**ESA CHARACTERISTICS**

**River Basin[s]:** Oldman River

**Natural Region[s]:**
- Rocky Mountain
- Parkland
- Grassland

**Natural Subregion[s]:**
- Montane
- Foothills Parkland
- Foothills Fescue

**Area:**
- 20,398.9 hectares
- 204.0 km²

**Density of Human Features:**
- Well 0.05 heads/km²
- Road 0.56 km/km²
- Pipeline 0.10 km/km²

**SIGNIFICANCE RATING:** National

- R1 Contains 36 element(s) of conservation concern
- Contains rare or unique landforms
  - Mokowan Butte erosional remnants
- Contains habitat for focal species
- Contains important wildlife habitat
- Contains riparian areas
  - a Contains headwater streams
  - b Contains intact riparian areas
  - c Contains riparian areas along the six major rivers
- Contains large natural areas
- Contains sites of recognized significance
**Amphibians and Reptiles**
- Leopard frog
- Mallow-leaved ninebark

**Birds**
- Black-headed grosbeak
- Maling grape fern
- Calliope hummingbird
- Mountain hollyhock
- Ferruginous hawk
- Nodding trisetum
- Hooded merganser
- Northern bladderpod
- Trumpeter swan
- Onion grass
- Parry’s sedge

**Fish**
- River shiner
- Pasture sedge

**Insects**
- Pale swallowtail
- Purple rattlesnakeroot
- Striped meadowhawk
- Slender cress

**Mammals**
- Grizzly bear
- Tall trisetum

**Vascular Plants**
- Alpine foxtail
- Wavy-leaved chickweed
- Blister sedge
- Western blue flag
- Blue camas
- Woodland brome
- Botrychium spathulatum
- Woollen-breeches
- Conimitella williamsii
- Nodding trisetum
- Geyer’s onion
- Northern bladderpod
- Linear-leaved montia
- Onion grass
- Large-flowered lungwort
- Parry’s sedge
- Linear-leaved montia
- Purple rattlesnakeroot
- Long-leaved arnica
- Slender cress
- Macloskey’s violet
- Tall trisetum
- Wavy-leaved chickweed
- Woodland brome
- Western blue flag
- Woolen-breeches

**Vegetation Communities**
- Limber pine / common bearberry
- Creeping juniper
1. Contains 253 element(s) of conservation concern
2. Contains rare or unique landforms
   - Barnaby Ridge Area patterned ground
   - Beaver Mines Area valleys, v-shaped valleys
   - Beaver Mines Area volcanic rocks
   - Coleman Area volcanic rocks
   - Crowsnest Lake Area karst springs
   - Crowsnest Mountain klippes
   - Crowsnest Pass flatirons
   - Drywood Mountain Area hanging valleys
   - Lundbreck Area hogbacks
   - Lundbreck Area river terraces, rock-cut terraces
   - Ma Butte Area volcanic rocks
   - Newman Peak Area volcanic rocks
   - Plateau Mountain Area limestone pavement
   - Thunder Mountain Area water gaps
   - Turtle Mountain Area rock falls
   - West Castle Mountain mountains, castellated mountains
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   - a. Contains headwater streams
   - b. Contains intact riparian areas
   - c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance

**Natural Region(s):**
- Rocky Mountain Grassland
- Parkland

**Natural Subregion(s):**
- Subalpine
- Montane
- Alpine
- Foothills Fescue
- Foothills Parkland

**River Basin(s):**
- Oldman River
- Bow River

**Area:**
- 398,552.0 hectares
- 3,985.5 km²

**Density of Human Features:**
- Well 0.05 heads/km²
- Road 0.33 km/km²
- Pipeline 0.11 km/km²
### Elements of Conservation Concern

#### Amphibians and Reptiles
- Leopard frog

#### Birds
- Black-headed grosbeak
- Cassin’s finch
- Ferruginous hawk
- Trumpeter swan

#### Insects
- Acadian hairstreak
- Arrowhead blue
- Astarte fritillary
- Blue copper
- Bronze copper
- Gillette’s checkerspot
- Henry’s copper
- Icarioides blue
- Little copper
- Lorquin’s admiral
- Moss’s elfin
- Oreas anglewing
- Pacific forktail
- Pacific fritillary
- Pale swallowtail
- Purple azure
- Sheridan’s green hairstreak

#### Liverworts
- Athalamia hyalina
- Chiloscyphus pallescens
- Conocephalum conicum
- Diplothyllum taxifolium
- Jungermannia atrovirens
- Jungermannia sphaerocarpa
- Lophozia ascendens

#### Mosses
- Alpiner broom moss
- Alpine curly heron’s bill moss
- Alpine grimmia
- Alpine lemming moss
- Atrichum selwynii
- Aubacornium androgynum
- Brachythecium plumosum
- Brachythecium reflexum
- Broken-leaf moss
- Bryum amblyodon
- Bryum calobryoides
- Bryum calophyllum
- Buxbaumia piperi
- Cirriphyllum cirrosum
- Common extinguisher moss
- Curl-leaved fork moss
- Desmatodon leucostoma
- Desmatodon systylus
- Dichodontium olympicum
- Didymodon vinealis
- Donian beardless moss
- Donian grimmia
- Drepanolcladus crassicostatus
- Encalypta brevicolla
- Encalypta spathulata

#### Vascular Plants
- Alpine foxtail
- Alpine harebell
- Alpine spleenwort
### Elements of Conservation Concern (continued)

<table>
<thead>
<tr>
<th>Alpine townsendia</th>
<th>Gaston’s cliff brake</th>
<th>Nodding trisetum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ascending grape fern</td>
<td>Geyer’s onion</td>
<td>Onion grass</td>
</tr>
<tr>
<td>Awnless trisetum</td>
<td>Glacier sedge</td>
<td>Pacific bluegrass</td>
</tr>
<tr>
<td>Back’s sedge</td>
<td>Ground-fir</td>
<td>Pale alpine fleabane</td>
</tr>
<tr>
<td>Big sagebrush</td>
<td>Hairy buttercup</td>
<td>Pale blue-eyed grass</td>
</tr>
<tr>
<td>Bitter-root</td>
<td>Hairy cinquefoil</td>
<td>Papaver pygmaeum</td>
</tr>
<tr>
<td>Blue camas</td>
<td>Hawk’s-beard</td>
<td>Parry’s rush</td>
</tr>
<tr>
<td>Blue suksdorfia</td>
<td>Intermediate hawk’s-beard</td>
<td>Pasture sedge</td>
</tr>
<tr>
<td>Bluegrass</td>
<td>Jones’ cumbine</td>
<td>Pathfinder</td>
</tr>
<tr>
<td>Botrychium michiganense</td>
<td>Lance-leaved grape fern</td>
<td>Peltaea glabella ssp simplex</td>
</tr>
<tr>
<td>Botrychium pinnatum</td>
<td>Lance-leaved lungwort</td>
<td>Pinesap</td>
</tr>
<tr>
<td>Botrychium spathulatum</td>
<td>Large-flowered brickellia</td>
<td>Pink false dandelion</td>
</tr>
<tr>
<td>Broad-lipped twayblade</td>
<td>Large-flowered lungwort</td>
<td>Porsild’s whitlow-grass</td>
</tr>
<tr>
<td>Broad-scaled sedge</td>
<td>Large-leaved lupine</td>
<td>Prairie false dandelion</td>
</tr>
<tr>
<td>Broom sedge</td>
<td>Least knotweed</td>
<td>Presl sedge</td>
</tr>
<tr>
<td>Browned sedge</td>
<td>Least lupine</td>
<td>Purple sedge</td>
</tr>
<tr>
<td>Canada brome</td>
<td>Lemonn’s rock cress</td>
<td>Purple sweet cicely</td>
</tr>
<tr>
<td>Carex cordillerana</td>
<td>Limber pine</td>
<td>Ragwort</td>
</tr>
<tr>
<td>Conimitella williamsii</td>
<td>Linanthus</td>
<td>Regel’s rush</td>
</tr>
<tr>
<td>Corymbose everlasting</td>
<td>Linear-leaved scorpionweed</td>
<td>Rockstar</td>
</tr>
<tr>
<td>Creeping fleabane</td>
<td>Little rice grass</td>
<td>Salt-marsh sand spurry</td>
</tr>
<tr>
<td>Draba densifolia</td>
<td>Low willowherb</td>
<td>Saxifraga ferruginea</td>
</tr>
<tr>
<td>Draba lingipes</td>
<td>Low yellow evening-primrose</td>
<td>Saxifraga odontoloma</td>
</tr>
<tr>
<td>Dwarf bitter-root</td>
<td>Lyall’s scorpionweed</td>
<td>Scented everlasting</td>
</tr>
<tr>
<td>Early buttercup</td>
<td>Macloskey’s violet</td>
<td>Scribner’s wheat grass</td>
</tr>
<tr>
<td>Eaton’s aster</td>
<td>Marsh felwort</td>
<td>Shrubby beardtongue</td>
</tr>
<tr>
<td>Epilobium clavatum</td>
<td>Meadow aster</td>
<td>Sitka romanzoffia</td>
</tr>
<tr>
<td>Epilobium glaberrimum ssp</td>
<td>Melic grass</td>
<td>Slender bog orchid</td>
</tr>
<tr>
<td>fastigiatum</td>
<td>Mimulus tilingii</td>
<td>Slender cress</td>
</tr>
<tr>
<td>Epilobium lactiflorum</td>
<td>Mingan grape fern</td>
<td>Slender hair grass</td>
</tr>
<tr>
<td>Festuca subulata</td>
<td>Mountain cress</td>
<td>Slender phlox</td>
</tr>
<tr>
<td>Few-flowered salt-meadow</td>
<td>Mountain hollyhock</td>
<td>Small baby-blue-eyes</td>
</tr>
<tr>
<td>grass</td>
<td>Mountain lady’s-slipper</td>
<td>Small yellow monkeyflower</td>
</tr>
<tr>
<td>Field grape fern</td>
<td>Nevada rush</td>
<td>Small-flowered rockstar</td>
</tr>
<tr>
<td>Flame-colored lousewort</td>
<td>Nodding arnica</td>
<td>Small-leaved montia</td>
</tr>
<tr>
<td>Fleabane</td>
<td>Nodding scorzonella</td>
<td>Smooth-leaved cinquefoil</td>
</tr>
<tr>
<td>Fringe-cups</td>
<td></td>
<td>Spike redtop</td>
</tr>
<tr>
<td>Front-range fleabane</td>
<td></td>
<td>Spreading stonecrop</td>
</tr>
</tbody>
</table>
Steller’s rock brake
Stem-clasping arnica
Straight-leaf moonwort
Suksdorfia
Tall trisetum
Tiny-flowered fescue
Trifid-leaved fleabane
Tufted tall manna grass
Two-leaved Bedstraw
Viola praemorsa ssp linguifolia
Water speedwell
Waterpod
Watson’s knotweed
Wavy-leaved chickweed
Western false-aphodel
Western fescue
Western larch
Western maidenhair fern
Western red cedar
Western ribgrass
Western twayblade
Whitebark pine
White-veined wintergreen
Woodland brome
Woollen-breeches
Wyeth’s lupine

Vegetation Communities
Aspen / thimbleberry
Balsam poplar - aspen / alpine foxtail - bluejoint
Big sagebrush - alder-leaved buckthorn
Big sagebrush - saskatoon
Douglas-fir - limber pine / ground juniper / mountain rough fescue
Drummond’s willow / bluejoint
Limber pine scree woodland
Subalpine fir - limber pine - aspen / veiny meadow rue
Subalpine fir - whitebark pine - Engelmann spruce / crowberry
Western larch / thimbleberry
Whitebark pine / ground juniper - common bearberry

Municipal District of Pincher Creek No. 9
Municipal District of Ranchland No. 66
Kananaskis Improvement District
Municipality of Crowsnest Pass
Municipal District of Foothills No. 31
Improvement District No. 4 (Waterton)
ESA CHARACTERISTICS

Natural Region(s): Rocky Mountain
Natural Subregion(s): Montane
River Basin(s): Oldman River

Area:
64.3 hectares
0.6 km²

Density of Human Features:
Well 0 heads/km²
Road 0 km/km²
Pipeline 0 km/km²

SIGNIFICANCE RATING: National

☑ 1 Contains 0 element(s) of conservation concern
☑ 2 Contains rare or unique landforms
  Lundbreck Area hogbacks
☐ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑ 5 Contains riparian areas
  ☑ a Contains headwater streams
  ☐ b Contains intact riparian areas
  ☑ c Contains riparian areas along the six major rivers
☑ 6 Contains large natural areas
☐ 7 Contains sites of recognized significance
**ESA Characteristics**

**Criterion**
- Contains 7 element(s) of conservation concern
- Contains rare or unique landforms
- Contains habitat for focal species
- Contains important wildlife habitat
- Contains riparian areas
  - Contains headwater streams
  - Contains intact riparian areas
  - Contains riparian areas along the six major rivers

- Contains large natural areas
- Contains sites of recognized significance

**Natural Region(s):** Rocky Mountain Grassland

**Natural Subregion(s):** Montane Foothills Fescue

**River Basin(s):** Oldman River

**Area:**
- 9,290.6 hectares
- 92.9 km²

**Density of Human Features:**
- Well 0 heads/km²
- Road 0.50 km/km²
- Pipeline 0 km/km²

Prepared by: Fiera Biological Consulting
Amphibians and Reptiles
Leopard frog

Mosses
*Aulacomnium androgynum*
Broken-leaf moss
*Jaffueliobryum wrightii*
*Pohlia atropurpurea*

Vascular Plants
Eaton’s aster

Vegetation Communities
Douglas-fir - limber pine / ground juniper / mountain rough fescue
ESA CHARACTERISTICS

River Basin(s): Bow River
Natural Region(s): Rocky Mountain Parkland
Natural Subregion(s): Montane Foothills Parkland
Area: 6,775.7 hectares
67.8 km²
Density of Human Features:
Well 0.01 heads/km²
Road 0.43 km/km²
Pipeline 0 km/km²

SIGNIFICANCE RATING: Provincial

☐ 1 Contains 0 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
   Pekisko Area crag-and-tail
☐ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☐ 5 Contains riparian areas
   a Contains headwater streams
   b Contains intact riparian areas
   c Contains riparian areas along the six major rivers
☐ 6 Contains large natural areas
☐ 7 Contains sites of recognized significance

Prepared by: Fiera Biological Consulting
ESA CHARACTERISTICS

CRITERION

☑ 1 Contains 1 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☐ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑ 5 Contains riparian areas
☐ a Contains headwater streams
☐ b Contains intact riparian areas
☐ c Contains riparian areas along the six major rivers
☐ 6 Contains large natural areas
☐ 7 Contains sites of recognized significance

ESA CHARACTERISTICS

Natural Region[s]: Rocky Mountain
Natural Subregion[s]: Montane
River Basin[s]: Bow River

Area:
195.4 hectares
2.0 km²

Density of Human Features:
Well 0 heads/km²
Road 0.89 km/km²
Pipeline 0 km/km²
Mosses
Grimmia teretinervis
ESA CHARACTERISTICS

