgrass	Ruppiaceae		5	OBL
<i>Populus balsamifera</i> L.	balsam poplar	Salicaceae		6	FACW/FAC
<i>Salix discolor</i> Muhl.	pussy willow	Salicaceae		7	FACW
<i>Anemopsis californica</i> (Nutt.) Hool. & Arn.	yerba mansa	Saururaceae		0	FACW/OBL
<i>Agalinis tenuifolia</i> (Vahl) Raf. var. <i>parviflora</i> (Nutt.) Pennell	slenderleaf false foxglove	Scrophulariaceae		10	FAC
<i>Bacopa rotundifolia</i> (Michx.) Wettst.	water hysop	Scrophulariaceae		8	OBL
<i>Besseya wyomingensis</i> (A. Nelson) Rydb.	Wyoming kittentails	Scrophulariaceae	G5 S1	6	FAC
<i>Gratiola neglecta</i> Torr.	clammy hedgehyssop	Scrophulariaceae		8	OBL
<i>Linaria canadensis</i> (L.) Chaz. var. <i>texana</i> (Scheele) Pennell	blue toadflax	Scrophulariaceae		8	UPL

Species	Common Name	Family (PLANTS)	Tracked by CNHP	FQI #	Wetland (Great Plains/ Western Mountains)
<i>Mimulus suksdorfii</i> A. Gray	Sukdorf's monkeyflower	Scrophulariaceae		6	FACW/FACU
<i>Penstemon eriantherus</i> Pursh	fuzzy tongue penstemon	Scrophulariaceae	G4 S1	5	UPL
<i>Scrophularia lanceolata</i> Pursh	lanceleaf figwort	Scrophulariaceae		5	FAC
<i>Smilax lasioneura</i> Hook.	Blue Ridge carrionflower	Smilacaceae	G5 S3S4	7	FAC
<i>Sparganium eurycarpum</i> Engelm.	broadfruit bur-reed	Sparganiaceae	G5 S2	6	OBL
<i>Viola sororia</i> Willd.	Bog violet	Violaceae		8	FAC

