

Special Features in Alberta

Proposed Framework for Site Identification and Initial Evaluation of Potential Special Features Sites

Prepared for:

The Special Places Provincial Co-ordinating Committee

July, 1998

PREFACE

This report was provided to the Special Places Provincial Co-ordinating Committee, by Alberta Environmental Protection.

It contains advice and opinions by individuals outside of government, mainly in the field of Conservation Biology.

Although intended to provide scientifically-based information and advice to decision makers, the report does not represent the views or policy of the Government of Alberta.

EXECUTIVE SUMMARY

The Special Features Report is a technical report to assist the Special Places Provincial Co-ordinating Committee to evaluate how sites with special features, or of special concern might be incorporated into the program's designation process.

It focuses on special features of Alberta's environmental diversity that are not captured in the landscape-level approach taken by the Committee in its initial work on Special Places. It is also intended to be of use to the Committee in evaluating many public nominations at a finer level of detail, based upon species, communities or landforms of special concern.

The report covers three areas.

First, it proposes a process to identify "special features" in Alberta and define their conservation status.

This process is intended to complement the coarse filter or "top down" approach of Alberta's Special Places program which attempts to capture environmental diversity by protecting broad landscapes or Level 1 Natural History Themes.

The Special Features Report takes the opposite, or "bottom up", approach to identify individual plant or animal species and communities, or landforms, that are limited in distribution or size, or are truly unique examples of Alberta's natural diversity. It does not address species such as grizzly bears, wolves or caribou, which are dealt with in separate broader-based management plans.

Second, the Report also provides a framework and criteria for evaluating special features and determining whether to recommend that they be considered for inclusion into the provincial system of protected areas. The evaluation criteria reflect principles regarding rarity, environmental significance, diversity, evolutionary significance, degree of threat, and current representation in protected areas.

Third, the Special Features Report identifies 149 special features, which may be suitable for inclusion in Alberta's protected areas network. However, this is a preliminary evaluation which relies primarily on data stored in the Alberta Natural Heritage Information Centre. Boundaries shown are abstract at this point, the sites have not been evaluated in terms of current protected areas priorities, nor has any screening been done regarding resource commitments.

A number of other site (216) are also identified in the report which require further study to confirm their potential for inclusion into the protected areas network.

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1.0 INTRODUCTION

1.1 Purpose of the Report

This report documents the process and results of a special features project undertaken by Alberta Environmental Protection during January to May 1998 as part of ongoing efforts to design and implement a quality protected areas system in Alberta. The information presented in this report provides a scientifically sound foundation for moving forward with identifying and conserving special aspects of Alberta's environmental diversity, particularly through designation of protected areas. Protected areas on provincial land are a core component of a much broader effort to conserve the province's environmental diversity, involving many interests (provincial and private) and many different approaches. The project results will be presented to the provincial co-ordinating committee guiding Alberta's Special Places Program whose goal is to complete a system of protected areas on provincial land that includes the environmental diversity of Alberta's six natural regions (Government of Alberta, 1995).

Recent work on the protected areas system in Alberta has focused on achieving representation of broad landscapes or Level 1 Natural History Themes. Theoretically, a coarse-filter, top-down approach which captures the full array of physical habitats and environmental gradients will result in most components of environmental diversity, known as elements, being included in protected areas (Kavanagh *et al.* 1994). However, some less common elements with significant conservation value are likely to be missed by relying solely on a landscape approach (Mehlman 1996, Gerry *et al.* 1998). Because ecological processes and elements of biodiversity occur at a variety of scales, a strategy to conserve these, ideally, should encompass a broad range of scales. Currently, conservation biologists recommend that programs to preserve biological diversity complement the coarse-filter, top-down approach with a fine-filter, bottom-up approach which considers particular species or taxa, vegetation communities, landforms, and other elements of special conservation concern (Adamus and Clough 1978, Noss 1995, Csuti *et al.* 1995).

For the purposes of this report, elements of special conservation concern, generally, are those that are restricted in extent or distribution, are small in number, or are considered an outstanding example of that element. For example, rare or vulnerable species and vegetation communities or outstanding and unusual landforms are elements of special conservation concern. However, not all elements of special conservation concern are considered in this project. For example, wide-ranging mammals of special conservation concern, such as grizzly bear, wolf, and woodland caribou, require a broad ecosystem management approach that is beyond the scope of this project. A "focal species analysis", which includes protected areas, is required to ensure conservation of these special elements (Noss, 1997).

The process described in this report uses available information on special elements in Alberta to identify sites, known as special features, which may need to be included in the protected areas network. Alberta's protected areas system will continue to evolve and change as new information becomes available on key elements of environmental diversity, their conservation needs and the role of protected areas in meeting these conservation needs. Compiling and analysing this information is a huge task - one begun by government and private conservation interests in Alberta and elsewhere, but far from finished. Since there are significant information gaps and uncertainties in our knowledge

of elements of environmental diversity, the report's results should be viewed as providing the best possible direction to decision makers at this time.

1.2 Project Objectives

The objectives of the special features project are:

- To define a framework and process for identifying special features and evaluating their conservation status in Alberta.
- To identify special features on provincial land for consideration by the Special Places Provincial Co-ordinating Committee for inclusion in Alberta's protected areas network.
- To identify information gaps and uncertainties regarding special features which will need to be addressed as part of ongoing efforts to protect environmental diversity.

1.3 Definition of Key Terms

Key terms used in this report are defined as follows:

Elements are components of environmental diversity defined at many different scales. An element may be a landform, a vegetation community or a species or subspecies of plant or animal.

Element groups are groupings of elements, such as landforms or vegetation communities or plants or vertebrate animals.

Special elements are elements of particular conservation concern defined using objective criteria including rarity, risk, outstanding characteristics and the agreement of specialists. In Alberta, elements of special conservation concern are defined by the Alberta Natural Heritage Information Centre.

Element occurrences are locations where elements are found.

Special element occurrences are locations where special elements are found. In Alberta, special element occurrences are recorded and tracked by the Alberta Natural Heritage Information Centre.

Special features are areas encompassing one or more special element occurrences. *Special feature polygons* are mapped areas of special features showing approximate boundaries. Sections 2.0 and 3.0 describe the process and criteria used in this project to identify special features and map special feature polygons.

1.4 The Alberta Natural Heritage Information Centre

The Alberta Natural Heritage Information Centre (ANHIC) is an interagency effort to compile information about elements of environmental diversity and other natural heritage information. Information is placed in data banks based on the system developed by The Nature Conservancy and used by Conservation Data Centres operated by most provinces and states in North America. The heritage data are not confined to computerized databases but are supplemented by large amounts of information in manual files, maps and libraries. The data bank is continually being expanded and updated as new information becomes available and resources permit.

Since its establishment in 1994, ANHIC has focused on compiling information about plant and vertebrate animal species with 20 or fewer known occurrences in Alberta or that are considered by conservation biologists to be of special conservation concern. More recently, classification systems for vegetation communities and landforms have been initiated and processes are underway to identify those that are of special conservation concern. In addition, information may be included on other elements of special conservation concern, such as seasonal wildlife concentrations and breeding colonies of various bird species. Also contained within ANHIC is information on Alberta's natural regions, subregions and natural history themes and on various land uses and designations relevant to conservation of environmental diversity.

1.5 Project Process

The project has drawn extensively on information stored in ANHIC. A small team of professionals with expertise in vascular plants, non-vascular plants, vertebrate animals, vegetation communities, landforms and geographic information system technology worked cooperatively throughout the project. The team included Alberta Environmental Protection staff and specialists outside of government, including Dr. Rene Belland (Devonian Botanical Garden, University of Alberta), Gavin More, (Canadian Heritage) and Dr. Brett Purdy (University of Alberta). Their work was facilitated by a consultant specializing in consensus process and environmental conservation.

Over a six-month period (January-June 1998), the project team developed and implemented a framework and process for identifying and evaluating special features using extensive information on conservation principles and on elements of special conservation concern housed with ANHIC. The team also drew on the network of professionals available to ANHIC for advice and review of draft materials.

Steps in the process included:

- Identification of special elements, special element occurrences and information gaps (for landforms, vegetation communities, plants and vertebrate animals).
- Identification of special features (by synthesizing information on special elements and applying objective criteria).
- Preliminary evaluation of special features (using numerical valuation based on objective criteria and assessment by specialists. Part of the assessment considered of elements already were included in protected areas [see Section 4.7]).

- Critical review of results by peers.
- Final evaluation of special features.
- Agreement on conclusions and recommendations.

2.0 IDENTIFICATION OF SPECIAL ELEMENTS, SPECIAL ELEMENT OCCURRENCES AND INFORMATION GAPS

Information currently in ANHIC deals primarily with four types of elements – landforms, vegetation communities, plant species (vasculars and mosses), and vertebrate animal species. There has not yet been a concentrated effort to include information on genetic, fungi, lichen, liverwort, invertebrate animal, microorganism, soil, bedrock or paleontological (fossil) elements.

2.1 Landforms

Landforms: Classification of Elements

A landform is defined as the morphology (shape) and character of the land surface that results from the interaction of physical processes (e.g. flowing water, wind, glacial action, weathering) and crustal movements with the geology of the earth's surface (Whittow 1984). Landforms comprise the earth's surface and include broad features, such as plains, plateaux, and mountains, and also smaller features, such as sand dunes, eskers, glacial moraine and alluvial fans (Bates and Jackson 1984). The landform classification system used by Alberta's Natural Heritage Information Centre is based on the origin or genesis of the landform. That is, landforms are grouped according to the dominant processes that form them. This approach to classification has been used successfully for conservation purposes in other jurisdictions (Herbank 1989, Spicer 1987).

Within ANHIC, landform elements are assigned to fourteen categories of geomorphologic processes. These geomorphologic processes include:

- running water,
- lake waves and currents,
- glacial ice and meltwater,
- glaciotectonism (bedrock movements due to glaciers),
- wind,
- ground water (karst, springs, geothermal),
- gravity and mass movements,
- weathering and differential erosion,
- frozen ground and snow,
- movements of the earth's crust,
- meteorite falls,
- igneous activity,
- peat accumulation (non-permafrost), and
- peat accumulation (permafrost).

Where there is a combination of processes in action, the element is usually assigned to the process that is most important to its development. Dr. Ian Campbell (University of Alberta), Dr. Rene Barendregt (University of Lethbridge) and Dr. Derald Smith (University of Calgary) advised on the classification system

All scales of landform elements, from coarse-filter elements reflected in Level 1 Themes (e.g. kame moraine, hummocky moraine, dune field, valley) to medium-filter elements (e.g. delta, meltwater channel, sand dune, lagoon) to fine-filter elements (e.g. rapids, crevasse, kame, dike) can be classified according to the processes that formed them. The classification system is easily modified as new elements are identified and process definitions are refined.

Information on the landform classification system and definition of elements is available upon request from ANHIC.

Landforms: Process and Criteria for Determining what is Special

Surficial geology maps and reports by the Geological Survey of Canada and the Alberta Geological Survey, other scientific publications (textbooks, theses, journal articles) and maps on Alberta's geomorphology, and environmentally significant area studies for municipal districts and counties were reviewed to determine the distribution and abundance of various landform elements in Alberta. A list of source documents is available from ANHIC. This information was augmented through interviews with experts, including Dr. Ian Campbell and Dr. Bruce Rains (University of Alberta), Dr. Derald Smith and Dr. Stu Harris (University of Calgary), Dr. Rene Barendregdt (University of Lethbridge), Dr. Laurence Andriashak (Alberta Geological Survey) and Dr. Ron Mussieux (Provincial Museum of Alberta).

The name, location information, classification, detailed description, and source information of each element occurrence were entered into a computer database. Information was not compiled on landforms which are extensive or widespread in the province such as mountains, valleys, floodplains, ground moraine, outwash plains, and lakes. Instead, attention focused on landform elements which are uncommon or outstanding, and hence of special conservation concern. All priority element occurrences compiled are mapped on 1:50,000 NTS maps.

Criteria for considering a landform element or an element occurrence to be of special conservation concern are:

- **There are five or fewer known occurrences of the element in the province.**
- **An occurrence of an element with more than five known occurrences in the province is considered special if it is an outstanding example of that landform element. Outstanding means the occurrence has been judged by geomorphic experts to be particularly noteworthy (i.e. the biggest, the best example, the most representative) in a provincial (in Alberta), national (in Canada) or international context.**

Landforms: Special Elements and Element Occurrences in Alberta

The list of special landform element occurrences considered for this project is provided in Appendices 1a and 1b. Appendix 1c supplies definitions for the landform types. [Figure 1 illustrates two examples of special landform elements in Alberta.] Landform element occurrences outside of protected areas are included in Map 1.

Landforms: Information Gaps and Uncertainties

The list and map of special landform elements and element occurrences are subject to change, as new information becomes available to ANHIC.

Key gaps and uncertainties regarding landforms are:

- The surficial geology of a substantial part of northern Alberta has not yet been surveyed or mapped.
- Review of relevant publications and, hence, compilation of all available information is not yet complete. Neither are all known element occurrences mapped, particularly those within protected areas.
- The quality and level of detail of information in the database is inconsistent, reflecting the varying extent and quality of the surveys and studies reviewed.
- Information on precise location of elements and site integrity is occasionally lacking.
- Differing terminology for similar landform features can lead to difficulties in accurately describing and classifying some features. For example, a bird's-foot delta is equivalent to a stable channel, mouth bar delta.
- Changing theories regarding the origin of landforms can lead to classification differences. For example, post-glacial megafloods instead of glaciation may be identified as a causative agent of spillway channels.

2.2 Vegetation Communities

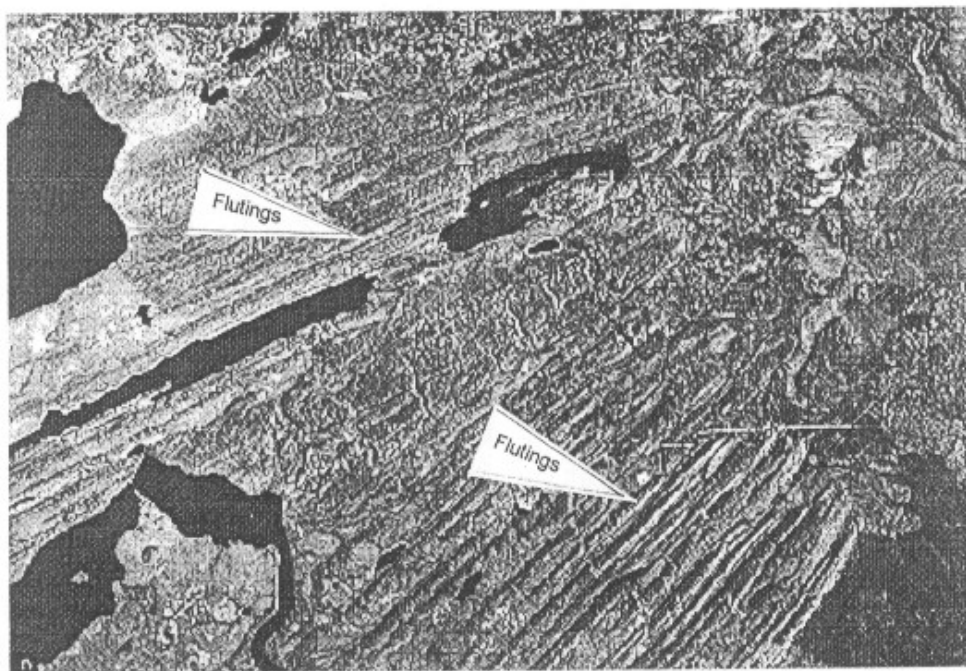
Vegetation Communities: Classification of Elements

Broad vegetation types are reflected in the names of natural regions and sub-regions in Alberta - Grassland, Parkland, Boreal Forest, Mixedgrass, Fescue, and Mixedwood. Within natural subregions, vegetation types based on structure (physiognomy) also are readily recognizable - forest, woodland, shrubland (tall/low), grassland, herbaceous or wetland. Vegetation types within these obvious structural units are further readily recognized based on one or two dominant species - for example, white spruce forest, lodgepole pine forest, aspen woodland, or rough fescue grassland.

The community level, however, is the most fundamental and widely used scale for classifying vegetation. Vegetation communities are recurring assemblages of plant species, the species occurring together because they respond similarly to a variety of site attributes (Grossman *et al.* 1994).



The Ram River Canyon (polygon #53). The canyon is deeply-incised, extends for several kilometres and has walls reaching to 300m high.



Giant flutings from the Cameron Hills area (polygon #120). These flutings are some of the largest known in Canada.

Figure 1. Examples of Special Landform Elements. (top photo details: photo #284, AS4826, 1997, 1:20,000 scale; bottom photo details: photo #236, AS4519, 1994, 1:60,000 scale).

Vegetation community classification in Alberta began in the 1930s with a series of published papers by Dr. E. Moss of University of Alberta. Over the past five decades, numerous researchers have used a variety of classification systems to describe vegetation communities in various parts of the province. These studies have differed greatly in detail and scale. The most recent major work has been the development of a series of ecosite field guides providing descriptions of forest communities for provincial lands in western and northern Alberta (Archibald *et al.* 1996, Beckingham *et al.* 1996). A similar series of guides, called rangeland carrying capacity guides, currently are being developed, describing shrubland and grassland communities in the forested areas as well as their forage production values and carrying capacities (Olson *et al.* 1994, Willoughby and Downing 1995, Willoughby and Smith 1997; Willoughby *et al.* 1997). A vegetation community classification for the mountains has been developed in the national parks (Achuff 1997, Corns and Achuff 1982). A list of sources for vegetation community descriptions in the province is available from ANHIC.

Building on this substantial body of work, ANHIC is developing a community classification system for conservation planning that is modeled after one developed by The Nature Conservancy in the United States (Grossman *et al.*, 1994). It names communities according to the dominant species found in each vegetation layer. Species within the same vegetation layer are separated by an “-”, layers are separated by an “/”. For example, a forest community could be named Engelmann spruce-subalpine fir/false azalea/grouseberry/feathermoss.

Reviewing the numerous studies on vegetation in Alberta over the past nine decades and standardizing vegetation community descriptions is a major undertaking which has only just begun. Initially the focus has been on developing a preliminary list of vegetation communities known to be of special conservation concern.

Vegetation Communities: Process and Criteria For Determining What is Special

To develop a preliminary list of special vegetation community elements, numerous publications describing vegetation types in Alberta were reviewed and discussions were held with several knowledgeable individuals. Key sources of information include: reports on the special features of the national parks (Achuff 1997, Achuff *et al.* 1986); a series of reports done for protected areas and protected areas planning that document both representative and special features (Achuff 1984, Fairbarns 1986, Fairbarns 1990, Lee *et al.* 1982, Wallis 1980, Wallis 1990, Wallis and Wershler 1984); ecosite and carrying capacity field guides for the forested portions of Alberta; and a variety of published papers and reports on Alberta's vegetation (Achuff *et al.* 1997, Adams *et al.* 1997, Bradley *et al.* 1991, Corns and Achuff 1982, Fargey and Mercer 1995, Lewis *et al.* 1928, Strong 1996, Timoney 1996, Vitt *et al.* 1975). As with other element groups, the list of special vegetation community elements for which ANHIC will gather information for conservation purposes is referred to as a tracking list.

In February 1998, a network of vegetation experts reviewed the preliminary list of special vegetation community elements and suggested revisions. Reviewers include Dr. Peter Achuff (Parks Canada), Barry Adams (Alberta Public Lands), Lorna Allen (ANHIC), Harry Archibald (Land and Forest Service), Cheryl Bradley (vegetation consultant), Dr. Ian Corns (Canadian Forestry Service), David Downing (vegetation consultant), Gerry Ehlert (Alberta Public Lands), Joyce Gould (ANHIC), Derek

Johnson (Canadian Forest Service), Dan MacIsaac (Canadian Forest Service), Kevin Timoney (vegetation consultant), Garry Trottier (Environment Canada), Cliff Wallis (vegetation consultant) and Mike Willoughby (Land and Forest Service). The revised list will be circulated to a broader number of knowledgeable individuals for review and comment. Once agreement is reached, this list will become the preliminary ANHIC tracking list. It is proposed that the list be reviewed and revised periodically by the tracking list network as new information on special elements becomes available.

Criteria for considering a vegetation community element or an element occurrence to be of special conservation concern are:

- **The element is uncommon, based on published information and the judgement of experts.**
- **The element is in decline or faced with extinction due to being restricted to a small portion of its former range.**

For the purposes of this project, priority has been given to those elements that are documented as significant and with documented locations. The level of information on each element is variable.

Vegetation Communities: Special Elements and Element Occurrences

Only 14 vegetation community elements were considered for the purposes of this project, due to the lack of information on element occurrences currently in the ANHIC database. These include:

- Individual community types or groupings of communities of limited extent in the province.
- Vegetation communities that are not well described, but due to habitat alteration, may be at risk. Figure 2 illustrates an example of a remnant vegetation community element considered at risk.
- Outstanding examples of vegetation communities known to be relatively restricted in the province.

Special vegetation community elements are listed in Appendix 2 and element occurrences are included on Map 1.

Vegetation Communities: Information Gaps and Uncertainties

The list and map of special elements and element occurrences for vegetation communities contained in this report are subject to change as new information becomes available.

Key gaps and uncertainties regarding the information on vegetation communities are as follows.

- Review of relevant publications and, hence, compilation of available information is only in the preliminary stages.
- Vegetation communities have not yet been surveyed and/or mapped in a substantial part of northern Alberta and in portions of the mountains, foothills and grasslands. In particular, areas of riparian and upland old-growth forests have not been identified.
- In some areas where vegetation communities have been described, scale of mapping is of insufficient detail to determine the location of special vegetation communities.



Figure 2. Example of a Special Vegetation Community—the *Festuca hallii* Community. This is considered a community type at risk. The remnant areas are outlined in white dashed lines. Photo details: photo #81, AS 4440, 1993, scale 1:20,000.

- Inconsistencies in the methodology and classification systems used for identifying vegetation communities make comparison between studies difficult and complicate identification of special vegetation community elements.
- There is very little information available on aquatic vegetation communities, particularly for springs or intermittent wetlands.
- Vegetation communities that undergo frequent disturbance, such as those on avalanche slopes, are not well known.
- Vegetation communities dominated by lichens and mosses, particularly in alpine areas, have not been described.
- Natural change (vegetation succession) means that some special vegetation communities are transitory.

2.3 Plants

Plants: Classification of Elements

The classification of plants is based on the concept of species. A species is a naturally occurring group of plants able to breed among themselves but not to breed with other plant groups. Each species has a unique scientific name composed of two Latin words. Many also have well known common names. Occasionally, subspecies or varieties are recognized within species, which may gradually be evolving into a new, distinct species.

Vascular plants - plants possessing an internal vascular system for transporting water and nutrients - are the most well known group of plants. Vascular plants include trees, shrubs, ferns, herbs and grasses. Scientific names of vascular plant taxa in Alberta are for the most part according to *The Flora of Alberta* (Moss 1983), except for species that more recently have been reworked by taxonomists in *The Flora of North America* (Flora of North America Editorial Committee 1993-1997). There are approximately 1600 native vascular plant species in Alberta.

Non-vascular plant taxa, including mosses, liverworts, hornworts, and lichens are less well known. Scientific names of non-vascular plant taxa are according to Anderson *et al.* (1990) for mosses, Stotler and Crandall-Stotler (1977) for liverworts and Egan (1987) for lichens. Approximately 650 species of mosses and liverworts and 650 species of lichens have been documented in Alberta to date.

Plants: Process and Criteria For Determining What is Special

A list of vascular plant elements of special conservation concern was first developed by ANHIC in 1994. The initial tracking list relied heavily on publications regarding rare plants in Alberta and Canada, including Argus and White (1978), Packer and Bradley (1984), Argus and Pryer (1990), and Wallis *et al.* (1987). Information sources on elements include published and unpublished literature, field data sheets, herbarium specimens, rare plant files and discussions with knowledgeable individuals.

To date, information gathering on non-vascular plant elements of conservation concern has focused on mosses. A tracking list for mosses has been developed using information provided by Dr. Dale Vitt and Dr. Rene Belland of the Devonian Botanic Garden, University of Alberta. Work is proceeding on developing a tracking list for liverworts and macrolichens.

The information on plants in ANHIC is processed in accordance with standards, including assessment of identification, levels of precision for mapping, and quality checks of data entry and mapping. For each element group, each species being considered by ANHIC is ranked on its status (globally and provincially) using a system developed by The Nature Conservancy and used throughout North America (Table 1). Evaluation of ranks is based primarily on number of occurrences although range within the province, population size, number of occurrences within protected areas, trends and threats also are used. ANHIC gathers information on elements which have been ranked S1, S2 and on some that have been ranked S3.

Table 1: Definition of Element Ranks

Global Rank	Provincial Rank	Definition of Rank
G1	S1	≤ 5 occurrences or only a few remaining individuals
G2	S2	6-20 occurrences or with many individuals in few occurrences
G3	S3	21-100 occurrences, may be rare and local throughout its range, or in a restricted range (may be abundant in some locations or may be vulnerable to extirpation because of some factor of its biology)
G4	S4	apparently secure under present conditions, typically > 100 occurrences but may be fewer with many large populations; may be rare in parts of its range, especially peripherally
G5	S5	demonstrably secure under present conditions, >100 occurrences; may be rare in parts of its range, especially peripherally

Other codes: “T_” - rank for a subspecific taxon; “_?” - rank uncertain; “_U” – status uncertain; “_R” – reported but lacks documentation.

A network of botanical experts meets formally once per year to review new information and re-evaluate assigned ranks of vascular and non-vascular taxa. Experts include: Dr. Peter Achuff (Parks Canada), Lorna Allen (ANHIC), Dr. Rene Belland (Devonian Botanic Garden, University of Alberta), Dana Bush (botanical consultant), Patsy Cotterill (botanical consultant), Graham Griffiths (botanical consultant), Ross Hastings (Provincial Museum of Alberta), Derek Johnson (Canadian Forest Service), Linda Kershaw (botanical consultant), Jane Lancaster (botanical consultant), Dr. Dale Vitt (Devonian Botanic Garden, University of Alberta), Cliff Wallis (botanical consultant) and Joan Williams (botanical consultant). In addition to the review of ranks, the network assists with the setting of priorities for status reports and addressing information gaps.

Criteria for considering a plant (vascular or non-vascular) taxa to be of special conservation concern are:

- The species, subspecies or variety has 20 or fewer known occurrences in Alberta (i.e. S1 and S2 ranks).
- The species, subspecies or variety is considered to be in decline or at risk.

Plants: Special Elements and Element Occurrences

Currently, 495 vascular plant taxa and 265 moss taxa are being tracked by ANHIC. Nearly 5000 occurrences of vascular plants and 800 occurrences of mosses have been recorded in the database and mapped. Figure 3 illustrates three plant elements considered of special conservation concern. Special plant elements considered for this project are those included on the Provincial Tracking List (March 1998) and listed in Appendices 3a and 3b. Their occurrences are included in Map 1.

Plants: Information Gaps and Uncertainties

The list and map of special elements and element occurrences for plants, especially non-vascular taxa, is subject to change as new information becomes available.

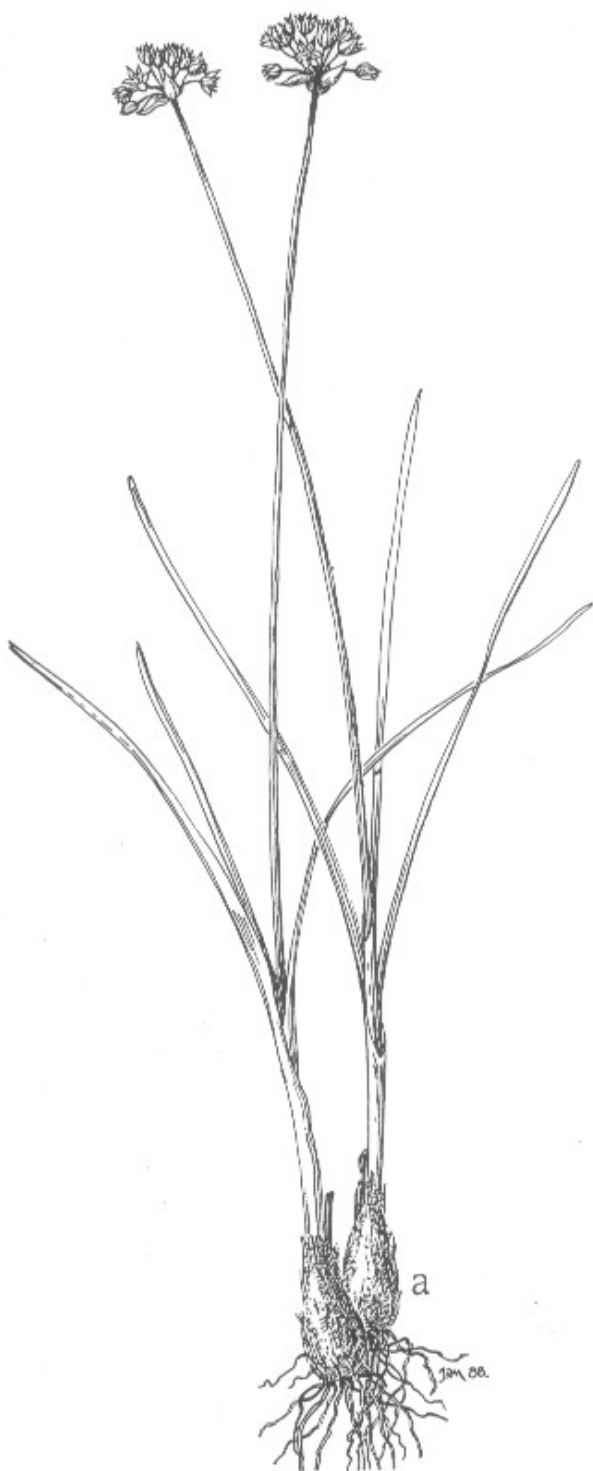
Key gaps and uncertainties regarding the information on plant elements are as follows.

- Basic plant surveys have not been undertaken in many parts of the province, particularly north of Edmonton, and even less of the province has been systematically surveyed for rare plants.
- Non-vascular groups (mosses, liverworts, hornworts, lichens) are under-reported throughout the province due to lack of field biologists who are experienced with these groups.
- Information on the occurrences of several thousand collections of mosses, liverworts and lichens has not yet been entered into the ANHIC database.
- Element occurrences from many sources of information other than specimen labels (e.g. biophysical reports, field notes) have not yet been entered.
- Many plant element occurrences are mapped only to within 2.5-10 km accuracy due to imprecise location descriptions on collection labels.
- Many element occurrences have not been surveyed since the date of original collection, which could be several decades ago. The current status of many occurrences, therefore, is unknown.
- Information is lacking regarding many element occurrences (e.g. size of population, habitat) and on the biology of plants (e.g. means of pollination/seed dispersal, germination requirements, genetic diversity within and among populations). This information is required to assess conservation significance and determine appropriate conservation approaches.
- The classification of some plants is uncertain and changeable, however this is becoming less of a problem as better tools (e.g. isozyme analysis) are developed.

2.4 Vertebrate Animals

Vertebrate Animals: Classification of Elements

Vertebrates are animals with a backbone, a skeleton of cartilage or bone and a skull, which surrounds a well-developed brain. Vertebrates include fish, amphibians, reptiles, birds and mammals. As with plants, the classification of vertebrate animals is based on the concept of species. A species is a naturally occurring group of animals able to breed among themselves but not to breed with animals of other groups. Each species has a scientific name, composed of two Latin words, as well as a widely accepted common name. Names of vertebrate animal species used in ANHIC follow Nelson



Allium geeyeri (an S2 species)



Polygala paucifolia (an S1 species)



Woodsia glabella (an S1 species)

Figure 3. Examples of Special Plant Elements (e.g., *Allium geeyeri*—polygon #525; *Woodsia glabella*—polygon #337, *Polygala paucifolia*—polygon #351).

and Paetz (1992) for fishes, Alberta Environmental Protection (1996) for amphibians, reptiles and birds, and Smith (1993) for mammals. Currently in Alberta there are 51 species of native fish, 10 species of native amphibians, 8 species of native reptiles, 297 species of native birds and 84 species of native mammals.

Vertebrate Animals: Process and Criteria For Determining What is Special

Since 1994, the Alberta Natural Heritage Information Centre (ANHIC) has been working to collect, evaluate and store information on Alberta's vertebrate animal species. Each species being considered by ANHIC is ranked on its status (globally and provincially) using a system developed by The Nature Conservancy which is in use throughout North America (Table 1). Evaluation of ranks is based primarily on number of occurrences although range within the province, population size, number of occurrences within protected areas, trends and threats also are used. ANHIC gathers information on elements that have been ranked S1, S2 and some that have been ranked as S3. The information is processed in accordance with standards, including assessment of identification, levels of precision for mapping, quality checks of data entry and mapping.