CRITERION

☑️ 1 Contains 13 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☑️ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑️ 5 Contains riparian areas
  ☑️ a Contains headwater streams
  ☑️ b Contains intact riparian areas
  ☐ c Contains riparian areas along the six major rivers
☑️ 6 Contains large natural areas
☑️ 7 Contains sites of recognized significance
  Bluerock Wildland Provincial Park
  Don Getty Wildland Provincial Park

ESA CHARACTERISTICS

Natural Region(s):
  Rocky Mountain

Natural Subregion(s):
  Subalpine
  Montane
  Alpine

River Basin(s):
  Bow River

Area:
  28,519.5 hectares
  285.2 km²

Density of Human Features:
  Well 0.04 heads/km²
  Road 0.06 km/km²
  Pipeline 0 km/km²

Prepared by: Fiera Biological Consulting

Mammals
Grizzly bear
Long-eared bat

Mosses
Alpine grimmia
Awl-leaved fork moss
Bryum algovicum
Desmatodon leucostoma
Homalothecium nevadense

Vascular Plants
Draba ventosa
Gaston’s cliff brake
Long-leaved arnica
Pale alpine fleabane
Parry’s rush
Scented everlasting
Scribner’s wheat grass
CRITERION

☑ 1 Contains 45 element(s) of conservation concern

☑ 2 Contains rare or unique landforms
   Kananaskis Country anticlinal mountains
   Kananaskis Country karst caves, joint caves

☑ 3 Contains habitat for focal species

☐ 4 Contains important wildlife habitat

☑ 5 Contains riparian areas
   a Contains headwater streams
   b Contains intact riparian areas
   c Contains riparian areas along the six major rivers

☑ 6 Contains large natural areas

☑ 7 Contains sites of recognized significance
   Bluerock Wildland Provincial Park
   Don Getty Wildland Provincial Park
   Elbow-Sheep Wildland Provincial Park

ESA CHARACTERISTICS

Natural Region(s): Rocky Mountain
Natural Subregion(s): Montane, Subalpine, Alpine
River Basin(s): Bow River

Area: 94,799.1 hectares
948.0 km²

Density of Human Features:
Well 0.08 heads/km²
Road 0.26 km/km²
Pipeline 0.07 km/km²
<table>
<thead>
<tr>
<th>Category</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birds</td>
<td>Drepanocladius crassicostatus</td>
</tr>
<tr>
<td>Calliope hummingbird</td>
<td>Fallacious screw moss</td>
</tr>
<tr>
<td>Insects</td>
<td>Homalothecium nevadense</td>
</tr>
<tr>
<td>Astarte fritillary</td>
<td>Hygroamblystegium tenax</td>
</tr>
<tr>
<td>Little copper</td>
<td>Jaffueliobryum rau</td>
</tr>
<tr>
<td>Sheridan’s green hairstreak</td>
<td>Mnium ambiguums</td>
</tr>
<tr>
<td>Thicket hairstreak</td>
<td>Philonotis marchica</td>
</tr>
<tr>
<td>Variegated meadowhawk</td>
<td>Scouleria aquaticar</td>
</tr>
<tr>
<td>Liverworts</td>
<td>Sieve-toothed moss</td>
</tr>
<tr>
<td>Jungermannia atrovirens</td>
<td>Vascular Plants</td>
</tr>
<tr>
<td>Mammals</td>
<td>Alpine bladder catchfly</td>
</tr>
<tr>
<td>Grizzly bear</td>
<td>Broad-lipped twayblade</td>
</tr>
<tr>
<td>Long-eared bat</td>
<td>Corymbose everlasting</td>
</tr>
<tr>
<td>Mosses</td>
<td>Dwarf bulrush</td>
</tr>
<tr>
<td>Amblyodon dealbatus</td>
<td>Dwarf fleabane</td>
</tr>
<tr>
<td>Aulacomnium androgynum</td>
<td>Early buttercup</td>
</tr>
<tr>
<td>Awl-leaved fork moss</td>
<td>Epilobium lactiflorum</td>
</tr>
<tr>
<td>Broken-leaf moss</td>
<td>Gaston’s cliff brake</td>
</tr>
<tr>
<td>Bryum algovicum</td>
<td>Hairy cinquefoil</td>
</tr>
<tr>
<td>Bryum muehlenbeckii</td>
<td>Hooker’s cinquefoil</td>
</tr>
<tr>
<td>Bryum turbinatum</td>
<td>Mingan grape fern</td>
</tr>
<tr>
<td>Cirriphyllum cirrosum</td>
<td>Northern bladderpod</td>
</tr>
<tr>
<td>Cynodontium tenellum</td>
<td>Papaver radicatum ssp kluanense</td>
</tr>
<tr>
<td>Dichelyma falcatum</td>
<td>Pellaea glabella ssp simplex</td>
</tr>
<tr>
<td>Didymodon subandreaeoides</td>
<td>Porsild’s whitlow-grass</td>
</tr>
<tr>
<td>Donian grimmia</td>
<td></td>
</tr>
</tbody>
</table>

Kananaskis Improvement District
Municipal District of
Bighorn No. 8

Municipal District of
Foothills No. 31

Municipal District of
Rocky View No. 44
ESA CHARACTERISTICS

Natural Region(s): Rocky Mountain
Natural Subregion(s): Montane
River Basin(s): Bow River

Area:
194.9 hectares
1.9 km²

Density of Human Features:
Well 0 heads/km²
Road 1.41 km/km²
Pipeline 0 km/km²

SIGNIFICANCE RATING: Provincial

CRITERION

☑ 1 Contains 5 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☐ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☐ 5 Contains riparian areas
☑ a Contains headwater streams
☐ b Contains intact riparian areas
☐ c Contains riparian areas along the six major rivers
☐ 6 Contains large natural areas
☐ 7 Contains sites of recognized significance
Liverworts
Jungermannia atrovirens

Mosses
Broken-leaf moss
Bryum algovicum
Bryum muehlenbeckii
Bryum turbinatum
1 Contains 7 element(s) of conservation concern

2 Contains rare or unique landforms

3 Contains habitat for focal species

4 Contains important wildlife habitat

5 Contains riparian areas
   a Contains headwater streams
   b Contains intact riparian areas
   c Contains riparian areas along the six major rivers

6 Contains large natural areas

7 Contains sites of recognized significance

Natural Region(s): Rocky Mountain
Natural Subregion(s): Montane
River Basin(s): Bow River

Area: 328.7 hectares
3.3 km²

Density of Human Features:
Well 0 heads/km²
Road 0.57 km/km²
Pipeline 0 km/km²
Amphibians and Reptiles
Leopard frog

Birds
Calliope hummingbird

Mosses
Bryum algovicum

Vascular Plants
Capitate sedge
Meadow bitter cress
Mingan grape fern
Pale blue-eyed grass
ESA CHARACTERISTICS

Natural Region(s): Rocky Mountain
Natural Subregion(s): Montane
River Basin(s): Bow River

Area:
66.3 hectares
0.7 km²

Density of Human Features:
Well 0 heads/km²
Road 0.87 km/km²
Pipeline 0 km/km²

SIGNIFICANCE RATING: Provincial

CRITERION

☑ 1 Contains 6 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☐ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☐ 5 Contains riparian areas
  ☐a Contains headwater streams
  ☐b Contains intact riparian areas
  ☐c Contains riparian areas along the six major rivers
☐ 6 Contains large natural areas
☐ 7 Contains sites of recognized significance

Prepared by: Fiera Biological Consulting
Birds
Calliope hummingbird

Insects
Variegated meadowhawk

Vascular Plants
Capitate sedge
Meadow bitter cress
Mingan grape fern
Pale blue-eyed grass
ESA CHARACTERISTICS

River Basin(s): Bow River
River Basin(s): Bow River
Natural Region(s): Rocky Mountain
Natural Region(s): Rocky Mountain
Natural Subregion(s): Montane
Natural Subregion(s): Montane
Natural Subregion(s): Foothills Parkland
Natural Subregion(s): Foothills Parkland

Area:
1,647.0 hectares
16.5 km²

Density of Human Features:
Well 0.06 heads/km²
Road 1.01 km/km²
Pipeline 0.29 km/km²

SIGNIFICANCE RATING: Provincial

☑ 1 Contains 6 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☐ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑ 5 Contains riparian areas
  a Contains headwater streams
☐ b Contains intact riparian areas
☐ c Contains riparian areas along the six major rivers
☐ 6 Contains large natural areas
☐ 7 Contains sites of recognized significance

Prepared by: Fiera Biological Consulting
**Birds**
Calliope hummingbird

**Insects**
Variegated meadowhawk

**Vascular Plants**
Capitate sedge
Meadow bitter cress
Mingan grape fern
Pale blue-eyed grass

Municipal District of Rocky View No. 44
**ESA CHARACTERISTICS CRITERION**

- **1** Contains 9 element(s) of conservation concern
- **2** Contains rare or unique landforms
- **3** Contains habitat for focal species
- **4** Contains important wildlife habitat
- **5** Contains riparian areas
  - **a** Contains headwater streams
  - **b** Contains intact riparian areas
  - **c** Contains riparian areas along the six major rivers
- **6** Contains large natural areas
- **7** Contains sites of recognized significance

**Natural Region(s):**
- Rocky Mountain
- Parkland
- Foothills

**Natural Subregion(s):**
- Montane
- Foothills Parkland
- Lower Foothills

**River Basin(s):**
- Bow River

**Area:**
- 8,512.9 hectares
- 85.1 km²

**Density of Human Features:**
- Well 0.45 heads/km²
- Road 1.15 km/km²
- Pipeline 0.29 km/km²

**SIGNIFICANCE RATING:** Provincial
Insects
Woodland skipper

Liverworts
Scapania apiculata

Mosses
Bryum algovicum
Bryum muehlenbeckii
Large-fruiting splachnum

Vascular Plants
Capitate sedge
Crawe’s sedge
Marsh gentian

Vegetation Communities
Douglas-fir - limber pine /
ground juniper / mountain
rough fescue
ESA CHARACTERISTICS CRITERION

1. Contains 1 element(s) of conservation concern
2. Contains rare or unique landforms
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   a. Contains headwater streams
   b. Contains intact riparian areas
   c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance

Natural Region(s): Rocky Mountain
                  Foothills
Natural Subregion(s): Subalpine
                     Upper Foothills
River Basin(s): Athabasca River
                Peace/Slave River

Area: 22,971.4 hectares
       229.7 km²

Density of Human Features:
Well 0.02 heads/km²
Road 0.11 km/km²
Pipeline 0.12 km/km²
Insects
Hudsonian old world swallowtail

Mammals
Grizzly bear
Woodland caribou - mountain ecotype
**ESA CHARACTERISTICS**

**Natural Region(s):** Rocky Mountain

**Natural Subregion(s):**
- Montane
- Subalpine

**River Basin(s):** Peace/Slave River

**Area:**
- 10,538.8 hectares
- 105.4 km²

**Density of Human Features:**
- Well 0 heads/km²
- Road 0.21 km/km²
- Pipeline 0.04 km/km²

---

**CRITERION**

- **☑** 1. Contains 2 element(s) of conservation concern
- **☐** 2. Contains rare or unique landforms
- **☑** 3. Contains habitat for focal species
- **☐** 4. Contains important wildlife habitat
- **☑** 5. Contains riparian areas
  - a. Contains headwater streams
  - b. Contains intact riparian areas
  - c. Contains riparian areas along the six major rivers
- **☑** 6. Contains large natural areas
- **☐** 7. Contains sites of recognized significance

---

**SIGNIFICANCE RATING:** Provincial

Contains 2 element(s) of conservation concern
Contains rare or unique landforms
Contains habitat for focal species
Contains important wildlife habitat
Contains riparian areas
Contains headwater streams
Contains intact riparian areas
Contains riparian areas along the six major rivers
Contains large natural areas
Contains sites of recognized significance
Insects
Napaea fritillary

Mammals
Grizzly bear

Vascular Plants
Northern rough fescue
**ESA CHARACTERISTICS**

**River Basin[s]:** Peace/Slave River

**Natural Region[s]:** Rocky Mountain

**Natural Subregion[s]:** Montane

**Area:** 2,854.0 hectares

**Density of Human Features:**
- Well: 0 heads/km²
- Road: 0.04 km/km²
- Pipeline: 0 km/km²

**SIGNIFICANCE RATING:** Provincial

- Contains 0 element(s) of conservation concern
- Contains rare or unique landforms
- Contains habitat for focal species
- Contains important wildlife habitat
- Contains riparian areas
  - Contains headwater streams
  - Contains intact riparian areas
  - Contains riparian areas along the six major rivers
- Contains large natural areas
- Contains sites of recognized significance

**Prepared by:** Fiera Biological Consulting
1. Contains 69 element(s) of conservation concern
2. Contains rare or unique landforms
   - Grande Cache Area hogbacks
   - Grande Cache area water gaps
   - Redrock Creek-Kakwa River Area gorges/canyons
   - Stinking Creek-South Torren River warm springs
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   - a. Contains headwater streams
   - b. Contains intact riparian areas
   - c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance
   - Kakwa Wildland Provincial Park
   - Rock Lake Provincial Park
   - Rock Lake-Solomon Creek Wildland Provincial Park
   - Two Lakes Provincial Park
   - Willmore Wilderness Park

Natural Region(s):
- Rocky Mountain
- Foothills

Natural Subregion(s):
- Subalpine
- Upper Foothills
- Lower Foothills
- Alpine
- Montane

River Basin(s):
- Peace/Slave River
- Athabasca River

Area:
- 329,574.1 hectares
- 3,295.7 km²

Density of Human Features:
- Well 0.07 heads/km²
- Road 0.21 km/km²
- Pipeline 0.05 km/km²
**Insects**
Astarte fritillary
Dingy arctic fritillary
Hudsonian old world swallowtail
Little copper
Magdalena alpine

**Liverworts**
Athalamia hyalina
Barbilophozia kunzeana
Barbilophozia quadriloba
Tritomaria polita
Tritomaria scitula

**Mammals**
Grizzly bear
Woodland caribou - mountain ecotype

**Mosses**
Alpine lemming moss
Aongstroemia longipes
Aulacomnium acuminatum
Brachythecium plumosum
Bryobrittonia longipes
Bryum algovicum
Curl-leaved fork moss
Cynodontium alpestre
Cynodontium tenellum
Didymodon johansenii
Didymodon vinealis
Drooping-leaved fork moss
Fallacious screw moss
Hair-like pogonatum
Hyalothecium pinnatifidum
Hypnum pallescens
Mnium ambiguum
Myurella tenerrima
Oreas martiana
Plagiobryum zieri
Pseudoleskeella sibirica
Rhizomnium andrewsianum
Rhizomnium magnifolium
Scouleria aquatica
Seligeria campylopoda
Twisted-leaved grimmia
Urn-like pogonatum

**Vascular Plants**
Alaska willow
Alpine bladder catchfly
Alpine saxifrage
Alpine sweet grass
Arctic lousewort
Ascending grape fern
Botrychium pinnatum
Draba longipes

Was not contained within the image.
ESA CHARACTERISTICS

River Basin(s): Peace/Slave River
Natural Region(s): Rocky Mountain
Natural Subregion(s): Subalpine
ESA

Area:

66.4 hectares
0.7 km²
Density of Human Features:

Well 0 heads/km²
Road 1.38 km/km²
Pipeline 0 km/km²

CRITERION

☑️ 1 Contains 0 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☑️ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑️ 5 Contains riparian areas
☐  a Contains headwater streams
☐  b Contains intact riparian areas
☐  c Contains riparian areas along the six major rivers
☑️ 6 Contains large natural areas
☐ 7 Contains sites of recognized significance

Prepare by: Fiera Biological Consulting
Mammals

Woodland caribou - mountain ecotype
ESA CHARACTERISTICS

**Natural Region(s):** Rocky Mountain Foothills

**Natural Subregion(s):** Subalpine Upper Foothills

**River Basin(s):** Peace/Slave River

**Area:**
- 332.0 hectares
- 3.3 km²

**Density of Human Features:**
- Well 0 heads/km²
- Road 0.33 km/km²
- Pipeline 0 km/km²

**SIGNIFICANCE RATING:** Provincial

- Contains 0 element(s) of conservation concern
- Contains rare or unique landforms
- Contains habitat for focal species
- Contains important wildlife habitat
- Contains riparian areas
  - Contains headwater streams
  - Contains intact riparian areas
  - Contains riparian areas along the six major rivers
- Contains large natural areas
- Contains sites of recognized significance

Prepared by: Fiera Biological Consulting
Mammals
Woodland caribou - mountain ecotype
1. Contains 195 element(s) of conservation concern
2. Contains rare or unique landforms
   - Abraham Lake Area flatirons
   - Cadomin Area karst caves, joint caves
   - Canmore Area hoodoos
   - Canmore Area kames, kame terraces
   - Canmore Area rock-shelters
   - Canmore Area speleothems
   - Cardinal/Brazeau Confluence Area eskers
   - Lac des Arcs fluvialite lakes, alluvial fan dammed lakes
   - Landslide Lake Area landslide lakes
   - Limestone Mountain rock labyrinths
   - Nordegg Area karst caves, bedding caves
   - Nordegg Area non-patterned fens without internal lawns, spring fens
   - Nordegg Area tufa depositing springs
   - Pinto Lake Area paternoster lakes
   - Pinto Lake Area speleothems
   - Ram Falls Area waterfalls
   - Rocky Mountain House Area non-patterned fens without internal lawns, spring fens
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   - a. Contains headwater streams
   - b. Contains intact riparian areas
   - c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance
   - Canadian Rocky Mountains World Heritage Site
   - Bow Valley Provincial Recreation Area
   - Bow Valley Wildland Provincial Park
   - Brazeau Canyon Wildland Provincial Park
   - Don Getty Wildland Provincial Park
   - Kootenay Plains Ecological Reserve
   - Peter Lougheed Provincial Park
   - Rock Lake-Solomon Creek Wildland Provincial Park
   - Spray Valley Provincial Park
   - Wapiabi Provincial Recreation Area

Natural Region(s):
- Rocky Mountain
- Foothills
- Boreal

Natural Subregion(s):
- Subalpine
- Upper Foothills
- Alpine
- Montane
- Dry Mixedwood
- Lower Foothills

River Basin(s):
- North Saskatchewan River
- Athabasca River
- Red Deer River
- Bow River

Area:
- 943,827.4 hectares
- 9,438.3 km²

Density of Human Features:
- Well 0.05 heads/km²
- Road 0.25 km/km²
- Pipeline 0.07 km/km²

Prepared by: Fiera Biological Consulting
**Birds**  
Calliope hummingbird  
Ferruginous hawk  
Gray-cheeked thrush  
Hooded merganser  
Peregrine falcon  

**Insects**  
Astarte fritillary  
Dingy arctic fritillary  
Henry’s copper  
Lake emerald  
Little copper  
Salmassellus steganothrix  
Thicket hairstreak  
Variegated meadowhawk  
Western red damsel  
Whitehouse’s emerald  

**Mammals**  
Grizzly bear  
Woodland caribou - mountain ecotype  

**Liverworts**  
Anastrophyllum assimile  
Anastrophyllum helleranum  
Athalamia hyalina  
Barbilophozia attenuata  
Barbilophozia quadriloba  
Chiloscyphus pallescens  
Cryptocolea imbricata  
Gymnomitrion corallioides  
Lophozia grandiretis  
Lophozia pellucida  
Mannia fragrans  
Marsupella commutata  
Marsupella revoluta  
Moerckia hibernica  
Pellia neesiana  
Sauteria alpina  
Scapania apiculata  
Scapania brevicaulis  
Scapania cuspiduligera  
Tritomaria scitula  

**Mosses**  
Aloe-like rigid screw moss  
Alpine lemming moss  
Amblyodon dealbatus  
Amphidium mougetii  
Anomobryum filiforme  
Aongstroemia longipes  
Bent screw moss  
Brown moss  
Bryobrittonia longipes  
Bryum algovicum  
Bryum amblyodon  
Bryum arcticum  
Bryum calobryoides  
Bryum pallens  
Bryum schleicheri  
Bryum stirtonii  
Bryum uliginosum  
Cirriphyllum cirrosum  
Conaria compacta  
Cuspidate earth moss  
Cynodontium schisti  
Cyrtonmium hymenophylloides  
Desmatodon laureri  
Desmatodon leucostoma  
Desmatodon sylustius  
Dicranum spadiceum  
Didymodon asferifolius  
Didymodon johanseni  
Didymodon subandreaeoides  
Donian beardless moss  
Encalypta brevicolla  
Encalypta brevipes  
Encalypta intermedia  

**Thread bloom moss**
**Timmia norvegica**  
Twisted-leaved grimmia  
Urn-like pogonatum  

**Vascular Plants**  
Alaska willow  
Alpine bladder catchfly  
Alpine braya  
Alpine foxtail  
Alpine harebell  
Alpine saxifrage  
Alpine sedge  
Alpine sweet grass  
Arctic wintergreen  
Ascending grape fern  
Beautiful cotton grass  
Bluegrass  
*Botrychium michiganense*  
*Botrychium pinnatum*  
*Botrychium spathulatum*  
Capitate sedge  
Changeable willow  
Corymbose everlasting  
Crave’s sedge  
Draba fladnizensis  
*Drummond’s cinquefoil*  
Dwarf bulrush  
Dwarf fleabane  
Engelmann’s spike-rush  
*Epilobium lactiflorum*  
Flame-colored lousewort  
Gaston’s cliff brake  
Glacier sedge  
Hairy cinquefoil  
Hooker’s cinquefoil  
*Huperzia haleakalae*  
Kananaskis whitlow-grass  
Lance-leaved grape fern  
Lapland reed grass  
Lapland rose-bay  
Large-flowered lousewort  
Leather grape fern  
Little-seed rice grass  
*Luzula acuminata*  
Macoun’s whitlow-grass  
Marsh felwort  
Marsh rush  
Meadow bitter cress  
Mingan grape fern  
Mountain bladder fern  
Mountain trisetum  
Nodding sedge  
Northern bladderpod  
One-headed everlasting  
Open sedge  
*Oxytropis campestris var davisii*  
Pale blue-eyed grass  
*Papaver radicatum ssp kluanense*  
Parry’s sedge  
*Pellaea glabella ssp occidentalis*  
*Pellaea glabella ssp simplex*  
Pink false dandelion  
Porsild’s whitlow-grass  
Primrose  
Purple sweet cicely  
Rocky Mountain willowherb  
Sand sedge  
Scented everlasting  
Seaside sedge  
Sitka columbine  
Slender-leaved sundew  
Smooth cliff brake  
Smooth woodsia  
Smooth-leaved cinquefoil  
Snow buttercup  
Spiderplant  
Steller’s rock brake  
Stem-clasping Arnica  
Telesonix  
Trifid-leaved fleabane  
Two-glumed rush  
Two-parted sedge  
Wood anemone  
Wooly lousewort  

**Vegetation Communities**  
Bog birch / mountain rough fescue  
Limber pine / common bearberry - creeping juniper  
Mountain rough fescue - hairy wild rye  
Mountain rough fescue - tufted hair grass  
Mountain sagewort - tall lungwort - hairy wild rye  
Northern wheat grass - dragonwort - pasture sagewort  
Northern wheat grass - needle-and-thread  
Northern wheat grass - slender wheat grass  
White spruce / fern moss
Clearwater County
Yellowhead County
Municipal District of
Bighorn No. 8
Mountain View County
Red Deer County
Kananaskis Improvement District
Improvement District
No. 12 (Jasper)
Improvement District
No. 9 (Banff)
1. Contains 2 element(s) of conservation concern
   - Morley Flats Area drumlins

2. Contains rare or unique landforms
   - Morley Flats Area drumlins

3. Contains habitat for focal species

4. Contains important wildlife habitat

5. Contains riparian areas
   - a. Contains headwater streams
   - b. Contains intact riparian areas
   - c. Contains riparian areas along the six major rivers

6. Contains large natural areas

7. Contains sites of recognized significance

**Natural Region(s):** Rocky Mountain
**Natural Subregion(s):** Montane
**River Basin(s):** Bow River

**Area:**
- 4,404.6 hectares
- 44.0 km²

**Density of Human Features:**
- Well 0.02 heads/km²
- Road 1.42 km/km²
- Pipeline 0.13 km/km²

**Significance Rating:** Provincial
Municipal District of Bighorn No. 8

Birds
Trumpeter swan

Mosses
Short-beaked rigid screw moss
1. Contains 266 element(s) of conservation concern
2. Contains rare or unique landforms
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   - a. Contains headwater streams
   - b. Contains intact riparian areas
   - c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance
   Waterton-Glacier International Peace Park

Natural Region(s):
- Rocky Mountain Parkland

Natural Subregion(s):
- Subalpine
- Montane
- Alpine
- Foothills Parkland

River Basin(s):
- Oldman River

Area:
- 51,214.1 hectares
- 512.1 km²

Density of Human Features:
- Well 0.03 heads/km²
- Road 0.23 km/km²
- Pipeline 0.03 km/km²

Prepared by: Fiera Biological Consulting
<table>
<thead>
<tr>
<th>Amphibians and Reptiles</th>
<th>Birds</th>
<th>Fish</th>
<th>Insects</th>
<th>Mammals</th>
<th>Liverworts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leopard frog</td>
<td></td>
<td></td>
<td></td>
<td>Jungermannia atrovirens</td>
<td>Asterella saccata</td>
</tr>
<tr>
<td>Black-headed grosbeak</td>
<td></td>
<td></td>
<td></td>
<td>Lophozia ascendens</td>
<td>Athalamia hyalina</td>
</tr>
<tr>
<td>Calliope hummingbird</td>
<td>Cassin’s finch</td>
<td></td>
<td></td>
<td>Mannia triandra</td>
<td>Calypogeia suecica</td>
</tr>
<tr>
<td>Cassin’s finch</td>
<td>Hooded merganser</td>
<td>Deepwater sculpin</td>
<td></td>
<td>Marsupella sphacelata</td>
<td>Cephalozia bicuspidata</td>
</tr>
<tr>
<td>Hooded merganser</td>
<td>Trumpeter swan</td>
<td>Pygmy whitefish</td>
<td></td>
<td>Pellia epiphylla</td>
<td>Chiloscyphus polyanthos</td>
</tr>
<tr>
<td>Trumpeter swan</td>
<td></td>
<td>River shiner</td>
<td></td>
<td>Pellia neesiana</td>
<td>Conocephalum conicum</td>
</tr>
<tr>
<td>Fish</td>
<td></td>
<td></td>
<td></td>
<td>Radula complanata</td>
<td>Diplophyllum taxifolium</td>
</tr>
<tr>
<td>Deepwater sculpin</td>
<td></td>
<td></td>
<td></td>
<td>Scapania curta</td>
<td>Harpanthus flotovianus</td>
</tr>
<tr>
<td>Pygmy whitefish</td>
<td></td>
<td></td>
<td></td>
<td>Scapania paludosa</td>
<td>Campylium radicale</td>
</tr>
<tr>
<td>River shiner</td>
<td></td>
<td></td>
<td></td>
<td>Scapania subalpina</td>
<td>Chalk brittle moss</td>
</tr>
<tr>
<td>Insects</td>
<td></td>
<td></td>
<td></td>
<td>Scapania undulata</td>
<td>Cirriphyllum cirrosus</td>
</tr>
<tr>
<td>Arrowhead blue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cladophora bolanderi</td>
</tr>
<tr>
<td>Blue copper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Common extinguisher moss</td>
</tr>
<tr>
<td>Dot-tailed whiteface</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Conardia compacta</td>
</tr>
<tr>
<td>Henry’s copper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Desmatodon leucostoma</td>
</tr>
<tr>
<td>Icarioides blue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Desmatodon sylvis</td>
</tr>
<tr>
<td>Lorquin’s admiral</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Didichondrium olympicum</td>
</tr>
<tr>
<td>Pacific fritillary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dicranum angustum</td>
</tr>
<tr>
<td>Pale swallowtail</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dicranum spadiceum</td>
</tr>
<tr>
<td>Semiluna hairstreak</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Didymodon vinealis</td>
</tr>
<tr>
<td>Senecella calanoides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ditrichium montanum</td>
</tr>
<tr>
<td>Sheridan’s green hairstreak</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Donian beardless moss</td>
</tr>
<tr>
<td>Striped meadowhawk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Encalypta brevipes</td>
</tr>
<tr>
<td>Two-tailed swallowtail</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Encalypta intermedia</td>
</tr>
<tr>
<td>Western red damsel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Encalypta spathulata</td>
</tr>
<tr>
<td>Mammals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fontinalis antipyretica</td>
</tr>
<tr>
<td>Grizzly bear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Green shield moss</td>
</tr>
<tr>
<td>Red-tailed chipmunk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Green-cushioned weissia</td>
</tr>
<tr>
<td>Wandering shrew</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Grimmia caespiticia</td>
</tr>
<tr>
<td>Mosses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Grimmia ovalis</td>
</tr>
<tr>
<td>Alpine broom moss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hair-pointed grimmia</td>
</tr>
<tr>
<td>Alpine curly heron’s bill moss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Heterocladium dimorphum</td>
</tr>
<tr>
<td>Alpine grimmia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Homalothecium nevadense</td>
</tr>
<tr>
<td>Anoectangium aestivum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Homalothecium pinnatifidum</td>
</tr>
<tr>
<td>Aulacomnium androgynum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hygrohypnum molle</td>
</tr>
<tr>
<td>Bent screw moss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hygrohypnum ochraceum</td>
</tr>
<tr>
<td>Blytt’s fork moss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hypnum pallescens</td>
</tr>
<tr>
<td>Brachythecium calcareum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hypnum procerrimum</td>
</tr>
<tr>
<td>Brachythecium plumosum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hypnum recurvatum</td>
</tr>
<tr>
<td>Brachythecium reflexum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Large grimmia</td>
</tr>
<tr>
<td>Brachythecium rutabulum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Leptodictyum humile</td>
</tr>
<tr>
<td>Broken-leaf moss</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lescurae saxicola</td>
</tr>
<tr>
<td>Bryum algovicum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mountain forest grimmia</td>
</tr>
<tr>
<td>Bryum calobryoides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Orthotrichum pallens</td>
</tr>
<tr>
<td>Bryum cyclophyllum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pohlia annotina</td>
</tr>
<tr>
<td>Botrychium michiganense</td>
<td>Lace fern</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botrychium pallidum</td>
<td>Lance-leaved grape fern</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botrychium pedunculosum</td>
<td>Lance-leaved lungwort</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botrychium pinnatum</td>
<td>Large-flowered brickellia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botrychium spathulatum</td>
<td>Large-flowered lungwort</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botrychium x watertonense</td>
<td>Least knotweed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brewer’s monkeyflower</td>
<td>Least lupine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad-lipped twayblade</td>
<td>Leather grape fern</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad-scaled sedge</td>
<td>Lemmon’s rock cress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Browned sedge</td>
<td>Linanthus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changeable willow</td>
<td>Linear-leaved montia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creeping fleabane</td>
<td>Linear-leaved scorpionweed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draba densifolia</td>
<td>Little rice grass</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dwarf bitter-root</td>
<td>Long-leaved arnica</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dwarf fleabane</td>
<td>Low willowherb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dwarf grape fern</td>
<td>Low yellow evening-primrose</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early buttercup</td>
<td>Lyall’s scorpionweed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eaton’s aster</td>
<td>Macloskey’s violet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epilobium clavatum</td>
<td>Macoun’s cinquefoil</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epilobium glaberrimum ssp</td>
<td>Male fern</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epilobium lactiflorum</td>
<td>Mallow-leaved ninebark</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epilobium leptocarpum</td>
<td>Melic grass</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Festuca subulata</td>
<td>Mimulus tilingii</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Few-flowered salt-meadow</td>
<td>Mingan grape fern</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>grass</td>
<td>Mock orange</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fleabane</td>
<td>Mountain currant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front-range fleabane</td>
<td>Mountain dwarf-primula</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geyer’s onion</td>
<td>Mountain hollyhock</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ground-fir</td>
<td>Mountain lady’s-slipper</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gymnocarpium disjunctum</td>
<td>Mountain trisetum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hairy buttercup</td>
<td>Nodding arnica</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hairy cinquefoil</td>
<td>Nodding scorzonella</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawk’s-beard</td>
<td>Nodding trisetum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hooker’s cinquefoil</td>
<td>Northern beech fern</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate hawk’s-beard</td>
<td>Northern bladderpod</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jones’ columbine</td>
<td>Onion grass</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open sedge</td>
<td>Pride of New England</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Vascular Plants**