Sources of information on vertebrate animal elements include museum collections, published and unpublished scientific literature, field surveys and field notes of knowledgeable individuals. The major initial sources for specimen data include the University of Alberta Museum of Zoology, the Canadian Museum of Nature, the Provincial Museum of Alberta, and the Royal Ontario Museum. Two computerized data files were major sources of observations. Parks Canada provided data files for mountain national parks, and the computer files and survey record cards for the Alberta Wildlife and Breeding Bird Survey were obtained from the Federation of Alberta Naturalists. In addition, data from the new Biodiversity/Species Observation Database (BSOD) maintained by Alberta Fish and Wildlife were used for selected species. Published atlases and guides also have provided an important information base, including Nelson and Paetz (1992), Russell and Bauer (1993), Semenchuk (1992), and Smith (1993). In addition, surveys completed by the Canadian Wildlife Service on important shorebird staging areas (Poston *et. al* 1990) and on Canadian Forces Base Suffield have been valuable sources of information.

Evaluation of rank was initially done in 1995 by a group of knowledgeable individuals from government agencies and the private sector and a preliminary provincial tracking list for vertebrates was developed. Provincial S ranks were refined for some species in 1996 and 1997 as data were accumulated from published sources and computer databases. The ANHIC system of assigning S ranks is based primarily on the number of occurrences of the element in the province, as outlined in Table 1. This is a different process than used to assign status to species-at-risk by Alberta Environmental Protection (1996) or the Committee on the Status of Endangered Wildlife in Canada. Because of differences in ranking systems, the three lists are not strictly comparable, however these sources have been useful in assigning ranks using the ANHIC system.

Various individuals with expertise in vertebrate animal conservation have provided information and advice, including Steve Brechtel, Mike Norton and Gordon Court (Alberta Fish & Wildlife), Dave Ingstrup (Canadian Wildlife Service), Wayne Roberts (University of Alberta), Larry Powell and

Tony Russell (University of Calgary) and Cliff Wallis, Cleve Wershler and Wayne Smith (biological consultants).

Criteria for considering a vertebrate animal element to be of special conservation concern are:

- **The species or subspecies has 20 or fewer known occurrences in Alberta.**
- **The species or subspecies is considered to have small populations in Alberta and may be in decline or at risk.**
- **Habitats for one or more species have been judged by specialists to be outstanding in a national or international context.**

Vertebrate Animals: Special Elements and Element Occurrences

Currently, very few data on vertebrate animal elements of special conservation concern have been incorporated into the ANHIC database. Only 41 special vertebrate animal elements were considered for the purposes of this project. These include eight fish species, nine amphibian and reptile species, 13 bird species and 11 mammal species. Figure 4 illustrates four vertebrate animals that are considered special elements. In addition, important habitats were considered including:

- priority staging areas for shorebirds as identified by Poston *et al* (1990) and
- migratory bird nesting area as identified in Sweetgrass Consultants (1997).

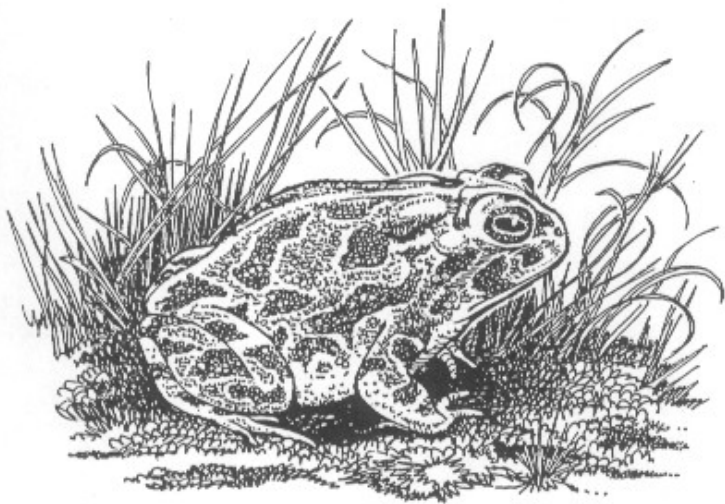
A list of special vertebrate animal elements considered as part of this project is provided in Appendix 4 and occurrences are included in Map 1.

Vertebrate Animals: Information Gaps and Uncertainties

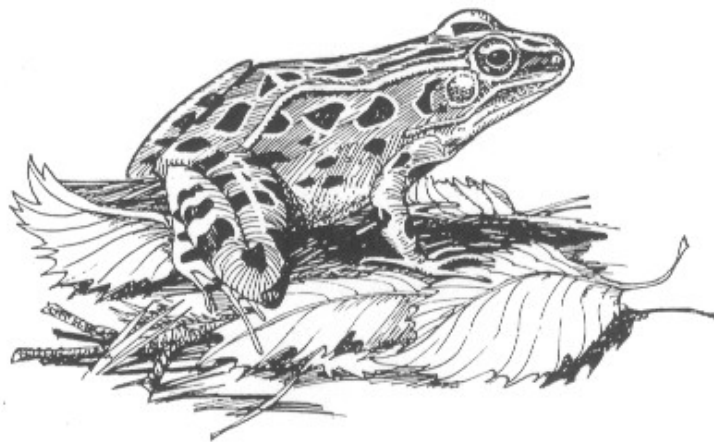
The list and map of special elements and element occurrences for vertebrate animals are subject to change as new information becomes available to ANHIC.

Key information gaps and uncertainties regarding vertebrate animal elements are as follows.

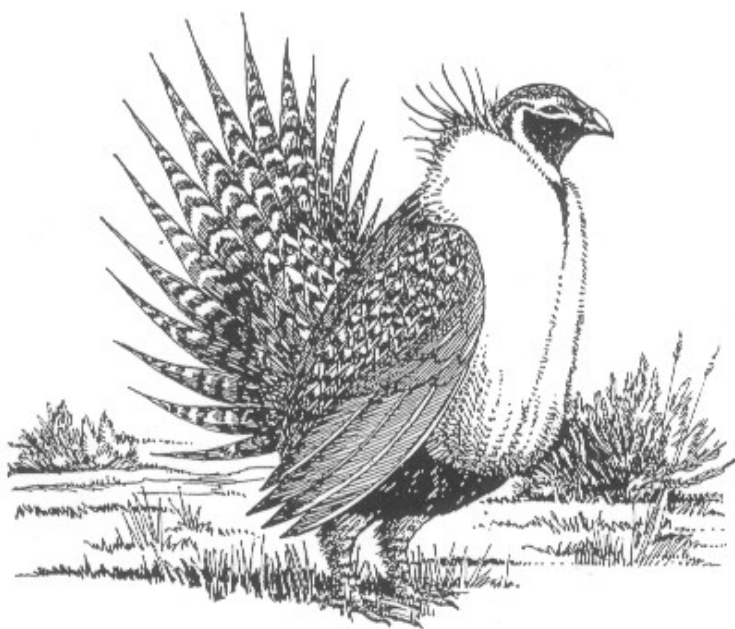
- Large portions of the province have yet to be systematically surveyed for the full spectrum of vertebrate animal species, particularly species that are difficult to see or otherwise detect.
- Many element occurrences have not been surveyed since the date of original collection. Since surveys may have been conducted several decades ago, the current status of many occurrences is unknown.
- Occurrence information on several vertebrate animal elements of special conservation concern has not yet been entered into the ANHIC database.
- Many vertebrate animal element occurrences are mapped only to a precision of 2.5 to 10 km due to imprecise location descriptions on specimen labels or in publications.
- Detailed information on many vertebrate animal element occurrences (e.g. size of population, habitat) and on the biology of species (e.g. seasonal range and movement, genetic diversity within and between populations, sensitivity to disturbances) is lacking. This information is required to assess conservation significance and determine appropriate conservation approaches.



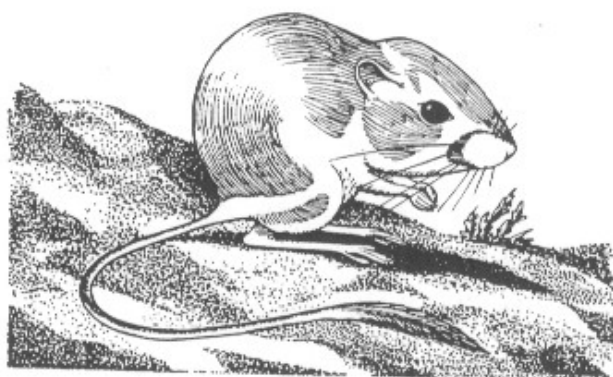
Great Plains toad (an S2 species)



Northern leopard frog (an S2S3 species)



Sage grouse (an S1S2 species)



Ord's kangaroo rat (an S2 species)

Figure 4. Examples of Special Vertebrate Animals (e.g., Leopard frog—polygon #68; Ord's kangaroo rat—polygon #75, Great Plains toad—polygon #522; Sage grouse—polygon #447). Images courtesy of the Wildlife Management Division, Alberta Environmental Protection.

- Data for some vertebrate animal elements of special conservation concern are not currently being considered by ANHIC. These include wide-ranging species that require a broad ecosystem management approach to protect habitats and ensure survival of populations such as wolf, woodland caribou, grizzly bear and river-dwelling fish.

3.0 IDENTIFICATION OF SPECIAL FEATURES

The occurrences of elements of special conservation concern form the basis for identifying special features. GIS technology allows all mapped special element occurrences (roughly 5000 in total) for landforms, vegetation communities, plants and vertebrate animals to be integrated onto one provincial map base (Map 1). One of the stated purposes of this project is to identify special features for possible inclusion in the provincial protected areas system. For this reason, only special element occurrences outside of existing protected areas (parks, ecological reserves, natural areas) were considered when identifying special features.

Special feature polygons were drawn around those areas with one or more of the following elements or element types:

- Priority Rare Elements - Include one or more elements with five or fewer known occurrences provincially or 100 or fewer occurrences globally.
- Outstanding Elements - Include one or more elements that are recognised as outstanding examples in a provincial, national or international context. This may include noteworthy landforms or vegetation types or sites with seasonal concentrations of vertebrate animals (e.g. internationally recognized shorebird staging areas).
- Elements-at-Risk – Include one or more elements considered at risk due to being restricted to a small portion of their former range or extent (e.g. *Festuca hallii* grassland communities or northern leopard frog).
- Assemblages of Elements - Areas with four or more elements considered of special conservation concern as identified in Section 2.0.

Special features polygons were first drawn around assemblages or concentrations of special element occurrences. Figure 5 illustrates one area that contains an assemblage of special elements. Boundaries at this point are abstract approximations as the precision of elements occurrences is variable. As well, boundaries do not generally take into account land ownership or land use. An assemblage usually includes four or more special element occurrences that appear clustered on a 1:100,000-scale map. Following identification of assemblages, individual occurrences of priority rare (≤ 5 occurrences) and outstanding elements and elements at risk were highlighted. Those not within recognized assemblages were evaluated and, if considered particularly significant, were enclosed within special features polygons. Special features, therefore, can include one highly significant special element occurrence, or several less significant special element occurrences.



Figure 5. Example of a Special Feature that Contains an Assemblage of Special Elements. Polygon #76 has S1 plant species (e.g. low yellow evening primrose, Virginia wild rye), S2 animal species (Ord's kangaroo rat) as well as outstanding examples of landform features (e.g., river terraces, salt depositing springs) and vegetation community types (e.g., riparian cottonwoods). Photo details: photo #109 and 110, AS3343, 1986, 1:40,000 scale).

In total, 463 special features have been identified and given a name that reflects their geographic location and, occasionally, the element type represented. These special features, and the reason why they were selected are provided in Table 2. Special features, with abstract approximations of boundaries, are shown on Map 1. Special elements found within each special feature are listed in Appendix 5.

4.0 EVALUATION OF SPECIAL FEATURE POLYGONS

To assist with conservation planning, special feature polygons identified were evaluated using seven criteria that reflect widely accepted principles currently being used by conservation planners to determine conservation needs and priorities. The criteria reflect principles regarding rarity, environmental significance, diversity, evolutionary significance, degree of threat and current representation in protected areas. These criteria are applied using numerical scores. The criteria are:

- rarity: rank of special elements (ERank),
- environmental significance (EnSig),
- diversity: number of special elements (#SE),
- diversity: number of special element groups (#SEG),
- evolutionary significance (Evol),
- degree of threat (Threat), and
- representation of special elements in protected areas(PARep).

In addition, an overall conservation priority score for each special feature polygon was evaluated based on the scores for each of the seven criteria.

Definition of the criteria and process for evaluation follow. Results of the evaluation are provided in Table 2.

4.1 Rarity: Rank of Special Elements (ERank)

The rank of an element is an indicator of rarity. Each special element in the province is assigned a rank by ANHIC based on the number of known occurrences provincially and globally.

Rank scores for plant and vertebrate elements are based on a combination of G and S ranks (see Table 1) using sequence values defined by The Nature Conservancy and widely accepted among conservationists. Combined G and S rank scores used for plant and vertebrate elements are as follows:

5	G1S1 or G1S2 or G2S1
4	G2S2 or G2S3 or G3S1 or G3S2 or G4S1
3	G3S3 or G4S2 or G5S1
2	G4S3 or G5S2
1	G5S3

Rarity ranks for landforms are not as well understood as those for plant and vertebrate elements. Scores for landforms, therefore, are based on the following:

- | | |
|---|---|
| 5 | 1 element occurrence in Alberta and uncommon globally |
| 4 | 1-5 element occurrences in Alberta |
| 3 | 6-20 element occurrences in Alberta and uncommon globally |
| 2 | 6- 20 element occurrences in Alberta |
| 1 | > 20 element occurrences in Alberta |

Elements that have not yet been ranked by ANHIC (e.g. vegetation communities and shorebird staging areas) are given a medium ranking of 3.

The special feature polygon is assigned the score of the highest ranking element within the polygon.

4.2 Environmental Significance (EnSig)

Environmental significance is an evaluation of the conservation profile, noteworthiness or outstanding nature of a special feature and the special elements contained within it. For example, those special features with special elements of limited distribution internationally which are considered the best example in the world are given the highest score. Those special features with elements noteworthy only at a regional scale are given the lowest score. Whether or not a special feature has been previously recognized as provincially or nationally significant also affects this evaluation. Since selection of special features is largely based on the occurrence of special elements considered to be of at least provincial significance, most special features identified are evaluated as provincial or higher significance. Scores for environmental significance are as follows:

- | | |
|---|-------------------------------------|
| 5 | International Significance |
| 4 | National Significance |
| 3 | Outstanding Provincial Significance |
| 2 | Provincial Significance |
| 1 | Regional Significance |

The special feature polygon is assigned a score reflecting the most environmentally significant element within the polygon.

4.3 Diversity: Number of Special Elements (#SE)

The number of special elements within a special feature polygon is an indicator of environmental diversity. Since special feature polygons vary in size, the number of special elements is not a measure of diversity per unit area but rather of total diversity within the polygon. Polygons with a higher numbers of special elements receive a higher score. Score categories are:

- | | |
|---|--------------|
| 5 | >10 elements |
|---|--------------|

4	5-10 elements
3	3-4 elements
2	2 elements
1	1 element

4.4 Diversity: Number of Special Element Groups (#SEG)

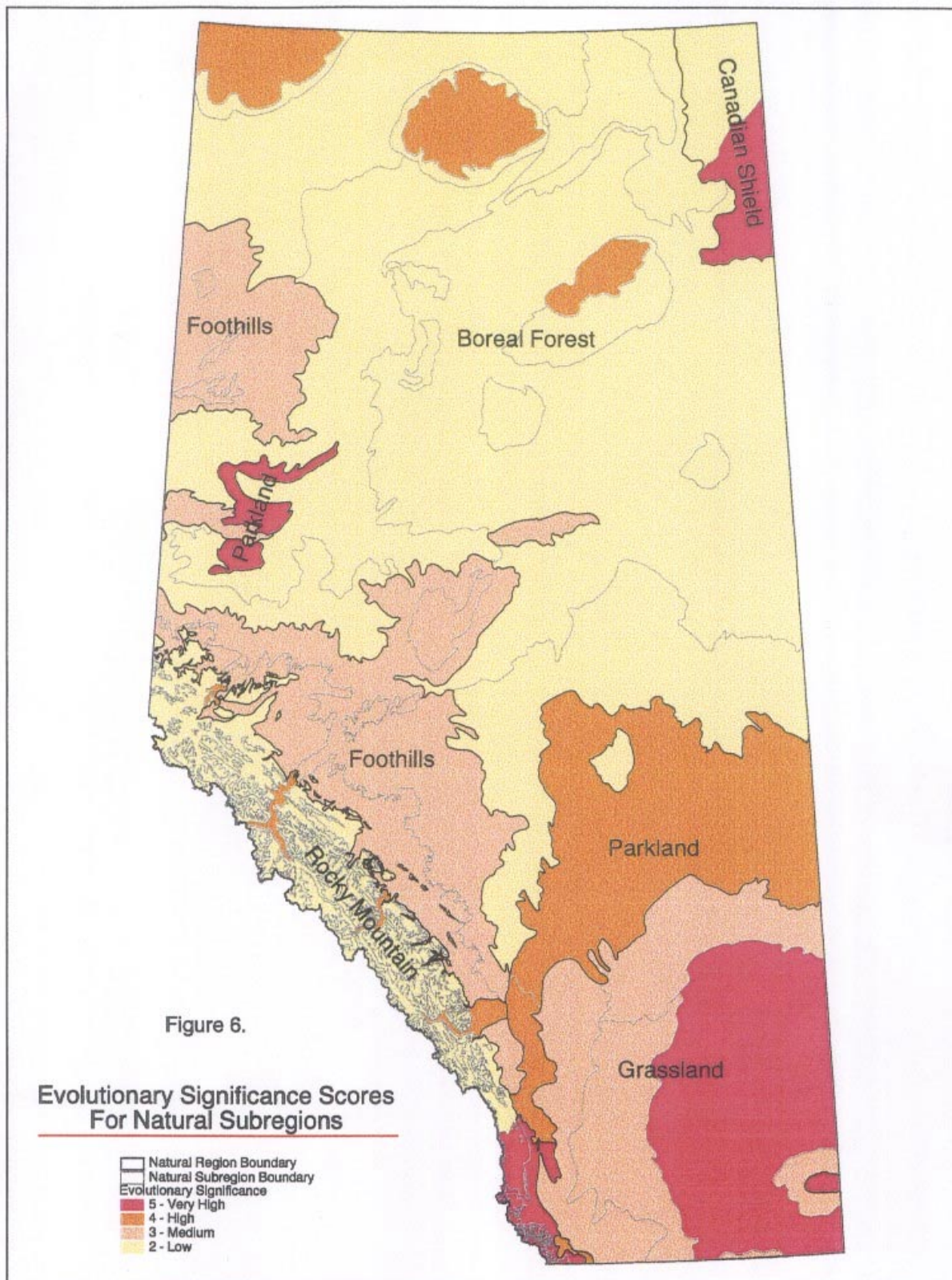
The number of special element groups also is an indicator of environmental diversity. Those polygons with all five groups of special elements represented – landform, vegetation community, vascular plant, non-vascular plant and vertebrate - are given a score of “5”, whereas those with only one group of special element represented are given a score of “1”. Scores are as follows:

5	5 element groups
4	4 element groups
3	3 element groups
2	2 element groups
1	1 element group

4.5 Evolutionary Significance (Evol)

A genetic perspective can be incorporated into the evaluation of special biological elements on the basis of evolutionary significance. For example, plant taxa that are endemic (occur in a small area and are thought to have evolved there) or plant populations that are peripheral or disjunct and genetically distinct from other populations of the species are considered to be of evolutionary significance (Purdy in prep.). Genetic information at the population and species level, however, is lacking for the large majority of rare plant species. An alternative approach to assessing evolutionary significance of special features relies on an assessment of the evolutionary capacity of natural subregions.

For the purposes of this project, Dr. Brett Purdy (evolutionary biologist, University of Alberta) has assigned ratings of evolutionary significance to each natural subregion in Alberta (Figure 6). For example, natural subregions in the Boreal Forest (BF) are of low evolutionary significance. This low rating is assigned because biological elements within the Boreal Forest Natural Region tend to have low rates of evolution and rare boreal elements in Alberta generally are widely distributed in North America or the world. An exception is the Subarctic Subregion – the tops of the Birch Mountains, Caribou Mountains and the Cameron Hills. This subregion is ranked as having of high evolutionary significance. The Sub-Arctic Subregion is characterized by disjunct populations of species more typical of more northerly sub-arctic habitats and which can be expected to experience genetic divergence.



The Athabasca Plain Subregion of the Canadian Shield Natural Region (CS) has been assigned a very high evolutionary significance rating. The extensive sand dune system within it is considered a centre of speciation by plant taxonomists. Several endemic species or varieties of species have been identified in the Athabasca Plain Subregion. The Kazan Upland Subregion of the CS however is typical of the extensive boreal shield environments outside of Alberta and is rated low.

The Upper and Lower Foothills subregions of the Foothills Natural Region (FH) are rated as having medium evolutionary significance because they represent habitats with relatively high productivity, a feature often associated with higher rates of evolution. Likewise the Montane Subregion of the Rocky Mountain Natural Region (RM) north of the Oldman River is considered of medium significance.

The Alpine and Subalpine subregions, north of the Oldman River are rated as having low evolutionary significance, as these environments are fairly extensive outside of Alberta. South of the Oldman River, however, the Montane, Subalpine and Alpine subregions are rated as having very high evolutionary significance. Many plant populations in the southwest are on the northern periphery of the ranges of species endemic to the mountain ranges of the western United States.

The Central Parkland and Foothills Parkland subregions of the Parkland Natural Region (PL) are rated as having high evolutionary significance because they represent transition zones between major floristic elements. Within these transition zones, populations of species often experience different ecological pressures (i.e. they may occur in different habitats or compete with different species for the same habitat), than are typical for the species. These ecological forces may facilitate divergence of the transition zone populations from others within the species. The Peace River Parkland Subregion is rated very high because plant populations are widely separated from the more southerly centres of the species' ranges.

The Foothills Fescue, Northern Fescue and Mixedgrass subregions of the Grassland Natural Region (GR) are rated of medium evolutionary significance. First, because they represent the northern extent of grassland features within North America, populations in Alberta are expected to be divergent from populations in the central portion of the species' ranges. Second, compared to the Boreal Forest Natural Region, rates of evolution are higher in grassland habitats, and rare elements are often found to have smaller geographic ranges. The Dry Mixedgrass Subregion is, however, of very high significance because many of the plants are Great Plains species occurring here are at the northern periphery of ranges that are centered in South Dakota and Nebraska.

Special feature polygons are scored for evolutionary significance consistent with that of the natural subregion in which they occur. Where a special feature straddles natural subregion boundaries, the highest significance rating is attached. Scores for risk assigned to natural subregions are as follows (note: no subregion was assigned a very low (i.e. "1") score):

- 5 GR-Dry Mixedgrass, PL-Peace River Parkland, RM- Alpine, Subalpine & Montane (south of the Oldman River), CS-Athabasca Plain
- 4 PL-Central Parkland, PL-Foothills, RM-Montane (north of the Oldman River), BF-Sub-Arctic
- 3 GR-Mixedgrass, GR-Foothills Fescue, GR-Northern Fescue, FH-Upper, FH-Lower
- 2 RM-Alpine & Subalpine (north of the Oldman River), BF-all except Sub-Arctic, CS-Kazan Upland

4.6 Degree of Threat (Threat)

An evaluation of the degree of threat to ecological integrity is based on an assessment of the degree of human-caused disturbances that have or are expected to pose threats to biodiversity and ecological processes within natural subregions.

For example, the Mixedgrass and Northern Fescue subregions of the Grassland Natural Region (GR) and the Central and Peace River subregions of the Parkland Natural Region (PL) are placed in the very high threat category as less than 15% of these regions remain as native vegetation. Most remaining native parcels are small, isolated and susceptible to continuing loss of native species due to the effects of fragmentation. The Alpine Subregion of the Rocky Mountain Natural Region (RM) and the Kazan Upland Subregion of the Canadian Shield Natural Region (CS) however are rated as under very low threat. They have experienced little loss of native vegetation and are considered to have a high degree of environmental integrity. In addition, there is low expectation for future threat to environmental integrity because of remoteness and current protective designations.

The Athabasca Plains of the Canadian Shield Natural Region (CS) and the Wetland Mixedwood, Peace Lowlands and Sub-Arctic subregions of the Boreal Forest Natural Region (BF) are identified at low threat. This is again because of remoteness and current protective designations as well as their low value for timber and energy resource extraction.

The Subalpine, Mixedwood and Boreal Highlands subregions together with the Upper and Lower Foothills subregions of the Foothills Natural Region (FH) are experiencing major forestry and energy developments and consequently major fragmentation of landscapes. These past and potential human-caused disturbances cause these subregions to be at medium or high threat. The Foothills Fescue, Foothills Parkland and Dry Mixedgrass subregions also receive medium or high threat scores, due to extensive clearing for cultivation and human settlement which has left few large parcels of native habitat intact.

Special features are provided a score for degree of threat consistent with that of the natural subregion in which they occur. Where a special feature straddles natural subregion boundaries, the highest significance rating is attached. Scores for level of threat assigned to natural subregions are as follows:

- 5 GR- Mixedgrass, GR-Northern Fescue, PL-Central Parkland, PL-Peace River Parkland
- 4 GR-Foothills Fescue, PL-Foothills Parkland, FH-Lower, RM-Montane, BF-Dry Mixedwood
- 3 GR-Dry Mixedgrass, FH-Upper, RM-Subalpine, BF-Mixedwood, BF-Highlands
- 2 BF-Wetland Mixedwood, BF-Peace Lowlands, BF-Sub-Arctic, CS-Athabasca Plain
- 1 RM-Alpine, CS-Kazan Upland

4.7 Representation of Special Elements in Protected Areas (PARep)

This evaluation criterion is a measure of the degree of protection already provided elements found within special feature polygons. Each special element is evaluated based on the number of element occurrences in the province and the number currently in protected areas – parks, ecological reserves, wilderness areas and natural areas. According to principles of conservation biology, protecting just one population is not sufficient to ensure long-term survival. Protection of several populations of species is recommended to assure conservation of biological diversity. Hence, the more examples of landforms or populations of species already included in protected areas, the lower the score that is assigned. Elements are scored as follows.

For elements with 5 or fewer occurrences in Alberta:

- 5 0 occurrences in protected areas
- 4 1-3 occurrences in protected areas
- 3 4 occurrences in protected areas

For elements with more than 5 occurrences in Alberta:

- 5 0 in protected areas
- 4 1-24% of occurrences in protected areas
- 3 25-49% of occurrences in protected areas
- 2 50-74% of occurrences in protected areas
- 1 ≥75 of occurrences in protected areas

Protected area representation scores of all elements in the special feature polygon were then evaluated and the polygon given a combined score as follows:

- 5 ≥ 50% of elements with a score of 5
- 4 ≥ 50% of elements with a score of 4 to 5
- 3 ≥ 50% of elements with a score of 3 to 5 or 3 to 1
- 2 ≥ 50% of elements with a score of 2 to 1
- 1 ≥ 50% of elements with a score of 1

If there is a tie in scores, then the higher score is assigned to the special feature polygon.

4.8 Conservation Priority

An overall conservation priority score for each special feature polygon was determined by evaluating the scores for the seven criteria. These reflect conservation principles regarding rarity, environmental significance, diversity, evolutionary significance, threat and current representation in protected areas. Criteria regarding rarity (ERank) and environmental significance (EnSig) are given higher weighting than other criteria in the overall evaluation.

The conservation priority score was determined as follows:

- | | |
|---|--|
| 5 | ERank or EnSig is “5” or at least four criteria have a score of “5” |
| 4 | ERank or EnSig is “4” or at least four criteria have a score of “4” to “5” |
| 3 | ERank or EnSig is “3” or at least four criteria have a score of “3” to “5” |
| 2 | at least four criteria have a score of “2” to “5” |
| 1 | satisfies none of the above criteria |

Conservation priority scores for the polygons are provided in Table 2. Sections 4.1 and 4.2 provide an explanation of how ERank and EnSig scores were derived.

All special features identified merit some form of protection, however the conservation priority scores provide guidance on which are most critical to protect based on current information. Many special features with lower conservation priority scores occur in portions of Alberta which have not been subject to biophysical inventory. This lack of survey information results in special features in these more remote regions being under-represented or under-valued. For example, special features are widely scattered through north-central Alberta, and Margaret Lake in the Cameron Hills of far northern Alberta has only special bird elements currently reported, but other special elements are expected to occur there as well. Furthermore, some special elements are transitory and may not be recorded in a brief survey of an area in a particular year. For example, mountain plover and piping plover change nesting locations from year to year, and several years survey of potential nesting habitat may be required to determine all special element occurrences.

5.0 ENVIRONMENTAL INTEGRITY, LAND OWNERSHIP AND SUITABILITY AS A PROVINCIAL PROTECTED AREA

The environmental integrity and land ownership of each special feature was assessed to determine the feasibility of considering the site for provincial protected area designation.

5.1 Environmental Integrity

A special feature is considered to have maintained its environmental integrity if special elements are still intact and the site has a nearly complete complement of native species and is relatively free of exotic species and human-caused disturbance. Ideally, ecological processes are functioning within the range of natural variation (Noss 1995). At a minimum, assessment of environmental integrity requires analysis of air photos, a site visit or both. This has recently been done for some special features, however for the large majority it has not.

Integrity is assessed for the entire site and not solely for an individual element within the site. For example, if most of the native vegetation has been removed from a site, it would be assessed as not having environmental integrity, even though it may contain a special landform element that is in itself intact.

Special features were assessed regarding environmental integrity as follows:

- | | |
|-------------|--|
| Yes (Y) | Recent information (air photo analysis, site visit) indicates the site maintains its environmental integrity, therefore the site continues to be considered as a special feature. |
| No (N) | Recent information indicates the site has experienced human disturbed (e.g. by cultivation, logging or other industrial, commercial or residential developments), therefore the site is removed from consideration as a special feature unless restoration in the short term is determined to be likely. |
| Unknown (U) | There is no recent information available regarding the environmental integrity of the site, or information that is available is not detailed enough to ascertain environmental integrity. More work is required to determine environmental integrity. |

5.2 Land Ownership

Provincial ownership of special features was verified by overlaying a map generated from GIS database files of land ownership by quarter section with special features polygons. Lands under private, municipal, or federal (including Indian Reserves) ownership are ineligible for consideration as provincial protected areas.

Special features were assessed with respect to land ownership as follows:

- | | |
|-------------|---|
| Yes (Y) | A site is entirely under provincial ownership, or enough of the site is under provincial ownership to adequately represent the special elements within the special feature, therefore the site could be considered for provincial protected area designation. |
| No (N) | A site is entirely or mostly under private, municipal or federal ownership therefore it is ineligible for provincial protected area designation. |
| Unknown (U) | The site is of mixed ownership and it is uncertain whether special elements within the special feature occur on provincial land, due to imprecision in the element occurrence record. More work is required to precisely determine locations of special elements. |

5.3 Suitability for Provincial Protected Area Designation

Special features known to have environmental integrity and to be under provincial ownership are listed in Table 3. These special features are suitable for consideration as protected areas using provincial designation. Table 3 also provides the conservation priority score for each special feature and notes regarding any previous conservation recognition of the site (e.g. under a provincial protective notation (PNT), a provincial recreation area (PRA), a provincial bird or wildlife sanctuary). Some sites may involve expansion of currently protected areas. In addition, overlap of the special feature with a candidate Special Place (SPCAN) or a nominated Special Place (SPNOM) is noted. Although candidate Special Places have been chosen based on representative natural history themes, these areas also may include special elements.

Special features requiring further work to determine their suitability for consideration as protected areas under provincial legislation are listed in Table 4. The majority of these sites can be evaluated quickly using air photo analysis to determine environmental integrity. For some sites, field inventories may be required to determine if significant elements are on provincial land or if elements are still intact. Table 4 also provides the conservation priority score for each special feature and indicates previous conservation recognition of the site, including candidate Special Places. For some special features, other considerations regarding suitability for protected area designation are identified. For example, it may not be feasible to include some large special landform elements in protected areas (e.g. meteor impact crater, spillway channel, esker). As well, there may be other mechanisms more suited to protecting some special features, such as wildlife sanctuary designation and lake management plans for shorebird and waterfowl staging areas.

6.0 CONCLUSIONS AND FUTURE DIRECTIONS

This project has been designed to provide a scientific basis for identifying and evaluating special features in Alberta, recognizing that special features are an important part of Alberta's environmental diversity. Objectives of the project were threefold:

- To define a framework and process for identifying special features and evaluating their conservation status in Alberta.
- To identify special features on provincial land for consideration for inclusion in Alberta's protected areas network.
- To identify information gaps and uncertainties regarding special features that will need to be addressed as part of ongoing efforts to protect environmental diversity.

The project objectives have been met. Project results point to key conclusions and future directions related to the three objectives.

6.1 Framework and Process for Identifying and Evaluating Special Features

A framework and process for identifying special features and evaluating their conservation status in Alberta has been defined and initially applied as part of this project. We propose that

the framework and process be accepted by the Special Places Provincial Co-ordinating Committee for ongoing identification and evaluation of special features in Alberta.