- Alpine foxtail
- Alpine sedge
- Alpine spleenwort
- Alpine townsendia
- American chickweed
- American saw-wort
- Awnless trisetum
- Back’s sedge
- Big sagebrush
- Blackened sedge
- Blister sedge
- Blue camas
- Blue suksdorfia
- Bluegrass
- Bolander’s quillwort
- Botrychium michiganense
- Lace fern
- Botrychium pallidum
- Lance-leaved grape fern
- Botrychium pedunculosum
- Lance-leaved lungwort
- Botrychium pinnatum
- Large-flowered brickellia
- Botrychium spathulatum
- Large-flowered lungwort
- Botrychium x watertonense
- Least knotweed
- Brewer’s monkeyflower
- Least lupine
- Broad-lipped twayblade
- Leather grape fern
- Broad-scaled sedge
- Lemmon’s rock cress
- Browned sedge
- Linear-leaved montia
- Changeable willow
- Linear-leaved scorpionweed
- Creeping fleabane
- Little rice grass
- Draba densifolia
- Long-leaved arnica
- Dwarf bitter-root
- Low willowherb
- Dwarf fleabane
- Low yellow evening-primrose
- Dwarf grape fern
- Lyall’s scorpionweed
- Early buttercup
- Macloskey’s violet
- Eaton’s aster
- Macoun’s cinquefoil
- Epilobium clavatum
- Male fern
- Epilobium glaberrimum ssp fastigiatum
- Mallow-leaved ninebark
- Epilobium lactiflorum
- Melic grass
- Epilobium leptocarpum
- Mimulus tilingii
- Festuca subulata
- Mingan grape fern
- Few-flowered salt-meadow grass
- Mock orange
- Fleabane
- Mountain currant
- Front-range fleabane
- Mountain dwarf-primula
- Geyer’s onion
- Mountain hollyhock
- Ground-fir
- Mountain lady’s-slipper
- Gymnocarpium disjunctum
- Mountain trisetum
- Hairy buttercup
- Nodding arnica
- Hairy cinquefoil
- Nodding scorzonella
- Hawk’s-beard
- Nodding trisetum
- Hooker’s cinquefoil
- Northern beech fern
- Intermediate hawk’s-beard
- Northern bladderpod
- Jones’ columbine
- Onion grass
- Open sedge
- Pride of New England
**Elements of Conservation Concern**

<table>
<thead>
<tr>
<th>Pacific bluegrass</th>
<th>Small-leaved montia</th>
<th>Woollen-breeches</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Papaver pygmaeum</em></td>
<td>Smooth-leaved cinquefoil</td>
<td></td>
</tr>
<tr>
<td>Paradoxical grape fern</td>
<td>Spike redtop</td>
<td></td>
</tr>
<tr>
<td>Parry’s rush</td>
<td><em>Stellaria obtusa</em></td>
<td></td>
</tr>
<tr>
<td>Pasture sedge</td>
<td><em>Stellaria umbellata</em></td>
<td></td>
</tr>
<tr>
<td>Pathfinder</td>
<td>Stem-clasping arnica</td>
<td></td>
</tr>
<tr>
<td>Payson’s sedge</td>
<td>Suksdorfia</td>
<td></td>
</tr>
<tr>
<td>Pinesap</td>
<td>Tall trisetum</td>
<td></td>
</tr>
<tr>
<td>Pink meadowsweet</td>
<td>Taper-fruit short-scale sedge</td>
<td></td>
</tr>
<tr>
<td>Presl sedge</td>
<td>Thurber’s bent grass</td>
<td></td>
</tr>
<tr>
<td>Purple rattlesnakeroot</td>
<td>Trilid-leaved fleabane</td>
<td></td>
</tr>
<tr>
<td>Purple sweet cicaely</td>
<td><em>Viola praemorsa ssp linguifolia</em></td>
<td></td>
</tr>
<tr>
<td>Ragwort</td>
<td>Viviparous fescue</td>
<td></td>
</tr>
<tr>
<td>Rockstar</td>
<td>Wallace’s little club-moss</td>
<td></td>
</tr>
<tr>
<td><em>Saxifraga ferruginea</em></td>
<td>Wavy-leaved chickweed</td>
<td></td>
</tr>
<tr>
<td>Scented everlasting</td>
<td>Western false-aspodel</td>
<td></td>
</tr>
<tr>
<td>Scribner’s wheat grass</td>
<td>Western fescue</td>
<td></td>
</tr>
<tr>
<td>Shrubby beardtongue</td>
<td>Western larch</td>
<td></td>
</tr>
<tr>
<td>Silvery everlasting</td>
<td>Western maidenhair fern</td>
<td></td>
</tr>
<tr>
<td>Sitka romanziolfa</td>
<td>Western polypody</td>
<td></td>
</tr>
<tr>
<td>Slender bog orchid</td>
<td>Western St. John’s-wort</td>
<td></td>
</tr>
<tr>
<td>Slender hair grass</td>
<td>Western twayblade</td>
<td></td>
</tr>
<tr>
<td>Small baby-blue-eyes</td>
<td>Western wakerobin</td>
<td></td>
</tr>
<tr>
<td>Small yellow monkeyflower</td>
<td>Western yew</td>
<td></td>
</tr>
<tr>
<td>Small-flowered hawk’s-beard</td>
<td>White-veined wintergreen</td>
<td></td>
</tr>
<tr>
<td>Small-flowered rockstar</td>
<td>Woodland brome</td>
<td></td>
</tr>
</tbody>
</table>

**Vegetation Communities**

- Bolander’s quillwort aquatic community

**Municipalities**

- Improvement District No. 4 [Waterton]
- Municipal District of Pincher Creek No. 9
- Cardston County
### ESA Characteristics

**Criteria**

1. **Contains 312 element(s) of conservation concern**
2. **Contains rare or unique landforms**
   - Nordegg Area tufa depositing springs
3. **Contains habitat for focal species**
4. **Contains important wildlife habitat**
5. **Contains riparian areas**
   - a. Contains headwater streams
   - b. Contains intact riparian areas
   - c. Contains riparian areas along the six major rivers
6. **Contains large natural areas**
7. **Contains sites of recognized significance**
   - Canadian Rocky Mountains World Heritage Site
   - Brazeau Canyon Wildland Provincial Park
   - Rock Lake-Solomon Creek Wildland Provincial Park
   - White Goat Wilderness Area
   - Whitehorse Wildland Provincial Park
   - Willmore Wilderness Park

### ESA Characteristics

**Natural Region(s):**
- Rocky Mountain
- Foothills

**Natural Subregion(s):**
- Alpine
- Subalpine
- Montane
- Upper Foothills

**River Basin(s):**
- Athabasca River
- North Saskatchewan River
- Peace/Slave River

**Area:**
- 1,123,115.9 hectares
- 11,231.2 km²

**Density of Human Features:**
- Well 0 heads/km²
- Road 0.03 km/km²
- Pipeline 0.01 km/km²

Prepared by: Fiera Biological Consulting
**Birds**
- Black swift
- Calliope hummingbird
- Peregrine falcon
- Willow ptarmigan

**Fish**
- Pygmy whitefish

**Insects**
- Astarte fritillary
- Dingy arctic fritillary
- Dot-tailed whiteface
- Henry's copper
- Hobomok skipper
- Little copper
- Rocky Mountain capshell
- Salmasellus steganothrix

**Liverworts**
- Anastrophyllum assimile
- Anastrophyllum helleranum
- Anastrophyllum michauxii
- Anastrophyllum saxicola
- Asterella lindenbergiana
- Athalamia hyalina
- Barbilophozia kunzeana
- Barbilophozia quadriloba
- Calypogeia integristipula
- Calypogeia sueica
- Cephalozia bicuspidata
- Chandonanthus setiformis
- Conocephalum conicum
- Diplophyllum taxifolium
- Gymnomitrion concinnatum
- Gymnomitrion corallioides
- Harpanthus flatovianus
- Jungermannia pumila
- Jungermannia sphaeocarpa
- Lophozia ascensens
- Lophozia badensis
- Lophozia capitata
- Lophozia excisa
- Lophozia grandiretis
- Lophozia incisa
- Lophozia obtusa
- Lophozia opacifolia
- Lophozia wenzelii
- Mannia pilosa
- Marsupella alpina
- Marsupella brevissima
- Marsupella revoluta
- Marsupella sparsifolia
- Marsupella sphacelata
- Moerckia blyttii
- Pellia endiviifolia
- Radula complanata
- Reboulia hemisphaerica
- Scapania apiculata
- Scapania cuspiduligera
- Scapania paludosa
- Scapania undulata
- Tritomaria polita
- Tritomaria scitula
- Grizzly bear
- Woodland caribou - mountain ecotype

**Mammals**
- Bug on a stick
- Cirripiphyllum cirrosus
- Cynodontium schisti
- Cynodontium tenellum
- Cyrtomnium hymenophylloides
- Desmatodon leucostoma
- Dichelyma falcatum
- Dicranum angustum
- Dicranum spadiceum
- Didymodon asperifolius
- Didymodon nigrescens
- Didymodon subandreaeoides
- Didymodon vinealis
- Ditrichum montanum
- Donian beardless moss
- Donian grimmia
- Drooping-leaved fork moss
- Encalypta breviolata
- Encalypta longicolla
- Encalypta spathulata
- Fallacious screw moss
- Froelichian splachnum
- Globe-fruit splachnum

**Mosses**
- Aloe-like rigid screw moss
- Alpine broom moss
- Alpine grimmia
- Alpine lemming moss
- Amblyodon dealbatus
- Andreea alpestris
- Andreea blyttii
- Anoectangiium aestivum
- Anomobryum filiforme
- Aongstroemia longipes
- Arctoia fulvella
- Aulacomnium androgynum
- Aulacomnium integrifolium
- Aulacomnium montanum
- Aulacomnium nitens
- Aulacomnium revolutum
- Aulacomnium subandreaeoides
- Aulacomnium vinealis
- Aulacomnium vinealis
- Aulacomnium vinealis
Grimmia mollis
Grimmia teretinervis
Hair-like pogonatum
Hair-pointed grimmia
Hairy-leaved beardless moss
Haller’s apple moss
Hercynian hair moss
Herzogiella seligeri
Heterocladium dimorphum
Homalothecium pinnatifidum
Hygrohypnum alpestre
Hygrohypnum cochlearifolium
Hygrohypnum eugyrium
Hygrohypnum molle
Hygrohypnum ochraceum
Hygrohypnum smithii
Hygrohypnum styriacum
Hylocomiastrum pyrenaicum
Hypnum callichroum
Hypnum pallescens
Hypnum procerrimum
Hypnum recurvatum
Jaffueliobryum wrightii
Lindberg’s bog moss
Loeskypnum badium
Long-stalked beardless moss
Luminous moss
Maidenhair moss
Meesia longiseta
Mnium ambiguum
Muhlenberg’s cord moss
Myurella sibirica
Narrow-leaved Chinese phoenix moss
Neat bog moss
Neckera pennata
Oligotrichum aligerum
Oligotrichum parallellum
Orthothecium intricatum
Orthothecium strictum
Orthotrichum pallasii
Orthotrichum rivulare
Pliogoniobryum marchica
Pliogoniobryum zieri
Pohlia andalusica
Pohlia annotina
Pohlia brevineris
Pohlia bulifera
Pohlia crudoides
Pohlia drummondii
Pohlia filum
Pohlia obtusifolia
Pohlia vexans
Porsild’s bryum
Pseudoleskea stenophylla
Pseudoleskeella sibirica
Pterygoneurn subsessile
Racomitrium aciculare
Racomitrium fasciculare
Racomitrium heterostichum
Racomitrium microcarpon
Racomitrium sudeticum
Red leaf moss
Red rock moss
Rhizomnium andrewsianum
Rhizomnium magnifolium
Rhizomnium nudum
Rhytidiadelphus squarrosus
Rigid screw moss
Schiastium trichodon
Scouleria aquatica
Sharp-pointed weissia
Short-beaked rigid screw moss
Slender splachnum
Spreading fringe moss
Sun grimmia
Thread bloom moss
Tongue-leaf small-kettle moss
Twisted-leaved grimmia
Ulota curvifolia
Undulated crane’s bill moss
Urn-like pogonatum

Vascular Plants
Alaska willow
Alpine alumroot
Alpine azalea
Alpine bitter cress
Alpine braya
Alpine saxifrage
Alpine sedge
Alpine sweet grass
Arctic lousewort
Arctic wintergreen
Ascending grape fern
Beautiful cotton grass
Botrychium pinnatum
Botrychium spathulatum
Braya humilis var. porsildii
Broad-scaled sedge
Changeable willow
Corymbose everlasting
Crawe’s sedge
Creeping fleabane
Draba fladnizensis
Draba glabella
Draba longipes
Draba ventosa
Drummond’s cinquefoil
Dwarf bulrush
Eaton’s aster
Epilobium clavatum
Epilobium lactiflorum
Epilobium leptocarpum
Epilobium luteum
Flattened spike-rush
Glacier sedge
Ground-fir
Hairy buttercup
Hairy cinquefoil
Hooker’s cinquefoil
Hooker’s sedge
Hudson Bay sedge

Huperzia haleakalae
Isoetes maritima
Isoetes occidentalis
Isoetes x truncata
Kananaskis whitlow-grass
Koenigia
Lance-leaved grape fern
Lapland reed grass
Lapland rose-bay
Large-flowered lousewort
Leafy braya
Leafy lousewort
Leather grape fern
Lemmon’s rock cress
Lens-fruited sedge
Letterman’s bluegrass
Macloskey’s violet
Macoun’s whitlow-grass
Marsh felwort
Mingan grape fern
Mountain bladder fern
Mountain cress
Mountain currant
Mountain mare’s-tail
Nodding arnica
Nodding sedge
Northern beech fern

Northern bent grass
Northern bur-reed
Northern rough fescue
One-headed everlasting
Oval-leaved blueberry
Pale alpine fleabane

Papaver radicatum ssp kluanense
Parry’s rush
Parry’s sedge
Pasture sedge

Pellaea glabella ssp simplex
Pink false dandelion
Polar grass
Porsild’s whitlow-grass
Poverty oat grass
Presl sedge
Primrose
Purple alpine sandwort
Purple sedge
Purple sweet cicely
Sandwort

Saxifraga ferruginea
Scented everlasting
Seaside sedge
Sitka columbine
Sitka romanzoffia
Slender bog orchid
Slender-leaved sundew
Small-headed sedge
Smooth woodsia
Snow buttercup

Spiderplant
Spreading stonecrop
Steller’s rock brake
Stem-clasping arnica
Telesonix
Thurber’s bent grass
Tiny-flowered fescue
Trifid-leaved fleabane
Tufted tall manna grass
Two-glumed rush
Two-parted sedge
Western buttercup
Western false-asphodel
Western hemlock
Western red cedar
Western ribgrass
Whitebark pine
Willow
Woolly lousewort
Woolly willow

Vegetation Communities
June grass - pasture sagewort - wild blue flax
Subalpine fir - whitebark pine - Engelmann spruce / crowberry
White birch - water birch / common bearberry
White spruce / prickly rose / fern moss
Whitebark pine - lodgepole pine / ground juniper - hairy wild rye - twinflower
Whitebark pine / ground juniper - common bearberry

Improvement District No. 12
(Jasper)
Municipality of Jasper
Yellowhead County

Improvement District No. 25
(Willmore Wilderness)
Improvement District No. 9
(Banff)
Clearwater County
ESA CHARACTERISTICS

CRITERION

☑ 1 Contains 212 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☑ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑ 5 Contains riparian areas
  ☑ a Contains headwater streams
  ☑ b Contains intact riparian areas
  ☑ c Contains riparian areas along the six major rivers
☑ 6 Contains large natural areas
☑ 7 Contains sites of recognized significance
  Canadian Rocky Mountains World Heritage Site
  Don Getty Wildland Provincial Park
  Ghost River Wilderness Area
  Peter Lougheed Provincial Park
  Siffleur Wilderness Area
  Spray Valley Provincial Park
  White Goat Wilderness Area

ESA CHARACTERISTICS

Natural Region(s):
Rocky Mountain
Foothills

Natural Subregion(s):
Alpine
Subalpine
Montane
Upper Foothills

River Basin(s):
Bow River
North Saskatchewan River
Red Deer River
Athabasca River

Area:
685,081.9 hectares
6,580.8 km²

Density of Human Features:
Well 0 heads/km²
Road 0.08 km/km²
Pipeline 0 km/km²

Prepared by: Fiera Biological Consulting
<table>
<thead>
<tr>
<th><strong>Birds</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Black swift</td>
<td>Scapania curta</td>
</tr>
<tr>
<td>Calliope hummingbird</td>
<td>Scapania cuspiduligera</td>
</tr>
<tr>
<td>Cassin’s finch</td>
<td>Scapania mucronata</td>
</tr>
<tr>
<td>Hooded merganser</td>
<td>Tritomaria polita</td>
</tr>
<tr>
<td></td>
<td>Tritomaria scitula</td>
</tr>
<tr>
<td><strong>Insects</strong></td>
<td></td>
</tr>
<tr>
<td>Astarte fritillary</td>
<td>Encalypta brevipes</td>
</tr>
<tr>
<td>Azure darner</td>
<td>Encalypta longicolla</td>
</tr>
<tr>
<td>Banff springs physa</td>
<td>Fissidens limbatus</td>
</tr>
<tr>
<td>Forcipate emerald</td>
<td>Froelichian splachnum</td>
</tr>
<tr>
<td>Henry’s copper</td>
<td>Green-cushioned weissia</td>
</tr>
<tr>
<td>Lake emerald</td>
<td>Heterocladium dimorphum</td>
</tr>
<tr>
<td>Lance-tipped darner</td>
<td>Hidden kettle moss</td>
</tr>
<tr>
<td>Little copper</td>
<td>Homalothecium pinnatifidum</td>
</tr>
<tr>
<td>Pacific forktail</td>
<td>Hypnum procerrimum</td>
</tr>
<tr>
<td>Salmasellus steganothrix</td>
<td>Hypnum recurvatum</td>
</tr>
<tr>
<td>Thicket hairstreak</td>
<td>Large grimmia</td>
</tr>
<tr>
<td>Variegated meadowhawk</td>
<td>Large-fruited splachnum</td>
</tr>
<tr>
<td>Vivid dancer</td>
<td>Lescuraea saxicola</td>
</tr>
<tr>
<td>Western red damsel</td>
<td>Long-stalked beardless moss</td>
</tr>
<tr>
<td>Whitehouse’s emerald</td>
<td>Maidenhair moss</td>
</tr>
<tr>
<td></td>
<td>Mnium ambiguum</td>
</tr>
<tr>
<td><strong>Liverworts</strong></td>
<td></td>
</tr>
<tr>
<td>Anastrophyllum michauxii</td>
<td>Myurella moss</td>
</tr>
<tr>
<td>Athalamia hyalina</td>
<td>Narrow-leaved Chinese phoenix moss</td>
</tr>
<tr>
<td>Barbilophozia binsteadii</td>
<td>Neckera penna</td>
</tr>
<tr>
<td>Conocephalum conicum</td>
<td>Orthothecium intricatum</td>
</tr>
<tr>
<td>Harpanthus flotovianus</td>
<td>Philonotis marchica</td>
</tr>
<tr>
<td>Jungermannia atrovirens</td>
<td>Plagiobryum zieri</td>
</tr>
<tr>
<td>Jungermannia obovata</td>
<td>Pohlia drummondii</td>
</tr>
<tr>
<td>Lophozia badensis</td>
<td>Pohlia longicolla</td>
</tr>
<tr>
<td>Lophozia grandiretis</td>
<td>Pseudoleskea patens</td>
</tr>
<tr>
<td>Lophozia wenzeli</td>
<td>Pseudoleskeella sibirica</td>
</tr>
<tr>
<td>Marsupella brevissima</td>
<td>Racomitrium sudeticum</td>
</tr>
<tr>
<td>Nardia breidleri</td>
<td>Scouleria aquatica</td>
</tr>
<tr>
<td>Nardia geoscyphus</td>
<td>Seligeria campylopoda</td>
</tr>
<tr>
<td>Porella cordaeana</td>
<td>Short-beaked rigid screw moss</td>
</tr>
<tr>
<td>Radula complanata</td>
<td>Timmia norvegica</td>
</tr>
<tr>
<td></td>
<td>Timmia sibirica</td>
</tr>
<tr>
<td><strong>Mammals</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tongue-leaf small-kettle moss</td>
</tr>
<tr>
<td></td>
<td>Twisted-leaved grimmia</td>
</tr>
<tr>
<td></td>
<td>Urn-like pogonatum</td>
</tr>
<tr>
<td><strong>Vascular Plants</strong></td>
<td></td>
</tr>
<tr>
<td>Alaska willow</td>
<td></td>
</tr>
<tr>
<td>Alpine bitter cress</td>
<td></td>
</tr>
</tbody>
</table>
Alpine bladder catchfly  
Alpine harebell  
Alpine saxifrage  
Alpine sedge  
Alpine sheep sorrel  
Arctic lousewort  
Ascending grape fern  
* Aster x maccallae  
Back’s sedge  
Beautiful cotton grass  
Bluegrass  
* Botrychium crenulatum  
* Botrychium pinnatum  
* Botrychium spathulatum  
Braya humilis var porsildii  
Broad-lipped twayblade  
Broad-scaled sedge  
Browned sedge  
Capitate sedge  
Changeable sedge  
Draba longipes  
Draba ventosa  
Drummond’s cinquefoil  
Dwarf bulrush  
Dwarf grape fern  
Early buttercup  
Eaton’s aster  
* Epilobium clavatum  
* Epilobium lactiflorum  
* Epilobium leptocarpum  
Flame-colored lousewort  
Gaston’s cliff brake  
Glacier sedge  
* Gymnocarpium disjunctum  
Hairy cinquefoil  
Hawk’s-beard  
Hooker’s cinquefoil  
Hooker’s sedge  
Huperzia haleakalae  
Lance-leaved grape fern  
Lapland rose-bay  
Large-flowered lousewort  
Leafy braya  
Leafy lousewort  
Lemmon’s rock cress  
Lens-fruited sedge  
Lettermann’s bluegrass  
Long-leaved arnica  
Low bent grass  
Macoun’s whitlow-grass  
Male fern  
Mingan grape fern  
Mountain bladder fern  
Mountain cress  
Mountain currant  
Mountain trisetum  
Nodding arnica  
Northern bent grass  
Northern bur-reed  
One-headed everlasting  
Open sedge  
Oval-leaved blueberry  
* Oxytropis campestris var davisi  
Pale alpine fleabane  
Pale blue-eyed grass  
Papaver radicatum ssp kluanense  
Parry’s rush  
Parry’s sedge  
Pasture sedge  
Pellaea glabella ssp occidentalis  
Pink false dandelion  
Poa laxa ssp banffiana  
Porsild’s whitlow-grass  
Potentilla subjuga  
Presl sedge  
Rockstar  
Sandwort  
Saxifraga ferruginea  
Scented everlasting  
Seaside sedge  
Shrubby beardtongue  
Sitka romanzi  
Slender bog orchid  
Small-flowered rockstar  
Small-headed sedge  
Smooth-leaved cinquefoil  
* Stellaria umbellata  
Steller’s rock brake  
Stem-clasping arnica  
Thurber’s bent grass  
Tiny-flowered fescue  
Trifid-leaved fleabane  
Two-glumed rush  
Two-parted sedge  
Western blue flag  
Western hemlock  
Western red cedar  
Woolly willow  

**Vegetation Communities**  
Aspen / hairy wild rye - showy aster avalanche community  
June grass - pasture sagewort - wild blue flax  
Limber pine / common bearberry - creeping juniper  
Richardson needlegrass - June grass - small-leaved everlasting  
Subalpine fir - limber pine - aspen / veiny meadow rue  
Subalpine fir - whitebark pine - Engelmann spruce / crowberry  
Whitebark pine - lodgepole pine / ground juniper - hairy wild rye - twinflower  
Whitebark pine / ground juniper - common bearberry
Municipalities

Improvement District No. 9 (Banff)
Kananaskis Improvement District
Municipal District of Bighorn No. 8
Clearwater County
Improvement District No. 12 (Jasper)
ESA CHARACTERISTICS

Natural Region(s):
Rocky Mountain

Natural Subregion(s):
Montane
Subalpine

River Basin(s):
North Saskatchewan River

Area:
3,761.2 hectares
37.6 km²

Density of Human Features:
Well 0 heads/km²
Road 0.06 km/km²
Pipeline 0 km/km²

SIGNIFICANCE RATING: Provincial

CRITERION

☑️ 1 Contains 17 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☑️ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑️ 5 Contains riparian areas
  ✓ a Contains headwater streams
  ✓ b Contains intact riparian areas
  ✓ c Contains riparian areas along the six major rivers
☑️ 6 Contains large natural areas
☑️ 7 Contains sites of recognized significance
  Kootenay Plains Ecological Reserve
  Siffleur Wilderness Area
Mammals
Woodland caribou - mountain ecotype

Mosses
Aloe-like rigid screw moss
Bent screw moss
Cuspidate earth moss
Orthothecium intricatum
Pseudoleskeella sibirica
Rigid screw moss

Vascular Plants
Alpine braya
Dwarf bulrush
Northern bladderpod
Pale blue-eyed grass
Parry’s sedge
Pellaea glabella ssp occidentalis
Seaside sedge

Vegetation Communities
Limber pine / common bearberry
- creeping juniper
Northern wheat grass -
dragonwort - pasture sagewort
Northern wheat grass -
small-leaved everlasting
Western wheat grass -
one-flowered ironplant
ESA CHARACTERISTICS CRITERION

☑ 1 Contains 9 element(s) of conservation concern

☐ 2 Contains rare or unique landforms

☑ 3 Contains habitat for focal species

☐ 4 Contains important wildlife habitat

☑ 5 Contains riparian areas
   - ☑ a Contains headwater streams
   - ☑ b Contains intact riparian areas
   - ☑ c Contains riparian areas along the six major rivers

☐ 6 Contains large natural areas

☑ 7 Contains sites of recognized significance
   Beauvais Lake Provincial Park

SIGNIFICANCE RATING: Provincial

ESA

Natural Region(s):
Rocky Mountain

Natural Subregion(s):
Montane

River Basin(s):
Oldman River

Area:
1,154.6 hectares
11.5 km²

Density of Human Features:
Well 0 heads/km²
Road 0.52 km/km²
Pipeline 0 km/km²

Prepared by: Fiera Biological Consulting
Amphibians and Reptiles
Leopard frog

Birds
Black-headed grosbeak

Insects
Woodland skipper

Mammals
Grizzly bear

Vascular Plants
Hairy buttercup
Limber pine
Mountain lady’s-slipper
Watson’s knotweed
Woodland brome

Vegetation Communities
Douglas-fir - limber pine / ground juniper / mountain rough fescue
**ESA CHARACTERISTICS**

**River Basin[s]:**
- Athabasca River

**Natural Region[s]:**
- Rocky Mountain
- Foothills

**Natural Subregion[s]:**
- Subalpine
- Alpine
- Upper Foothills
- Montane

**Area:**
- 31,582.0 hectares
- 315.8 km²

**Density of Human Features:**
- Well 0.01 heads/km²
- Road 0.01 km/km²
- Pipeline 0 km/km²

**SIGNIFICANCE RATING:** International

- **Contains** 5 element(s) of conservation concern
- **Contains** rare or unique landforms
- **Contains** habitat for focal species
- **Contains** important wildlife habitat
- **Contains** riparian areas
  - a Contains headwater streams
  - b Contains intact riparian areas
  - c Contains riparian areas along the six major rivers
- **Contains** large natural areas
- **Contains** sites of recognized significance
  - Canadian Rocky Mountains World Heritage Site
  - Rock Lake Provincial Park
  - Rock Lake-Solomon Creek Wildland Provincial Park
Mosses
Amblyodon dealbatus
Didymodon johansenii
Orthothecium strictum
Thread bloom moss