The framework and process are based on current principles regarding conservation of environmental diversity. They are designed to use information contained in the Alberta Natural Heritage Information Centre and the Biodiversity/Species Observation Database and to draw on a broad network of expertise in Alberta's professional conservation community. We suggest that the framework and process continue to be used to identify and evaluate special features as new information becomes available and that they periodically be assessed and revised to ensure continued consistency with principles of conservation and relevance to protection of environmental diversity in Alberta.

6.2 Special Features Suitability for Provincial Protected Areas Designation

One hundred and forty-nine (149) special features are evaluated as including bio-physical resources suitable for inclusion in the provincial protected areas network. Consideration of these areas by the Special Places Provincial Coordinating Committee can proceed immediately.

Special features which occur on provincial land and are known to have environmental integrity are listed in Table 3 and shown on Map 2. Boundaries of special feature polygons shown on Map 2 are abstract approximations and will require refinement once protected area priorities are established. To assist decision-makers in establishing priorities for protected areas planning, an evaluation of conservation priority and notes regarding existing or proposed conservation designations also are provided (Table 3). There has been no screening of resource commitments on these sites as it was not part of preparing this report.

Two hundred and sixteen (216) special features require further work to confirm their suitability for inclusion in the provincial protected areas network.

Special features with some uncertainty about their environmental integrity or provincial ownership are listed in Table 4 and shown on Map 2. Also listed in Table 4 are special features with a mix of private and provincial ownership where cooperative conservation options may be considered. Some information needs, identified on Table 4, can be addressed quickly, for example through air photo interpretation, whereas others will require longer-term site investigations. Addressing these information needs in a timely and systematic manner will enable a more comprehensive approach to protected areas planning and help to ensure important aspects of Alberta's environmental diversity are not lost. Boundaries of special features polygons shown on Map 2 are abstract approximations and will require refinement once priorities are established. To assist decision-makers in establishing priorities for protected areas planning, an evaluation of conservation priority and notes regarding existing or proposed conservation designations also are provided (Table 4). There has been no screening of resource commitments on these sites as it was not part of preparing this report.

6.3 Information Needs Regarding Special Elements

Several information gaps and uncertainties regarding special elements have been identified. They will need to be addressed as part of ongoing efforts to inventory and protect the province's environmental diversity. Coordination through the Alberta Natural Heritage Information Centre and the Biodiversity/Species Observation Database, both within Alberta Environmental Protection, will continue.

Information gaps and uncertainties regarding special elements have been identified in Section 2.0 of this report. In summary they include:

- Completing review of existing information sources to identify elements of special conservation concern and recording occurrences in the ANHIC database. Element types needing particular attention are landforms, vegetation communities, vertebrates, invertebrates (e.g. butterflies, dragonflies, freshwater molluscs), non-vascular plants (e.g., liverworts, hornworts, lichens) and fungi.
- Field checking of element occurrence records which have imprecise location descriptions or for which the last documented siting was two or more decades ago and there is a likelihood that populations have been affected by disturbances or land use changes.
- Inventorying of protected areas, particularly sites recently added to the provincial protected areas network, as well as sites under reservation not addressed in this report, to identify, map and precisely describe occurrences of special elements.
- Identifying special element inventory needs outside of protected areas, particularly for northern Alberta where very few biophysical surveys have been completed. Innovative and efficient ways for obtaining inventories may be considered, including involvement of a variety of government agencies, private industries and non-government organizations.
- Encouraging research on the conservation biology of special elements including life histories of species, factors affecting survival, population dynamics within species, and genetic diversity within and among populations. This information is required to assess conservation significance and determine appropriate conservation approaches.
- Developing strategies and processes for monitoring the status of special elements, identifying and reviewing relevant information on special elements as it becomes available, and relating this information to management practices inside and outside of protected areas.

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8.0 GLOSSARY

alluvial fan – The fan-shaped deposit of sediment laid down by a swift-flowing stream as it enters a plain or an open valley.

biodiversity – The variety of genes, species and ecosystems on earth and the ecological processes of which they are a part.

centre of speciation – Area where species are originating at a relatively high rate.

coarse-filter approach – An approach to conservation of biodiversity which considers large ecosystems or landscape units.

delta – The fan-shaped alluvial feature formed at the mouth of a river, where more material is deposited than can be removed by currents.

differential erosion – The more rapid erosion of one portion of the earth's surface as compared with another.

dike – A vertical or highly inclined sheet of igneous rock formed when molten rock material from the interior of the earth has forced its way towards the surface through a cleft, or by melting a passage for itself, and has there cooled and solidified.

disjunct – A population of a species widely separated from other populations of that species.

ecological processes – Natural forces acting on geologic material and life forms within ecosystems. Ecological processes include drought, flood, erosion, deposition, soil disturbance, fire, photosynthesis, herbivory, predation and decomposition.

element – A component of environmental diversity. It may be defined at many different scales. An element may be a landform type, a vegetation community type or a species or subspecies of plant or animal.

element occurrence – A documented location of an element which is recorded in the Alberta Natural Heritage Information Centre.

element group – A grouping of similar elements, such as landforms, vegetation communities, plants or vertebrate animals.

endemic – Describes a biologic element that occurs in a small area and is thought to have evolved there.

environmental diversity – The variety of plants, animals and landforms on earth.

environmental (ecological) integrity – The quality of an area in which the complement of native species is nearly complete and exotic species are insignificant. Ideally, ecological processes function within the range of natural variation.

evolutionary capacity – The ability of a natural subregion to experience evolution based on an assessment of evolutionary pressures on organisms and current rates of evolution.

esker – A long, narrow ridge of sand and gravel which was once the bed of a stream flowing beneath or in the ice of a glacier, and was left behind when the ice melted.

fine-filter approach – An approach to conserving biodiversity which considers the needs of individual species.

focal species analysis – An approach to determining conservation needs by analysing the conservation requirements of one or several species considered of special conservation concern.

fragmentation – A process where large blocks of natural habitat are broken up into smaller and isolated pieces.

genetic divergence – The process of change in the genes of populations of the same species, such that over time they may be differentiated into separate species.

genetically distinct – Differentiated on the basis of gene (hereditary factor) characteristics.

geothermal – Relating to the heat of the earth's interior.

glacial moraine – The debris or fragments of rock material deposited by glaciers.

glaciotectonism – structural deformation of bedrock and/or drift masses as a direct result of glacier-ice movement or loading, without completely removing or destroying the rock or sediment beyond recognition.

ground moraine – Material deposited from a glacier on the ground surface over which the glacier has moved. The topography is usually flat or gently undulating.

hibernaculum – The place in which an animal or group of animals overwinter.

hummocky moraine – Area of strongly rolling topography, comprised of rounded hills and depressions, usually produced by the melting of stagnant glacial ice.

igneous activity – Formation of rock from a molten or partially molten state, as contrasted with sedimentation processes in rock formation.

isozyme analysis – An approach for recognizing differences among groups of organisms by analysing for variants of enzymes.

kame – A mound of gravel and sand which is formed by the deposition of sediment from a stream beneath a glacier.

karst – A type of topography that is formed in limestone, dolomite or gypsum by dissolving or solution.

lagoon – A shallow body of water which is partly or completely separated from the main water body by a narrow strip of land.

meltwater channel – A channel formed by the melting of glacial ice.

natural history themes – Categories for describing Alberta's environmental diversity used by the Alberta Special Places Program. Level 1 themes are broad landscape types within a natural subregion. Level 2 themes are broad habitat or vegetation types. Level 3 themes are specific landforms, plant communities or species.

outwash plain – A plain composed of material washed out from glaciers.

peat accumulation – Build-up of decaying vegetation (primarily mosses and sedges) in wetland areas.

peripheral population – A population that is near the limit of the species' distribution range.

permafrost – Permanently frozen ground or subsoil. The temperature in the material has remained below 0°C for more than two years.

special element - An element of special conservation concern defined using objective criteria including rarity, risk, outstanding characteristics and the agreement of specialists. Tracking lists of special elements in Alberta, are developed through a consultative process facilitated by the Alberta Natural Heritage Information Centre.

special element occurrence – The documented location of a special element which is recorded within the Alberta Natural Heritage Information Centre.

special feature - An area which includes the occurrence(s) of one or more special elements.

special feature polygon - The mapped area of a special feature showing approximate boundaries.

tracking list - ANHIC develops tracking lists of elements that are considered of high priority because they are rare or special in some way. Tracking lists serve as a focus for data gathering to increase our knowledge and understanding of the elements of Alberta's biodiversity.

**Appendix 1a. Landform Element Occurrences of Special Conservation Concern:
≤ 5 Occurrences in Alberta.**

<u>Site Name</u>	<u>Element Name</u>	<u>Subelement</u>
Airdrie Murdlins	Murdlins	
Andrew Lake	Stocks	
Black Butte	Stocks	
Burning Sulphur	Burning sulphur	
Cadomin Cave	Rock Labyrinths	
Cold Lake Baymouth Bars	Baymouth Bars	
Coliseum-Shunda Mountain	Rock Labyrinths	
Crowsnest Volcanics	Volcanic Rocks	
Del Bonita Uplands/Shanks Lake	Asymmetric Valleys	
Driedmeat Lake	Deltas	Unilobate
Eagle Butte Impact Structure	Impact Structures	
Hot Pot	Burning gas	
LaCrete Sand Hills	Dune Ridges	Lacadena Ridge
Leland Lake/Tulip Lake	Plutons	
Lost River	Honeycomb Weathering	
Ma Butte	Volcanic Rocks	
Mackay River Palsa	Palsa Bogs	
Middle Sand Hills	Dune Ridges	Dune-Track Ridge
Moose Mountain	Ice Caves	Cold Zone
Newman volcanics	Volcanic Rocks	
Pekisko	Crag-and-Tail	
Pincher Creek South	Volcanic Rocks	
Plateau Mountain Ecological Reserve Extension	Biscuit Board Topography	
Ptolemy Creek	Ice Caves	Cold Trap
Ptolemy Creek	Ice Caves	Relict Permafrost
Ptolemy Creek	Ice Caves	Cold Zone
Ptolemy Creek	Ice Caves	Perennial
Ptolemy Creek	Ice Caves	Perennial
Ptolemy Creek	Ice Caves	Perennial
Ram River Falls/Canyon	Plunge Pool Lakes	
Richardson River	Dune Ridges	Lake Claire Ridge
Richardson River	Dune Ridges	Cree Lake Ridge
Ronald Lake Sandhills	Dune Ridges	Lake Claire Ridge
St. Agnes	Crag-and-Tail	
Whitemud Falls Ecological Reserve Extension	Stacks	
Wolverine River Sand Hills	Dune Ridges	Lacadena Ridge
Ya Ha Tinda	Rock Labyrinths	

**Appendix 1b. Landform Element Occurrences of Special Conservation Concern:
Outstanding Occurrences.**

<u>Site Name</u>	<u>Element Name</u>	<u>Subelement</u>	<u>Description</u>
Algar Bog	Wooded Bogs with Internal Lawns	Flat Bog	A large and diverse peatland of provincial significance.
Alice Creek	Non-Patterned Fens with Internal Lawns	Horizontal Fen	A good sized, 300 sq. km., non-patterned open horizontal fen. Channel fens are very well developed and extensive.
Alice Creek	Non Patterned Fens without Internal Lawns	Channel Fen	A good sized, 300 sq. km., non-patterned open horizontal fen. Channel fens are very well developed and extensive.
Andrew Lake	Fault-line Scarps		Area has excellent examples of fault-line scarps. They occur along a major fault which transects the rock strike in a NNW to NW direction.
Andrew Lake	Raised Beaches		Area has an excellent series of raised beaches that mark the former shorelines of Andrew Lake.
Athabasca Flutings	Flutings	Giant	Excellent examples of giant flutings and remnant ridges formed subglacially under hydrostatic pressure. They have a N-S orientation. Produced by the Livingstone Lake flow event. The flute field is about 15 km wide.
Audet Lake Patterned Fens	Patterned Fens	Northern Ribbed Fen	An excellent example of a northern ribbed fen. Patterning extends over 5 to 6 sq. km. of peatland NE of Audet Lake.
Bain Bluff	Earth Slides		A good example of an earth slide along a southern Alberta river. It has multiple retrogressive failures that probably originated from lateral basal erosion by the river. The slide is about 2.5 sq. km. in area.
Bear River Sandhills	Dunes	Parabolic	Classical examples of parabolic and dome dunes. Presently inactive. Highest dunes are commonly 10 to 11m above the surrounding surface. Dune field covers about 7700 ha.
Beavermines Valley	Valleys	V-Shaped	A good example of a v-shaped valley located within an earlier-formed u-shaped valley. The junction of the v-shaped and u-shaped valleys is usually marked by a waterfall, in this case, Castle Falls. The waterfall marks a former position of the glacial ice in the u-shaped valley.
Big Sagebrush	Patterned Ground		Good examples of patterned ground.
Bistcho Lake Peat Plateaux	Peat Plateaux		Excellent example of peat plateaux in the Boreal Subarctic. A large peatland covering 3750 sq. km.
Black Mountain	Hogbacks		Rugged hogback ridges of national significance.
Blackfoot Reserve	Megablocks		One of the most important known megablocks in Alberta due to its large size and surface exposure. The block is at least 10 sq. km. in area and has been correlated to bedrock outcrops found 250 km to the north. It has an approximate thickness of 10m.
Bourque Lake Tunnel Lake	Glacial Tunnel Lakes		A good example of a glacial tunnel lake.
Brazeau Tufa	Tufa Depositing Springs		A good example of a tufa-depositing hillside spring. Tufa is still actively mineralizing out of the spring water and being deposited on the bottom of the stream bed.
Brule Lake	Dunes	Parabolic	An excellent example of montane sand dunes and sandhills in Alberta. Has active and stabilized dunes. The dunes forms here are derived from wind deposition and erosion of sand originating on the floodplain of the Athabasca River. Aeolian material is strongly calcareous.
Buffalo Lake	Moraine Plateaux		The highest moraine plateau in the area. It is about 45m above the surrounding landscape.
Cadomin Cave	Karst Caves	Joint	A cave with a length of about 2500m and a depth of about 220m. An important bat hibernacula.
Calahoo Creek Warm Springs	Warm Springs		A good example of a warm spring (temperature of 14 C). Spring has a flow rate of about 3.8 litres/sec.
Cameron Hills	Flutings	Giant	Area has the largest glacial flutings known in Canada. Their long-axial orientation reflect ice flows from a NE source or sources plus localized divergences and convergences around major uplands.

<u>Site Name</u>	<u>Element Name</u>	<u>Subelement</u>	<u>Description</u>
Canmore Corridor/Lac des Arcs	Fluvial Lakes	Alluvial Fan Dammed	Lac des Arcs was formed by the coalescing of two alluvial fans on opposite sides of the river, which created a damming effect on the flow of water.
Chappice Lake	Drift Basins	Saline/Alkaline Lake	A permanent hypersaline lake in a region of the province where naturally occurring, permanent wetlands are rare. Has extensive saline springs/seepages in excellent condition.
Charles Lake	Tectonic Lake Basins	Fault Lake	Charles Lake is an outstanding example of a structurally controlled waterbody. It follows a major fault structure, the Allan Fault, for about 40 km.
Chelsea Creek Flutings	Flutings		Area has some of the best examples in Canada of glacial flutings formed by retreating glaciers.
Cherry Point Earth Flows	Earth Flows		A good example of an earthflow. The appearance of the cavity and debris apron suggest that after a possible initial rotational slip on the bank face, the surficial lacustrine clay was remoulded to the consistency of a thick porridge. It then flowed through a narrow bottleneck in the upper valley wall and down the bank to form a spoil pile.
Clear Hills	Iron Depositing Springs		A nationally significant iron oxide spring (47.5% mineral content). The outlet and surrounding area are rust-red from the iron deposits which form either a soft mass or miniature dams and pools that resemble rimstone. The water temperature is cold (2.3 C).
Clear Hills	Patterned Fens	Northern Ribbed Fen	A large northern ribbed fen. The area also has a number of 'peat mounds' which may be an early stage to peat plateau or palsa development. The density and diversity of the mounds here is unparalleled elsewhere in Alberta.
Clearwater Patterned Fen	Patterned Fens	Spring Fen	A unique saline patterned fen along the Clearwater River.
Coal Lake	Glacial Tunnel Lakes		Good example of a glacial tunnel lake. It lies in the Gwynne subglacial meltwater channel. This channel is dotted with a number of shallow lakes which have formed as a result of the low gradient and variation in thickness of the alluvial fill.
Cold Lake	Ice Scour Lakes		The deepest ice-scour lake in Alberta.
Coliseum-Shunda Mountain	Non-Patterned Fens without Internal Lawns	Spring Fen	An excellent example of a spring fen.
Crowsnest Mountain	Klippes		A striking example of a klippe where the Lewis Thrust carried Palaeozoic limestones over much younger sandstones and shales of Cretaceous age. It was cut off from the main range by erosion in the Allison Creek valley.
Crowsnest River	Rock Falls		A massive rockfall failure that originated in steeply dipping and folded limestone beds. It had a volume of 37,000,000 cubic metres and ranks among the world's largest. The rockfall contains huge boulders ranging up to 15m in diameter.
Crowsnest River	River Terraces		Excellent examples of gravel river terraces (well preserved). There are several levels of these terraces along the Crowsnest River.
Crowsnest River	Sulphur Depositing/Odor Springs		An excellent example of a karst spring containing concentrations of sulphur. The spring has a flow rate of about 7.6 litres/sec. Sulphur bacteria are present. The suspended sulphur gives the springwater a milky appearance.
Cypress Hills	Erosional Remnants		The highest plateau on the plains of western Canada. It encompasses about 2600 sq. km. of nearly level plateau. Paleosols occur there. Also excellent examples of Tertiary conglomerates. About 210 sq. km. of the hills projected above the ice sheet as a nunatak, one of the best documented.
Del Bonita Uplands/Shanks Lake	Erosional Remnants		An exceptional area that was unglaciated by both Cordilleran and Laurentide ice. The area is capped by a thick covering of preglacial sands and coarse quartzitic gravels deposited after the Laurentide Orogeny. These gravels served as an "armor plating" for the softer, underlying sediments and protected the area from being eroded and removed from the landscape.
Del Bonita Uplands/Shanks Lake	Ice Wedge Casts		Area contains excellent examples of ice wedge casts which are relict periglacial features. The largest ones are up to 2-3m wide and more than 3m deep.

<u>Site Name</u>	<u>Element Name</u>	<u>Subelement</u>	<u>Description</u>
Devil's Head Klippe	Klippes		A good example of a klippe formed as a result of a Middle Cambrian Eldon Formation being thrust over an Upper Devonian Fairholme Group in the Front Ranges of the Rocky Mountains.
Driedmeat Lake	Meltwater Channels	Subglacial	An excellent example of a subglacial meltwater channel. The channel averages about 1 km in width and contains steeply sloped banks as high as 46m. Now occupied by a chain of lakes: Ord, Coal, and Saunders.
Driftwood Bend Megablock	Megablocks		One of the largest megablocks yet discovered in Alberta. It covers at least 10 sq. km. It is over 10m thick and extends for more than 1.5 km along the Oldman River, where it outcrops.
Drumheller Badlands	Badlands		One of the best badland areas in Alberta. Many badland features including miniature pediments and fans, rills, gullies, veneered terraces, hoodoos, buttes and mesas, knife edge divides, rounded interfluvies and soil erosion features. Piping is also common. Has outcrops of the Upper Cretaceous Horseshoe Canyon Formation.
Dune Point	River Terraces		Area contains classic examples of terrace succession and other features characteristic of a meandering river channel. River terraces are massive and have a complex geomorphology. Terraces are the largest in southern Alberta.
Dune Point	Salt Depositing Springs		Area contains some of the most diverse saline and alkali springs in Alberta.
Edgerton Dunes	Dune Ridges	North Battleford Ridge	Has good examples of the North Battleford type of dune ridge. The ridges are quite long and aligned parallel to each other. The dune field covers about 130 sq. km.
Edgerton Dunes	Non-Patterned Fens without Internal Lawns	Stream Fen	An excellent example of a stream fen in a sand plain/dune area. Good condition.
Edgerton Landslide	Rock Slides		One of three contiguous translational slides with a volume of 350,000 cubic metres. The slide evolved from a rapid rockslide to a slow earthflow slide, the first description of such a transition in Canada.
Ells River Incised Meanders	River Meanders	Incised	The Ells River has excellent examples of well developed and deeply incised meanders.
Fairview Marl Lake	Marl Lakes		Excellent example of a marl lake and wetland complex.
Forgetmenot Mountain	Karst Caves	Joint	The deepest known cave in Alberta.
Forgetmenot Mountain	Felsenmeer		Good examples of felsenmeer on Forget-Me-Not Mountain.
Forgetmenot Mountain	Patterned Ground		Good examples of stone stripes and polygons on the summit of Forget-me-not Mountain.
Fort Hills	Kames	Kame Delta	An excellent example of a large (65 sq. km.) kame delta complex. The complex comprises the Fort Hills.
Fort Hills	Patterned Fens	Northern Ribbed Fen	Two fens surrounding McClelland lake, one to the SW and the other to the E of the lake have the most prominent string and flark pattern in the province.
Fort Smith (Slave River Rapids)	Rapids		One of the premiere set of rapids in Canada. There is a 35m drop over a distance of 27 km. The scenic red granite of the rocks here mark the western margin of the Canadian Shield.
Fort Vermilion Sandhills	Dunes	Transverse	This area has a greater variety and morphology of dune forms than in any other dune occurrence in Canada. Three sets of transverse dunes occur. Dune field covers about 610 sq. km.
Front Canyons	Hanging Valleys		A scenic hanging valley with about 300m of elevational drop.
Ft. Chipewyan	Raised Beaches		An excellent example of raised beaches from former Glacial Lake McConnell. They occur at elevations considerably higher than the current level of Lake Athabasca.
Glenwood Erratic	Erratics		A large, glacial erratic rock measuring 7 x 9 metres in size. It is made of quartzite. This erratic is part of the Foothills Erratics Train that has rocks originating from the Jasper area.
Grassi Lake	Rock-Shelters		Good examples of rock-shelters. Cliffs in the area are remnants of Devonian reefs that are 'riddled' with caves.

<u>Site Name</u>	<u>Element Name</u>	<u>Subelement</u>	<u>Description</u>
Grassi Lake	Disappearing Streams		The stream flowing through the area vanishes into a subterranean channel, only to reappear with greatly increased flow.
Grassy Mountain Crowsnest	Flatirons		Good examples of flatirons in massive limestone.
Hand Hills	Erosional Remnants		An excellent example of an erosional remnant. It is covered with Tertiary conglomerate and gravels, a rare geological feature. It is an ancient plateau that now rises 225m above the surrounding prairie.
Hawk Hills Slope Fens	Non-Patterned Fens without Internal Lawns	Slope Fen	An excellent example of a slope fen.
Hay Lake Thermokarst Lake	Thermokarst Lakes		Excellent examples of thermokarst ponds.
Hell's Gate Water Gap	Water Gaps		A good example of a water gap created by the erosive action of the Smoky and Sulphur River. Vertical 'canyon' walls of bedrock and conglomerates occur at the site.
Horseshoe Lake	Drift Basins	Saline/Alkaline Lake	An excellent example of a hypersaline lake. Large areas of the basin dry up during severe droughts.
Indian Cabins Peat Plateaux	Peat Plateaux		Excellent example of peat plateaux. The peatland has extensive collapse scar development.
Island Lake	Drift Basins	Holm Lake	Lake has several large and numerous smaller islands, an excellent example of a holm lake.
Jackknife Springs	Tufa Depositing Springs		The spring has a large travertine mound about 3m high and 30m in diameter. It is capped by a twin bathtub-like structure.
Kakwa North	Warm Springs		A good example of a warm spring. It has a temperature of 9 C.
Kakwa North	Patterned Ground		Excellent example of stone stripes, circles, and boulderfields at an elevation greater than 1800m.
Kilini Creek	Patterned Fens	Spring Fen	Good example of a spring fen. Springs are calcareous.
Kinsella Tufa and Ice-walled Channel	Meltwater Channels	Ice-walled	Area contains an excellent example of an ice-walled meltwater channel.
Kinsella Tufa and Ice-walled Channel	Tufa Depositing Springs		Site has one of the few examples of dome springs with tufa deposits in the east-central part of Alberta.
Kipp Megablock	Megablocks		A well exposed glacial megablock and geological type section. It is visible for about 1.5 km along the Oldman River, where it outcrops.
Kipp Megablock	Aligned Coulees		An excellent example of well-developed aligned coulees. Marked parallelism and the tendency to occur on windward valley walls are well displayed here.
Kleskun Hills	Erosional Remnants		A good example of an erosional remnant that has some badland characteristics. Bedrock of the Cretaceous Wapiti Formation is exposed here.
LaCrete Sand Hills	Dunes	Transverse	An important area for transverse dunes. Dune area covers about 65 sq. km.
Lake Athabasca South Shore	Beaches		This area has the longest beach in Alberta, extending along the south shore of Lake Athabasca.
Landslide Lake	Landslide Lakes		A good example of a lake formed as a result of a landslide in the Front Ranges of the Rocky Mountains.
Leland Lake/Tulip Lake	Tectonic Lake Basins	Fault Lake	A good example of a fault lake. The intriguing shape of Tulip Lake is believed to be the consequence of the combination of NNE foliation and an east-trending system of fractures.
Lesser Slave Lake Provincial Park Extension	Aeolian Beach Ridges		Area has some of the best aeolian beach ridges in Alberta, however, some are highly disturbed by wellsites and cutlines.
Little Smoky Landslide	Rock Slides		A large (18,000,000 cubic metres) and relatively recent (1958) active slide. At intervals of the order of decades, sufficient subsidence and translation occur in front of the backscarp to permit a new block to fail by slow settlement and the scar to retrogress.
Livingstone Gap	Water Gaps		A spectacular water gap in which the Oldman River flows through a narrow incision in the Livingstone Range.

<u>Site Name</u>	<u>Element Name</u>	<u>Subelement</u>	<u>Description</u>
Lloydminster Crevasse Fillings	Crevasse Fillings		Area contains excellent examples of crevasse fillings (also termed linear disintegration ridges). The ridges vary in size but can range up to 7m in height, 90m wide and several kilometres in length. There are two sets of ridges that intersect at acute or right angles, thus forming a waffle, diamond or box pattern.
Lonepine Creek Dendritic Eskers	Eskers		This area has some of the best examples of tributary esker ridges having a dendritic pattern. The dendritic pattern is believed to be relatively uncommon in Alberta.
Lost River	Drumlins		Area contains good examples of drumlins and drumlinoid ridges. Classic drumlins range to 15m in height and are composed entirely of gravel and sand.
Lousana Canyon	Gorges/Canyons		Part of the deepest (90 to 150 m) canyon along the Red Deer River. Has outcrops of the Upper Cretaceous Horseshoe Canyon and Tertiary Paskapoo Formations. Also has excellent examples of slope failure and slump features including perched wetlands.
Lower Red Deer River	Badlands		Contains the largest and most spectacular area of badlands in Canada. Numerous badland features including pipes, tunnels, sinkholes, caves, dry valleys, buttes, mesas, natural bridges, disappearing streams, ephemeral stream terraces, channels, ephemeral waterfalls, hoodoos, pediments, fluvial fans and aprons.
Lower Red Deer River	Alluvial Fans	Coalescing	A good example of a coalescing fan. At least ten, clearly identifiable, fine grained alluvial fans have coalesced forming a bajada across the site. The surface of the bajada is covered by a distributary, semi-radial pattern of braided streams.
Mackay River Incised Meanders	River Meanders	Incised	The lower Mackay River has some of the best, deeply incised meanders in Alberta.
Many Island Lake	Playa Lakes		A large playa lake with extensive marshes in wetter years.
Manyberries Creek Badlands	Sandstone Dikes		Good examples of sandstone dikes occurring in the Oldman and Bearpaw Formations.
Margaret Lake	Veneer Bogs		Excellent examples of veneer bogs.
Marten Mountain Ribbed Fen	Patterned Fens	Northern Ribbed Fen	A large and excellent example of a northern ribbed fen.
McLelland Lake Sinkholes	Dolines	Collapse	Area has excellent examples (12) of collapse dolines. The dolines are circular and deep.
McLennan Sloping Fens	Non-Patterned Fens without Internal Lawns	Slope Fen	Good example of a slope fen. It is comprised mainly of sphagnum peats and to a lesser extent, sedge peats. Small, more or less circular mounds of glaciolacustrine materials are scattered throughout the wetlands.
Middle Sand Hills	Dunes	Parabolic	Area contains one of the largest and most diverse blocks of mixed grassland and sand dunes remaining in Canada. Excellent examples of parabolic dunes.
Middle Sand Hills	Gorges/Canyons		One of the premiere wild river sections in the Grassland Region of Canada. One of two deep canyons in the mixed grassland of Canada.
Mikkwa River Wooded Bog	Wooded Bogs without Internal Lawns	Northern Plateau Bog	Peatland has excellent examples of northern plateau bogs. Peatland is large (375 sq. km.) and situated on an elevated plateau. In addition, channel fens are very well developed and extensive.
Milk River Valley - Pinhorn	Badlands		An exceptional area that contains a diversity of badland features (e.g., sandstone outcrops and concretions, solitary buttes, clay flats, narrow ravines, gullies, piping features, etc.). There are outcrops of Comrey sandstone of the Oldman Formation plus outcrops from the Foremost Formation of Upper Cretaceous age.
Milk River Valley - Pinhorn	Gorges/Canyons		A spectacular canyon in the grasslands of Alberta. It is over 120m deep and 1.5 km wide in places and is incised in bedrock. The Oldman and Foremost Formations are exposed along the valley sides. The canyon served as a major spillway during the last deglaciation.
Milk River Valley - Pinhorn	Neck Cutoffs		There are excellent examples of neck cutoffs in the Milk River valley that have been created by the erosive action of the Milk River.
Milk River Valley - Pinhorn	Bar-and-Swale Topography		Good examples of bar-and-swale topography occur in the Milk River valley.

<u>Site Name</u>	<u>Element Name</u>	<u>Subelement</u>	<u>Description</u>
Milk River Valley - Pinnhorn	Pipes and Related Phenomena		The Milk River badlands contain spectacular examples of piping phenomena, some of the best in Canada. Piping phenomena can be observed over an area of about 260 sq. km. Piping produces a spectacular display of disappearing streams, dry valleys, sinkholes, blind and hanging valleys, waterfalls, natural bridges, residual hills and caves.
Mokowan Butte	Erosional Remnants		Mokowan Butte is the only place in Alberta that provides a record of early Quaternary cordilleran glaciation. It has the most complete and best preserved stratigraphy of the Kennedy Drift, containing evidence for at least six glacial and six interglacial episodes. The site contains rare pre-Wisconsin paleosols. The Butte is part of the preglacial Flaxville Plain, of Pliocene age, the oldest and highest bench. The area was unglaciated during the Wisconsin period.
Montagneuse River Earth Slide	Earth Slides		A massive slide (1300m long, 1400m wide, 80m thick). It had a volume of 76,000,000 cubic metres. As of 1996 it was the largest historic rapid landslide on the Interior Plains of Canada. For a period of time it dammed the Montagneuse River, stopping its flow, and formed a reservoir 1.5 km long.
Moose Mountain	Anticlinal Mountains		A good example of an anticlinal mountain. The center of the dome has been eroded down to the Mississippian Rundle Group.
Moose Mountain	Patterned Ground		Excellent examples of patterned ground features, including solifluction lobes, terracettes, sorted circles, nets and stripes.
Moose Point	Moraine	de Geer	Excellent example of a de Geer moraine.
Morley Drumlins	Drumlins		Reputed to be the largest drumlin field in Alberta. Individual drumlins range from 70m to a kilometer in length, from 10 to 50m wide and from 5 to 23m high. They consist of Cordilleran till. Some of the more irregular ridges are bedrock cored.
Mud Butte	Hill-hole Pairs		This area probably has North America's largest and best exposed site of glaciotectionic deformation. Mud Buttes is a prominent ice-thrust ridge, rising about 100 m above surrounding land. It is comprised of a compact group of low hills about 2 km long and 800 m wide.
Mudspring Lake Soapholes	Soapholes		One of the largest concentration of soapholes in the grassland/parkland region of Alberta. Soapholes occur in and around Mudspring Lake.
Muriel Lake hill/hole pair	Hill-hole Pairs		One of the largest thrust hills in the Sand River area. It covers an area of 140 sq. km. In places, the hills exceed 100m in height. The source depression is partially filled by Muriel and Sinking Lakes.
Muskeg Mountain Channel Fens	Non-Patterned Fens without Internal Lawns	Channel Fen	Peatland has extensive well developed channel fens.
Muskeg River Bog	Wooded Bogs with Internal Lawns	Northern Plateau Bog	A good example of a northern plateau bog. One of the most southerly plateau bogs with evidence of collapse scar formation.
Neutral Hills	Hill-hole Pairs		A large ridge comprised of upthrust glacially contorted bedrock that rises 150m above the surrounding landscape and extends along an east-west axis into Saskatchewan. This feature forms a classical large hill-hole pair. The source depression is located NE of the Hills, immediately up-glacier of the thrust mass.
Okotoks Erratic	Erratics		One of the largest glacial erratics in North America and the largest known surface erratic in the world (excluding buried or partially buried megablocks). It weighs about 18,000 tons. Its original dimensions were 9m tall, 18m wide and 41m long.
Oldman River Oldman River	Aligned Coulees Reverse Faults		One of the few major high angle thrust faults on the plains. Site has a series of imbricate thrusts.
Oliva Lake	Drift Basins	Saline/Alkaline Lake	Oliva Lake is 2 to 3 times more saline than sea water; the lakeshore is encrusted with salt.
Oliva Lake	Meltwater Channels	Ice-walled	Area contains an excellent example of an ice-walled meltwater channel.