Vascular Plants
Telesonix

Yellowhead County
Improvement District No. 12
(Jasper)
Improvement District No. 25
(Willmore Wilderness)
ESA CHARACTERISTICS

River Basin(s): Bow River
Natural Region(s): Rocky Mountain
Natural Subregion(s): Montane, Subalpine, Alpine

Area: 12,705.9 hectares
127.1 km²

Density of Human Features:
Well 0 heads/km²
Road 0.08 km/km²
Pipeline 0 km/km²

CRITERION

☑ 1 Contains 3 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☑ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑ 5 Contains riparian areas
   ☑ a Contains headwater streams
   ☐ b Contains intact riparian areas
   ☐ c Contains riparian areas along the six major rivers
☑ 6 Contains large natural areas
☑ 7 Contains sites of recognized significance
   Bluerock Wildland Provincial Park
   Don Getty Wildland Provincial Park
   Elbow-Sheep Wildland Provincial Park
   Sheep River Provincial Park

SIGNIFICANCE RATING: Provincial

R 1 Contains 3 element(s) of conservation concern
£ 2 Contains rare or unique landforms
£ 3 Contains habitat for focal species
£ 4 Contains important wildlife habitat
R 5 Contains riparian areas
   R 6 Contains headwater streams
   R 7 Contains intact riparian areas
£ 8 Contains riparian areas along the six major rivers
R 9 Contains large natural areas
£ 10 Contains sites of recognized significance
   Bluerock Wildland Provincial Park
   Don Getty Wildland Provincial Park
   Elbow-Sheep Wildland Provincial Park
   Sheep River Provincial Park
**Mammals**
Grizzly bear
Long-eared bat

**Vascular Plants**
Creeping fleabane
Presl sedge
ESA CHARACTERISTICS

River Basin(s): Bow River

Natural Subregion(s):
- Subalpine
- Montane
- Alpine

Natural Region(s):
- Rocky Mountain

Area: 37,239.3 hectares
- 372.4 km²

Density of Human Features:
- Well 0.01 heads/km²
- Road 0.03 km/km²
- Pipeline 0.01 km/km²

ESA SIGNIFICANCE RATING: National

1. **Contains 60 element(s) of conservation concern**
2. **Contains rare or unique landforms**
   - Canmore Area rock-shelters
   - Canmore Area speleothems
   - Kananaskis Country rockglaciers
   - Lac des Arcs fluviatile lakes, alluvial fan dammed lakes
3. **Contains habitat for focal species**
4. **Contains important wildlife habitat**
5. **Contains riparian areas**
   - a) Contains headwater streams
   - b) Contains intact riparian areas
   - c) Contains riparian areas along the six major rivers
6. **Contains large natural areas**
7. **Contains sites of recognized significance**
   - Bow Valley Wildland Provincial Park
**ELEMENTS OF CONSERVATION CONCERN**

**Kananaskis Improvement District**

**Municipal District of Bighorn No. 8**

**Improvement District No. 9 (Banff)**

**Birds**
- Calliope hummingbird
- Hooded merganser

**Insects**
- Gillette’s checkerspot
- Little copper
- Sheridan’s green hairstreak
- Thicket hairstreak
- Variegated meadowhawk

**Liverworts**
- Chiloscyphus pallescens
- Lophozia badensis
- Pellia endiviifolia
- Scapania apiculata

**Mosses**
- Amphidium mougeotii
- Bent screw moss
- Bryum algovicum
- Bryum muehlenbeckii
- Cirriphyllum cirrosum
- Cuspidate earth moss
- Cyrtomium hymenophylloides
- Desmatodon systylius
- Didymodon subandreaeoides
- Donian beardless moss
- Hairy-leaved beardless moss
- **Hygroamblystegium tenax**
- **Jaffueliobryum wrightii**
- Large-fruitied splachnum
- Maidenhair moss
- **Myurella tenerrima**
- Narrow-leaved Chinese phoenix moss
- **Philonotis marchica**
- Plagiobryum zieri
- Porsild’s bryum
- Rigid screw moss
- Short-beaked rigid screw moss
- **Timmia norvegica**
- Twisted-leaved grimmia

**Vascular Plants**
- Alpine foxtail
- Alpine saxifrage
- Corymbose everlasting
- Crawe’s sedge
- Dwarf bulrush
- Engelmann’s spike-rush
- **Epilobium luteum**
- Field grape fern
- Flame-colored lousewort
- Gaston’s cliff brake
- Hairy cinquefoil
- **Lance-leaved grape fern**
- Little-seed rice grass
- Macoun’s cinquefoil
- Marsh gentian
- Mingan grape fern
- Mountain mare’s-tail
- Pasture sedge
- **Pellaea glabella ssp occidentalis**
- **Pellaea glabella ssp simplex**
- Slender-leaved sundew
- Smooth cliff brake
- Smooth woodsia
- Steller’s rock brake

**Vegetation Communities**
- White spruce / dwarf birch - beaked willow / bristle-leaved sedge
**ESA CHARACTERISTICS**

**CRITERION**

- **1** Contains 89 element(s) of conservation concern
- **2** Contains rare or unique landforms
  - Cadomin Area karst caves, joint caves
- **3** Contains habitat for focal species
- **4** Contains important wildlife habitat
- **5** Contains riparian areas
  - a Contains headwater streams
  - b Contains intact riparian areas
  - c Contains riparian areas along the six major rivers
- **6** Contains large natural areas
- **7** Contains sites of recognized significance
  - Canadian Rocky Mountains World Heritage Site
  - Whitehorse Wildland Provincial Park

**ESA CHARACTERISTICS**

- **Natural Region[s]:** Rocky Mountain
- **Natural Subregion[s]:** Subalpine, Alpine
- **River Basin[s]:** Athabasca River, North Saskatchewan River

- **Area:** 17,414.9 hectares, 174.1 km²
- **Density of Human Features:**
  - Well 0 heads/km²
  - Road 0.03 km/km²
  - Pipeline 0 km/km²

Prepared by: Fiera Biological Consulting
Insects
Astarte fritillary
Dingy arctic fritillary
Henry’s copper
Little copper

Liverworts
Anastrophyllum assimile
Barbilophozia attenuata
Barbilophozia quadrioba
Gymnomitrion corallioides
Lophozia pellucida
Marsupella commutata
Marsupella revoluta
Scapania brevicaulis
Scapania cuspiduligera
Tritomaria scitula

Mammals
Grizzly bear
Long-legged bat

Mosses
Alpine lemming moss
Amblyodon dealbatus
Anomobryum filiforme
Aongstroemia longipes
Bent screw moss
Bryobrittonia longipes
Bryum algovicum
Bryum amblyodon
Bryum calobryoides
Bryum schleicheri
Bryum stirtionii
Cirriphyllum cirrosus
Cystopteris hymenophylloides

Desmatodon laureri
Desmatodon leucostoma
Desmatodon systerius
Didymodon asperifolius
Didymodon johansenii
Didymodon subandreaeoides
Froelichian splachnum
Globe-fruited splachnum
Hygrohypnum styriacum
Myurella tenerrima
Orthotrichum strictum
Orthotrichum pallens
Orthotrichum pylaisii
Plagiobryum demissum
Plagiobryum zieri
Porsild’s bryum
Pseudoleskeella sibirica
Red leaf moss
Seligeria campylopoda
Seligeria subimmersa
Urn-like pogonatum

Vascular Plants
Alaska willow
Alpine braya
Alpine harebell
Alpine saxifrage
Alpine sedge
Alpine sweet grass
Arctic lousewort
Arctic wintergreen
Beautiful cotton grass
Bluegrass
Botrychium pinnatum
Capitate sedge
Draba fladnizensis
Drummond’s cinquefoil
Dwarf fleabane
Flame-colored lousewort
Glacier sedge
Hairy cinquefoil
Huperzia haleakalae
Lance-leaved grape fern
Lapland reed grass
Large-flowered lousewort
Macoun’s whitlow-grass
Mingan grape fern
Nodding sedge
Northern bladderpod
One-headed everlasting
Oxytropis campestris var davisii
Papaver radicatum ssp kluanense
Scented everlasting
Sitka columbine
Smooth-leaved cinquefoil
Telesonix
Trifid-leaved fleabane
Two-glumed rush
Two-parted sedge
Woolly lousewort

Vegetation Communities
Drummond’s willow / veiny meadow rue
Mountain sagewort - tall lungwort - hairy wild rye
White spruce / fern moss
CRITERION

☑ 1 Contains 1 element(s) of conservation concern
☑ 2 Contains rare or unique landforms
   Grande Cache area water gaps
☑ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑ 5 Contains riparian areas
   ✓ a Contains headwater streams
   ✓ b Contains intact riparian areas
   ☑ c Contains riparian areas along the six major rivers
☑ 6 Contains large natural areas
☑ 7 Contains sites of recognized significance
   Sulphur Gates Provincial Recreation Area

ESA CHARACTERISTICS

Natural Region(s): Rocky Mountain
Natural Subregion(s): Montane, Subalpine
River Basin(s): Peace/Slave River

Area:
1,090.1 hectares
10.9 km²

Density of Human Features:
Well 0 heads/km²
Road 0.54 km/km²
Pipeline 0 km/km²
Mammals
Grizzly bear

Mosses
*Homalothecium pinnatifidum*
ESA CHARACTERISTICS

CRITERION

☑️ 1 Contains 116 element(s) of conservation concern

☑️ 2 Contains rare or unique landforms
   Grande Cache area water gaps

☑️ 3 Contains habitat for focal species

☐ 4 Contains important wildlife habitat

☑️ 5 Contains riparian areas
   ✓ a Contains headwater streams
   ✓ b Contains intact riparian areas
   ☐ c Contains riparian areas along the six major rivers

☑️ 6 Contains large natural areas

☑️ 7 Contains sites of recognized significance
   Canadian Rocky Mountains World Heritage Site
   Willmore Wilderness Park

ESA CHARACTERISTICS

Natural Region(s):
Rocky Mountain Foothills

Natural Subregion(s):
Subalpine Alpine
Upper Foothills Montane

River Basin(s):
Peace/Slave River Athabasca River

Area:
460,541.8 hectares
4,605.4 km²

Density of Human Features:
Well 0 heads/km²
Road 0 km/km²
Pipeline 0 km/km²

Prepared by: Fiera Biological Consulting
### Elements of Conservation Concern

#### Insects
- Astarte fritillary
- Azure darner
- Dingy arctic fritillary
- Henry’s copper
- Lake emerald
- Little copper
- Magdalena alpine
- Napaea fritillary
- Pacific fritillary
- Ringed emerald

#### Liverworts
- Barbilophozia kunzeana
- Barbilophozia quadriloba
- Chiloscyphus pallescens
- Chiloscyphus polyanthos
- Gymnomitrium concinnatum
- Moerckia blyttii
- Pleuroclada alberscens
- Scapania glaucocephala
- Tritomaria scitula

#### Mammals
- Brown lemming
- Grizzly bear
- Woodland caribou - mountain ecotype

#### Mosses
- Aloe-like rigid screw moss
- Alpine broom moss
- Amblyodon dealbatus
- Andreaea blyttii
- Aulacomnium androgynum
- Blytt’s fork moss
- Bryobrittonia longipes
- Bryum algovicum
- Cyrtomium hymenophyloides
- Dichelyma falcatum
- Drooping-leaved fork moss
- Grimmia mollis
- Hair-like pogonatum
- Hercynian hair moss
- Homalothecium pinnatifidum
- Hygrohynnum cochlearifolium
- Leskeella nervosa
- Lindberg’s bog moss
- Mountain forest grimmia
- Myurella tenerrima
- Oligotrichum aligerum
- Oligotrichum parallellum
- Oreas martiana
- Plagiobryum zieri
- Pohlia drummondii
- Pohlia obtusifolia
- Porsild’s bryum
- Pterygoneurum subsessile
- Racemobrittonia aciculare
- Racemobrittonia fasciculare
- Racemobrittonia heterostichum
- Red rock moss
- Sharp-pointed weissia
- Spreading fringe moss
- Thread bloom moss
- Timmia norvegica
- Twisted-leaved grimmia
- Urn-like pogonatum

#### Vascular Plants
- Alaska willow
- Alpine azalea
- Alpine bitter cress
- Alpine bladder catchfly
- Alpine braya
- Alpine harebell
- Alpine saxifrage
- Alpine sweet grass
- Arctic lousewort
- Arctic wintergreen
- Ascending grape fern
- Beautiful cotton grass
- Botrychium pinnatum
- Changeable willow
- Creeping fleabane
- Draba fladnizensis
- Draba longipes
- Epilobium lactiflorum
- Flame-colored lousewort
- Forked wormwood
- Glacier sedge
- Hudson Bay sedge
- Huperzia haleakalae
- Koenigia
- Large-flowered lousewort
- Lemmon’s rock cress
- Mingan grape fern
- Mountain cress
- Mountain currant
- Northern rough fescue
- One-headed everlasting
- Oval-leaved blueberry
- Oxytropis campestris var davisii
- Papaver radicatum ssp kluanense
- Pedicularis oederi
- Porsild’s whitlow-grass
- Primrose
- Purple alpine sandwort
- Purple sweet cicely
- Rose mandarin
- Saxifraga ferruginea
- Scented everlasting
- Seaside sedge
- Sitka columbine
Snow buttercup
Spiderplant
Spreading stonecrop
Steller’s rock brake
Trifid-leaved fleabane
Two-glumed rush
Two-parted sedge
Wavy-leaved chickweed
Western buttercup
Whitebark pine
Woolly lousewort

**Vegetation Communities**
Northern rough fescue - hairy wild rye
Northern rough fescue - tufted hair grass
Whitebark pine - lodgepole pine / ground juniper - hairy wild rye - twinflower

**Municipalities**
Improvement District No. 25 (Willmore Wilderness)
Improvement District No. 12 (Jasper)
Municipal District of Greenview No. 16
Yellowhead County
Rocky Mountain

ESA CHARACTERISTICS

- Natural Region(s): Rocky Mountain, Foothills
- Natural Subregion(s): Subalpine, Upper Foothills, Alpine
- River Basin(s): Athabasca River

Area:
- 3,237.3 hectares
- 32.4 km²

Density of Human Features:
- Well: 0 heads/km²
- Road: 0.51 km/km²
- Pipeline: 0 km/km²

SIGNIFICANCE RATING: Provincial

☑ 1 Contains 5 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☐ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑ 5 Contains riparian areas
  ☑ a Contains headwater streams
  ☑ b Contains intact riparian areas
  ☐ c Contains riparian areas along the six major rivers
☑ 6 Contains large natural areas
☑ 7 Contains sites of recognized significance
  Rock Lake Provincial Park
  Rock Lake-Solomon Creek Wildland Provincial Park
**Mosses**