<u>Site Name</u>	<u>Element Name</u>	<u>Subelement</u>	<u>Description</u>
Pakan Bog Iron Springs	Iron Depositing Springs		Site has a sizable deposit of ochre (about 0.5 ha and 20 cm in depth).
Pakowki Dunes	Blowouts		The sand hills have excellent examples of blowouts.
Pakowki Lake	Playa Lakes		A large playa lake. It is part of the Pakowki Lake Endoreic Basin, a small pocket of interior drainage with no outlet north of the Milk River Ridge.
Pekisko	Hogbacks		A good example of hogbacks composed of Belly River Formation.
Pekisko	Pitted Deltas		A good example of a pitted delta of late Pleistocene age. The pitted surface of the gravel delta is due to the proximity of the glacier snout and the burial of ice during deposition into Glacial Lake Highwood.
Pekisko	Cuestas		A good example of cuestas in the foothills of Alberta.
Pelican Lake Wetland	Wooded Bogs with Internal Lawns	Northern Plateau Bog	Good examples of northern plateau bogs within an extensive area of peatland between the Athabasca River and Pelican Lake.
Plateau Mountain Ecological Reserve Extension	Limestone Pavement		A good example of limestone pavement at an elevation of 2100m. A rare feature in the Alberta Rockies.
Porcupine Hills	Erosional Remnants		An excellent example of an erosional remnant, parts of which were unglaciated. It is about 90 km long and 27 km wide. The hills are "outliers" on the western edge of the plains that differ notably in geological structure from the neighbouring foothills in that they are underlain by gently eastward-dipping sandstone and shale beds of late Cretaceous age.
Prince's Springs	Salt Depositing Springs		The permanent springs here are among the largest in the grasslands of Alberta.
Ptolemy Creek	Karst Springs		One of the largest karst springs in Alberta. It has a flow of about 2120 litres/second and is classified as a mature spring (i.e., where waters discharge from a well-formed cave that may be of enterable dimensions and which is located at or close to the elevation of a valley floor). This is the only unequivocal example of a mature spring known in the Canadian Rockies.
Ptolemy Creek	Karst Caves	Joint	The cave system is the second longest in Canada at over 12,798m. It has six entrances. The cave has many pitches and frequent constrictions. There are more pitches in this cave than any other Canadian cave.
Ptolemy Creek	Marl Lakes		An important marl wetland in the Municipality of Crowsnest Pass.
Ptolemy Creek	Frost Pockets		A good example of a frost pocket cave. It has one entrance and a length of 21m.
Ptolemy Creek	Speleothems		The cave has good examples of speleothems, such as 'cave pearls'.
Ptolemy Creek	Anticlinal Valleys		A good example of an anticlinal valley. Allison Creek flows along the strike of the breached Allison Anticline.
Ptolemy Creek	Dolines	Solution	The doline in this area is large in size. It is backed by a small cliff.
Ptolemy Creek	Fluviatile Lakes	Alluvial Fan Dammed	A good example of an alluvial fan dammed lake.
Ram River Falls/Canyon	Waterfalls		A striking waterfall with a drop of about 25m. Water flows over a resistant sandstone bed within the Upper Cretaceous Cardium Formation.
Ram River Falls/Canyon	Gorges/Canyons		A deeply incised gorge or 'canyon' of the Ram River with numerous rapids and waterfalls. Numerous waterfalls tumble off the 150 to 300m canyon walls into the river.
Ratsnest Cave	Speleothems		Site contains extensive and relatively undisturbed speleothems.
Ratsnest Cave	Karst Caves	Bedding	Canada's 8th longest cave (just over 4 km long). It is the warmest cave in the Rockies at 5 C year round. It has extensive development of a fault-guided bedding plane fissure.
Reflex Lake/Salt Springs	Salt Depositing Springs		Site has one of the most diverse and complex saline spring ecosystems in Alberta. Associated with the main springs are marl or tufa deposits which are considered rare in the region.
Richardson River	Dunes	Parabolic	Area contains excellent examples of parabolic dunes in the largest single uninterrupted dune field in Canada. The parabolic dunes are asymmetrical with their left, SW wings shorter.

<u>Site Name</u>	<u>Element Name</u>	<u>Subelement</u>	<u>Description</u>
Richardson/Marguerite Rivers Dissected Kame	Kames	Kame Moraine	An excellent example of deeply dissected kame moraine in Alberta. Area has high, well-drained ridges, some of which are covered with a pebble "pavement".
Ronald Lake Sandhills	Dunes	Parabolic	Area has excellent examples of parabolic dunes. Dune field covers about 655 sq. km.
Rycroft Earth Slide	Earth Slides		A spectacular example of an earth slide. It had a volume of 39,000,000 cubic metres. One of the largest landslides in Alberta. It dammed the Saddle River for a period of time.
Sand Point	Spits		One of the longest sand spits in Alberta. It juts 3 km into Lake Athabasca.
Shunda Water Gap	Water Gaps		A spectacular Grand-Canyon-style canyon occurs where the North Saskatchewan River crosses the Brazeau Range. The river is antecedent, i.e. it was present before the mountains were and eroded through them during uplift of the range, thus producing a true canyon, not merely a gorge.
Slave River Islands	River Islands	Bedrock Island	An excellent example of a bedrock island within the Slave River.
Smoke Lake	Marl Bogs		A good example of a marl bog (has mixed marl and tufa deposits).
St. Mary River Incised Meanders	River Meanders	Incised	Excellent examples of meanders that have been incised (about 45m) into the sandstone bedrock.
Sturgeon River Delta	Deltas	Stable Channel-Mouth Bar	A good example of a stable channel-mouth bar delta (also termed a birdsfoot delta).
Suffield South	Neck Cutoffs		The site has a classic meander cutoff.
Sundance Hoodoos	Hoodoos		Contains some of the most unique hoodoo formations in Alberta.
Sweetgrass Hills East	Dikes		One of the best examples of an igneous intrusive dike in Alberta, a rare feature for the province.
Thistle Creek-Brazeau Bluehole Springs	Blue-hole Springs		Excellent example of a blue-hole spring. Site also has calcareous tufa and salt deposits.
Thunder Lake Eskers	Eskers		The largest esker and kettle lake complex so far documented in Alberta (1984). It can be traced more than 14 km along the Brazeau River valley. In places it is more than 2 km wide. Consists of steep-sided ridges of coarse gravel with a sand and fine gravel matrix.
Upper Oldman Rock Cut Terraces	River Terraces	Rock-cut Terrace	Area contains some of the best examples of rock-cut terraces in Alberta. A thin lag of gravel overlies the terraces.
Verdigris Coulee	Overflow Channels		One of the best examples that illustrates the classic form of a glacial spillway.
Vermilion Chutes	Rapids		Large set of rapids where the river abruptly drops 7m in elevation.
Wapiabi Cave	Karst Caves	Bedding	This cave features some of the finest phreatic passages in Alberta. It has one entrance with 540m of tunnel. The cave has examples of speleothems (soda straws, stalactites and stalagmites).
Wappau Lake	Patterned Fens	Net Fen	An excellent example of a net fen. Area also has excellent examples of channel fens.
West Castle West Castle West Castle	Patterned Ground Paternoster Lakes Iron Depositing Springs		Good examples of patterned ground. Good examples of paternoster lakes. An important area for spring deposits. The Peigans have harvested their sacred paint from this area.
Whiskey Gap	Erosional Remnants		This area has the only exposure of the No. 3 bench pre-glacial erosional surface in Alberta.
Whitefish Lake Rubble Terrain	Ice-Thrust Moraine		The best example of ice-thrust moraine in Alberta.
Wildhorse #1	Eskers		The largest and best developed esker in this region of Alberta. It is over 19 km long and in places rises 15m above the surrounding prairie level. It is over 1.5 km wide for a considerable part of its length.

<u>Site Name</u>	<u>Element Name</u>	<u>Subelement</u>	<u>Description</u>
Willow Creek	Meltwater Channels	Subglacial	An excellent example of a subglacial meltwater channel perched on the side of a hillslope. The channel is large and steep-sided and has massive sandstone outcrops. The channel had a convex-up shape.
Wolf Lake	Hill-hole Pairs		Wolf Lake and Wolf Hill in combination represent a large hill-hole in a complex setting, probably the best example of this feature in Alberta. The boundaries of the ice-scooped depression are essentially tear faults along which material from Wolf Lake basin was shoved into Wolf Hill. The hill covers about 42 sq. km. and is about 135m high.
Ya Ha Tinda Ya Ha Tinda	Patterned Ground Waterfalls		A large, diverse area of patterned ground features. Spectacular falls that cascades over rock ledges and dropping in two stages; the upper stage rather short and the lower stage much deeper.
Zama City Patterned Fen	Patterned Fens	Net Fen	Good example of a net fen. Has numerous small ponds and pools of water throughout the peatland.
Zama Lakes	Levee Dammed Lakes		Best example of levee-dammed lakes in Alberta.

Appendix 1c. Landform Elements: Definitions.

<u>Landform Element</u>	<u>Subelement</u>	<u>Genesis</u>	<u>Definition</u>
Aeolian beach ridge		Lake waves & currents	A low, essentially continuous mound of beach and dune material heaped up by the action of waves and currents in conjunction with wind on the backshore of a beach beyond the present limit of storm waves, and occurring singly or as one of a series of approximately parallel deposits. The ridges can represent former positions of a shoreline (A.G.I. 1984; Smith 1998).
Aligned coulee		Wind	Coulees generally located along the windward side of stream and river valleys, and that are aligned parallel with the prevailing winds. The mean trend of such coulees in parts of southern Alberta is 70E east of north, the direction of the strongest and most persistent winds. Most coulees are located on valley walls with a southwesterly, or windward, exposure (i.e., facing west). Aligned coulees are restricted geographically in Alberta to the major stream valleys that are found from Lethbridge to the mountains (e.g., Oldman, St. Mary, Belly, Castle) (Beatty 1975). Campbell (1997/1998) suspects that these coulees are structurally-controlled water channels, however, the exact mechanisms responsible for coulee alignment remain poorly documented (Lemmen et al. 1997).
Alluvial fan	Coalescing fan	Running water	An alluvial plain formed as a result of lateral growth of adjacent alluvial fans until they finally coalesce to form a continuous inclined deposit, particularly along a mountain front. These fans, also called "bajadas", have an undulating character due to the convexities of the component fans (A.G.I. 1984; Campbell 1997/1998; Parker 1997).
Artificial mountain		Movements of the earth's crust	A mountain formed by convex flexure of bedrock strata (Parker 1997).
Artificial valley		Movements of the earth's crust	A valley that follows the axis of an anticline (A.G.I. 1984).
Asymmetric valley		Frozen ground & snow	A valley in areas affected by permafrost (present or past), and that has one valley side commonly much steeper than the other. The steeper slope generally faces north or northwards. The most probable explanation for this asymmetry is the greater soil fluctuation activity that occurs on south-facing slopes plus the asymmetric lateral stream corrosion that occurs in such areas. These valleys usually occur in parallel sets with fairly regular spacing between them (Brierley 1988; French 1996).
Badlands		Running water	An intricately stream-dissected topography characterized by a very fine drainage network with high drainage densities and short, steep slopes. Badlands have little or no vegetative cover generally overlying unconsolidated or weakly cemented clays or silts, sometimes with soluble minerals such as gypsum or halite (A.G.I. 1984; Driscoll 1984).
Bar-and-swale topography		Running water	A term used to describe that part of a river floodplain in which the micro-relief of the alluvial surface is characterized by bars (e.g., scroll bars) and troughs (swales) formed in earlier depositional phases in an area of meander growth (Whitow 1984).
Baymouth bar		Lake waves & currents	A bar of sand or gravel extending partially or entirely across the mouth of a bay (A.G.I. 1984).
Beach		Lake waves & currents	The gently sloping shore of a body of water which is washed by waves, especially the parts covered by sand or pebbles. Beaches can also be comprised of cobbles, boulders, silt, marl or clay (A.G.I. 1984).
Biscuit board topography		Glacial ice & meltwater	Topography, usually on rolling uplands or plateaus, that consists of glacial cirques which have been eroded headward in horizontally stratified sedimentary rocks. The cirques have not yet coalesced and the resultant topography has the appearance of large "bites" being removed from it similar to dough that has had biscuits cut out and removed (Smith 1987; Whitow 1984).
Blowout		Wind	A general term for various saucer- or trough-shaped hollows formed by wind erosion on a dune or other sand deposit, especially when the protective vegetation cover has been removed or destroyed (A.G.I. 1984; Whitow 1984).
Blue-hole spring		Ground water (cold springs)	A spring that issues from the bottom of lakes; the water having a bluish or greenish appearance (Borneuf 1983).
Burning sulphur Burning gas		Spontaneous combustion	The process whereby the oxidation of sulphides or pyrites within bedrock creates enough heat to keep sublimar molten or to spontaneously combust through the chemical action of oxidation. Natural gas or methane seeps may also spontaneously combust where conditions are suitable, such as at the Lutose Creek Hot Pot (A.E.P. no date).
Crag-and-tail		Glacial ice & meltwater	A streamlined hill or ridge, resulting from glaciation and consisting of a knob of resistant bedrock (the "crag") on the up-ice side, with an elongate body (the "tail") of more erodible bedrock, till, or both, on its lee side (A.G.I. 1984).
Crevasse filling		Glacial ice & meltwater	A relatively straight ridge of stratified sand and gravel, till or other sediments, formed by the filling of a crevasse in a stagnant glacier which later melted. Crevasse fillings may resemble eskers but are not generally as winding or branching. Most crevasse fillings are much wider and have more nearly level tops compared to narrower eskers, whose top surface generally undulates. Bends in crevasse fillings tend to be angular and crossings of different generations of crevasse fillings are not uncommon (Mollard 1972).

<u>Landform Element</u>	<u>Subelement</u>	<u>Genesis</u>	<u>Definition</u>
Cuesta		Movements of the earth's crust	An asymmetrical ridge, with a long gentle slope on one side conforming with the dip of the underlying strata, and a steep or cliff-like face on the other side formed by the outcrop of the resistant beds (A.G.I. 1984; Mollard 1972).
Delta	Stable channel-Mouth bar delta	Running water	A delta generally consisting of a "muddy plain" incised by deep and sometimes long distributary channels that may be levee-bordered. Abandoned distributary channels are commonly filled with sand, sometimes sand and mud or entirely with mud. The mouth bars at the front of the delta usually contain large volumes of sand. The projecting distributary channels may branch outward like the outstretched toes or claws of a bird. This pattern of channels has given rise to the name birdsfoot delta which is one form of a stable channel-mouth bar delta (A.G.I. 1984; Parker 1957; Smith 1991).
Delta	Unlobate delta	Running water	A single-channel delta created in lakes where wave action is restricted (generally small lakes), with the result that the momentum of the incoming stream carries it well out into the lake; deposition of river sediments occurs mainly at the sides of the stream, usually forming a pair of bars projecting into the lake (Hutchinson 1957).
Dike		Igneous activity	A sheet-like body of intrusive igneous rock that cuts across the structure of adjacent rocks or cuts through massive rocks. The majority of dikes are formed from basic igneous rocks which may be either more or less resistant to erosion than the host rock itself. Thus, a dike's surface outcrop may form either a wall-like feature or, if considerably eroded, it may create a topographic trench or gully (A.G.I. 1984; Whittow 1984).
Disappearing stream		Ground water (karst terrain)	A surface stream that disappears underground, either partially or totally, in sinks or swallowholes (A.G.I. 1984; Sweeting 1973).
Doine	Collapse	Ground water (karst terrain)	A closed depression formed as a result of the collapse of cavern roofs relatively near to the surface. The sides of the depression are cliff-like and the floor is composed of the irregular limestone/gypsum blocks from the fragmented roof. It has an oval or irregularly shaped near-circular form. Though they are relatively shallow they usually have a high depth:diameter ratio (Sweeting 1973).
Doine	Solution	Ground water (karst terrain)	A small enclosed depression formed by the solution enlargement of joints and consequent settling of the surface. The level floor is usually a jumble of small blocks dislocated by subsidence. Enlargement is either circular in plan, if there is one dominant vertical joint, or otherwise irregular if there are several, and can achieve dimensions of up to 1000m in diameter and 100m deep. Where the karst limestone possesses a cover of superficial deposits, solution enlargement permits the latter to subside into vertical fissures, whose slopes are unstable because of the unconsolidated nature of the surface material (Sweeting 1973).
Drift basin	Holm lake	Glacial ice & meltwater	A body of water that is dotted with islands (Veatch and Humphrys 1964).
Drift basin	Saline/Alkaline lake	Glacial ice & meltwater	A body of water containing high concentrations of alkalis (e.g., sodium carbonate, sodium sulphate, potassium carbonate) or salts (e.g., sodium chloride) alkali or salt deposits can be extensive; lakes are often intermittent, drying up and forming alkali or salt flats during the summer (Macdonald 1982; Veatch and Humphrys 1964).
Drumlin		Glacial ice & meltwater	A streamlined, oval to elongated hill composed of a variety of constituents (e.g., till, bedrock). A drumlin's long axis is parallel to the direction of ice movement. The end facing the direction of the ice front is blunter and steeper than the downstream tal end, which appears in plan and profile. Drumlins vary in height from 6 to 60m, commonly 15 to 24m, and in length from a 100m to several kilometres. Drumlins usually occur in groups termed a field or a swarm. The formation of drumlins has been attributed to: (a) the product of subglacial deformation, (b) the product of subglacial lodgement, (c) the product of melt-out of debris-rich ice, or (d) the product of fluvial infills or erosional remnants of subglacial floods (A.G.I. 1984; Bennett and Glasser 1996; Mollard 1972; Whittow 1984). Recent work by Shaw et al. (1989, 1996) and Rains et al. (1993) provide evidence that formation of drumlins is attributable to erosion and deposition by subglacial meltwater flows.
Dune ridge	Cree Lake ridge	Wind	Very long most frequently very straight sand ridges, characteristically passing over topographical irregularities formed by bedrock or glacial deposit (David 1977).
Dune ridge	Dune-track ridge	Wind	Relatively rare features that mark the former position and shape of the back base line of a parabolic dune head. The ridges are arcuate, sometimes slightly sinuous or irregular. They always occur in groups connecting the two wings across the blowout depression. They often form when the base of dunes are stabilized by vegetation (Lemmen et al. 1997).
Dune ridge	Lacadena ridge	Wind	A relatively short and somewhat wide dune ridge having a low central axis along its center line and having slipface-like slopes along both sides (David 1977).
Dune ridge	Lake Claire ridge	Wind	A very straight ridge having a characteristic zigzag pattern on it at one or more locations along its course (David 1977).
Dune ridge	North Battleford ridge	Wind	An elongate ridge with a slightly sinuous crest-line, formed by the "transverse" deflation of the southern wing of a former parabolic dune. The resulting ridge has a strongly asymmetrical transverse profile. These ridges always lie parallel to one another (David 1977).

<i>Landform Element</i>	<i>Subelement</i>	<i>Genesis</i>	<i>Definition</i>
Dune	Parabolic dune	Wind	Typically, a type of curved sand dune, having the horns pointing upwind. It is usually formed by the process known as a "blowout" in which the centre of the dune is partly removed and carried downwind, leaving the horns behind and drawn out in an elongated form. The steepest slope of the redistributed sand is located on the convex side of the dune. Parabolic dunes form a group that has been called the 'parabolic dune association'. Within this association are several dune forms (e.g., blowout dunes, shield dunes) that have developed the same way as an 'ordinary' parabolic dune but which have certain characteristic features that make them different from the others in the association (A.G.I. 1984; David 1998; Lemmen et al. 1997; Mollard 1972; Whittow 1984).
Dune	Transverse dune	Wind	A strongly asymmetrical ridge of sand extending transverse to the direction of the prevailing winds, having a gentle windward slope and a steep leeward slope (A.G.I. 1984).
Earth flow		Gravity (mass movement)	An existing or former flow of water-saturated earth materials in the form of a viscous stream of mud. The rate of movement may be either slow or fast, depending on the gradient down which the material flowed, among other factors. Earthflows terminate in lobelike forms. They may grade into mudflows (A.G.I. 1984; Mollard 1972).
Earth slide		Gravity (mass movement)	A downhill movement of a mass of superficial material due to slope failure, often as a result of water reducing the friction along a shear plane in the soil mantle. With an increasing addition of water the slide will probably turn into an earth flow. The movement only affects the soil cover. Earth slides with a backward rotation have been termed "earth slumps" (Varnes 1978; Whittow 1984).
Erosional remnant		Running water	An elevated upland area that is distinct and that has been separated, by the action of erosion (especially by running water), from the surrounding landscape. These features are usually large in areal extent but can be much smaller in size. They can be expressed as fat-topped isolated buttes and plateaus or as elevated uplands with ridges and ravines. Erosional remnants may be capped by gravels (e.g., Swan Hills) or by a resistant layer of rock (e.g., buttes) (A.G.I. 1984).
Erratic		Glacial ice & meltwater	A transported rock fragment different from the bedrock beneath it. The agent of transport is most commonly glacial ice. Erratics can be deposited at considerable distances from where they were derived. They range in size from a pebble to a house-size block (A.G.I. 1984; Mollard 1972).
Esker		Glacial ice & meltwater	A serpentine ridge of roughly stratified gravel and sand that was deposited by a stream flowing in or beneath the ice of a stagnant or retreating glacier and was left behind when the ice melted (A.G.I. 1984).
Fault-line scarp		Movements of the earth's crust	A scarp that is the result of differential erosion that has occurred on either side of a fault-line when rocks of contrasting hardness are brought into juxtaposition. Also, a scarp or cliff formed originally by fault movement and subsequently eroded backward from its original position, which may be coincident with a fault plane, parallel to, or in line with it (Mollard 1972; Whittow 1984).
Felsenmeer		Frozen ground & snow	A continuous and chaotic assemblage of moderate-sized to large-sized blocks of broken, jagged rock, mainly the result of intense frost-action on well-jointed rocks; found particularly in high altitudes and high latitudes on flat or gently-sloping surface. Some of the blocks are formed in place; others may have been derived from glacially transported boulders. Some may be stabilized in position but others show downstream movement by solifluction. When they become concentrated into stream-like masses moving downslope, they become 'stone rivers'. Felsenmeer are also known as "blockfields" (French 1996; Mollard 1972; Thornbury 1969; Whittow 1984).
Flatiron		Weathering and differential erosion	One of a series of short, triangular spurs or ridges on the flank of a mountain, having a narrow apex and a broad base, resembling a huge flatiron; it usually consists of a plate of steeply inclined resistant rock between deep valleys. A flatiron is commonly associated with the erosion of a dome structure. Flatirons are erosional forms which develop on tectonically disturbed masses (A.G.I. 1984; Campbell 1997/1998; Whittow 1984).
Fluting		Glacial ice & meltwater	Smooth straight parallel furrows, usually fairly small, that have been worn in the surface of rocks by glacial erosion (Mollard 1972). Grooves and ridges in till that are parallel to the direction of ice movement have also been termed flutes (A.G.I. 1984). According to Bennett and Glasser (1996), flutes are typically low (<3m), narrow (<3m), regularly spaced ridges which are usually less than 100m long and are aligned parallel to the direction of ice flow.
Fluting	Giant fluting	Glacial ice & meltwater	Very large subglacial meltwater features. Giant flutings are considered to have been formed by longitudinal vortices in subglacial meltwater sheets flowing at high velocities. Giant flutes, separated by remnant ridges, form discontinuous fields in central and southern Alberta (Shaw et al. 1989, 1995).
Fluviatile lake	Alluvial fan dammed lake	Running water	A body of water held in the valley of a main river course, either temporarily or perennially, by the confluence or fanlike deposits at the mouth of a lateral tributary. The deposits contain more sediment than the main stream can remove. If the lateral tributary discharges at the middle of one side of a lake, it may build a delta of sufficient size to cut the basin in half (Hutchinson 1957; Smith 1998).
Frost pocket		Weathering and differential erosion	A joint or bedding plane surface exposure that has been enlarged by weathering, especially freeze-thaw action. Frost pockets take on the appearance of cave entrances, but rarely go back far enough to lose daylight (Rollins 1992).
Glacial tunnel lake		Glacial ice & meltwater	A lake occupying a basin formed by glacial meltwater running under the main ice sheet and that excavated the underlying tills. These lakes are often elongated and form chain-like configurations (Hydrogeological Consultants Ltd. 1974).

<i>Landform Element</i>	<i>Subelement</i>	<i>Genesis</i>	<i>Definition</i>
Gorge/Canyon		Running water	A stream-cut chasm, the sides of which are composed of cliffs or a series of cliffs rising from its bed; a narrow, deep valley with nearly vertical walls (A.G.I. 1984).
Hanging valley		Glacial ice & meltwater	A tributary glacial valley whose mouth is high above the floor of the main valley, the discordance being due to the greater erosive power of the trunk glacier in the main valley. A river flowing down the hanging valley will therefore, descend to the main valley as a waterfall on a series of cataracts (A.G.I. 1984; Whitton 1984).
Hill/Hole pair		Glaciotelectonism	A disclotchill of ice-thrust material, often slightly crumpled, situated a short distance down-glacier from a depression of similar size and shape. The hill and associated depression are usually next to each other, but may be separated in some instances by as much as 5 km. Both pre-existing drift or bedrock may be involved in the dislocated hills. The depression represents the source of material now in the hill. In some instances the hole is bounded by tear-faults, and the resulting depression has quite straight sides (Aber et al. 1989).
Hogback		Movements of the earth's crust	A ridge with a narrow summit and steep slopes of nearly equal inclination, specifically a sharp-crested ridge formed by the outcropping edges of steeply inclined resistant rocks, and produced by differential erosion (A.G.I. 1984).
Honeycomb weathering		Weathering and differential erosion	A type of chemical weathering in which innumerable pits, hollows and niches are produced on a rock exposure. The pitted surface resembles an enlarged honeycomb and is characteristic of finely granular rocks, such as tuff and sandstones (A.G.I. 1984). Also termed "alveolar weathering" or "taffoni weathering" (Campbell 1997/1998; French 1996).
Hoodoos		Weathering and differential erosion	A column, pinnacle, or pillar of rock or cemented conglomerates produced in a region of sporadic heavy rainfall by differential weathering or erosion of horizontal strata (e.g., undercutting by wind), facilitated by joints and by layers of varying hardness, and occurring in varied and often eccentric or grotesque forms (A.G.I. 1984; Whitton 1984).
Iccecave	Cold trap cave	Ground water (karst terrain)	A cave having a shape that permits the accumulation of cold dense air at the lowest point of the cave and maintains a temperature below freezing for over a year (Rollins 1992).
Iccecave	Cold zone cave	Ground water (karst terrain)	A cave having a shape and configuration that permits the formation of a cold zone near the cave entrance. Unequal cooling and warming of air caused by the effects of evaporation creates the cold zone where ice deposits will collect (Rollins 1992).
Iccecave	Perennial ice cave	Ground water (karst terrain)	A high altitude alpine cave, where the average annual temperature of the surface is less than 0°C and, depending on its size and configuration of entrances and chambers, may contain permanent ice (Rollins 1992).
Iccecave	Relict permafrost cave	Ground water (karst terrain)	An ice cave that is situated in an area of relict permafrost (Rollins 1992).
Ice scour lake		Glacial ice & meltwater	A lake formed in a basin after the scouring action of ice moves loose material or carves a depression either in softer rocks or in zones of fractures and joints (Hutchinson 1957).
Ice wedge cast		Frozen ground & snow	A wedge-shaped feature that is a cast of a former ice wedge that has been filled by sand or other materials. Depending upon the degree of deformation during thaw, the feature is either a cast (i.e., bears some resemblance to the original form), or a pseudomorph (i.e., bears little resemblance to the original form) (Berg 1969; French 1996; Whitton 1984).
Ice thrust moraine		Glaciotelectonism	Mixed and contorted bedrock, till and water-sorted material translocated by ice in a more or less intact state as thrust blocks, or deformed into thrust slabs and folds; topography consists of ridges, irregularly shaped hills and depressions (Shetsen 1987).
Impact structure		Meteorite falls	A saucer-shaped pit or crater-like depression of variable size on the earth's surface, produced by the impact of a moving body, most commonly a meteorite. This feature has also been termed an 'astrobleme' (A.G.I. 1984; Korsch and Rutter 1982).
Iron depositing spring		Ground water (cold springs)	A spring that deposits iron or oxides of iron. Iron-depositing springs frequently originate in surficial deposits; however, iron staining is quite common in other types of springs. Iron staining is common in spring outlets from fractures in sandstones, shales, and coals, as well as in colluvial and alluvial sediments. Springs having a high concentration of iron oxide often have deposits of ochre in the vicinity of the spring. Ochre is an earthy or powdery iron oxide mineral that is usually red, yellow or brown in color (A.G.I. 1984; Allan 1920; Borneuf 1983).
Kame	Kame delta	Glacial ice & meltwater	A small or large, conspicuous, mesa-like landform created when debris-laden meltwater streams discharge gravels and sands into a temporary glacial lake or pond lying on, in, under, or against stagnant glacier ice. Kame deltas tend to comprise better bedded and sorted sediments than kames built on land. They have a distinctive flat top and a uniformly inclined frontal margin that is commonly lobate in outline (Korsch and Rutter 1982; Whitton 1984).
Kame	Kame moraine	Glacial ice & meltwater	A type of moraine comprised of groups or elongate strings of hummocky mounds of irregularly bedded sand and gravel with subordinate till, deposited unevenly from meltwater flowing along or near a moving or decaying stagnant glacier. The inner faces of the kames represent slumped sediments that rested against the ice (Mollard 1972).
Karst cave	Bedding cave	Ground water (karst terrain)	A natural hollow chamber or series of chambers and galleries developed between two layers of similar, soluble rock (e.g., limestone, dolomite or gypsum). The chamber occurs beneath the earth's surface, or in the side of a mountain or hill, with an opening to the surface and large enough for a person to enter (A.G.I. 1984; Bogli 1980; Parker 1997).

<i>Landform/Feature</i>	<i>Subelement</i>	<i>Genesis</i>	<i>Definition</i>
Karst cave	Joint cave	Ground water (karst terrain)	A natural, hollow chamber or series of chambers and galleries created along joints and faults in soluble rock (e.g., limestone, dolomite or gypsum). The chamber occurs beneath the earth's surface, or in the side of a mountain or hill, with an opening to the surface and large enough for a person to enter (A.C.I. 1984; Bogli 1980; Parker 1997).
Karst spring		Ground water (karst terrain)	Any natural appearance of a watercourse originating from a karst area (Borneuf 1983).
Klippe		Movements of the earth's crust	An isolated overthrust mass of folded rocks, usually a nappe, cut off from the main fold structure by erosion. It is an erosional remnant or outlier of a nappe, a large-scale tectonic overfold in the earth's crustal rocks that has moved forward as a recumbent fold sometimes for tens of kilometres along a thrust plane (A.G.I. 1984; Whittow 1984).
Landslide lake		Gravity (mass movement)	A lake formed behind rockfalls, mudflows, debris slides or other kinds of slides that may fill valley floors and dam streams (Hutchinson 1957).
Levee dammed lake		Running water	A lake related in their origin to river bank levees. Where levees act as barriers or enclosures to hold water other than from the primary river, levee dammed lakes can form (Campbell 1997/1998; Hutchinson 1957; Veatch and Humphrys 1964).
Limestone pavement		Ground water (karst terrain)	A glacio-karstic landform, produced on a glacially planed limestone surface which has subsequently become dissected into blocks by solution-enlargement of vertical joints; these areas are often dominated by regular patterns of blocks and clefts so that they appear like artificial paving (Ford and Williams 1989; Sweeting 1973).
Marl bog		Peat accumulation (non-permafrost)	A peatland that now occupies the site of a former, or extinct lake and that contains deposits of marl in its underlying sediments (Veatch and Humphrys 1964).
Marl lake		Ground water (cold springs)	A waterbody characterized by quantities of marl in its bottom sediments. Marl is an old term loosely applied to a variety of material, mostly unconsolidated earthy deposits consisting chiefly of an intimate mixture of clay and calcium carbonate, usually including shell fragments and sometimes glauconite. It is formed under marine but especially under freshwater conditions. Where the marl lake bottom is white, not covered by organic muds, the water is often remarkably clear, or the water may be "milky" where shallows are subject to wave action (A.G.I. 1984; Veatch and Humphrys 1964).
Megablock		Glaciotelectonism	Enormous masses of material, principally bedrock, that have been moved to their present location by glaciers. Megablocks are more-or-less horizontal, slightly deformed, and are often buried under or within thick drift. Most are exposed along the banks of modern rivers (Ayer et al. 1989; Stalker 1976).
Meltwater channel	Ice-walled channel	Glacial ice & meltwater	A type of channel that originated from meltwaters downcutting and moving through tunnels in the ice or through open ice-walled trenches, probably along crevasses or lines of weakness in stagnant ice. After the channels were cut they were often infilled with drift, depending on the amount of debris contained in the ice walls (Gravenor et al. 1960).
Meltwater channel	Subglacial channel	Glacial ice & meltwater	A steep-sided meltwater channel cut into bedrock or till by glacial meltwaters beneath a glacier or ice-sheet. Subglacial channels may cut across or be orientated transverse to the surface contours and drainage patterns of the present-day topography. Most subglacial channels are now streamless or occupied by tiny watercourses which clearly were not responsible for their formation (Whitow 1984). These features have also been termed "tunnel valleys". Tunnel valleys, however, are usually regarded as being considerably larger than subglacial channels and of increasing significance in terms of the current work in Alberta on meltwater effects vis-a-vis the megaflood hypothesis (Campbell 1997/1998; Evans 1954).
Moraine	de Geer moraine	Glacial ice & meltwater	A type of moraine comprised of successions of small parallel to subparallel, subequally spaced, often sharp-crested, narrow, subangular bouldery, sandy to silty till ridges up to 12m high. They may be either straight to broadly curvilinear (arcuate) in plan and are interpreted to have formed underwater where the glacier terminated in a former deep lake and subsequently retreated. The individual ridges are often covered with large subangular boulders and separated by varved silt and clay (Mollard 1972; Smith 1987).
Moraine plateaux		Glacial ice & meltwater	Generally subcircular, flat-topped mesa-like mounds composed of till and/or stratified drift (Mollard 1972). According to Shaw et al. (1996), moraine plateaux are thought to be mainly residuals from incomplete sheetflood erosion of previously deposited sediment.
Murdlin		Glaciotelectonism	A special variety of "hill-hole pair" consisting of an elongated loop with a central trough. The hill resembles a drumlin when viewed from the side, but has its highest crest at the distal end and has a longitudinal central depression. The lateral ridges and distal mound are formed of debris shoved from the trough. Murdlins are believed to have formed during the final stages of glaciation in places where a narrow tongue of active ice pushed through a marginal belt of dead ice (Aber et al. 1989).
Neck cutoff		Running water	The remnant of a meander spur, formed when a vigorously downcutting stream breaks through the narrow strip of land between adjacent curves in the stream course; it usually stands as an isolated hill enclosed by stream meanders. This feature is also termed a meander core (A.G.I. 1984; Smith 1988; Whittow 1984).

<i>Landform Element</i>	<i>Subelement</i>	<i>Genesis</i>	<i>Definition</i>
Non-patterned fen with internal lawns	Horizontal fen	Peat accumulation (non-permafrost)	A fen with a very gently sloping, featureless surface that slopes gently in the direction of drainage. They occupy broad often ill-defined depressions, and may be interconnected with other fens. They are generally wooded and contain wetter areas that are slightly depressed (i.e., lawns), the lawns being somewhat circular in form. In such lawns, dead trees, partially buried in peat and often tilted in random direction, are common. These fens represent a relatively dry form of fen and peat accumulation is generally uniform (CCELC 1987; Vitt et al. 1994).
Non-patterned fen without internal lawns	Channel fen	Peat accumulation (non-permafrost)	A fen occurring in a topographically well-defined channel which at present does not contain a continuously flowing stream. The depth of peat is usually uniform (CCELC 1987).
Non-patterned fen without internal lawns	Slope fen	Peat accumulation (non-permafrost)	A fen occurring mainly on slowly draining, nutrient-enriched seepage slopes. Pools are usually absent, but wet seepage tracks may occur. Peat thickness seldom exceeds 2m (CCELC 1987).
Non-patterned fen without internal lawns	Spring fen	Peat accumulation (non-permafrost)	A wetland form that is fed predominantly by groundwater discharge sources such as springs. The surface of a spring fen is gently sloping, although there may be a series of pools dammed by peaty ridges. Spring fens may be located immediately below upland recharge areas or may be several tens of kilometres from the associated uplands, depending on the hydrology of the aquifer formations. Spring fens are characteristically long and narrow, originating from a point source. Small "islands" may develop on them in those parts of the fen that receive less spring water and, therefore, develop a less minerotrophic vegetation with trees and shrubs. This results in a pattern of tree islands in these generally edge-dominated wetlands. Such fens can be highly minerotrophic if the spring water contains large amounts of dissolved minerals; in such cases, marl deposits may be encountered (CCELC 1988).
Non-patterned fen without internal lawns	Stream fen	Peat accumulation (non-permafrost)	A fen located in the main channel or along the banks of permanent or semi-permanent streams. This fen is affected by the water of the stream at normal and flood stages (CCELC 1987).
Overflow channel	Glacial ice & meltwater		A channel, often streamless, cut in solid rock or in drift, having been carved out by the overflow of an ice-dammed lake. They are characteristically flat-floored and steep-sided, with sharp edges at both top and bottom. They can only be recognized with certainty where they are associated with deltas, lake shorelines and lake-bottom deposits formed in the formerly impounded pro-glacial lake. Overflow channels should be distinguished from glacial meltwater channels. These types of channels have also been referred to as "glacial spillways" (Whitow 1984).
Palsa bog	Peat accumulation (permafrost present)		A bog composed of individual or coalesced palsas, occurring in an unfrozen peatland (CCELC 1988). A palsa is a circular or elongated peaty permafrost mound that has a perennially frozen core of alternating layers of segregated ice and peat or mineral soil material. The peat is relatively dry, but permafrost occurs within about 0.5 m of the surface. Palsas are typically 1-7 m in height and less than 100 m in diameter. Near the southern limit of their distribution, they usually occur as elevated wooded islands or peninsulas that rise abruptly above the surface in large, very sparsely wooded, non-frozen fens. Their surface can be highly uneven, often containing collapse scars. Palsas form by freezing from above and permafrost usually penetrates into the underlying mineral soil (CCELC 1988; Clark 1988; French 1996; Zoltai 1971).
Permafrost lakes	Glacial ice & meltwater		A linear series of small lakes occupying rock basins in a glacial valley, connected by streams, rapids, or waterfalls (A.G.I. 1984; Hutchinson 1957).
Patterned fen	Net fen	Peat accumulation (non-permafrost)	A fen with a broad net pattern of low, interconnected peat ridges ("strings"), enclosing wet hollows or shallow pools. The wetland surface is almost completely level; greater slopes result in the formation of northern ribbed fens (CCELC 1987).
Patterned fen	Northern ribbed fen	Peat accumulation (non-permafrost)	A fen characterized by the development of narrow (1-5m wide), low (5-75cm high) peaty ridges (also called "strings") oriented at right angles to the direction of water movement. These ridges may stretch across the fen in a smooth arc or in sinuous arcs that may divide and rejoin. Wet peaty depressions, called "flaks", occur between the ridges. Northern ribbed fens have a slightly sloping surface (0.1-1.0% slope). These fens are distinguished from other patterned fens by the presence of sharply defined, narrow ridges separated by narrow flarks. Northern ribbed fens are usually underlain by peat that is in excess of 1m in thickness (CCELC 1988).
Patterned fen	Spring fen	Peat accumulation (non-permafrost)	A wetland form that is fed predominantly by groundwater discharge sources such as springs. The surface of a spring fen is gently sloping, although there may be a series of pools dammed by peaty ridges. Spring fens may be located immediately below upland recharge areas or may be several tens of kilometres from the associated uplands, depending on the hydrology of the aquifer formations. Spring fens are characteristically long and narrow, originating from a point source. Small "islands" may develop on them in those parts of the fen that receive less spring water and, therefore, develop a less minerotrophic vegetation with trees and shrubs. This results in a pattern of tree islands in these generally edge-dominated wetlands. Such fens can be highly minerotrophic if the spring water contains large amounts of dissolved minerals; in such cases, marl deposits may be encountered (CCELC 1988).
Patterned ground	Frozen ground & snow		A term for the minor and microrelief land features of more or less symmetrical form (e.g., circles, polygons, nets, steps, stripes) that are characteristic of but not confined to surficial materials that now or at some previous time were subject to intense frost action. In some of these features, the finer and coarser materials are sorted into various polygonal forms of varying dimensions with angular stones around the perimeter and finer materials in the centre. This action also applies to sorted or stone circles, nets, steps and stripes (A.G.I. 1984; Mollard 1977).

<i>Landform Element</i>	<i>Subelement</i>	<i>Genesis</i>	<i>Definition</i>
Peat plateaux		Peat accumulation (permafrost present)	Flat-topped elevated expanses of relatively dry peat that are dominated by a ground layer of lichens. They can occur as small, isolated, irregular to nearly circular-shaped islands within fens to complex networks of coalescing plateaux with only minor areas of fens. Peat plateaux contain a perennially frozen core of segregated ice that usually does not extend downwards into the underlying mineral soil. This is probably the main difference genetically, between them and palsas. Peat plateaux seldom exceed 120 cm in height above the general surface of the peatland but may be several square kilometers in area. They result from the freezing of peat with the formation of segregated ice lenses and the consequent uplift of the peaty surface. Permafrost is generally found within about 0.5 m of the surface. At the southern fringe of their occurrence the permafrost is melting out of the plateaux, forming collapse scars. "Collapse scars" are depressions in a peatland caused by the thawing of permafrost within or beneath the peat. The peat surface subsides, sometimes to a depth of about 100 cm (CCELC 1988; French 1996; Halsey et al. 1995; Vitt et al. 1994).
	Pipes and related phenomena	Running water	Tubular underground channels or conduits created by subterranean erosion from surface runoff waters that percolate into desiccation cracks or fissures and which remove solid particles from clastic (fragmental) rocks and other materials. Pipes are generally long and narrow, connecting a series of collapse features and vertical shafts. The size and morphology of the pipes vary greatly but diameters may exceed several meters. The collapse features vary from a few centimeters to 9 meters in diameter and may extend to a depth of 15 meters below the surface. Piping where tubes are preserved occurs either along the margins of recently gullied flats such as floodplains and terraces, or in the crowns, slopes and channels of badland hills. Pseudokarsts produced by piping display disappearing streams, sinkholes, blind and hanging valleys, natural bridges, residual hills and caves (Barendregt 1977; Fairbridge 1968).
Pit/delta		Glacial ice & meltwater	A delta characterized by numerous depressions such as kettles, shallow pits, and potholes, produced by the partial or complete burial of glacial ice by alluvium and the subsequent thaw of the ice and collapse of the surficial materials (A.G.I. 1984; Parker 1997).
Playa lake		Running water	A shallow, intermittent lake in an arid region, occupying a playa in the wet season but often drying up in summer. A playa is a low, essentially flat part of a large undrained basin in an arid region. Playas variously show sheetwash stains, giant contraction polygons and stripes, salt pressure polygons, and/or white salt flats (A.G.I. 1984; Kupsch and Rutter 1982; Parker 1997; Thornbury 1969).
Plunge pool lake		Running water	Bodies of water that occur in basins scoured in the bed of a stream at the foot of a former waterfall by the force and eddying effect of the falling water (Hutchinson 1957; Parker 1997).
Pluton		Igneous activity	A cylindrical mass of granitic rock emplaced or intruded at high level and at low temperatures in a near-solid state (Whittow 1984).
Raised beach		Lake waves & currents	An ancient beach occurring above the present shoreline, having been elevated either by local uplift of the land or by lowering of the sea level (A.G.I. 1984).
Rapids		Running water	A part of a stream where the current is moving swiftly and where the water surface is broken by obstructions (e.g., rocks), as where the stream descends over a series of small steps (A.G.I. 1984).
Reverse fault		Movements of the earth's crust	A fault along which the hanging wall has been raised relative to the footwall. Low angle reverse faults are often termed thrust faults. These have a dip of 45° or less over much of their extent, on which the hanging wall appears to have moved upward relative to the footwall. Horizontal compression rather than vertical displacement is a characteristic feature of thrust faults (A.G.I. 1984).
River island	Bedrock island	Running water	An elevated piece of land within the channel of a river or near its mouth and formed of bedrock (A.G.I. 1984).
River meander	Incised meander	Running water	Meanders that are carved markedly downward into the surface of the valley in which they originally formed. Incised meanders are closely bordered or enclosed by the valley walls. The walls are often comprised of rock. Two types of incised meanders are generally recognized: (a) entrenched meanders which show little or no contrast between the slopes of the two valley sides of a meander curve, and (b) ingrown meanders which exhibit pronounced asymmetry of cross profile with undercut slopes on the outside of the meander curve and slip-off slopes on the inside (A.G.I. 1984; Thornbury 1969).
River terrace		Running water	One of a series of benches above the level of the river, flanking and more or less parallel to the river channel. They are the dissected remnants of an abandoned flood plain, river bed, or valley floor produced during a former stage of erosion or deposition (A.G.I. 1984; Rains 1997).
River terrace	Rock-cut terrace	Running water	A river terrace comprised almost entirely of bedrock except, in some cases, for a thin alluvial veneer. It is sometimes called a strath terrace (Campbell 1997/1998; Rains 1997; Whittow 1984).
Rock fall		Gravity (mass movement)	Newly detached pieces of bedrock of any size that are detached from a steep slope or cliff, along a surface on which little or no shear displacement takes place, and that descend mostly through the air by free fall, bounding, or rolling. Movements are very rapid to extremely rapid (Mollard 1972; Varnes 1978).
Rock labyrinth		Gravity (mass movement)	A regular arrangement on a slope of large, joint-bounded and translated bedrock blocks, separated by "streets" of varying width (some up to 15 m wide). The labyrinth style of block movement involves slippage of intact blocks along a weaker surface without appreciable rotation. Processes (apart from downward gravitational components) capable of producing such a separation are likely to be settling of the underlying weak material, wedging developed by freezing of water, or expansion during chemical alteration of certain minerals. These landforms have also been called "rock citius" (Simmons and Cruden 1980).

<i>Landform Element</i>	<i>Subelement</i>	<i>Genesis</i>	<i>Definition</i>
Rock slide		Gravity (mass movement)	The downward and usually rapid movement of newly detached segments of bedrock, sliding on a surface of bedding, jointing, or faulting. The moving mass usually breaks up into many small units. Rock slides with a backward rotation have been termed "rock slumps" (A.G.I. 1984; Whitton 1984).
Rock-shelter		Weathering and differential erosion	A shallow cave or alcove created by the differential erosion of the matrix. The cave may be located beneath an overhanging rock ledge and the cave bottom can be more or less flat (Bogli 1980).
Salt depositing spring		Ground water (cold springs)	A spring containing water of high salinity (principally sodium chloride), and that leaves salt deposits on its surface of the ground through evaporation and precipitation (Borneuf 1983).
Sandstone dike		Weathering and differential erosion	A near-vertical, sheet-like body of sandstone or lithified sand, usually less than 10 cm in thickness, that cuts through bedrock in the manner of an igneous dike. They are thought to be formed by the infilling of a bedrock fissure from above or by injection from below. Where the dike's surface outcrop is more resistant to erosion than the host rock itself, it may form a wall-like or ridge-like feature (Parker 1997; Whitton 1984).
Soapstone		Ground water (cold springs)	A part of the land surface that is characterized by a local weakness of limited extent underlain by a viscous admixture of sand, silt, clay and water. The weakened area is commonly circular or slightly elongated and has well-defined boundaries. A soapstone may be several meters in depth and is covered by a thin, fragile crust through the cracks of which mud and water oozes to the surface. Where there is sufficient flow of water from the soapstone, a soapstone spring may occur (Toth 1966).
Speleothem		Ground water (karst terrain)	A mineral deposit formed in caves by the action of water, and includes such forms as stalactites, stalagmites, columns, pillars, cave pearls, flowstone, needles, etc. (A.G.I. 1984; Sweeting 1973).
Spi		Lake waves & currents	A narrow and elongated accumulation of sand or gravel projecting from the shore into a body of water. It grows out from the shoreline as a result of longshore drift (A.G.I. 1984; Whitton 1984).
Stack		Running water	An isolated, pillar-like rocky island, detached from a shore by water erosion. It is sometimes referred to as a pillar, chimney rock, column, needle, "flower-pot rock", etc. (Fairbridge 1968; Parker 1997).
Stock		Igneous activity	An igneous intrusion that is less than 100 square kilometres in surface exposure, is usually but not always discordant, and resembles a batholith except in size (A.G.I. 1984).
Sulphur depositing/odor spring		Ground water (cold springs)	A spring containing high concentrations of dissolved hydrogen sulphide gas, thus giving the spring water a distinctive "rotten-egg" odor. Hydrogen sulphide is related to the presence of bacteria, which are observed in numerous springs. The bacteria can be white, pale yellow, and pale brown and sometimes form filamentous colonies that float gently in the spring waters. Associated with hydrogen sulphide gas is sulphur, which can be observed either in suspension in spring water, giving it a milky appearance, or as sulphur deposits around the spring orifice (Borneuf 1983).
Tectonic lake basin	Fault lake	Movements of the earth's crust	A lake contained within a basin on tilted fault blocks that are the result of movements of the deeper parts of the earth's crust (Hutchinson 1957).
Thermokarst lake		Frozen ground & snow	A lake or pond (generally circular or oval-shaped) usually in a perennially frozen peatland, and contained within a subsidence depression (e.g., a collapse scar) created by the thawing of permafrost (A.G.I. 1984; CCELC 1987; Veatch and Humphrys 1964).
Tufa depositing spring		Ground water (cold springs)	A spring that has an encrustation or other deposit of calcium carbonate, precipitated from the spring water either adjacent to its orifice or along a stream below the spring. The tufa can form bars, mounds, terraces and dams, especially around hot springs (Borneuf 1983).
Valley	V-shaped valley	Running water	A valley whose form is largely created by fluvial erosion and which is characterized by evenly sloping sides and a V-shaped cross-profile (Rains 1997; Whitton 1984).
Veneer bog		Peat accumulation (permafrost present)	A permafrost dominated bog with a ground cover dominated by feathermosses and scanty tree cover. The bog may contain circular to irregularly shaped collapse scars that have a sharp boundary with the surrounding bog. The collapse scars have no permafrost. Veneer bogs may be found on low angle slopes (CCELC 1988; Vitt et al. 1996).
Volcanic rock		Igneous activity	A finely crystalline or glassy igneous rock resulting from volcanic action at or near the earth's surface, either ejected explosively or extruded as lava. The finely crystalline and glassy forms of the rock result from the rapid cooling of the lava when it appeared at the surface (A.G.I. 1984; Whitton 1984).
Warm spring		Ground water (hot springs)	A spring whose temperature is at least 5°C above the mean annual air temperature. A warm spring may contain deposits of tufa and have hydrogen sulphide gas within its waters. (Borneuf 1983).
Water gap		Running water	A deep pass in a mountain ridge, through which a stream flows; especially a narrow gorge or ravine cut through resistant rocks by stream erosion (A.G.I. 1984).
Waterfall		Running water	A perpendicular or steep descent of a stream, as where it crosses an outcrop of resistant rock overhanging softer rock that has been eroded (A.G.I. 1984).

<i>Landform Element</i>	<i>Subelement</i>	<i>Genesis</i>	<i>Definition</i>
Wooded bog with internal lawns	Flat bog	Peat accumulation (non-permafrost)	A bog having a flat, featureless surface. They occur in broad, poorly defined depressions. The depth of peat is generally uniform. They are usually treed with black spruce and have open, wet Sphagnum-Carex-dominated lawns often containing partially buried stands of dead trees. The internal lawns are characteristically less than 50 cm lower than the surrounding wooded bog surface (CCELC 1988; Vitt et al. 1994).
Wooded bog with internal lawns	Northern plateau bog	Peat accumulation (non-permafrost)	A raised bog elevated 0.5-1m above the surrounding fen, often occurring as a "bog island". The surface is generally flat. The plateau bog is usually teardrop-shaped, with the pointed end oriented in the downslope direction. The thickness of the peat is commonly in excess of 2m, but is seldom greater than 5m. They are usually treed with black spruce and have open, wet Sphagnum-Carex-dominated lawns often containing partially buried stands of dead trees. The internal lawns are characteristically less than 50 cm lower than the surrounding wooded bog surface (CCELC 1988; Vitt et al. 1994).
Wooded bog without internal lawns	Northern plateau bog	Peat accumulation (non-permafrost)	A raised bog elevated 0.5-1m above the surrounding fen, often occurring as a "bog island". The surface is generally flat, characterized only by small wet depressions. The plateau bog is usually teardrop-shaped, with the pointed end oriented in the downslope direction. These bogs are usually treed with stunted black spruce. The thickness of the peat is commonly in excess of 2m, but is seldom greater than 5m (CCELC 1988).

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Appendix 2. Vegetation Community Elements of Special Conservation Concern

<u>Element Name</u>	<u>Common Name</u>	<u>Reason</u>
Artemisia tridentata - Balsamorhiza sagittata shrub herbaceous	big sagebrush - balsamroot shrub herbaceous	limited extent
Artemisia tridentata - Rhamnus alnifolia shrub herbaceous	big sagebrush - alder-leaved buchthorn shrub herbaceous	limited extent
Artemisia tridentata - Saxifraga bronchialis shrub herbaceous	big sagebrush - spotted saxifrage shrub herbaceous	limited extent
Festuca hallii herbaceous alliance	plains rough fescue herbaceous alliance	at risk
Juniperus horizontalis - Koeleria macrantha pediment shrub herbaceous	creeping juniper - June grass pediment shrub herbaceous	limited extent
Larix occidentalis/Calamagrostis rubescens woodland/forest	western larch/pine reed grass woodland/forest	limited extent
Peace River Parkland remnant grasslands	Peace River Parkland remnant grasslands	at risk
Pinus flexilis woodland/forest alliance	limber pine woodland/forest alliance	at risk
Populus spp. riparian woodland alliance	cottonwood riparian woodland alliance	outstanding example
Salix bebbiana Foothills Parkland grove shrubland	Bebb's willow Foothills Parkland grove shrubland	limited extent
Sarcobatus vermiculatus herbaceous shrub alliance	greasewood herbaceous shrub alliance	limited extent
Schizachyrium scoparium - Poa interior herbaceous	little bluestem - inland bluegrass herbaceous	limited extent
Thuja plicata woodland/forest alliance	red cedar woodland/forest alliance	limited extent
Yucca glauca/ Calamovilfa longifolia shrub herbaceous	yucca shrub herbaceous	limited extent

Appendix 3a. Vascular Plant Elements of Special Conservation Concern.

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Abronia micrantha</i>	sand verbena	S2	G5
<i>Acer negundo</i>	Manitoba maple	S2?	G5
<i>Achillea millefolium</i> var <i>megacephala</i>		SR	G5T1
<i>Adiantum pedatum</i>	maidenhair fern	S1S2	G5
<i>Agoseris lackschewitzii</i>	pink false dandelion	S2	G4
<i>Agropyron scribneri</i>	Scribner's wheat grass	S2	G5
<i>Agropyron x brevifolium</i>		S?	HYR
<i>Agrostis exarata</i>	spike redtop	S2	G5
<i>Agrostis humilis</i>	low bent grass	S1S2	G4
<i>Agrostis mertensii</i>	northern bent grass	S1S2	G5
<i>Agrostis thurberiana</i>	Thurber's bent grass	S2	G5
<i>Allium geyeri</i>	Geyer's onion	S2	G4G5
<i>Alopecurus occidentalis</i>	alpine foxtail	S2	G5
<i>Amaranthus californicus</i>	Californian amaranth	S1	G4
<i>Anemone quinquefolia</i>	wood anemone	S1	G5
<i>Antennaria aromatica</i>	scented everlasting	S1S2	G4
<i>Antennaria corymbosa</i>	corymbose everlasting	S2	G5
<i>Antennaria luzuloides</i>	silvery everlasting	S1	G5
<i>Antennaria monocephala</i>	one-headed everlasting	S2	G4G5
<i>Aquilegia formosa</i>	Sitka columbine	S2	G5
<i>Aquilegia jonesii</i>	Jones' columbine	S2	G4
<i>Arabis lemmonii</i>	Lemmon's rock cress	S2	G5
<i>Arctagrostis arundinacea</i>	polar grass	S1	G?
<i>Arenaria longipedunculata</i>	sandwort	S2	G3G4Q
<i>Aristida longiseta</i>	red three-awn	S1	G5?
<i>Arnica amplexicaulis</i>	stem-clasping arnica	S2	G4
<i>Arnica longifolia</i>	long-leaved arnica	S2	G5
<i>Arnica parryi</i>	nodding arnica	S2	G5
<i>Artemisia borealis</i>	northern wormwood	S2?	G5?
<i>Artemisia furcata</i> var <i>furcata</i>	forked wormwood	S1	G4T?
<i>Artemisia tilesii</i>	Herriot's sagewort	S2?	G5
<i>Artemisia tridentata</i>	big sagebrush	S2	G5
<i>Asclepias ovalifolia</i>	low milkweed	S2	G5?
<i>Asclepias viridiflora</i>	green milkweed	S1	G5

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Aster campestris</i>	meadow aster	S2	G5
<i>Aster eatonii</i>	Eaton's aster	S2	G5
<i>Aster pauciflorus</i>	few-flowered aster	S1S2	G4
<i>Aster umbellatus</i>	flat topped white aster	S2	G5
<i>Aster x maccallae</i>		SU	HYB
<i>Astragalus bodinii</i>	Bodin's milk vetch	S1	G4
<i>Astragalus kentrophyta</i> var <i>kentrophyta</i>		S1	G5T4
<i>Astragalus lotiflorus</i>	low milk vetch	S2	G5
<i>Astragalus purshii</i>	Pursh's milk vetch	S2	G5
<i>Athyrium distentifolium</i>	alpine spleenwort	S1	G4G5
<i>Atriplex canescens</i>	saltbush	SU	G5
<i>Atriplex powellii</i>	Powell's saltbush	S2	G4G5
<i>Atriplex truncata</i>	saltbush	S1	G5
<i>Bacopa rotundifolia</i>	water hyssop	S1	G5
<i>Bahia oppositifolia</i>	picradeniopsis	S1	G5?
<i>Barbarea orthoceras</i>	American winter cress	S2	G5
<i>Bidens frondosa</i>	common beggarticks	S1	G5
<i>Boisduvalia glabella</i>	smooth boisduvalia	S2	G5
<i>Boschniakia rossica</i>	ground-cone	S1	G5
<i>Botrychium ascendens</i>	ascending grape fern	SP	G3?
<i>Botrychium campestre</i>	field grape fern	S1	G3
<i>Botrychium crenulatum</i>		S1	G3
<i>Botrychium hesperium</i>	western grape fern	S1	G3
<i>Botrychium lanceolatum</i>	lance-leaved grape fern	S2	G5
<i>Botrychium minganense</i>		S2	G4
<i>Botrychium multifidum</i> var <i>intermedium</i>	leather grape fern	S1S2	G5T4?
<i>Botrychium paradoxum</i>	paradoxical grape fern	S1	G2
<i>Botrychium pedunculatum</i>		S1	G3?
<i>Botrychium simplex</i>	dwarf grape fern	S1	G5
<i>Botrychium spathulatum</i>		S1S2	G3G4
<i>Botrychium x watertonense</i>		S1	HYB
<i>Brasenia schreberi</i>		SU	G5
<i>Braya purpurascens</i>	alpine braya	S1	G4G5
<i>Brickellia grandiflora</i>	large-flowered brickellia	S2	G5
<i>Bromus altissimus</i>	Canada brome	S1	G5

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Calamagrostis lapponica</i>	Lapland reed grass	S1	G5
<i>Cumassia quumash var quumash</i>	blue camas	S2	G5T?
<i>Campanula uniflora</i>	alpine harebell	S2	G4
<i>Cardamine bellidifolia</i>	alpine bitter cress	S2	G5
<i>Cardamine parviflora</i>	small bitter cress	S1	G5
<i>Cardamine pratensis</i>	meadow bitter cress	S1	G5
<i>Cardamine umbellata</i>	mountain cress	S2	G?
<i>Carex achusta</i>	browned sedge	S2	G5
<i>Carex aperta</i>	open sedge	S2	G4
<i>Carex arcta</i>	narrow sedge	S1	G5
<i>Carex backii</i>	Back's sedge	S2	G4
<i>Carex bicolor</i>		SU	G5
<i>Carex bipartita</i>	two-parted sedge	S1S2	G5
<i>Carex capitata</i>	capitate sedge	S2	G5
<i>Carex crawei</i>	Crawe's sedge	S2	G5
<i>Carex enanderi</i>	goose-grass sedge	S2?	G2G4
<i>Carex epapillosa</i>	blackened sedge	S1	G?Q
<i>Carex franklinii</i>	Franklin's sedge	S2	G3G4Q
<i>Carex glacialis</i>	glacier sedge	S2	G5
<i>Carex haydeniana</i>	Hayden's sedge	S2	G4G5
<i>Carex heleonastes</i>	Hudson Bay sedge	S2	G4
<i>Carex hookerana</i>	Hooker's sedge	S2	G4?
<i>Carex houghtoniana</i>	sand sedge	S2	G5
<i>Carex hystricina</i>	porcupine sedge	S1	G5
<i>Carex illota</i>	small-headed sedge	S1S2	G4G5
<i>Carex kelloggii</i>	Kellogg's sedge	S2	G5
<i>Carex lacustris</i>	lakeshore sedge	S2	G5
<i>Carex lenticularis var dolia</i>	lens-fruited sedge	S2	G5T3Q
<i>Carex leporinella</i>		SU	G5
<i>Carex loliacea</i>	rye-grass sedge	S2	G5
<i>Carex maritima var incurviformis</i>	seaside sedge	S2	G3G5T?
<i>Carex mertensii</i>	purple sedge	S1S2	G5
<i>Carex misandra</i>	nodding sedge	S1S2	G5
<i>Carex multicastrata</i>		SR	G5
<i>Carex nebrascensis</i>	Nebraska sedge	S3	G5

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Carex oligosperma</i>	few-fruited sedge	S1	G4
<i>Carex parryana</i> var <i>parryana</i>	Parry's sedge	S2	G4T1
<i>Carex pauciflora</i>	few-flowered sedge	S2	G5
<i>Carex paysonis</i>	Payson's sedge	S2	G4
<i>Carex pedunculata</i>		S1	G5
<i>Carex petasata</i>	pasture sedge	S2	G5
<i>Carex petricosa</i>	stone sedge	S2	G4
<i>Carex piperi</i>		SR	G3?
<i>Carex platylepis</i>	broad-scaled sedge	SU	G4?
<i>Carex podocarpa</i>	alpine sedge	SU	G4G5
<i>Carex preslii</i>	Presl sedge	S2	G4
<i>Carex pseudocyperus</i>	cyperus-like sedge	S2	G5
<i>Carex retrorsa</i>	turned sedge	S2S3	G5
<i>Carex rostrata</i>	beaked sedge	S2	G5
<i>Carex scoparia</i>	broom sedge	S1	G5
<i>Carex sitchensis</i>		SR	G?
<i>Carex supina</i>	Weak Sedge	S1	G5
<i>Carex tinctoria</i>	tinged sedge	S1	G4G5
<i>Carex tosa</i>		S2S3	G5
<i>Carex trisperma</i>	three-seeded sedge	S2S3	G5
<i>Carex umbellata</i>	umbellate sedge	SP	G5
<i>Carex vesicaria</i>	blister sedge	S2?	G5
<i>Carex vulpinoidea</i>	fox sedge	S2	G5
<i>Castilleja pallida</i>		SU	G5
<i>Castilleja sessiliflora</i>	downy paintbrush	S1	G5
<i>Centunculus minimus</i>	chaffweed	S1	G5
<i>Cerastium beeringianum</i> ssp <i>terrae-novae</i>		SR	G5T1
<i>Cheilanthes gracillima</i>	lace fern	S1	G4G5
<i>Chenopodium atrovirens</i>	goosefoot	SR	G5
<i>Chenopodium desiccatum</i>	goosefoot	S2	G5
<i>Chenopodium incanum</i>	goosefoot	S1?	G5
<i>Chenopodium leptophyllum</i>	narrow-leaved goosefoot	SU	G5
<i>Chenopodium subglabrum</i>	smooth narrow-leaved goosefoot	S2	G3
<i>Chenopodium watsonii</i>	Watson's goosefoot	S1	G5
<i>Cirsium scariosum</i>	thistle	SU	G5