*Amblyodon dealbatus*

*Didymodon johansenii*

*Orthothecium strictum*

Thread bloom moss

**Vascular Plants**

Ascending grape fern
ESA CHARACTERISTICS

Natural Region(s): Rocky Mountain
Natural Subregion(s): Subalpine, Alpine
River Basin(s): Peace/Slave River

Area:
65,635.9 hectares
656.4 km²

Density of Human Features:
Well 0 heads/km²
Road 0 km/km²
Pipeline 0 km/km²

CRITERION

☑ 1 Contains 56 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☑ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑ 5 Contains riparian areas
   ✓ a Contains headwater streams
   ✓ b Contains intact riparian areas
   ☐ c Contains riparian areas along the six major rivers
☑ 6 Contains large natural areas
☑ 7 Contains sites of recognized significance
   Kakwa Wildland Provincial Park

SIGNIFICANCE RATING: Provincial

34
Liverworts
Athalamia hyalina

Mammals
Brown lemming
Grizzly bear
Woodland caribou - mountain ecotype

Mosses
Anomobryum filiforme
Bryum knowltonii
Cirriphyllum cirrosum
Cynodontium tenellum
Dichelyma falcatum
Didymodon johansenii
Didymodon subandreaeoides
Donian beardless moss
Drepanocladus crassicostatus
Mnium ambiguum
Myurella tenerrima
Orthothecium intricatum
Orthothecium strictum
Orthotrichum pallens
Philonotis marchica
Saxifraga ferruginea
Scouleria aquatica
Seligeria campylopora
Seligeria subimmersa
Sharp-pointed weissia
Timmia norvegica
Twisted-leaved grimmia

Vascular Plants
Alpine bladder catchfly
Alpine saxifrage
Alpine sweet grass
Arctic lousewort
Arctic wintergreen
Botrychium pinnatum
Changeable willow
Creeping fleabane
Draba longipes
Epilobium lactiflorum
Flame-colored lousewort
Hudson Bay sedge
Large-flowered lousewort
Lemmon’s rock cress
Macoun’s whitlow-grass
Mountain cress
Narrow sedge
One-headed everlasting
Papaver radicatum ssp kluanense
Porsild’s whitlow-grass
Purple alpine sandwort
Purple sweet cicely
Raup’s willow
Saxifraga ferruginea
Small-flowered Indian paintbrush
Snow buttercup
Spike redtop
Stem-clasping arnica
Trifid-leaved fleabane
Two-parted sedge
Wavy-leaved chickweed
Western buttercup
Western red cedar
1 Contains 6 element(s) of conservation concern
2 Contains rare or unique landforms
3 Contains habitat for focal species
4 Contains important wildlife habitat
5 Contains riparian areas
   a Contains headwater streams
   b Contains intact riparian areas
   c Contains riparian areas along the six major rivers
6 Contains large natural areas
7 Contains sites of recognized significance
   Beehive Natural Area

Natural Region(s): Rocky Mountain
   Natural Subregion(s): Subalpine, Alpine
   River Basin(s): Oldman River

Area: 6,733.6 hectares
67.3 km²

Density of Human Features:
   Well 0.01 heads/km²
   Road 0 km/km²
   Pipeline 0 km/km²

Prepared by: Fiera Biological Consulting
Liverworts
*Scapania cuspiduligera*

Mammals
Grizzly bear

Mosses
Donian grimmia
*Drepanocladus crassicostatus*
*Myurella tenerrima*

Vascular Plants
Lance-leaved grape fern
Whitebark pine
☑ Contains 10 element(s) of conservation concern
☐ Contains rare or unique landforms
☑ Contains habitat for focal species
☐ Contains important wildlife habitat
☑ Contains riparian areas
  ☑ a Contains headwater streams
  ☐ b Contains intact riparian areas
  ☐ c Contains riparian areas along the six major rivers
☑ Contains large natural areas
☑ Contains sites of recognized significance
  Canadian Rocky Mountains World Heritage Site
  White Goat Wilderness Area

Natural Region(s): Rocky Mountain
Natural Subregion(s): Alpine, Subalpine, Montane
River Basin(s): North Saskatchewan River

Area: 44,537.7 hectares
445.4 km²

Density of Human Features:
Well 0 heads/km²
Road 0 km/km²
Pipeline 0 km/km²
Insects
Astarte fritillary
Henry’s copper
Little copper

Mammals
Woodland caribou - mountain ecotype

Vascular Plants
Alpine sweet grass
Arctic lousewort
Epilobium clavatum
Huperzia haleakalae
Lapland rose-bay
Pale alpine fleabane
Papaver radicatum ssp kluanense
### ESA Characteristics

**Natural Region(s):** Rocky Mountain  
**Natural Subregion(s):** Alpine, Subalpine  
**River Basin(s):** Bow River, Red Deer River

**Area:** 15,220.2 hectares  
152.2 km²

**Density of Human Features:**  
Well: 0 heads/km²  
Road: 0 km/km²  
Pipeline: 0 km/km²

### Significance Rating
- **R1** Contains 6 element(s) of conservation concern
- **R2** Contains rare or unique landforms  
  Ghost River-Waiparous Creek braided streams
- **R3** Contains habitat for focal species
- **R4** Contains important wildlife habitat
- **R5** Contains riparian areas  
  - **R5a** Contains headwater streams
  - **R5b** Contains intact riparian areas
  - **R5c** Contains riparian areas along the six major rivers
- **R6** Contains large natural areas
- **R7** Contains sites of recognized significance  
  Canadian Rocky Mountains World Heritage Site  
  Ghost River Wilderness Area
Insects
Henry’s copper

Mosses
Bryum cyclophyllum
Bryum schleicheri
Bryum turbinatum
Large grimmia

Vascular Plants
Sandwort
ESA CHARACTERISTICS CRITERION

1. Contains 4 element(s) of conservation concern
2. Contains rare or unique landforms
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   - a. Contains headwater streams
   - b. Contains intact riparian areas
   - c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance
   - Canadian Rocky Mountains World Heritage Site
   - Kootenay Plains Ecological Reserve
   - Siffleur Wilderness Area

ESA CHARACTERISTICS

Natural Region(s): Rocky Mountain
Natural Subregion(s): Alpine, Subalpine, Montane
River Basin(s): North Saskatchewan River

Area:
42,479.8 hectares
424.8 km²

Density of Human Features:
Well 0 heads/km²
Road 0 km/km²
Pipeline 0 km/km²
**Mammals**
- Grizzly bear
- Woodland caribou - mountain ecotype

**Vascular Plants**
- *Huperzia haleakalae*
- Lance-leaved grape fern
- *Sitka romanzoffia*
- *Tiny-flowered fescue*
1. Contains 29 element(s) of conservation concern
2. Contains rare or unique landforms
   Plateau Mountain Area limestone pavement
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   a. Contains headwater streams
   b. Contains intact riparian areas
   c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance
   Plateau Mountain Ecological Reserve

ESA CHARACTERISTICS

Natural Region(s): Rocky Mountain
Natural Subregion(s): Alpine, Subalpine
River Basin(s): Oldman River, Bow River
Area: 2,333.0 hectares, 23.3 km²
Density of Human Features:
Well 0.17 heads/km²
Road 0.52 km/km²
Pipeline 0.23 km/km²

SIGNIFICANCE RATING: Provincial
### Insects
- Astarte fritillary
- Henry's copper
- Little copper
- Pacific fritillary

### Liverworts
- **Athalamia hyalina**

### Mammals
- Grizzly bear

### Mosses
- Alpine grimmia
- Alpine lemming moss
- Blunt-leaved hair moss
- *Brachythecium plumosum*
- *Bryum amblyodon*
- *Bryum calophyllum*
- *Bryum pallens*
- *Cirriphyllum cirrosum*
- *Desmatodon systylius*
- Donian beardless moss
- Donian grimmia
- *Fissidens limbatus*

### Vascular Plants
- Alpine bladder catchfly
- Alpine harebell
- Browneed sedge

---

Kananaskis Improvement District
ESA CHARACTERISTICS

CRITERION

☑ 1 Contains 5 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☑ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑ 5 Contains riparian areas
   ☑ a Contains headwater streams
   ☐ b Contains intact riparian areas
   ☐ c Contains riparian areas along the six major rivers
☑ 6 Contains large natural areas
☑ 7 Contains sites of recognized significance
   Bluerock Wildland Provincial Park
   Sheep River Provincial Park

ESA CHARACTERISTICS

Natural Region(s): Rocky Mountain
Natural Subregion(s): Montane, Subalpine
River Basin(s): Bow River

Area:
6,182.7 hectares
61.8 km²

Density of Human Features:
Well 0.02 heads/km²
Road 0.41 km/km²
Pipeline 0 km/km²
Liverworts
*Cephaloziella hampeana*

Mammals
Grizzly bear
Long-eared bat

Mosses
Donian grimmia

Vascular Plants
Capitate sedge
Creeping fleabane
ESA CHARACTERISTICS

1. Contains 63 element(s) of conservation concern
2. Contains rare or unique landforms
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   a. Contains headwater streams
   b. Contains intact riparian areas
   c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance
   Canadian Rocky Mountains World Heritage Site
   Elbow-Sheep Wildland Provincial Park
   Peter Lougheed Provincial Park

ESA CHARACTERISTICS

Natural Region(s): Rocky Mountain
Natural Subregion(s): Subalpine Alpine
River Basin(s): Bow River

Area: 51,305.8 hectares
513.1 km²

Density of Human Features:
Well 0 heads/km²
Road 0.15 km/km²
Pipeline 0 km/km²
### Insects
- Henry’s copper
- Lance-tipped darner
- Little copper
- Pacific fritillary

### Liverworts
- Anastrophyllum michauxii
- Jungermannia sphaerocarpa
- Marchantia alpestris
- Scapania curta
- Tritomaria scitula

### Mammals
- Grizzly bear

### Mosses
- Alpine grimmia
- Amblyodon dealbatus
- Awl-leaved fork moss
- Blunt-leaved hair moss
- Bryum algovicum
- Bryum pallens
- Donian beardless moss
- Donian grimmia
- Homalothecium nevadense
- Homalothecium pinnatifidum
- Hygrohypnum styriacum
- Hypnum recurvatum

### Vascular Plants
- Alpine harebell
- Alpine sedge
- Awnless trisetum
- Bluegrass
- Botrychium pinnatum
- Botrychium spathulatum
- Broom sedge
- Changeable willow
- Draba longipes
- Epilobium clavatum
- Epilobium lactiflorum
- Kananaskis whitlow-grass
- Lance-leaved grape fern
- Lemmon’s rock cress
- Long-leaved arnica
- Macoun’s whitlow-grass
- Mingan grape fern
- Mountain bladder fern
- Mountain cress
- Open sedge
- Parry’s rush
- Porsild’s whitlow-grass
- Rockstar
- Short-tail rush
- Shrubby beardtongue
- Smooth-leaved cinquefoil
- Steller’s rock brake
- Two-glumed rush
- Western larch
- Willow

### Vegetation Communities
- Engelmann spruce / rock willow
- Kananaskis Improvement District
  Improvement District
  No. 9 [Banff]
ESA CHARACTERISTICS

River Basin[s]: Bow River
Natural Region[s]: Rocky Mountain
Natural Subregion[s]: Montane, Subalpine, Alpine

Area:
2,431.3 hectares
24.3 km²

Density of Human Features:
Well 0 heads/km²
Road 0.77 km/km²
Pipeline 0 km/km²

CRITERION

☑ 1 Contains 20 element(s) of conservation concern
☑ 2 Contains rare or unique landforms
☑ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑ 5 Contains riparian areas
  - a Contains headwater streams
  - b Contains intact riparian areas
  - c Contains riparian areas along the six major rivers
☑ 6 Contains large natural areas
☑ 7 Contains sites of recognized significance
  Evan-Thomas Provincial Recreation Area

SIGNIFICANCE RATING: National
42

Prepared by: Fiera Biological Consulting
Insects
Gillette’s checkerspot

Liverworts
Lophozia badensis
Pellia endiviifolia

Mammals
Grizzly bear

Mosses
Bryum muehlenbeckii
Cirriphyllum cirrosum
Cuspidate earth moss
Desmatodon systylius
Donian beardless moss
Maidenhair moss
Myurella tenerrima
Porsild’s bryum
Timmia norvegica

Vascular Plants
Alpine foxtail
Alpine saxifrage
Flame-colored lousewort
Hairy cinquefoil
Lance-leaved grape fern
Macoun’s cinquefoil
Mingan grape fern
Pasture sedge

Kananaskis Improvement District
ESA CHARACTERISTICS

1. Contains 23 element(s) of conservation concern
2. Contains rare or unique landforms
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   - a. Contains headwater streams
   - b. Contains intact riparian areas
   - c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance
   - Canadian Rocky Mountains World Heritage Site
   - Spray Valley Provincial Park

Natural Region(s): Rocky Mountain
Natural Subregion(s): Subalpine, Alpine, Montane
River Basin(s): Bow River

Area:
- 25,525.3 hectares
- 255.3 km²

Density of Human Features:
- Well: 0 heads/km²
- Road: 0.37 km/km²
- Pipeline: 0 km/km²

Prepared by: Fiera Biological Consulting
<table>
<thead>
<tr>
<th>Liverworts</th>
<th>Purple sweet cicely</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Lophozia ascendens</em></td>
<td>Western larch</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mammals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grizzly bear</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mosses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bent screw moss</td>
</tr>
<tr>
<td><em>Bryum muehlenbeckii</em></td>
</tr>
<tr>
<td><em>Cirriphyllum cirrosum</em></td>
</tr>
<tr>
<td>Donian beardless moss</td>
</tr>
<tr>
<td><em>Fissidens limbatus</em></td>
</tr>
<tr>
<td><em>Homalothecium nevadense</em></td>
</tr>
<tr>
<td>Large-fruited splechnum</td>
</tr>
<tr>
<td><em>Pohlia drummondii</em></td>
</tr>
<tr>
<td><em>Seligeria campylopoda</em></td>
</tr>
<tr>
<td>Short-beaked rigid screw moss</td>
</tr>
<tr>
<td><em>Timmia norvegica</em></td>
</tr>
<tr>
<td>Twisted-leaved grimmia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vascular Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ascending grape fern</td>
</tr>
<tr>
<td>Bluegrass</td>
</tr>
<tr>
<td><em>Epilobium luteum</em></td>
</tr>
<tr>
<td><em>Huperzia haleakalae</em></td>
</tr>
<tr>
<td>Kananaskis whitlow-grass</td>
</tr>
<tr>
<td>Macoun’s cinquefoil</td>
</tr>
<tr>
<td>Macoun’s whitlow-grass</td>
</tr>
<tr>
<td>Mountain cress</td>
</tr>
</tbody>
</table>

Kananaskis Improvement District
Improvement District
No. 9 [Banff]
ESA CHARACTERISTICS

Natural Region(s): Rocky Mountain
Natural Subregion(s): Montane, Subalpine
River Basin(s): Bow River

Area:
3,370.4 hectares
33.7 km²

Density of Human Features:
Well 0 heads/km²
Road 1.28 km/km²
Pipeline 0.26 km/km²