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Conimitella williamsii</i>	conimitella	S2	G3
<i>Coptis trifolia</i>	goldthread	S2	G5
<i>Coreopsis tinctoria</i>	common tickseed	S1S2	G5
<i>Corispermum nitidum</i>	bugseed	S1?	G5
<i>Cornus unalaschensis</i>		SR	G5?
<i>Crepis atriobarba</i>	hawk's-beard	S2	G5
<i>Crepis intermedia</i>	intermediate hawk's-beard	S2	G5
<i>Crepis occidentalis</i>	small-flowered hawk's-beard	S2	G5
<i>Cryptantha affinis</i>		SU	G4
<i>Cryptantha minima</i>	small cryptanthe	S1	G5
<i>Cryptogramma stelleri</i>	Steller's rock brake	S2	G5
<i>Cuscuta gronovii</i>	common dodder	S1	G5
<i>Cynoglossum boreale</i>	wild comfrey	S1	G4Q
<i>Cyperus schweinitzii</i>	sand nut-grass	S2	G5
<i>Cyperus squarrosus</i>	awned nut-grass	S1	G5
<i>Cypripedium acaule</i>	stemless lady's-slipper	S2	G5
<i>Cypripedium montanum</i>	mountain lady's-slipper	S2	G4G5
<i>Cystopteris montana</i>	mountain bladder fern	S2	G5
<i>Danthonia californica</i>	California oat grass	S?	G5
<i>Danthonia spicata</i>	poverty oat grass	S1S2	G5
<i>Danthonia unispicata</i>	one-spike oat grass	S2	G5
<i>Deschampsia elongata</i>	slender hair grass	S1	G5
<i>Dichanthelium acuminatum var acuminatum</i>	hot-springs millet	SX	G5T?
<i>Dichanthelium leibergii</i>	Leiberg's millet	SR	G5
<i>Dichanthelium oligosanthes</i>	sand millet	S1	G5
<i>Douglasia montana</i>	mountain dwarf-primula	S1	G4?
<i>Downingia laeta</i>	downingia	S1	G5
<i>Draba densifolia</i>	whitlow-grass	S2	G5
<i>Draba fladnizensis</i>	whitlow-grass	S1	G4
<i>Draba glabella</i>	whitlow-grass	S1	G4G5
<i>Draba kananaskis</i>	Kananaskis whitlow-grass	S1	G1Q
<i>Draba longipes</i>	whitlow-grass	S2	G4
<i>Draba macounii</i>	Macoun's whitlow-grass	S2S3	G3
<i>Draba reptans</i>	whitlow-grass	S1S2	G5
<i>Draba ventosa</i>	whitlow-grass	S2	G3

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Drosera anglica</i>	oblong-leaved sundew	S2S3	G5
<i>Drosera linearis</i>	slender-leaved sundew	S2	G4
<i>Dryopteris cristata</i>	crested shield fern	S1	G5
<i>Dryopteris filix-mas</i>	male fern	S1	G5
<i>Elatine triandra</i>	waterwort	S1	G5
<i>Eleocharis compressa</i> var <i>borealis</i>	flattened spike-rush	SU	G5T5
<i>Eleocharis nitida</i>		SR	G3G4
<i>Eleocharis ovata</i>	Engelmann's spike-rush	S1?	G5
<i>Eleocharis tenuis</i>	slender spike-rush	SU	G5
<i>Ellisia nyctelea</i>	waterpod	S2	G5
<i>Elodea longivaginata</i>	Canada waterweed	S1S2	G4G5
<i>Elymus mollis</i>	American dune grass	S1	G5
<i>Elymus virginicus</i>	Virginia wild rye	S1	G5
<i>Elymus vulpinus</i>		SR	G1Q
<i>Epilobium clavatum</i>	willowherb	S2	G5
<i>Epilobium glaberrimum</i> ssp <i>fastigiatum</i>	willowherb	S1S2	G5T?
<i>Epilobium halleanum</i>	willowherb	S1	G5
<i>Epilobium lactiflorum</i>	willowherb	S2	G5
<i>Epilobium leptocarpum</i>	willowherb	S1	G5
<i>Epilobium luteum</i>	willowherb	S1	G5
<i>Epilobium mirabile</i>	willowherb	SR	G4Q
<i>Epilobium oreganum</i>		SR	G2
<i>Epilobium saximontanum</i>	Rocky Mountain willowherb	S2	G5
<i>Erigeron divergens</i>	fleabane	S1	G5
<i>Erigeron flagellaris</i>	creeping fleabane	S1	G5
<i>Erigeron hyssopifolius</i>	wild daisy fleabane	S1	G5
<i>Erigeron lackschewitzii</i>		S1	G3Q
<i>Erigeron ochroleucus</i> var <i>ochroleucus</i>		SR	G5T3
<i>Erigeron ochroleucus</i> var <i>scribneri</i>		S2?	G5T5
<i>Erigeron pallens</i>	pale alpine fleabane	S2	G5T2?
<i>Erigeron radicans</i>	dwarf fleabane	S2	G3
<i>Erigeron trifidus</i>	trifid-leaved fleabane	S2	G2
<i>Erigeron uncialis</i>		S1?	G3G4
<i>Erigeron uncialis</i> ssp <i>conjugans</i>		SU	G3G4T3
<i>Eriogonum cernuum</i>	nodding umbrella-plant	S2	G5

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Eriogonum ovalifolium</i> var <i>ovalifolium</i>	silver-plant	S2	G5T?
<i>Eriogonum pauciflorum</i>		SU	G5
<i>Eriophorum callitrix</i>	beautiful cotton grass	S2	G5
<i>Eriophorum scheuchzeri</i>	one-spike cotton grass	S2S3	G5
<i>Eupatorium maculatum</i>	spotted Joe-pye weed	S1S2	G5
<i>Festuca altaica</i>	northern rough fescue	SU	G5
<i>Festuca minutiflora</i>	tiny-flowered fescue	S2	G5
<i>Festuca occidentalis</i>	western fescue	S1	G5
<i>Festuca subulata</i>	fescue	S1	G5
<i>Festuca vivipara</i> var <i>glabra</i>		SU	G4G5QT?
<i>Franseria acanthicarpa</i>	bur ragweed	S2	G5
<i>Galium bifolium</i>	two-leaved Bedstraw	S1	G5
<i>Gayophytum racemosum</i>	low willowherb	S1	G5
<i>Gentiana aquatica</i>	marsh gentian	S1S2	G4
<i>Gentiana glauca</i>	alpine gentian	S2	G4G5
<i>Gentianopsis detonsa</i> ssp <i>raupii</i>	northern fringed gentian	S1	G4T?
<i>Geranium carolinianum</i>	Carolina wild geranium	S2	G5
<i>Geranium erianthum</i>	geranium	S1	G5
<i>Glyceria elata</i>	tufted tall manna grass	SU	G4G5
<i>Gnaphalium microcephalum</i>	common cudweed	S1	G5
<i>Gnaphalium viscosum</i>	clammy cudweed	SH	G5
<i>Gymnocarpium jessoense</i>	northern oak fern	S1S2	G5
<i>Habenaria saccata</i>	slender bog orchid	S2S3	G5
<i>Hackelia ciliata</i>		SR	G3
<i>Halimolobos virgata</i>	halimolobos	S1	G4
<i>Heliotropium curassavicum</i>	spatulate-leaved heliotrope	S2	G5
<i>Heuchera glabra</i>	alpine alumroot	S1	G5
<i>Hieracium cynoglossoides</i>	woolly hawkweed	S2S3	G?
<i>Hierochloa alpina</i>	alpine sweet grass	S2	G5
<i>Hippuris montana</i>	mountain mare's-tail	S1	G4
<i>Hordeum pusillum</i>	little barley	SH	G5
<i>Houstonia longifolia</i>	long-leaved bluets	S2	G4G5
<i>Hymenopappus filifolius</i>	tufted hymenopappus	S1S2	G5
<i>Hypericum formosum</i> var <i>scouleri</i>	western St. John's-wort	S2	G5T?
<i>Hyperticum majus</i>	large Canada St. John's-wort	S1S2	G5

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Iliamna rivularis</i>	mountain hollyhock	S2	G5
<i>Iris missouriensis</i>	western blue flag	S1	G5
<i>Isoetes bolanderi</i> var <i>bolanderi</i>	Bolander's quillwort	S1	G4T4
<i>Isoetes echinospora</i>	northern quillwort	S1	G5
<i>Isoetes howellii</i>		SP	G4G5
<i>Isoetes maritima</i>		S1	G3?
<i>Isoetes occidentalis</i>		S1	G4G5
<i>Isoetes x truncata</i>		SHYB	HYB
<i>Juncus biglumis</i>	two-glumed rush	S2	G5
<i>Juncus brevicaudatus</i>	short-tail rush	S1	G5
<i>Juncus confusus</i>	few-flowered rush	S2	G5
<i>Juncus filiformis</i>	thread rush	S2S3	G5
<i>Juncus nevadensis</i>	Nevada rush	S1	G5
<i>Juncus parryi</i>	Parry's rush	S2	G4G5
<i>Juncus regelii</i>	Regel's rush	S1	G5
<i>Juncus stygius</i> var <i>americanus</i>	marsh rush	S2	G5T5
<i>Koenigia islandica</i>	koenigia	S1	G4
<i>Lactuca biennis</i>	tall blue lettuce	S2	G5
<i>Larix occidentalis</i>	western larch	S2	G5
<i>Lesquerella arctica</i> var <i>purshii</i>	northern bladderpod	S2	G4T?
<i>Lewisia pygmaea</i> var <i>pygmaea</i>	dwarf bitter-root	S2	G5T5
<i>Lewisia rediviva</i>	bitter-root	S1	G5
<i>Lilaea scilloides</i>	flowering-quillwort	S1	G4
<i>Linanthus septentrionalis</i>	linanthus	S1S2	G5
<i>Linaria canadensis</i>	field toad-flax	S1	G4G5
<i>Listera caurina</i>	western twayblade	S1	G4?
<i>Listera convallarioides</i>	broad-lipped twayblade	S2	G5
<i>Lithophragma glabrum</i>	rockstar	S2	G4G5
<i>Lithophragma parviflorum</i>	small-flowered rockstar	S2	G5
<i>Lobelia dortmanna</i>	water lobelia	S1	G4
<i>Lobelia spicata</i>	spiked lobelia	S1	G5
<i>Loiseleuria procumbens</i>	alpine azalea	S2	G5
<i>Lomatium cous</i>	biscuit-root	S1	G5
<i>Lomatogonium rotatum</i>	marsh felwort	S2	G5
<i>Lupinus arcticus</i> ssp <i>subalpinus</i>		SU	G?

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Lupinus minimus</i>	least lupine	S2	G3G4
<i>Lupinus polyphyllus</i>	large leaved lupine	S1?	G5
<i>Lupinus wyethii</i>	Wyeth's lupine	S1	G5
<i>Luzula acuminata</i>	wood-rush	S1	G5
<i>Luzula groenlandica</i>	wood-rush	S1	G4
<i>Luzula rufescens</i>	reddish wood-rush	S1	G5
<i>Lycopodium inundatum</i>	bog club-moss	S1	G5
<i>Lycopodium selago</i>	mountain club-moss	SU	G5
<i>Lycopodium sitchense</i>	ground-fir	S2	G5
<i>Lycopus americanus</i>	American water-horehound	S2	G5
<i>Lygodesmia rostrata</i>	annual skeletonweed	S2	G5?
<i>Lysimachia lanceolata</i>	lance-leaved loosestrife	S1S2	G5
<i>Machaeranthera tanacetifolia</i>	tansy aster	SR	G5
<i>Malaxis monophylla</i>	white adder's-mouth	S2	G5
<i>Malaxis paludosa</i>	bog adder's-mouth	S1	G4
<i>Marsilea vestita</i>	hairy pepperwort	S1S2	G5
<i>Melica hitchcockii</i>		SR	G?
<i>Melica smithii</i>	melic grass	S2	G4
<i>Melica spectabilis</i>	onion grass	S2	G5
<i>Mertensia lanceolata</i>	lance-leaved lungwort	S2?	G5
<i>Mertensia longiflora</i>	large-flowered lungwort	S2?	G4G5
<i>Microsteris gracilis</i>	slender phlox	S1S2	G5
<i>Mimulus breweri</i>		S1	G4?
<i>Mimulus floribundus</i>	small yellow monkeyflower	S1S2	G5
<i>Mimulus glabratus</i>	smooth monkeyflower	S1	G5
<i>Mimulus guttatus</i>	yellow monkeyflower	SU	G5
<i>Mimulus tilingii</i>		SU	G5
<i>Minuartia elegans</i>	purple alpine sandwort	S1S2	G4G5
<i>Minuartia yukonensis</i>		SR	G3G4
<i>Monotropa hypopithys</i>	pinemap	S2	G5
<i>Montia linearis</i>	linear-leaved montia	S2	G5
<i>Montia parvifolia</i>	small-leaved montia	S1S2	G4G5
<i>Muhlenbergia asperifolia</i>	scratch grass	S2	G5
<i>Muhlenbergia racemosa</i>	marsh muhly	S1	G5
<i>Munroa squarrosa</i>	false buffalo grass	S1	G5

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Najas flexilis</i>	slender naiad	S1S2	G5
<i>Nemophila breviflora</i>	small baby blue eyes	S2	G5
<i>Nothocalais cuspidata</i>	prairie false dandelion	S1S2	G5
<i>Nymphaea tetragona</i> ssp <i>leibergii</i>		S1	G5T5
<i>Nymphaea tetragona</i> ssp <i>tetragona</i>		S1	G5T5
<i>Oenothera andina</i>	upland evening-primrose	S1	G4
<i>Oenothera breviflora</i>	taraxia	S1	G5
<i>Oenothera flava</i>	low yellow evening-primrose	S1	G5
<i>Oenothera psammophila</i>		SU	G3
<i>Oenothera serrulata</i>	shrubby evening-primrose	S2	G5
<i>Onosmodium molle</i>	western false gromwell	S2	G4G5
<i>Oplopanax horridus</i>	devil's-club	S2S3	G4G5
<i>Orobanche ludoviciana</i>	Louisiana broom-rape	S2	G5
<i>Orobanche uniflora</i>	one-flowered cancer-root	S2S3	G5
<i>Oryzopsis canadensis</i>	Canadian rice grass	S1	G5
<i>Oryzopsis exigua</i>	little rice grass	S1	G5
<i>Oryzopsis micrantha</i>	little-seed rice grass	S2	G5
<i>Osmorhiza longistylis</i>	smooth sweet cicely	S2	G5
<i>Osmorhiza purpurea</i>	purple sweet cicely	S2	G4G5
<i>Oxytropis jordalii</i> ssp <i>jordalii</i>	purple mountain locoweed	S2	G4T4
<i>Oxytropis lagopus</i> var <i>conjugans</i>	hare-footed locoweed	S2	G4T3
<i>Papaver kluanensis</i>	alpine poppy	S2	G3?Q
<i>Papaver pygmaeum</i>	alpine poppy	S2	G3
<i>Parietaria pensylvanica</i>	American pellitory	S2	G5
<i>Parnassia parviflora</i>	small northern grass-of-parnassus	S2	G4
<i>Pedicularis arctica</i>	Arctic lousewort	S2	G4
<i>Pedicularis capitata</i>	large-flowered lousewort	S2	G4
<i>Pedicularis lanata</i>	woolly lousewort	S2	G4G5
<i>Pedicularis racemosa</i>	leafy lousewort	S1	G5
<i>Pedicularis sudetica</i>	purple rattle	S1	G5
<i>Pellaea gastonyi</i>		S1S2	G2G4
<i>Pellaea glabella</i>	smooth cliff brake	S3?	G5
<i>Penstemon fruticosus</i> var <i>scouleri</i>	shrubby beardtongue	S2	G4T?
<i>Phacelia linearis</i>	linear-leaved scorpionweed	S2	G5
<i>Phacelia lyallii</i>	Lyall's scorpionweed	S2S3	G3G4

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Phegopteris connectilis</i>	northern beech fern	S2	G5
<i>Philadelphus lewisii</i>	mock orange	S1	G5
<i>Phippsia algida</i>		SR	G5
<i>Physocarpus malvaceus</i>	mallow-leaved ninebark	S1	G4G5
<i>Physostegia ledinghamii</i>		S2	G3
<i>Pinguicula villosa</i>	small butterwort	S1S2	G4
<i>Pinus monticola</i>	western white pine	SU	G5
<i>Pinus ponderosa</i>	ponderosa pine	S1	G5
<i>Plantago canescens</i>	western ribgrass	S2	G4G5
<i>Plantago maritima</i>	sea-side plantain	S1	G5
<i>Poa gracillima</i>	Pacific bluegrass	S2	G4
<i>Poa laxa ssp banffiana</i>		SR	G5?T1
<i>Poa leptocoma</i>	bog bluegrass	S2	G5
<i>Poa lettermanii</i>	Letterman's bluegrass	S1S2	G4
<i>Poa nervosa</i>	Wheeler's bluegrass	S2	G5
<i>Poa nevadensis</i>	Nevada bluegrass	SU	G5
<i>Poa stenantha</i>	bluegrass	SU	G5
<i>Polanisia dodecandra</i>	clammyweed	S1	G5Q
<i>Polygala paucifolia</i>	fringed milkwort	S1	G5
<i>Polygonum austinae</i>	Austin's knotweed	S1	G4
<i>Polygonum engelmannii</i>	slender knotweed	S1S2	G?
<i>Polygonum minimum</i>	least knotweed	S2	G5
<i>Polygonum watsonii</i>	Watson's knotweed	S1S2	G3G4
<i>Polypodium hesperium</i>	western polypody	S2	G5
<i>Polypodium sibiricum</i>		SU	G5?
<i>Polypodium virginianum</i>	rock polypody	S2	G5
<i>Populus angustifolia</i>	narrow-leaf cottonwood	S2	G5
<i>Potamogeton foliosus</i>	leafy pondweed	S1S2	G5
<i>Potamogeton natans</i>	floating-leaf pondweed	S2	G5
<i>Potamogeton obtusifolius</i>	blunt-leaved pondweed	S2	G5
<i>Potamogeton praelongus</i>	white-stem pondweed	S2	G5
<i>Potamogeton robbinsii</i>	Robbins' pondweed	S1	G5
<i>Potamogeton strictifolius</i>	linear-leaved pondweed	S1S2	G5
<i>Potentilla drummondii</i>	Drummond's cinquefoil	S2	G5
<i>Potentilla finitima</i>	sandhills cinquefoil	S1	G?

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Potentilla hookeriana</i>	Hooker's cinquefoil	S1S2	G4
<i>Potentilla macounii</i>		S1?	G2?
<i>Potentilla multifida</i>	branched cinquefoil	S1	G5
<i>Potentilla multiseeta</i>	smooth-leaved cinquefoil	S1	G3G4Q
<i>Potentilla paradoxa</i>	bushy cinquefoil	S2	G5
<i>Potentilla plattensis</i>	low cinquefoil	S2	G4
<i>Potentilla subjuga</i>		S1	G3?
<i>Potentilla villosa</i>	hairy cinquefoil	S2S3	G4
<i>Prenanthes alata</i>	white lettuce	S1	G5
<i>Prenanthes sagittata</i>	purple rattlesnakeroot	S2	G3G4
<i>Primula egaliksensis</i>	primrose	S2	G4
<i>Primula stricta</i>	erect primrose	S1S2	G4
<i>Psilocarphus elatior</i>	woollyheads	S2	G4Q
<i>Psoralea argophylla</i>	silverleaf psoralea	S2S3	G5
<i>Pterospora andromedea</i>	pine-drops	S2	G5
<i>Puccinellia cusickii</i>	Cusick's salt-meadow grass	SU	G3G4
<i>Puccinellia distans ssp hauptiana</i>		S1	G3G4
<i>Puccinellia pauciflora</i>	few-flowered salt-meadow grass	S1	G?
<i>Pyrola grandiflora</i>	Arctic wintergreen	S2	G5
<i>Pyrola picta</i>	white-veined wintergreen	S1	G4G5
<i>Ranunculus eximius</i>		SP	G4Q
<i>Ranunculus glaberrimus</i>	early buttercup	S2	G5
<i>Ranunculus grayi</i>	Gray's buttercup	S2	G4G5
<i>Ranunculus nivalis</i>	snow buttercup	S1	G5
<i>Ranunculus occidentalis var brevistylis</i>	western buttercup	S2	G5T5
<i>Ranunculus uncinatus</i>	hairy buttercup	S2	G5
<i>Ranunculus verecundus</i>	alpine buttercup	S2	G5
<i>Rhododendron lapponicum</i>	Lapland rose-bay	S2	G5
<i>Rhynchospora capillacea</i>	slender beak-rush	S1	G5
<i>Ribes laxiflorum</i>	mountain currant	S2	G5
<i>Romanzoffia sitchensis</i>	Sitka romanzoffia	S2	G4
<i>Rorippa curvipes</i>	yellow cress	SU	G5
<i>Rorippa sinuata</i>	spreading yellow cress	S2	G5
<i>Rorippa tenerrima</i>	slender cress	S2	G5
<i>Rorippa truncata</i>	blunt-leaved yellow cress	S1	G5

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Rumex paucifolius</i>	alpine sheep sorrel	S1	G4
<i>Ruppia maritima</i>	widgeon grass	S2	G5
<i>Sagina decumbens</i>	spreading pearlwort	S1	G5
<i>Sagina nivalis</i>	pearlwort	SU	G5
<i>Sagina nodosa</i>	pearlwort	S1	G5
<i>Sagittaria latifolia</i>	broad-leaved arrowhead	S1	G5
<i>Salix alaxensis</i> var <i>alaxensis</i>	Alaska willow	S2	G5T?
<i>Salix commutata</i>	changeable willow	S1	G5
<i>Salix lanata</i> ssp <i>calcicola</i>	woolly willow	S2	G4T4
<i>Salix planifolia</i> ssp <i>tyrrellii</i>		SR	G5T2
<i>Salix raupii</i>	Raup's willow	S1	G2
<i>Salix sitchensis</i>	Sitka willow	S1	G5
<i>Salix stolonifera</i>	willow	S1	G4G5
<i>Sarracenia purpurea</i>	pitcher-plant	S2	G5
<i>Saussurea americana</i>	American saw-wort	S1	G5
<i>Saxifraga ferruginea</i>	saxifrage	S2	G5
<i>Saxifraga flagellaris</i> ssp <i>setigera</i>	spiderplant	S2	G5T?
<i>Saxifraga nelsoniana</i> ssp <i>porsildiana</i>	Nelson's saxifrage	S2	G5T3T4
<i>Saxifraga nivalis</i>	alpine saxifrage	S2	G4G5
<i>Saxifraga odontoloma</i>	saxifrage	S1?	G5
<i>Saxifraga oregana</i> var <i>montanensis</i>	Oregon saxifrage	SU	G4G5T?Q
<i>Saxifraga subapetala</i>		SR	G2G3Q
<i>Schizachyrium scoparium</i> var <i>scoparium</i>	little bluestem	S2	G5T?
<i>Scirpus clintonii</i>	Clinton's bulrush	S1	G4
<i>Scirpus fluviatilis</i>	river bulrush	S1	G5
<i>Scirpus pallidus</i>	pale bulrush	S1	G5
<i>Scirpus pumilus</i> var <i>rollandii</i>	dwarf bulrush	S2	G?T3
<i>Scirpus rufus</i>	Red Bulrush	S1	G5
<i>Sedum divergens</i>	spreading stonecrop	S2	G5?
<i>Selaginella wallacei</i>	Wallace's little club-moss	S1	G5
<i>Senecio cymbalarioides</i>	ragwort	S1	G5
<i>Senecio integerrimus</i> var <i>ochroleucus</i>		SR	G5T?
<i>Silene antirrhina</i>	sleepy catchfly	SE?	G5
<i>Silene furcata</i>	alpine bladder catchfly	S2	G5
<i>Sisyrinchium septentrionale</i>	pale blue-eyed grass	S2	G3G4

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Sitanion hystrix</i>	squirreltail	S2	G5
<i>Sparganium fluctuans</i>	bur-reed	S1	G5
<i>Sparganium glomeratum</i>	bur-reed	S1	G4?
<i>Sparganium hyperboreum</i>	northern bur-reed	S1	G5
<i>Spartina pectinata</i>	prairie cord grass	S1	G5
<i>Spergularia marina</i>	salt marsh sand spurry	S2	G5
<i>Sphenopholis obtusata</i>	prairie wedge grass	S2	G5
<i>Spiraea densiflora</i>	pink meadowsweet	S1	G5
<i>Spiranthes lacera</i>	northern slender ladies'-tresses	S1	G5
<i>Stellaria americana</i>	American chickweed	S1	G3G4
<i>Stellaria arenicola</i>	sand-dune chickweed	S1	G3
<i>Stellaria crispa</i>	wavy-leaved chickweed	S2	G5
<i>Stellaria nitens</i>		SR	G5
<i>Stellaria obtusa</i>	chickweed	S1	G5
<i>Stellaria umbellata</i>	chickweed	S1S2	G5
<i>Stephanomeria runcinata</i>	rush-pink	S2	G5
<i>Streptopus roseus</i>	rose mandarin	S1	G5
<i>Streptopus streptopoides</i>	twisted-stalk	S1	G5
<i>Suaeda moquinii</i>	Moquin's sea-blite	S2	G5
<i>Suckleya suckleyana</i>	poison suckleya	S2	G5
<i>Suksdorfia ranunculifolia</i>	suksdorfia	S2	G5
<i>Suksdorfia violacea</i>	blue suksdorfia	S1S2	G4
<i>Tanacetum huronense</i>	Indian tansy	S1	G5Q
<i>Taxus brevifolia</i>	western yew	S1	G4
<i>Telesonix heucheriformis</i>	telesonix	S2	G4
<i>Tellima grandiflora</i>	fringe-cups	S1?	G5
<i>Thelesperma marginatum</i>	greenthread	S1	G5
<i>Thellungiella salsuginea</i>	mouse-ear cress	S1	G4G5
<i>Thuja plicata</i>	western red cedar	S2	G5
<i>Torreyochloa pallida</i> var <i>fernaldii</i>		S?	G5?T4Q
<i>Townsendia condensata</i>	alpine townsendia	S1	G4
<i>Townsendia exscapa</i>	low townsendia	S1S2	G5
<i>Tradescantia occidentalis</i>	western spiderwort	S1	G5
<i>Triantha occidentalis</i> ssp <i>brevistyla</i>		SU	G5T4
<i>Triantha occidentalis</i> ssp <i>montana</i>		SU	G5T?

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Trillium ovatum</i>	western wakerobin	S1	G5
<i>Trisetum canescens</i>	tall trisetum	S1	G?
<i>Trisetum cernuum</i>	nodding trisetum	S2?	G5
<i>Trisetum montanum</i>	mountain trisetum	S1S2	G4G5
<i>Trisetum wolfii</i>	awnless trisetum	S1	G4
<i>Tsuga heterophylla</i>	western hemlock	S1	G5
<i>Typha angustifolia</i>	narrow-leaved cattail	SE?	G5
<i>Utricularia cornuta</i>	horned bladderwort	S1	G5
<i>Vaccinium ovalifolium</i>	oval-leaved blueberry	S2	G5
<i>Vaccinium uliginosum</i>	bog bilberry	S2S3	G5
<i>Veronica catenata</i>	water speedwell	S1S2	G5
<i>Veronica serpyllifolia</i>	thyme-leaved speedwell	S2	G?
<i>Viola macloskeyi</i> var <i>pallens</i>	Macloskey's violet	S1S2	G5T5
<i>Viola pedatifida</i>	crowfoot violet	S1S2	G5
<i>Viola praemorsa</i> ssp <i>linguifolia</i>		S2	G5T5
<i>Wolffia columbiana</i>	watermeal	S2	G5
<i>Woodsia glabella</i>	smooth woodsia	S1	G5
<i>Yucca glauca</i>	soapweed	S1	G5

Appendix 3b. Non-vascular Plant Elements of Special Conservation Concern.

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Alcina brevirostris</i>	short-beaked rigid screw moss	S2	G3G5
<i>Alcina rigida</i>	aloe-like rigid screw moss	S2	G3G5
<i>Amblyodon dealbatus</i>		S2	G3G5
<i>Amphidium mougeotii</i>		S1	G5
<i>Andreaea alpestris</i>		S1	G?
<i>Andreaea blyttii</i>		S1	G5
<i>Andreaea nivalis</i>	red rock moss	S2	G5
<i>Andreaea rupestris</i>	black rock moss	S2	G5
<i>Anoetangium aestivum</i>		S1	G3G5
<i>Anomobryum filiforme</i>		S2	G4
<i>Anomodon minor</i>		S1	G5
<i>Aongstroemia longipes</i>		S2	G?
<i>Arctoa fulvella</i>		S1	G3G5
<i>Atrichum undulatum</i>	undulated crane's bill moss	S1S2	G5
<i>Aulacomnium androgynum</i>		S2	G5
<i>Barbula coreensis</i>		S1	G?
<i>Bartramia halleriana</i>		S1	G4G5
<i>Blindia acuta</i>	sharp-pointed weissia	S1S2	G5
<i>Brachythecium acutum</i>		SU	G?Q
<i>Brachythecium albicans</i>		S2?	G5
<i>Brachythecium campestre</i>		S2	G4G5Q
<i>Brachythecium erythrorrhizon</i>		S2	G5
<i>Brachythecium hylotapetum</i>		S2	G?
<i>Brachythecium leibergii</i>		S2	G?
<i>Brachythecium nelsonii</i>		S2	G?
<i>Brachythecium plumosum</i>		S2	G5
<i>Brachythecium reflexum</i>		S1	G4G5
<i>Brachythecium rutabulum</i>		S2?	G5
<i>Bryobrittonia longipes</i>		S3	G3
<i>Bryoerythrophyllum ferruginascens</i>	red leaf moss	S2	G4
<i>Bryohaplocladium virginianum</i>		SU	G5
<i>Bryum algovicum</i>		S2	G4G5
<i>Bryum amblyodon</i>		S1	G?
<i>Bryum arcticum</i>		S1	G?

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Bryum calobryoides</i>		S1	G3
<i>Bryum calophyllum</i>		S1	G?
<i>Bryum cyclophyllum</i>		S1	G4G5
<i>Bryum dichotomum</i>		S1	G5?
<i>Bryum knowltonii</i>		S1	G3G4
<i>Bryum maritimum</i>		S1	G3G4
<i>Bryum meesioides</i>		SR	G3G4
<i>Bryum muehlenbeckii</i>		S1	G4G5
<i>Bryum pallens</i>		S2	G4G5
<i>Bryum pallescens</i>		S2	G5
<i>Bryum purpurascens</i>		S1	G3G4
<i>Bryum schleicheri</i>		S1	G?
<i>Bryum stirtonii</i>		S1S2	G?
<i>Bryum turbinatum</i>		SU	G5
<i>Bryum uliginosum</i>		S2	G3G5
<i>Buxbaumia aphylla</i>	bug on a stick	S2	G3
<i>Buxbaumia viridis</i>	green shield moss	S1	G4
<i>Campylium polygamum</i>		S3	G5
<i>Campylium radicale</i>		S1	G3G5
<i>Cirriphyllum cirrosum</i>		S2	G?
<i>Claopodium bolanderi</i>		S2	G4
<i>Conardia compacta</i>		S2	G3G5
<i>Coscinodon calyptratus</i>	sieve-toothed moss	S2	G?
<i>Coscinodon cribratus</i>		S1	G3?
<i>Cynodontium glaucescens</i>	glaucous shield moss	S1	G3G4
<i>Cynodontium schisti</i>		S1	G3G5
<i>Cynodontium strumiferum</i>		S2	G3G5
<i>Cynodontium tenellum</i>		S2	G?
<i>Cyrtomnium hymenophylloides</i>		S1S2	G5?
<i>Desmatodon cernuus</i>	narrow-leaved chain-teeth moss	S1	G3G5
<i>Desmatodon guenpinii</i>		SR	G3G5
<i>Desmatodon heimii</i>	long-stalked beardless moss	S2	G5
<i>Desmatodon laureri</i>		S1	G?
<i>Desmatodon leucostoma</i>		S2	G?
<i>Desmatodon randii</i>		S1	G2G3

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Desmatodon systylius</i>		S2	G4G5
<i>Dichelyma falcatum</i>		S1	G4G5
<i>Dichodontium olympicum</i>		S1	G?
<i>Dicranella cerviculata</i>	red necked fork moss	SR	G?
<i>Dicranella crispa</i>	curl-leaved fork moss	S2	G?
<i>Dicranella heteromalla</i>	silky fork moss	S1	G?
<i>Dicranella palustris</i>	drooping-leaved fork moss	S1?	G?
<i>Dicranella subulata</i>	awl-leaved fork moss	S2S3	G?
<i>Dicranum angustum</i>	cushion moss	S1S2	G?
<i>Dicranum majus</i>	greater fork moss	S1	G4G5
<i>Dicranum ontariense</i>	cushion moss	S1	G4G5
<i>Dicranum pallidisetum</i>	alpine curly heron's bill moss	S1	G?
<i>Dicranum spadicum</i>	cushion moss	S2S3	G?
<i>Dicranum tauricum</i>	broken-leaf moss	S1S2	G4
<i>Didymodon asperifolius</i>		S?	G3G5
<i>Didymodon fallax</i>	fallacious screw moss	S2	G5
<i>Didymodon johansenii</i>		S2	G?
<i>Didymodon nigrescens</i>		S1	G?
<i>Didymodon rigidulus</i>	rigid screw moss	S2	G5
<i>Didymodon subandreaeoides</i>		S2	G?
<i>Didymodon tophaceus</i>	blunt-leaved hair moss	S2	G5
<i>Didymodon vinealis</i>		S1	G5
<i>Discelium nudum</i>	naked weissia	S1	G3G4
<i>Ditrichum montanum</i>		S1	G?
<i>Drepanocladus brevifolius</i>	brown moss	S1	G?
<i>Drepanocladus capillifolius</i>	brown moss	S1	G?
<i>Drepanocladus crassicoatus</i>	brown moss	S1	G?
<i>Dryptodon patens</i>	spreading fringe moss	S2	G4G5
<i>Encalypta brevicolla</i>	candle-snuffer moss	S2	G4
<i>Encalypta brevipes</i>	candle-snuffer moss	S1	G3
<i>Encalypta intermedia</i>	candle-snuffer moss	S2	G?
<i>Encalypta longicolla</i>	candle-snuffer moss	S1	G3G4
<i>Encalypta spathulata</i>	candle-snuffer moss	S2	G3?
<i>Encalypta vulgaris</i>	common extinguisher moss	S1S2	G5
<i>Entodon breviseris</i>		SR	G3?

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Entodon concinnus</i>		S2S3	G4G5
<i>Entodon schleicheri</i>		S1	G3G5
<i>Fissidens adianthoides</i>	maidenhair moss	S2S3	G5
<i>Fissidens grandifrons</i>	narrow leaved Chinese phoenix moss	S2	G3G5
<i>Fissidens limbatus</i>		S?	G3G5
<i>Fontinalis antipyretica</i>		S2	G5
<i>Fontinalis dalecarlica</i>		S?	G3G5
<i>Fontinalis missourica</i>		S?	G2G4
<i>Fontinalis neomexicana</i>		S2	G3G5
<i>Funaria americana</i>	cord moss	S1	G2G3
<i>Funaria muhlenbergii</i>	Muhlenberg's cord moss	S1	G4
<i>Grimmia anomala</i>	mountain forest grimmia	S2	G?
<i>Grimmia donniana</i>	Donian grimmia	S2	G4G5
<i>Grimmia elatior</i>	large grimmia	SR	G?
<i>Grimmia incurva</i>	black grimmia	S1	G4G5
<i>Grimmia montana</i>	sun grimmia	S2	G?
<i>Grimmia pilifera</i>	hair giboshi moss	S1	G4G5
<i>Grimmia pulvinata</i>	grey-cushioned grimmia	SR	G4G5
<i>Grimmia tenerrima</i>	alpine grimmia	S2	G3G5
<i>Grimmia teretinervis</i>		S1	G3G5
<i>Grimmia torquata</i>	twisted-leaved grimmia	S2	G3G5
<i>Grimmia trichophylla</i>	hair-pointed grimmia	S1	G5?
<i>Gymnostomum aeruginosum</i>	tufted rock beardless moss	S2?	G5
<i>Herzogiella seligeri</i>		S1	G4
<i>Herzogiella turfacea</i>		S1	G4G5
<i>Heterocladium dimorphum</i>		S1	G4G5
<i>Homalothecium nevadense</i>		S2?	G4
<i>Homalothecium pinnatifidum</i>		S2?	G4
<i>Homomallium adnatum</i>		SR	G3G5
<i>Hydrogrimmia mollis</i>		S1	G3G5
<i>Hygroamblystegium noterophilum</i>		S1	G4
<i>Hygroamblystegium tenax</i>		S2	G5
<i>Hygrohypnum alpestre</i>		S1	G3G5
<i>Hygrohypnum bestii</i>		S2S3	G4
<i>Hygrohypnum cochlearifolium</i>		S1	G?

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Hygrohypnum duriusculum</i>		S1	G?
<i>Hygrohypnum molle</i>		SR	G4G5
<i>Hygrohypnum ochraceum</i>		S2	G5
<i>Hygrohypnum smithii</i>		S1	G3G5
<i>Hygrohypnum styriacum</i>		S2	G?
<i>Hylacomiastrum pyrenaicum</i>		S2	G4G5
<i>Hypnum callichroum</i>		S2	G?
<i>Hypnum pallescens</i>		SU	G5
<i>Hypnum procerrimum</i>		S3	G3G4
<i>Hypnum recurvatum</i>		S2	G3G5
<i>Jaffuelobryum raui</i>		S1	G4?
<i>Jaffuelobryum wrightii</i>		S2	G3G4
<i>Kiaeria blyttii</i>	Blytt's fork moss	S1S2	G5
<i>Kiaeria falcata</i>	sickle-leaved fork moss	SR	G5
<i>Kiaeria starkei</i>	alpine broom moss	S2	G5
<i>Lescuraea saxicola</i>		S1	G4G5
<i>Leskea gracilescens</i>		S1?	G5
<i>Leskea obscura</i>		S1?	G5
<i>Leskea polycarpa</i>		S1?	G4G5
<i>Leskeella nervosa</i>		S2	G5
<i>Limprichtia cossonii</i>		SU	G?
<i>Loeskypnum badium</i>		S1	G4G5
<i>Meesia longiseta</i>		S1	G3G4
<i>Mielichhoferia macrocarpa</i>		S1	G2?
<i>Mnium ambiguum</i>		S2	G5
<i>Myurella sibirica</i>		SR	G4?
<i>Neckera pennata</i>		S2?	G5
<i>Oligotrichum aligerum</i>		SR	G5
<i>Oligotrichum hercynicum</i>	Hercynian hair moss	S2	G5
<i>Oligotrichum parallelum</i>		S2	G5
<i>Oreas martiana</i>		S1	G5?
<i>Orthothecium intricatum</i>		S2	G4G5
<i>Orthothecium strictum</i>		S2	G?
<i>Orthotrichum affine</i>		S2	G3G5
<i>Orthotrichum pullens</i>		S2	G5

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Orthotrichum pumilum</i>		S1S2	G5
<i>Orthotrichum pylatitii</i>		S2	G4G5
<i>Oxystegus tenuirostris</i>	acid-soil moss	S1	G5
<i>Paraleucobryum longifolium</i>	long-leaved fork moss	S1	G5
<i>Phascum cuspidatum</i>	cuspidate earth moss	S2	G5
<i>Phascum vlassovii</i>		S1	G2?
<i>Philonotis marchica</i>		S1	G5
<i>Philonotis yezoana</i>		S1	G2G3
<i>Physcomitrium hookeri</i>	bladder-cap moss	S1	G2G4
<i>Physcomitrium pyriforme</i>	urn moss	S1	G5
<i>Plagiobryum demissum</i>		S1	G?
<i>Plagiobryum zierii</i>		S2	G3G4
<i>Plagiomnium rostratum</i>		S1	G5
<i>Platydictya minutissima</i>		SU	G3
<i>Pogonatum dentatum</i>	hair-like pogonatum	S2S3	G3G4
<i>Pogonatum urnigerum</i>	urn-like pogonatum	S2S3	G5
<i>Pohlia andalusica</i>		S1	G?
<i>Pohlia annotina</i>		S1	G4G5
<i>Pohlia atropurpurea</i>		S2	G4G5
<i>Pohlia brevinervis</i>		S1	G?
<i>Pohlia bulbifera</i>		S1	G4G5
<i>Pohlia camptotrachela</i>		SR	G?
<i>Pohlia columbica</i>		SR	G?
<i>Pohlia crudoides</i>		S1	G?
<i>Pohlia drummondii</i>		S2	G3G4
<i>Pohlia elongata</i>		S1	G4G5
<i>Pohlia filum</i>		S1	G4G5
<i>Pohlia longicolla</i>		S1	G4G5
<i>Pohlia obtusifolia</i>		S1	G?
<i>Polytrichum longisetum</i>	slender hairy-cap	S1	G5
<i>Polytrichum lyallii</i>	hair cap moss	S2	G?
<i>Polytrichum sexangulare</i>	northern hair moss	S2	G4
<i>Pottia intermedia</i>		SR	G2G4
<i>Pottia nevadensis</i>		SR	G4
<i>Pottia truncata</i>	little blunt-fruited beardless moss	SR	G3G5

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Pseudobryum cinclidioides</i>		S1	G5
<i>Pseudoleskea patens</i>		S2	G5
<i>Pseudoleskea stenophylla</i>		S1S2	G?
<i>Pseudoleskeella sibirica</i>		S2	G?
<i>Pterygoneurum ovatum</i>	hairy-leaved beardless moss	S1	G5
<i>Pterygoneurum subsessile</i>		S2	G4?
<i>Racomitrium aciculare</i>		S1S2	G5
<i>Racomitrium affine</i>		SU	G?
<i>Racomitrium elongatum</i>		SU	G?
<i>Racomitrium fasciculare</i>		S1	G5
<i>Racomitrium heterostichum</i>		SU	G5
<i>Racomitrium macounii</i>		S1	G?
<i>Racomitrium microcarpon</i>		SU	G?
<i>Racomitrium sudeticum</i>		SU	G?
<i>Rhizomnium andrewsianum</i>		S1	G3G5
<i>Rhizomnium nudum</i>		S2	G?
<i>Rhodobryum ontariense</i>		S1	G5
<i>Rhytidiadelphus squarrosus</i>	pipecleaner moss	S2	G4G5
<i>Schistidium agassizii</i>	elf bloom moss	S1	G3G5
<i>Schistidium heterophyllum</i>		SR	G3
<i>Schistidium pulvinatum</i>		S1	G5
<i>Schistidium tenerum</i>	thread bloom moss	S1	G?
<i>Schistidium trichodon</i>		S1	G?
<i>Schistostega pennata</i>	luminous moss	S1	G4G5
<i>Scleropodium cespitosum</i>		SR	G4
<i>Scleropodium obtusifolium</i>		SR	G4
<i>Scouleria aquatica</i>		S2	G4
<i>Seligeria calcarea</i>	chalk brittle moss	S1	G3G4
<i>Seligeria campylopoda</i>		S2	G3G5
<i>Seligeria donniana</i>	Donian beardless moss	S2	G4G5
<i>Seligeria subimmersa</i>		S2	G?
<i>Seligeria tristichoides</i>		SU	G4
<i>Sphagnum balticum</i>	peat moss	S1	G?
<i>Sphagnum compactum</i>	neat bog moss	S2	G5
<i>Sphagnum contortum</i>	twisted bog moss	S2	G5

<u>Scientific Name</u>	<u>Common Name</u>	<u>S Rank</u>	<u>G Rank</u>
<i>Sphagnum fallax</i>	peat moss	S2	G5
<i>Sphagnum fimbriatum</i>	fringed bog moss	S2S3	G5
<i>Sphagnum lindbergii</i>	Lindberg's bog moss	S2S3	G5?
<i>Splachnum ampullaceum</i>	flagon-fruited splachnum	S2	G5
<i>Splachnum rubrum</i>	red collar moss	S2	G3
<i>Splachnum vasculosum</i>	large-fruited splachnum	S1S2	G?
<i>Stegonia pilifera</i>		S2	G?
<i>Tayloria froelichiana</i>	Froelichian splachnum	S1	G?
<i>Tayloria hornschurchii</i>	small-kettle moss	S1	G?
<i>Tayloria lingulata</i>	tongue-leaf small-kettle moss	S2S3	G3G5
<i>Tayloria serrata</i>	slender splachnum	S2	G5
<i>Tayloria splachnoides</i>	splachnoid cyrtodon	S1	G2G3
<i>Tetraplodon urceolatus</i>	alpine lemming moss	S2	G?
<i>Thamnobryum neckeroides</i>		S1	G?
<i>Thuidium delicatulum</i>		SR	G5
<i>Thuidium philibertii</i>		S1S2	G5
<i>Timmia norvegica</i>		S2	G3G4
<i>Timmia sibirica</i>		S1	G?
<i>Tortella inclinata</i>	bent screw moss	S2	G4G5
<i>Tortula caninervis</i>		SR	G?
<i>Tortula princeps</i>	common twisted moss	SR	G5?
<i>Trichodon cylindricus</i>	narrow-fruited fork moss	S1	G4G5
<i>Ulota curvifolia</i>		S1	G3G5
<i>Voitia nivalis</i>	hidden kettle moss	S1	G4
<i>Warnstorfia pseudostraminea</i>	brown moss	S1	G2G3
<i>Warnstorfia tundrae</i>	brown moss	S2	G?
<i>Weissia controversa</i>	green-cushioned weissia	S1	G5
<i>Zygodon viridissimus</i>		S1	G5

Appendix 4. Vertebrate Animal Elements of Special Conservation Concern*

Scientific Name	Common Name	Global		Provincial Rank	Comments
		Rank	Rank		
BUFO COGNATUS	Great Plains toad	G5	S2		
BUFO HEMIOPHYS	Canadian toad	G4	S3S4		An example chosen from a limited northern population. A species considered at risk.
RANA PIPIENS	northern leopard frog	G5	S2S3		A species considered at risk.
RANA PRETIOSA	spotted frog	G3G4	S3		A G3G4 species. A G3 species may be rare and local throughout its range, or in a restricted range.
GAVIA STELLATA	red-throated loon	G5	S1B		
GAVIA PACIFICA	Pacific loon	G5	S1B		
PELECANUS ERYTHORHYNCHOS	American white pelican	G3	S2S3B		A G3 species. A G3 species may be rare and local throughout its range, or in a restricted range.
PLEGADIS CHIHUI	white-faced ibis	G5	S1B		
FALCO PEREGRINUS	peregrine falcon	G5	S3B		Peregrine populations south of the North Saskatchewan River were considered of special conservation concern.
CENTROCERCUS UROPHASIANUS	sage grouse	G5	S1S2		
CHARADRIUS MELODIUS	pipit plover	G3	S2B		A G3 species. A G3 species may be rare and local throughout its range, or in a restricted range.
CHARADRIUS MONTANUS	mountain plover	C2	S1B		
LARUS CANUS	mew gull	C5	S1B		
ATHENE CUNICULARIA	burrowing owl	C4	S2S3B		A species considered at risk.
CATHARUS MINIMUS	gray-checked thrush	C5	S1B		
SPZELLA ARBOREA	American tree sparrow	C5	S1B, SZN		
ICTERUS BULLOCKII	Bullock's oriole	C5	S1B		
LAMPETRA JAPONICA	Arctic lamprey	C4	S1		
CCTTUS BAIRDI	mottled sculpin (St. Mary River sculpin)	C5	S1		
CGREGONUS ZENITHICUS	shortjaw cisco	C2	S1		Only one EO known from Alberta (i.e., Barrow's Lake).
PROSOPOM COULTERI	pygmy whitefish	C5	S1		
NOTROPIS BLENNIUS	river shiner	C5	S2		
CARPIODES CYPRINUS	quillback	C5	S2		
MOXOSTOMA ANISURUM	silver redhorse	C5	S2		
PERCINA CAPRODES	logperch	C5	S1		Two known populations of this species occur in Alberta (i.e., Marie Lake and Cold Lake).
Sorex vagrans	wandering shrew	C5	S1S2		
MYOTIS EVOTIS	long-eared bat	C5	S2		
MYOTIS VOLANS	long-legged bat	C5	S2		
TAMIAS RUFICAUDUS	red-tailed chipmunk	C5	S2		
PEROGNATHUS FASCIATUS	olive-backed pocket mouse	C5	S2S3		
DIPDOMYS ORDII	Ord's kangaroo rat	C5	S2		
ONYCHOMYS LEUCOGASTER	northern grasshopper mouse	C5	S2S3		
MICROTUS XANTHOGNATHUS	yellow-cheeked vole	C5	S3		
MICROTUS OCHROGASTER	prairie vole	C5	S2		Habitat very localized. Species' numbers may be lower than S3 rank indicates.
MICROTUS RICHARDSONI	water vole	C5	S3		Habitat very localized. Species' numbers may be lower than S3 rank indicates.
LAGURUS CURTATUS	sagebrush vole	C5	S3		

<i>Scientific Name</i>	<i>Common name</i>	<i>Global Rank</i>	<i>Provincial Rank</i>	<i>Comments</i>
CHRYSEMYS PICTA	painted turtle	C5	S1	
PHRYNOSOMA HERNANDESI	short-horned lizard	C5	S2S3	
HETERODON NASICUS NASICUS	plains hognose snake	C5T5	S2	
PTUOPIUS MELANOLEUCUS	bull snake	C5	S3	Only hibernacula EOs were identified. Hibernacula were considered a feature at risk.
CHOTALLUS VIRIDIS	prairie rattlesnake	C5	S3	Only hibernacula EOs were identified. Hibernacula were considered a feature at risk.
	migratory bird nesting areas			Good examples of migratory bird nesting areas (i.e., waterbirds) were identified from ESA data.
	shorebird staging area			Important shorebird staging areas were identified based on Poston et al. (1990).

*This list includes only those elements (excluding migratory bird nesting areas and shorebird staging areas) that have currently been processed in the ANHIC database. The provincial ranks are under review.

Appendix 5. Special Feature Polygons and Elements of Special Conservation Concern.

ID Special Feature Polygon Name

4 West Castle

Natural Subregion(s)

Alpine
Montane
Sub-Alpine

Scientific Element Name (Vertebrate Animals)		Common Name	ERank	PARep
Sorex vagrans		wandering shrew	3	1
Tamias ruficaudus		red-tailed chipmunk	2	1
Scientific Element Name (Non-vascular Plants)		Common Name	ERank	PARep
Splachnum ampullaceum		flagon-fruited splachnum	2	5
Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Agrostis exarata		spike redtop	2	3
Arabis lemmonii		Lemmon's rock cress	2	1
Botrychium simplex		dwarf grape fern	3	1
Carex kelloggii		Kellogg's sedge	2	4
Carex petasata		pasture sedge	2	2
Carex scoparia		broom sedge	3	4
Conimitella williamsii		conimitella	4	3
Deschampsia elongata		slender hair grass	3	4
Draba densifolia		whitlow-grass	2	3
Epilobium clavatum		willowherb	2	2
Eriogonum ovalifolium var ovalifolium		silver-plant	4	3
Galium bifolium		two-leaved Bedstraw	3	5
Gayophytum racemosum		low willowherb	3	4
Hieracium cynoglossoides		woolly hawkweed	4	2
Juncus parryi		Parry's rush	3	2
Lithophragma parviflorum		small-flowered rockstar	2	2
Melica smithii		melic grass	3	3
Melica spectabilis		onion grass	2	2
Mertensia longiflora		large-flowered lungwort	3	2
Microsteris gracilis		slender phlox	3	5
Montia parvifolia		small-leaved montia	4	3
Orobanche uniflora		one-flowered cancer-root	2	2
Poa stenantha		bluegrass	1	1
Polygonum minimum		least knotweed	2	1
Potentilla villosa		hairy cinquefoil	3	1
Ranunculus verecundus		alpine buttercup	2	1
Rorippa tenerrima		slender cress	2	4
Saxifraga ferruginea		saxifrage	2	1
Sitanion hystrix		squirreltail	2	3
Suksdorfia ranunculifolia		suksdorfia	2	1
Suksdorfia violacea		blue suksdorfia	4	2
Veronica serpyllifolia		thyme-leaved speedwell	4	2
Viola macloskeyi var pallens		Macloskey's violet	3	2
Site Name	Landform Element Name	Subelement	ERank	PARep
Barnaby Ridge Area	Patterned Ground		1	3
Barnaby Ridge Area	Paternoster Lakes		4	4
Beaver Mines Area	Iron Depositing Springs		1	3

5 Front Canyons

Natural Subregion(s)

Alpine
Montane
Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Brachythecium nelsonii		4	3
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Aquilegia jonesii	Jones' columbine	3	1
Carex haydeniana	Hayden's sedge	3	2
Cirsium scariosum	thistle	1	3
Draba densifolia	whitlow-grass	2	3
Epilobium clavatum	willowherb	2	2
Erigeron pallens	pale alpine fleabane	4	1
Eriogonum ovalifolium var ovalifolium	silver-plant	4	3
Hieracium cynoglossoides	woolly hawkweed	4	2
Mertensia lanceolata	lance-leaved lungwort	2	3
Mertensia longiflora	large-flowered lungwort	3	2
Mimulus tilingii		1	4

ID Special Feature Polygon Name

5 Front Canyons

Natural Subregion(s)

Alpine
Montane
Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Papaver pygmaeum	alpine poppy	4	1
Potentilla villosa	hairy cinquefoil	3	1
Townsendia condensata	alpine townsendia	4	1
Viola praemorsa ssp linguifolia		2	2

Site Name	Landform Element Name	Subelement	ERank	PARep
Drywood Mountain Area	Hanging Valleys		1	1

6 Big Sagebrush

Natural Subregion(s)

Alpine
Montane
Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Aulacomnium androgynum		2	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Antennaria aromatica	scented everlasting	4	3
Artemisia tridentata	big sagebrush	2	4
Brickellia grandiflora	large-flowered brickellia	2	1
Carex kelloggii	Kellogg's sedge	2	4
Cirsium scariosum	thistle	1	3
Conimitella williamsii	conimitella	4	3
Cryptogramma stelleri	Steller's rock brake	2	1
Cypripedium montanum	mountain lady's-slipper	3	1
Draba densifolia	whitlow-grass	2	3
Epilobium glaberrimum ssp fastigiatum	willowherb	4	1
Epilobium saximontanum	Rocky Mountain willowherb	2	3
Erigeron flagellaris	creeping fleabane	3	2
Festuca occidentalis	western fescue	3	4
Glyceria elata	tufted tall manna grass	2	4
Habenaria saccata	slender bog orchid	2	2
Juncus confusus	few-flowered rush	2	4
Juncus regelii	Regel's rush	3	5
Listera convallarioides	broad-lipped twayblade	2	2
Melica smithii	melic grass	3	3
Melica spectabilis	onion grass	2	2
Mertensia longiflora	large-flowered lungwort	3	2
Microsteris gracilis	slender phlox	3	5
Mimulus guttatus	yellow monkeyflower	1	2
Orobanchë uniflora	one-flowered cancer-root	2	2
Oryzopsis exigua	little rice grass	3	4
Osmorhiza purpurea	purple sweet cicely	3	2
Penstemon fruticosus var scouleri	shrubby beardtongue	4	3
Poa stenantha	bluegrass	1	1
Potentilla platensis	low cinquefoil	3	2
Pyrola picta	white-veined wintergreen	4	3
Salix sitchensis	Sitka willow	3	5
Saxifraga odontoloma	saxifrage	3	4
Spergularia marina	salt-marsh sand spurry	2	4
Tellima grandiflora	tringe-cups	3	5
Trisetum canescens	tall trisetum	4	4

Site Name	Landform Element Name	Subelement	ERank	PARep
Barnaby Ridge Area	Patterned Ground		1	3

Vegetation Community Element Name
Artemisia tridentata - Balsamorhiza sagittata
Artemisia tridentata - Rhamnus alnifolia shrub herbaceous
Artemisia tridentata - Saxifraga bronchialis

ID Special Feature Polygon Name

7 Ptolemy Creek

Natural Subregion(s)

Alpine
Montane
Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Adiantum pedatum	maldenhall fern	3	1
Aster campestris	meadow aster	2	5
Aster eatonii	Eaton's aster	2	2
Carex backii	Back's sedge	3	3
Conimitella williamsii	conimitella	4	3
Crepis atriobarba	hawk's-beard	2	2
Cypripedium montanum	mountain lady's-slipper	3	1
Elymus virginicus	Virginia wild rye	3	4
Epilobium lactiflorum	willowherb	2	1
Gnaphalium viscosum	clammy cudweed	4	5
Hieracium cynoglossoides	woolly hawkweed	4	2
Hippuris montana	mountain mare's-tail	4	1
Larix occidentalis	western larch	2	3
Listera convallarioides	broad-lipped twayblade	2	2
Melica spectabilis	onion grass	2	2
Mimulus guttatus	yellow monkeyflower	1	2
Plantago canescens	western ribgrass	3	4
Thuja plicata	western red cedar	2	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Crowsnest Lake Area	Karst Springs		1	2
Crowsnest Pass	Karst Caves	Joint	1	2
Crowsnest Area	Ice Caves	Cold Trap	4	4
Savanna Area	Marl Lakes		3	3
Crowsnest Area	Frost Pockets		1	4
Crowsnest Area	Ice Caves	Relict Permafrost	4	4
Crowsnest Area	Ice Caves	Cold Zone	4	5
Crowsnest Area	Ice Caves	Perennial	4	4
Crowsnest Area	Ice Caves	Perennial	4	4
Crowsnest Area	Ice Caves	Perennial	4	4
Crowsnest Pass	Speleothems		1	2
Crowsnest Pass	Anticlinal Valleys		1	4
Crowsnest Area	Dolines	Solution	1	?
Crowsnest Pass Area	Fluviatile Lakes	Alluvial Fan Dammed	4	4

Vegetation Community Element Name

Larix occidentalis/Calamagrostis rubescens

8 Beavermines Valley

Natural Subregion(s)

Montane

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Dicranum tauricum	broken-leaf moss	4	5

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex kelloggii	Kellogg's sedge	2	4
Danthonia californica	California oat grass	1	3
Danthonia unispicata	one-spike oat grass	2	4
Erigeron divergens	fleabane	3	4
Eriogonum ovalifolium var ovalifolium	silver-plant	4	3
Galium bifolium	two-leaved Bedstraw	3	5
Hieracium cynoglossoides	woolly hawkweed	4	2
Juncus parryi	Parry's rush	3	2
Lewisia pygmaea var pygmaea	dwarf bitter-root	2	2
Lewisia rediviva	bitter-root	3	5
Lithophragma parviflorum	small-flowered rockstar	2	2
Lupinus minimus	least lupine	4	3
Microsteris gracilis	slender phlox	3	5
Orobancha uniflora	one-flowered cancer-root	2	2
Phacelia linearis	linear-leaved scorpionweed	2	4
Polygonum engelmannii	slender knotweed	4	3
Polygonum minimum	least knotweed	2	1
Pterospora andromedea	pine-drops	2	2

Site Name	Landform Element Name	Subelement	ERank	PARep
Beaver Mines Area	Valleys	V-Shaped	1	4

ID Special Feature Polygon Name

8 Beavermines Valley

Natural Subregion(s)

Montane

9 Carbondale Valley

Natural Subregion(s)

Alpine

Montane

Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex kelloggii	Kellogg's sedge	2	4
Carex mertensii	purple sedge	3	4
Epilobium saximontanum	Rocky Mountain willowherb	2	3
Erigeron ochroleucus var scribneri		2	3
Listera caurina	western twayblade	4	2
Lithophragma parviflorum	small-flowered rockstar	2	2
Mimulus guttatus	yellow monkeyflower	1	2
Monotropa hypopithys	pinetop	2	2
Osmorhiza purpurea	purple sweet cicely	3	2
Stellaria crispa	wavy-leaved chickweed	2	3
Suksdorfia violacea	blue suksdorfia	4	2
Thuja plicata	western red cedar	2	3
Viola praemorsa ssp linguifolia		2	2

10 Lynx Creek

Natural Subregion(s)

Montane

Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Grimmia montana	sun grimmia	4	3

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Botrychium lanceolatum	lance-leaved grape fern	2	2
Cardamine umbellata	mountain cress	4	1
Carex aperta	open sedge	3	2
Carex kelloggii	Kellogg's sedge	2	4
Conimitella williamsii	conimitella	4	3
Deschampsia elongata	slender hair grass	3	4
Festuca occidentalis	western fescue	3	4
Glyceria elata	tufted tall manna grass	2	4
Habenaria saccata	slender bog orchid	2	2
Juncus parryi	Parry's rush	3	2
Listera caurina	western twayblade	4	2
Microsteris gracilis	slender phlox	3	5
Mimulus guttatus	yellow monkeyflower	1	2
Orobancha uniflora	one-flowered cancer-root	2	2
Penstemon fruticosus var scouleri	shrubby beardtongue	4	3
Phacelia linearis	linear-leaved scorpionweed	2	4
Poa nervosa	Wheeler's bluegrass	2	1
Ranunculus glaberrimus	early buttercup	2	3
Ranunculus uncinatus	hairy buttercup	2	2
Trisetum cernuum	nodding trisetum	2	3

Vegetation Community Element Name

Thuja plicata alliance

11 Hillcrest Mountain

Natural Subregion(s)

Montane

Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Brachythecium hylotapetum		4	5
Brachythecium leibergii		4	3
Brachythecium reflexum		4	5
Polytrichum lyallii	hair cap moss	4	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Cirsium scariosum	thistle	1	3
Hieracium cynoglossoides	woolly hawkweed	4	2
Linanthus septentrionalis	linanthus	3	3
Lithophragma parviflorum	small-flowered rockstar	2	2
Mimulus floribundus	small yellow monkeyflower	3	3

ID Special Feature Polygon Name

11 Hillcrest Mountain

Natural Subregion(s)

Montane

Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Nemophila breviflora	small baby-blue-eyes	2	2
Penstemon fruticosus var scouleri	shrubby beardtongue	4	3
Phacelia linearis	linear-leaved scorpionweed	2	4
Plantago canescens	western ribgrass	3	4

12 Crowsnest River

Natural Subregion(s)

Montane

Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Alopecurus occidentalis	alpine foxtail	2	3
Aster campestris	meadow aster	2	5
Bromus altissimus	Canada brome	3	4
Crepis intermedia	intermediate hawk's-beard	2	2
Danthonia unispicata	one-spike oat grass	2	4
Draba longipes	whitlow-grass	3	1
Eriogonum ovalifolium var ovalifolium	silver-plant	4	3
Mimulus guttatus	yellow monkeyflower	1	2
Penstemon fruticosus var scouleri	shrubby beardtongue	4	3
Phacelia linearis	linear-leaved scorpionweed	2	4
Townsendia exscapa	low townsendia	3	5
Trisetum canescens	tall trisetum	4	4
Trisetum cernuum	nodding trisetum	2	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Turtle Mountain Area	Rock Falls		1	2
Burnis Area	River Terraces		1	3
Crowsnest Pass	Sulphur Depositing/Odor Springs		1	2

13 Pincher Creek South

Natural Subregion(s)

Montane

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Allium geeyi	Geyer's onion	3	3
Camassia quamash var quamash	blue camas	4	4
Carex kelloggii	Kellogg's sedge	2	4
Lupinus minimus	least lupine	4	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Beaver Mines Area	Volcanic Rocks		4	5

14 Pollhaven

Natural Subregion(s)

Montane

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Iliamna rivularis	mountain hollyhock	2	2
Pterospora andromedea	pine-drops	2	2
Stellaria crispa	wavy-leaved chickweed	2	3

15 Mokowan Butte

Natural Subregion(s)

Montane

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Iliamna rivularis	mountain hollyhock	2	2
Lesquerella arctica var purshii	northern bladderpod	4	4
Melica smithii	melic grass	3	3
Mertensia longiflora	large-flowered lungwort	3	2
Pterospora andromedea	pine-drops	2	2

Site Name	Landform Element Name	Subelement	ERank	PARep
Mokowan Butte	Erosional Remnants		1	4

ID Special Feature Polygon Name

15 Mokowan Butte

Natural Subregion(s)

Montane

16 Sugarloaf Mountain

Natural Subregion(s)

Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Agropyron scribneri	Scribner's wheat grass	2	2
Eriogonum ovalifolium var ovalifolium	silver-plant	4	3
Lupinus wyethii	Wyeth's lupine	3	5
Penstemon fruticosus var scouleri	shrubby beardtongue	4	3
Polygonum engelmannii	slender knotweed	4	3

17 Livingstone Gap

Natural Subregion(s)

Montane

Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Didymodon rigidulus	rigid screw moss	2	3

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Antennaria luzuloides	silvery everlasting	3	4
Plantago canescens	western ribgrass	3	4

Site Name	Landform Element Name	Subelement	ERank	PARep
Thunder Mountain Area	Water Gaps		1	3

18 Plateau Mountain Ecological Reserve Extension Natural Subregion(s)

Alpine

Sub-Alpine

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Microtus richardsoni	water vole	1	2

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Brachythecium erythrorrhizon		2	4
Brachythecium plumosum		2	4
Fissidens limbatus		2	4
Schistidium pulvinatum		3	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Agropyron scribneri	Scribner's wheat grass	2	2
Carex adusta	browned sedge	2	3
Carex haydeniana	Hayden's sedge	3	2
Carex petricosa	stone sedge	3	2
Eriogonum ochroleucum var scribneri		2	3
Festuca altaica	northern rough fescue	1	2
Festuca minutiflora	tiny-flowered fescue	2	1
Lewisia pygmaea var pygmaea	dwarf bitter-root	2	2
Penstemon fruticosus var scouleri	shrubby beardtongue	4	3
Ranunculus glaberrimus	early buttercup	2	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Plateau Mountain Area	Limestone Pavement		1	4
Plateau Mountain Area	Biscuit Board Topography		4	5