SIGNIFICANCE RATING: Provincial

1. Contains 42 element(s) of conservation concern
2. Contains rare or unique landforms
   Lac des Arcs fluvial lakes, alluvial fan dammed lakes
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   a. Contains headwater streams
   b. Contains intact riparian areas
   c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance
   Bow Valley Provincial Recreation Area
   Elbow-Sheep Wildland Provincial Park
<table>
<thead>
<tr>
<th><strong>Birds</strong></th>
<th><strong>Hypnum procerrimum</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hooded merganser</td>
<td></td>
</tr>
<tr>
<td><strong>Insects</strong></td>
<td></td>
</tr>
<tr>
<td>Sheridan’s green hairstreak</td>
<td></td>
</tr>
<tr>
<td>Thicket hairstreak</td>
<td></td>
</tr>
<tr>
<td>Variegated meadowhawk</td>
<td></td>
</tr>
<tr>
<td>Western red damsel</td>
<td></td>
</tr>
<tr>
<td><strong>Mammals</strong></td>
<td></td>
</tr>
<tr>
<td>Grizzly bear</td>
<td></td>
</tr>
<tr>
<td><strong>Mosses</strong></td>
<td></td>
</tr>
<tr>
<td>Amblyodon dealbatus</td>
<td></td>
</tr>
<tr>
<td>Bent screw moss</td>
<td></td>
</tr>
<tr>
<td>Blunt-leaved hair moss</td>
<td></td>
</tr>
<tr>
<td>Bryum algovicum</td>
<td></td>
</tr>
<tr>
<td>Bryum muehlenbeckii</td>
<td></td>
</tr>
<tr>
<td>Bryum pallens</td>
<td></td>
</tr>
<tr>
<td>Bryum uliginosum</td>
<td></td>
</tr>
<tr>
<td>Cirriphyllum cirrosum</td>
<td></td>
</tr>
<tr>
<td>Common extinguisher moss</td>
<td></td>
</tr>
<tr>
<td>Conardia compacta</td>
<td></td>
</tr>
<tr>
<td>Cyrtomnium hymenophyloides</td>
<td></td>
</tr>
<tr>
<td>Didymodon subandreaeoides</td>
<td></td>
</tr>
<tr>
<td>Fallacious screw moss</td>
<td></td>
</tr>
<tr>
<td>Green-cushioned weissia</td>
<td></td>
</tr>
<tr>
<td>Hygroamblystegium tenax</td>
<td></td>
</tr>
<tr>
<td>Hypnum pallescens</td>
<td></td>
</tr>
</tbody>
</table>

| **Insects**               |                        |
| Sheridan’s green hairstreak|                        |
| Thicket hairstreak        |                        |
| Variegated meadowhawk     |                        |
| Western red damsel        |                        |
| **Mammals**               |                        |
| Grizzly bear              |                        |
| **Mosses**                |                        |
| Amblyodon dealbatus       |                        |
| Bent screw moss           |                        |
| Blunt-leaved hair moss    |                        |
| Bryum algovicum           |                        |
| Bryum muehlenbeckii       |                        |
| Bryum pallens             |                        |
| Bryum uliginosum          |                        |
| Cirriphyllum cirrosum     |                        |
| Common extinguisher moss  |                        |
| Conardia compacta         |                        |
| Cyrtomnium hymenophyloides|                        |
| Didymodon subandreaeoides |                        |
| Fallacious screw moss     |                        |
| Green-cushioned weissia   |                        |
| Hygroamblystegium tenax   |                        |
| Hypnum pallescens         |                        |

**Municipalities**

Kananaskis Improvement District
Municipal District of
Bighorn No. 8
ESA CHARACTERISTICS

**River Basin[s]:** Bow River

**Natural Region[s]:** Rocky Mountain

**Natural Subregion[s]:** Subalpine
Alpine
Montane

**Area:**
- 80,087.7 hectares
- 800.1 km²

**Density of Human Features:**
- Well: 0 heads/km²
- Road: 0.07 km/km²
- Pipeline: 0 km/km²

**SIGNIFICANCE RATING:** Provincial

☑️ 1 Contains 45 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☑️ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑️ 5 Contains riparian areas
  - a Contains headwater streams
  - b Contains intact riparian areas
  - c Contains riparian areas along the six major rivers
☑️ 6 Contains large natural areas
☑️ 7 Contains sites of recognized significance
  - Bluerock Wildland Provincial Park
  - Bow Valley Provincial Recreation Area
  - Don Getty Wildland Provincial Park
  - Elbow-Sheep Wildland Provincial Park
  - Peter Lougheed Provincial Park
| **Insects** | 
| --- | --- |
| Little copper | *Draba ventosa* |
| Pacific fritillary | *Epilobium clavatum* |
| Sheridan’s green hairstreak | Gaston’s cliff brake |
| Variegated meadowhawk | Hairy cinquefoil |

| **Mammals** | 
| --- | --- |
| Grizzly bear | Kananaskis whitlow-grass |

| **Mosses** | 
| --- | --- |
| Alpine grimmia | Lemmon’s rock cress |
| *Amblyodon dealbatus* | Long-leaved arnica |
| *Bryum muehlenbeckii* | Macoun’s whitlow-grass |
| *Cirriphyllum cirrosum* | Mingan grape fern |
| *Didymodon subandreaeoides* | Northern bladderpod |
| Donian beardless moss | Pale alpine fleabane |
| Donian grimmia | Parry’s rush |
| Fallacious screw moss | *Pellaea glabella ssp simplex* |
| *Homalothecium nevadense* | Porsild’s whitlow-grass |
| Maidenhair moss | Rockstar |
| Narrow-leaved Chinese phoenix moss | Scented everlasting |
| Short-beaked rigid screw moss | Scribner’s wheat grass |
| *Timmia norvegica* | Slender bog orchid |

| **Vascular Plants** | 
| --- | --- |
| Alpine harebell | Smooth cliff brake |
| *Botrychium pinnatum* | Smooth woodsia |
| Corymbose everlasting | Spreading stonecrop |
| Kananaskis Improvement District | Tiny-flowered fescue |
|  | Two-glumed rush |
|  | Western larch |
**ESA CHARACTERISTICS CRITERION**

1. Contains 34 element(s) of conservation concern
2. Contains rare or unique landforms
   - Ghost River Area klippe
   - Kananaskis Country karst caves, joint caves
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   - a. Contains headwater streams
   - b. Contains intact riparian areas
   - c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance
   - Canadian Rocky Mountains World Heritage Site
   - Bluerock Wildland Provincial Park
   - Don Getty Wildland Provincial Park
   - Elbow-Sheep Wildland Provincial Park

**Natural Region(s):**
- Rocky Mountain
- Foothills

**Natural Subregion(s):**
- Subalpine
- Alpine
- Montane
- Upper Foothills

**River Basin(s):**
- Bow River
- Red Deer River
- Oldman River

**Area:**
- 63,092.2 hectares
- 630.9 km²

**Density of Human Features:**
- Well: 0 heads/km²
- Road: 0.01 km/km²
- Pipeline: 0 km/km²

**SIGNIFICANCE RATING:** Provincial
Insects
Astarte fritillary
Little copper
Liverworts
Pellia neesiana
Mammals
Grizzly bear
Mosses
Alpine grimmia
Awl-leaved fork moss
Cirriphyllum cirrosum
Desmatodon leucostoma
Donian grimmia
Homalothecium nevadense
Mnium ambiguum
Schistidium pulvinatum
Vascular Plants
Alpine harebell
Broad-scaled sedge
Conimitella williamsii
Corymbose everlasting
Draba ventosa
Dwarf bitter-root
Early buttercup
Epilobium clavatum
Gaston’s cliff brake
Lemmon’s rock cress
Little-seed rice grass
Long-leaved arnica
Northern bladderpod
One-headed everlasting
Pale alpine fleabane
Papaver radicatum ssp kluanense
Parry’s rush
Prairie false dandelion
Primrose
Scented everlasting
Scribner’s wheat grass
Shrubby beardtongue
Smooth woodsia
**ESA CHARACTERISTICS CRITERION**

1. **Contains 50 element(s) of conservation concern**
   Cypress Hills Area ventifacts

2. **Contains rare or unique landforms**
   Cypress Hills Area ventifacts

3. **Contains habitat for focal species**
   Cypress Hills Area ventifacts

4. **Contains important wildlife habitat**
   Cypress Hills Area ventifacts

5. **Contains riparian areas**
   - a. Contains headwater streams
   - b. Contains intact riparian areas
   - c. Contains riparian areas along the six major rivers

6. **Contains large natural areas**
   Cypress Hills Area ventifacts

7. **Contains sites of recognized significance**
   Cypress Hills Provincial Park

**Area:**
- **53,037.2 hectares**
- **530.4 km²**

**Density of Human Features:**
- Well **0.20** heads/km²
- Road **0.75** km/km²
- Pipeline **0.03** km/km²
<table>
<thead>
<tr>
<th>Amphibians and Reptiles</th>
<th>Vascular Plants</th>
<th>Vegetation Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leopard frog</td>
<td>American pellitory</td>
<td>Smooth sweet cicely</td>
</tr>
<tr>
<td>Birds</td>
<td>Biscuit-root</td>
<td>Spike redtop</td>
</tr>
<tr>
<td>Ferruginous hawk</td>
<td>Blunt-leaved yellow cress</td>
<td>Waterpod</td>
</tr>
<tr>
<td>Trumpeter swan</td>
<td>Botrychium michiganense</td>
<td>White adder’s-mouth</td>
</tr>
<tr>
<td>Western burrowing owl</td>
<td>Botrychium pallidum</td>
<td></td>
</tr>
<tr>
<td>Insects</td>
<td>Botrychium pedunculose</td>
<td>Round-leaved hawthorn / cow parsnip - common nettle - west</td>
</tr>
<tr>
<td>Arrowhead blue</td>
<td>Broad-scaled sedge</td>
<td>ern Canada violet</td>
</tr>
<tr>
<td>Blue-eyed darner</td>
<td>Bushy cinquefoil</td>
<td></td>
</tr>
<tr>
<td>Icarioides blue</td>
<td>Carex saximontana</td>
<td></td>
</tr>
<tr>
<td>Lance-tipped darner</td>
<td>Chenopodium incanum</td>
<td></td>
</tr>
<tr>
<td>Pacific forktail</td>
<td>Dwarf fleabane</td>
<td></td>
</tr>
<tr>
<td>Pronghorn clubtail</td>
<td>Dwarf grape fern</td>
<td></td>
</tr>
<tr>
<td>Rocky Mountain dotted blue</td>
<td>Early buttercup</td>
<td></td>
</tr>
<tr>
<td>Striped meadowhawk</td>
<td>Eaton’s aster</td>
<td></td>
</tr>
<tr>
<td>Twelve-spotted skimmer</td>
<td>Flowering-quillwort</td>
<td></td>
</tr>
<tr>
<td>Woodland skipper</td>
<td>Hooker’s sedge</td>
<td></td>
</tr>
<tr>
<td>Mosses</td>
<td>Leafy pondweed</td>
<td></td>
</tr>
<tr>
<td>Aulacomnium androgynum</td>
<td>Low yellow evening-primrose</td>
<td></td>
</tr>
<tr>
<td>Brachythecium rutabulum</td>
<td>Mingan grape fern</td>
<td></td>
</tr>
<tr>
<td>Bryum algovicum</td>
<td>Nevada rush</td>
<td></td>
</tr>
<tr>
<td>Bryum uliginosum</td>
<td>Paradoxical grape fern</td>
<td></td>
</tr>
<tr>
<td>Dicranum ontariense</td>
<td>Pasture sedge</td>
<td></td>
</tr>
<tr>
<td>Hygroamblystegium tenax</td>
<td>Pinesap</td>
<td></td>
</tr>
<tr>
<td>Pseudeleskea patens</td>
<td>Rockstar</td>
<td></td>
</tr>
<tr>
<td>Pseudeleskea stenophylla</td>
<td>Small-flowered hawk’s-beard</td>
<td></td>
</tr>
</tbody>
</table>

**Municipalities**

Cypress County
1. Contains 9 element(s) of conservation concern
2. Contains rare or unique landforms
   Thunder Mountain Area water gaps
   Whaleback Ridge hogbacks
3. Contains habitat for focal species
4. Contains important wildlife habitat
5. Contains riparian areas
   a. Contains headwater streams
   b. Contains intact riparian areas
   c. Contains riparian areas along the six major rivers
6. Contains large natural areas
7. Contains sites of recognized significance
   Bob Creek Wildland Provincial Park

Natural Region(s): Rocky Mountain
Natural Subregion(s): Montane, Subalpine
River Basin(s): Oldman River

Area: 20,776.5 hectares
207.8 km²

Density of Human Features:
Well 0 heads/km²
Road 0.02 km/km²
Pipeline 0 km/km²
Mammals
Grizzly bear

Mosses
Hygrohypnum styriacum
Rigid screw moss

Vascular Plants
Blue camas
Conimitella williamsii
Eaton’s aster
Intermediate hawk’s-beard
Linear-leaved scorpionweed
Western ribgrass

Vegetation Communities
Whitebark pine / ground juniper - common bearberry
1. Contains 8 element(s) of conservation concern
   - Whaleback Ridge hogbacks

2. Contains rare or unique landforms

3. Contains habitat for focal species

4. Contains important wildlife habitat

5. Contains riparian areas
   - a. Contains headwater streams
   - b. Contains intact riparian areas
   - c. Contains riparian areas along the six major rivers

6. Contains large natural areas

7. Contains sites of recognized significance
   - Black Creek Heritage Rangeland

---

**ESA CHARACTERISTICS**

**Natural Region(s):**
- Rocky Mountain
- Grassland

**Natural Subregion(s):**
- Montane
- Foothills Fescue

**River Basin(s):**
- Oldman River

**Area:**
- 7,712.7 hectares
- 77.1 km²

**Density of Human Features:**
- Well 0.01 heads/km²
- Road 0 km/km²
- Pipeline 0 km/km²
Vascular Plants

Blue camas
*Conimitella williamsii*
Dwarf fleabane
Intermediate hawk’s-beard
Meadow aster
Smooth-leaved cinquefoil
Western false-asphodel
Western ribgrass
ESA CHARACTERISTICS

River Basin(s): Bow River

Natural Region(s): Rocky Mountain
Parkland

Natural Subregion(s): Montane
Foothills Parkland

Area: 4,270.5 hectares
42.7 km²

Density of Human Features:
Well 0.14 heads/km²
Road 0.10 km/km²
Pipeline 0 km/km²

SIGNIFICANCE RATING: Provincial

☑ 1 Contains 0 element(s) of conservation concern
☐ 2 Contains rare or unique landforms
☐ 3 Contains habitat for focal species
☐ 4 Contains important wildlife habitat
☑ 5 Contains riparian areas
  ✔ a Contains headwater streams
  ✔ b Contains intact riparian areas
  ☐ c Contains riparian areas along the six major rivers
☑ 6 Contains large natural areas
☑ 7 Contains sites of recognized significance
  OH Ranch Heritage Rangeland

Prepared by: Fiera Biological Consulting