19 Pekisko

Natural Subregion(s)

Foothills Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Danthonia californica	California oat grass	1	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Pekisko Area	Crag-and-Tail		4	4
Pekisko Area	Hogbacks		4	5
Eden Valley I.R. Area	Pitted Delias		4	5

ID Special Feature Polygon Name

19 Pekisko

Natural Subregion(s)

Foothills Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Pekisko Area	Cuestas		4	4

Vegetation Community Element Name
Salix bebbiana Foothills Parkland groves

20 Upper Highwood

Natural Subregion(s)

Alpine

Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Agropyron scribneri	Scribner's wheat grass	2	2
Antennaria aromatica	scented everlasting	4	3
Arnica longifolia	long-leaved arnica	2	1
Epilobium clavatum	willowherb	2	2
Festuca altaica	northern rough fescue	1	2
Poa leptocoma	bog bluegrass	2	2

21 Sheep River

Natural Subregion(s)

Alpine

Lower Foothills

Sub-Alpine

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Myotis evotis	long-eared bat	2	5

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex capitata	capitate sedge	2	3
Carex preslii	Presl sedge	3	1
Erigeron flagellaris	creeping fleabane	3	2
Eriophorum scheuchzeri	one spike cotton grass	2	1
Poa leptocoma	bog bluegrass	2	2
Thuja plicata	western red cedar	2	3

Vegetation Community Element Name
Pinus flexilis alliance

22 Forgetmenot Mountain

Natural Subregion(s)

Lower Foothills

Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Grimmia montana	sun grimmia	4	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Kananaskis Country	Karst Caves	Joint	1	2
Kananaskis Country	Felsenmeer		1	4
Kananaskis Country	Patterned Ground		1	3

23 Moose Mountain

Natural Subregion(s)

Alpine

Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex petricosa	stone sedge	3	2
Carex tinctoria	tinged sedge	4	5
Papaver kluanensis	alpine poppy	4	2
Silene fuscata	alpine bladder catchfly	2	2

Site Name	Landform Element Name	Subelement	ERank	PARep
Kananaskis Country	Anticline Mountains		1	4

ID Special Feature Polygon Name

23 Moose Mountain

Natural Subregion(s)

Alpine
Sub-Alpine

Site Name	Landform Element Name	Subelement	ERank	PARep
Kananaskis Country	Ice Caves	Cold Zone	4	5
Kananaskis Country	Patterned Ground		1	3

24 Canmore Corridor/Lac des Arcs

Natural Subregion(s)

Alpine
Montane
Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Cyrtomium hymenophylloides		3	4
Homalothecium pinnatifidum		3	3
Hygrohypnum bestii		3	3

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Pellaea glabella	smooth cliff brake	1	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Lac des Arcs	Fluviatile Lakes	Alluvial Fan Dammed	4	4

25 Mt. Lorette

Natural Subregion(s)

Alpine
Sub-Alpine

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Microtus richardsoni	water vole	1	2

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Desmatodon systylius		3	4
Phascum cuspidatum	cuspidate earth moss	2	5
Timmia norvegica		4	2

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Alopecurus occidentalis	alpine foxtail	2	3
Botrychium hesperium	western grape fern	4	4
Botrychium lanceolatum	lance-leaved grape fern	2	2
Carex haydeniana	Hayden's sedge	3	2
Carex petasata	pasture sedge	2	2
Potentilla macounii		5	4
Potentilla villosa	hairy cinquefoil	3	1
Saxifraga nivalis	alpine saxifrage	3	1

26 Lower Kananaskis River

Natural Subregion(s)

Lower Foothills
Montane
Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Cirriphyllum cirrosum		4	2
Didymodon subandreaeoides		4	2

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Antennaria corymbosa	corymbose everlasting	2	4
Festuca altaica	northern rough fescue	1	2
Pellaea glabella	smooth cliff brake	1	3
Potentilla villosa	hairy cinquefoil	3	1
Primula stricta	erect primrose	4	4
Scirpus pumilus var rollandii	dwarf bulrush	4	2

ID Special Feature Polygon Name

27 Clearwater River West

Natural Subregion(s)

Alpine
Sub-Alpine
Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Artemisia borealis	northern wormwood	2	2
Carex maritima var incurviformis	seaside sedge	4	2
Danthonia californica	California oat grass	1	3
Salix alaxensis var alaxensis	Alaska willow	4	3
Scirpus pumilus var rolandii	dwarf bulrush	4	2

28 Ram Mountain

Natural Subregion(s)

Sub-Alpine
Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Barbarea orthoceras	American winter cress	2	3
Campanula uniflora	alpine harebell	3	1
Carex petricosa	stone sedge	3	2
Draba fladnizensis	whitlow-grass	4	4
Draba ventosa	whitlow-grass	4	1
Epilobium clavatum	willowherb	2	2
Epilobium saximontanum	Rocky Mountain willowherb	2	3
Erigeron radicans	dwarf fleabane	4	4
Erigeron trifidus	trifid-leaved fleabane	4	4
Lesquerella arctica var purshii	northern bladderpod	4	4
Minuartia elegans	purple alpine sandwort	4	2
Papaver kluanensis	alpine poppy	4	2
Pedicularis capitata	large-flowered lousewort	3	3
Potentilla multisepta	smooth-leaved cinquefoil	4	4
Pyrola grandiflora	Arctic wintergreen	2	2
Ranunculus grayi	Gray's buttercup	3	2
Rhododendron lapponicum	Lapland rose-bay	2	3
Salix alaxensis var alaxensis	Alaska willow	4	3
Saxifraga flagellaris ssp setigera	spiderplant	4	3
Veronica serpyllifolia	thyme-leaved speedwell	4	2

29 Ya Ha Tinda

Natural Subregion(s)

Alpine
Montane
Sub-Alpine
Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Botrychium minganense		3	1
Epilobium saximontanum	Rocky Mountain willowherb	2	3
Festuca altaica	northern rough fescue	1	2

Site Name	Landform Element Name	Subelement	ERank	PARep
Ya Ha Tinda Area	Rock Labyrinths		4	5
Ya Ha Tinda Area	Patterned Ground		4	3
Ya Ha Tinda Area	Waterfalls		4	2
Ya Ha Tinda Area	Biscuit Board Topography		4	5

30 Kootenay Plains Ecological Reserve Extension Natural Subregion(s)

Montane

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Aloina rigida	aloe-like rigid screw moss	3	4
Brachythecium albicans		2	4
Bryum pallescens		2	4
Orthothecium intricatum		3	4
Pseudoleskeella sibirica		4	3

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Pellaea glabella	smooth cliff brake	1	3
Salix alaxensis var alaxensis	Alaska willow	4	3

ID Special Feature Polygon Name

30 Kootenay Plains Ecological Reserve Extension Natural Subregion(s)
Montane

31 White Goat Lakes Natural Subregion(s)
Montane
Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Didymodon tophaceus	blunt-leaved hair moss	2	5
Tortella inclinata	bent screw moss	3	2
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Antennaria aromatica	scented everlasting	4	
Lesquerella arctica var purshii	northern bladderpod	4	4
Salix lanata ssp calcicola	woolly willow	5	1
Vegetation Community Element Name			
Pinus flexilis alliance			

32 Cardinal Divide Natural Area Extension Natural Subregion(s)
Alpine
Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Cirriophyllum cirrosum		4	2
Didymodon johansenii		4	4
Gymnostomum aeruginosum	tufted rock beardless moss	2	5
Hygrohypnum bestii		3	3
Mielichhoferia macrocarpa		5	4
Plagiobryum zierlii		4	3
Polytrichum lyallii	hair cap moss	4	4
Pseudoleskeella sibirica		4	3
Schistidium tenerum	thread bloom moss	4	4
Seligeria subimmersa		4	4
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Agrostis thurberiana	Thurber's bent grass	2	1
Antennaria aromatica	scented everlasting	4	3
Antennaria monocephala	one-headed everlasting	3	1
Aquilegia formosa	Sitka columbine	2	2
Artemisia borealis	northern wormwood	2	2
Carex aperta	open sedge	3	2
Carex bipartita	two-parted sedge	3	1
Carex misandra	nodding sedge	3	2
Carex petricosa	stone sedge	3	2
Carex podocarpa	alpine sedge	2	1
Draba fladnizensis	whitlow-grass	4	4
Draba macounii	Macoun's whitlow-grass	4	1
Epilobium saximontanum	Rocky Mountain willowherb	2	3
Erigeron pallens	pale alpine fleabane	4	1
Erigeron radicans	dwarf fleabane	4	4
Eriophorum scheuchzeri	one-spike cotton grass	2	1
Hieracium alpinum	alpine sweet grass	2	1
Lesquerella arctica var purshii	northern bladderpod	4	4
Papaver kluanensis	alpine poppy	4	2
Pedicularis capitata	large-flowered lousewort	3	3
Pedicularis lanata	woolly lousewort	3	3
Poa leptocoma	bog bluegrass	2	2
Poa stenantha	bluegrass	1	1
Potentilla drummondii	Drummond's cinquefoil	2	1
Salix alaxensis var alaxensis	Alaska willow	4	3
Saxifraga nivalis	alpine saxifrage	3	1
Telesonix heucheriformis	telesonix	3	3

33 Cardinal River Headwaters Natural Subregion(s)
Alpine
Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Anoetangium aestivum		4	4

ID Special Feature Polygon Name

33 Cardinal River Headwaters

Natural Subregion(s)

Alpine

Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Bryobrittonia longipes		3	3
Bryum amblyodon		4	4
Cirriphyllum cirrosum		4	2
Cynodontium schisti		4	4
Desmatodon laureri		4	4
Didymodon subandreaeoides		4	2
Encalypta brevicollis	candle-snuffer moss	3	1
Encalypta brevipes	candle-snuffer moss	4	4
Hygrohypnum bestii		3	3
Plagiobryum zierii		4	3
Pohlia drummondii		4	2
Pohlia longicollis		4	4
Pseudoleskeella sibirica		4	3
Seligeria campylopoda		3	2
Stegonia pilifera		4	3
Timmia norvegica		4	2
Tortella inclinata	bent screw moss	3	2
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Agoseris lackschewitzii	pink false dandelion	3	1
Arenaria longipedunculata	sandwort	4	2
Braya purpurascens	alpine braya	4	4
Carex franklinii	Franklin's sedge	4	1
Carex glacialis	glacier sedge	2	2
Carex misandra	nodding sedge	3	2
Carex podocarpa	alpine sedge	2	1
Draba fladnizensis	whitlow-grass	4	4
Eriophorum callitrix	beautiful cotton grass	2	1
Eriophorum scheuchzeri	one-spoke cotton grass	2	1
Hierochloa alpina	alpine sweet grass	2	1
Minuartia elegans	purple alpine sandwort	4	2
Parnassia parviflora	small northern grass-of-parnassus	3	2
Pedicularis capitata	large-flowered lousewort	3	3
Pedicularis lanata	woolly lousewort	3	3
Primula egaliksensis	primrose	3	2
Salix alaxensis var alaxensis	Alaska willow	4	3
Saxifraga flagellaris ssp setigera	spiderplant	4	3
Silene furcata	alpine bladder catchfly	2	2
Telesonix heucheriformis	telesonix	3	3

34 Cadomin Cave

Natural Subregion(s)

Alpine

Sub-Alpine

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Myotis volans	long-legged bat	2	5
Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Aongstroemia longipes		4	5
Brachythecium albicans		2	4
Bryum schleicheri		4	4
Cyrtomnium hymenophylloides		3	4
Didymodon johansenii		4	4
Didymodon subandreaeoides		4	2
Gymnostomum aeruginosum	tufted rock beardless moss	2	5
Mielichhoferia macrocarpa		5	4
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Antennaria aromatica	scented everlasting	4	3
Arnica amplexicaulis	stem-clasping arnica	3	1
Botrychium spathulatum		4	2
Cryptogramma stelleri	Steller's rock brake	2	1
Lesquerella arctica var purshii	northern bladderpod	4	4
Lycopodium selago	mountain club-moss	1	1
Salix alaxensis var alaxensis	Alaska willow	4	3
Telesonix heucheriformis	telesonix	3	3

ID Special Feature Polygon Name

34 Cadomin Cave

Natural Subregion(s)

Alpine
Sub-Alpine

Site Name	Landform Element Name	Subelement	ERank	PARep
Cadomin Area	Karst Caves	Joint	1	2
Luscar Mountain Area	Rock Labyrinths		4	5

35 Coliseum-Shunda Mountain

Natural Subregion(s)

Sub-Alpine
Upper Foothills

Scientific Element Name (Non-vascular Plants)		Common Name	ERank	PARep
Fissidens adianthoides		maidenhair moss	2	4
Philonotis marchica			3	4
Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Anemone quinquefolia		wood anemone	3	5
Botrychium spathulatum			4	2
Calamagrostis lapponica		Lapland reed grass	3	4
Carex parryana var parryana		Parry's sedge	3	3
Carex petricosa		stone sedge	3	2
Epilobium saximontanum		Rocky Mountain willowherb	2	3
Erigeron radicans		dwarf fleabane	4	4
Pedicularis capitata		large-flowered lousewort	3	3
Primula egaliksensis		primrose	3	2
Rhododendron lapponicum		Lapland rose-bay	2	3
Saxifraga nivalis		alpine saxifrage	3	1
Telesonix heucheriformis		telesonix	3	3
Trisetum cernuum		nodding trisetum	2	3
Site Name	Landform Element Name	Subelement	ERank	PARep
Nordegg Area	Non-Patterned Fens without Internal Lawns	Spring Fen	3	4
Coliseum Mountain	Rock Labyrinths		4	5

36 Brazeau Tufa

Natural Subregion(s)

Upper Foothills

Scientific Element Name (Non-vascular Plants)		Common Name	ERank	PARep
Splachnum rubrum		red collar moss	4	5
Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Carex capitata		capitate sedge	2	3
Carex heleonastes		Hudson Bay sedge	3	4
Carex maritima var incurviformis		seaside sedge	4	2
Juncus filiformis		thread rush	2	4
Primula egaliksensis		primrose	3	2
Site Name	Landform Element Name	Subelement	ERank	PARep
Nordegg Area	Tufa Depositing Springs		1	4

37 Ambler Mountain/Copton Ridge/Mt. Hamell Natural Subregion(s)

Alpine
Montane
Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Aulacomnium acuminatum		5	5
Brachythecium leibergii		4	3
Bryum algovicum		3	4
Cynodontium tenellum		4	2
Dicranella crispa	curl-leaved fork moss	4	5
Didymodon vinealis		3	4
Grimmia torquata	twisted-leaved grimmia	3	3
Hypnum pallescens		1	4
Oreas martiana		3	5
Plagiobryum zierii		4	3
Pogonatum dentatum	hair-like pogonatum	4	4

ID Special Feature Polygon Name

37 Ambler Mountain/Copton Ridge/Mt. Hamell Natural Subregion(s)

Alpine
Montane
Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Pseudoleskeella sibirica		4	3
Seligeria campylopoda		3	2
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Artemisia furcata var furcata	forked wormwood	4	5
Koenigia islandica	koenigia	4	3
Malaxis paludosa	bog adder's-mouth	4	4
Saxifraga flagellaris ssp setigera	spiderplant	4	3

38 Kakwa North

Natural Subregion(s)

Alpine
Sub-Alpine
Upper Foothills

Scientific Element Name (Non-vascular Plants)		Common Name	ERank	PARep
Bryobrittonia longipes			3	3
Cynodontium tenellum			4	2
Dicranella crispa		curl-leaved fork moss	4	5
Dicranella palustris		drooping-leaved fork moss	2	4
Pogonatum urnigerum		urn-like pogonatum	2	2
Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Agrostis exarata		spike redtop	2	3
Antennaria monocephala		one-headed everlasting	3	1
Aquilegia formosa		Sitka columbine	2	2
Epilobium clavatum		willowherb	2	2
Erigeron pallens		pale alpine fleabane	4	1
Festuca altaica		northern rough fescue	1	2
Gentiana glauca		alpine gentian	3	1
Hierochloa alpina		alpine sweet grass	2	1
Lycopodium sitchense		ground-fir	2	4
Pedicularis arctica		Arctic lousewort	3	1
Pedicularis capitata		large-flowered lousewort	3	3
Potentilla multisepta		smooth-leaved cinquefoil	4	4
Ranunculus grayi		Gray's buttercup	3	2
Ranunculus verecundus		alpine buttercup	2	1
Saxifraga nelsoniana ssp porsildiana		Nelson's saxifrage	4	1
Site Name	Landform Element Name	Subelement	ERank	PARep
Stinking Creek-South Torren River	Warm Springs		4	4
Lynx Creek Headwaters Area	Patterned Ground		1	3

39 Blood Timber Limit

Natural Subregion(s)

Montane

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	4
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Alopecurus occidentalis	alpine foxtail	2	3
Arnica parryi	nodding arnica	2	1
Botrychium hesperium	western grape fern	4	4
Botrychium minganense		3	1
Botrychium spathulatum		4	2
Camassia quamash var quamash	blue camas	4	4
Carex petasata	pasture sedge	2	2
Cirsium scariosum	thistle	1	3
Crepis intermedia	intermediate hawk's-beard	2	2
Danthonia californica	California oat grass	1	3
Festuca altaica	northern rough fescue	1	2
Melica spectabilis	onion grass	2	2
Trisetum wolffii	awnless trisetum	4	3

ID Special Feature Polygon Name

40 Beauvais Lake Provincial Park Extension Natural Subregion(s)
Montane

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Bryum calophyllum		4	4
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Hieracium cynoglossoides	woolly hawkweed	4	2
Lupinus minimus	least lupine	4	3
Polygonum watsonii	Watson's knotweed	4	4

41 Crowsnest Mountain Natural Subregion(s)
Sub-Alpine

Site Name	Landform Element Name	Subelement	ERank	PARep
Crowsnest Mountain	Klippes		3	2

42 Mt. Livingstone Natural Area Extension Natural Subregion(s)
Montane
Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex platylepis	broad-scaled sedge	2	1
Conimitella williamsii	conimitella	4	3

43 Black Mountain Natural Subregion(s)
Montane

Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Crepis intermedia		intermediate hawk's-beard	2	2
Erigeron radicans		dwarf fleabane	4	4
Hieracium cynoglossoides		woolly hawkweed	4	2
Plantago canescens		western ribgrass	3	4

Site Name	Landform Element Name	Subelement	ERank	PARep
Whaleback Ridge	Hogbacks		3	5

44 Upper Oldman Rock Cut Terraces Natural Subregion(s)
Foothills Fescue
Montane

Scientific Element Name (Vertebrate Animals)		Common Name	ERank	PARep
Lagurus curtatus		sagebrush vole	1	4
Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Plantago canescens		western ribgrass	3	4
Site Name	Landform Element Name	Subelement	ERank	PARep
Lundbreck Area	River Terraces	Rock-cut Terrace	1	4

45 Fisher Creek at Maclean Trail Natural Subregion(s)
Lower Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Amblyodon dealbatus		3	4
Aulacomnium androgynum		2	4
Campyllum polygamum		1	4
Philonotis marchica		3	4

ID Special Feature Polygon Name

46 Fortress Mountain

Natural Subregion(s)

Alpine

Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Pohlia drummondii		4	2
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Draba kananaskis	Kananaskis whitlow-grass	5	4
Draba macounii	Macoun's whitlow-grass	4	1
Larix occidentalis	western larch	2	3
Osmorhiza purpurea	purple sweet cicely	3	2
Oxytropis jordalii ssp jordalii	purple mountain locoweed	3	1
Ranunculus nivalis	snow buttercup	3	3
Ranunculus occidentalis var brevistylis	western buttercup	2	1

47 Ratsnest Cave

Natural Subregion(s)

Montane

Scientific Element Name (Non-vascular Plants)		Common Name	ERank	PARep
Pterygoneurum ovatum		hairy-leaved beardless moss	3	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Canmore Area	Speleothems		1	2
Canmore Area	Karst Caves	Bedding	3	2

49 Morley Drumlins

Natural Subregion(s)

Montane

Site Name	Landform Element Name	Subelement	ERank	PARep
Morley Flats Area	Drumlins		1	4

50 Devil's Head Klippe

Natural Subregion(s)

Alpine

Sub-Alpine

Site Name	Landform Element Name	Subelement	ERank	PARep
Ghost River Area	Klippes		3	2

51 Lonepine Creek Dendritic Eskers

Natural Subregion(s)

Central Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Lonepine Creek Area	Eskers		1	4

52 Baseline Fire Tower

Natural Subregion(s)

Sub-Alpine

Upper Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Cynodontium schisti		4	4
Encalypta brevicolla	candle-snuffer moss	3	1
Pogonatum urnigerum	urn-like pogonatum	2	2

53 Ram River Falls/Canyon

Natural Subregion(s)

Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Epilobium saximontanum	Rocky Mountain willowherb	2	3

ID Special Feature Polygon Name

53 Ram River Falls/Canyon

Natural Subregion(s)

Upper Foothills

Site Name	Landform Element Name	Subelement	ERank	PARep
Ram Falls Area	Waterfalls		4	2
Ram Falls Area	Gorges/Canyons		4	3
Ram Falls Area	Plunge Pool Lakes		4	4

54 Bighorn Mountains/South Ram

Natural Subregion(s)

Alpine

Sub-Alpine

Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Lesquerella arctica var purshii	northern bladderpod	4	4
Pedicularis lanata	woolly lousewort	3	3
Potentilla villosa	hairy cinquefoil	3	1
Rhododendron lapponicum	Lapland rose-bay	2	3

55 Landslide Lake

Natural Subregion(s)

Alpine

Sub-Alpine

Site Name	Landform Element Name	Subelement	ERank	PARep
Landslide Lake Area	Landslide Lakes		3	1

57 Payne-Beaverdam

Natural Subregion(s)

Foothills Fescue

Foothills Parkland

Montane

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Camassia quamash var quamash	blue camas	4	4
Hieracium cynoglossoides	woolly hawkweed	4	2
Montia linearis	linear-leaved montia	2	2
Veronica serpyllifolia	thyme-leaved speedwell	4	2

58 Police Outpost Provincial Park Extension

Natural Subregion(s)

Foothills Fescue

Foothills Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Alopecurus occidentalis	alpine foxtail	2	3
Barbarea orthoceras	American winter cress	2	3
Camassia quamash var quamash	blue camas	4	4
Cirsium scariosum	thistle	1	3
Conimitella williamsii	conimitella	4	3
Iris missouriensis	western blue flag	3	4
Melica smithii	melic grass	3	3
Prenanthes sagittata	purple rattlesnakeroot	4	1

59 Whiskey Gap

Natural Subregion(s)

Foothills Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Agrostis exarata	spike reedtop	2	3
Alopecurus occidentalis	alpine foxtail	2	3
Conimitella williamsii	conimitella	4	3
Erigeron radicans	dwarf fleabane	4	4
Hymenopappus filifolius	tufted hymenopappus	3	4
Iris missouriensis	western blue flag	3	4
Orobancha ludoviciana	Louisiana broomrape	2	5

ID Special Feature Polygon Name

59 Whiskey Gap

Natural Subregion(s)

Foothills Fescue

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Oxytropis lagopus var conjugans	hare-footed locoweed	4	4
Plantago canescens	western ribgrass	3	4
Ranunculus glaberrimus	early buttercup	2	3
Schizachyrium scoparium var scoparium	little bluestem	4	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Whiskey Gap Area	Erosional Remnants		1	4

60 Del Bonita Uplands/Shanks Lake

Natural Subregion(s)

Foothills Fescue

Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Oxytropis lagopus var conjugans	hare-footed locoweed	4	4

Site Name	Landform Element Name	Subelement	ERank	PARep
Del Bonita Area	Asymmetric Valleys		5	5
Del Bonita Area	Erosional Remnants		5	4
Del Bonita Area	Ice Wedge Casts		5	5

61 Ross Grassland Natural Area Extension

Natural Subregion(s)

Foothills Fescue

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Aster campestris	meadow aster	2	5
Oxytropis lagopus var conjugans	hare-footed locoweed	4	4

62 Sweetgrass Hills West (base)

Natural Subregion(s)

Dry Mixedgrass

Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex nebrascensis	Nebraska sedge	1	5
Crepis occidentalis	small-flowered hawk's-beard	2	3
Danthonia californica	California oat grass	1	3
Danthonia unispicata	one-spoke oat grass	2	4
Juncus confusus	few-flowered rush	2	4
Parietaria pensylvanica	American pellitory	2	4
Korippa tenerrima	slender cress	2	4

63 Sweetgrass Hills East

Natural Subregion(s)

Dry Mixedgrass

Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex nebrascensis	Nebraska sedge	1	5
Crepis occidentalis	small-flowered hawk's-beard	2	3
Danthonia californica	California oat grass	1	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Lower Sweetgrass Hills	Dikes		4	2

ID Special Feature Polygon Name

64 Willow Creek

Natural Subregion(s)

Foothills Fescue
Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Erigeron ochroleucus var scribneri		2	3
Schizachyrium scoparium var scoparium	little bluestem	4	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Porcupine Hills	Meltwater Channels	Subglacial	1	5

65 Water Valley

Natural Subregion(s)

Montane
Upper Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Brachythecium albicans		2	4
Drepanocladus brevifolius	brown moss	4	4
Philonotis marchica		3	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Parnassia parviflora	small northern grass-of-parnassus	3	2

66 Airdrie Murdlins

Natural Subregion(s)

Foothills Fescue

Site Name	Landform Element Name	Subelement	ERank	PARep
Airdrie Area	Murdlins		4	5

68 Milk River Valley - Pinhorn

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Chrysemys picta	painted turtle	3	4
Icterus bullockii	Bullock's Oriole	3	5
Phrynosoma douglasii var brevirostre	short horned lizard	2	4
Rana pipiens	northern leopard frog	2	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Chenopodium leptophyllum	narrow-leaved goosetoot	1	4
Eriogonum cernuum	nodding umbrella-plant	2	2
Hordeum pusillum	little barley	4	5
Suaeda moquinii	Moquin's sea-blite	2	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Pinhorn Area	Badlands		1	4
Pinhorn Area	Gorges/Canyons		1	3
Pinhorn Area	Neck Cutoffs		1	5
Pinhorn Area	Bar-and-Swale Topography		1	4
Milk River Area	Pipes and Related Phenomena		1	2

Vegetation Community Element Name
Riparian cottonwoods

69 Lost River

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius montanus	Mountain Plover	5	5
Phrynosoma douglasii var brevirostre	short-horned lizard	2	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Abronia micrantha	sand verbena	2	5
Castilleja sessiliflora	downy paintbrush	3	5

ID Special Feature Polygon Name

69 Lost River

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Chenopodium subglabrum	smooth narrow-leaved goosefoot	4	5
Crepis occidentalis	small-flowered hawk's-beard	2	3
Linanthus septentrionalis	linanthus	3	3
Lygodesmia rostrata	annual skeletonweed	2	4
Marsilea vestita	hairy pepperwort	3	5
Oenothera andina	upland evening-primrose	4	5
Orobancha ludoviciana	Louisiana broom-rape	2	5
Psilocarphus elatior	woollyheads	3	4
Suaeda moquinii	Moquin's sea-blite	2	5
Townsendia exscapa	low townsendia	3	5
Yucca glauca	soapweed	3	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Lost River Area	Drumlins		1	4
Comrey Area	Honeycomb Weathering		4	4

Vegetation Community Element Name
Sarcobatus vermiculatus alliance
Yucca glauca/ Calamovilfa longifolia shrub herbaceous

70 Manyberries Creek Badlands

Natural Subregion(s)

Dry Mixedgrass

Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Onychomys leucogaster	northern grasshopper mouse	2	4
Perognathus fasciatus	olive-backed pocket mouse	2	5
Phrynosoma douglasii var brevirostre	short-horned lizard	2	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Stephanomeria runcinata	rush-pink	2	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Manyberries Area	Sandstone Dikes		1	4

Vegetation Community Element Name
Juniperus horizontalis - Koeleria macrantha pediment vegetation

71 Pakowki Dunes

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Athene cunicularia	Burrowing Owl	3	
Centrocercus urophasianus	Sage Grouse	3	
Onychomys leucogaster	northern grasshopper mouse	2	4
Perognathus fasciatus	olive-backed pocket mouse	2	5
Phrynosoma douglasii var brevirostre	short-horned lizard	2	4
Rana pipiens	northern leopard frog	2	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Amaranthus californicus	Californian amaranth	4	5
Chenopodium desiccatum	goosefoot	2	5
Chenopodium leptophyllum	narrow-leaved goosefoot	1	4
Chenopodium subglabrum	smooth narrow-leaved goosefoot	4	5
Cyperus schweinitzii	sand nut-grass	2	2
Downingia laeta	downingia	3	4
Franseria acanthicarpa	bur ragweed	2	4
Heliotropium curassavicum	spatulate-leaved heliotrope	2	5
Linanthus septentrionalis	linanthus	3	3
Orobancha ludoviciana	Louisiana broom-rape	2	5
Suaeda moquinii	Moquin's sea-blite	2	5
Tradescantia occidentalis	western spiderwort	3	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Pakowki Lake Sand Hills	Blowouts		2	4

ID Special Feature Polygon Name

71 Pakowki Dunes

Natural Subregion(s)

Dry Mixedgrass

72 City of Lethbridge and area

Natural Subregion(s)

Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Crotalus viridis	prairie rattlesnake	1	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Aristida longiseta	red three-awn	3	5
Bahia oppositifolia	picradeniopsis	3	5
Crepis occidentalis	small-flowered hawk's-beard	2	3
Draba reptans	whitlow-grass	3	5
Festuca altaica	northern rough fescue	1	2
Nemophila breviflora	small baby-blue-eyes	2	2
Oenothera serrulata	shrubby evening-primrose	2	5
Polanisia dodecandra	clammyweed	3	5
Populus angustifolia	narrow-leaf cottonwood	2	4
Thelesperma marginatum	greenthread	3	5

Vegetation Community Element Name
Riparian cottonwoods

73 Brockett

Natural Subregion(s)

Foothills Fescue

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Populus angustifolia	narrow-leaf cottonwood	2	4
Stephanomeria runcinata	rush-pink	2	3

Vegetation Community Element Name
Riparian cottonwoods

74 Hilda Sand Dunes

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Astragalus lotiflorus	low milk vetch	2	5
Carex parryana var parryana	Parry's sedge	3	3
Centunculus minimus	chaffweed	3	5
Elatine triandra	waterwort	3	4
Lilaea scilloides	flowering-quillwort	4	4
Sisyrinchium septentrionale	pale blue-eyed grass	4	4
Townsendia exscapa	low townsendia	3	5

75 Middle Sand Hills

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Crotalus viridis	prairie rattlesnake	1	
Dipodomys ordii	Ord's kangaroo rat	2	5
Notropis blennioides	river shiner	2	5
Onychomys leucogaster	northern grasshopper mouse	2	4
Perognathus fasciatus	olive-backed pocket mouse	2	5
Pituophis melanoleucus	bull snake	1	
Rana pipiens	northern leopard frog	2	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Eriogonum cernuum	nodding umbrella-plant	2	2
Halimolobos virgata	halimolobos	4	5
Sitanion hystrix	squirreltail	2	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Middle Sand Hills	Dunes	Parabolic	5	4
Middle Sand Hills	Dune Ridges	Dune-Track Ridge	5	5
Medicine Hat Area	Gorges/Canyons		5	3

ID Special Feature Polygon Name

75 Middle Sand Hills

Natural Subregion(s)

Dry Mixedgrass

76 Dune Point

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Dipodomys ordii	Ord's kangaroo rat	2	5

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Acer negundo	Manitoba maple	2	4
Elymus virginicus	Virginia wild rye	3	4
Oenothera flava	low yellow evening-primrose	3	4
Osmorhiza longistylis	smooth sweet cicely	2	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Empress Area	River Terraces		1	3
Bindloss Area	Salt Depositing Springs		1	3

Vegetation Community Element Name
Riparian cottonwoods

77 Wildhorse #1

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Athene cunicularia	Burrowing Owl	3	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Astragalus lotiflorus	low milk vetch	2	5
Astragalus purshii	Pursh's milk vetch	2	4
Boisduvalia glabella	smooth boisduvalia	2	3
Centunculus minimus	chaffweed	3	5
Marsilea vestita	hairy pepperwort	3	5
Polygonum watsonii	Watson's knotweed	4	4
Sisyrinchium septentrionale	pale blue-eyed grass	4	4
Spergularia marina	salt-marsh sand spurry	2	4

Site Name	Landform Element Name	Subelement	ERank	PARep
Onefour Area	Eskers		1	4

78 Black Butte

Natural Subregion(s)

Mixedgrass

Site Name	Landform Element Name	Subelement	ERank	PARep
Pinhorn Area	Stocks		4	5

80 Verdigris Coulee

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Athene cunicularia	Burrowing Owl	3	

Site Name	Landform Element Name	Subelement	ERank	PARep
Town of Milk River Area	Overflow Channels		1	5

81 Reed Lake

Natural Subregion(s)

Foothills Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Lagurus curtatus	sagebrush vole	1	4

ID Special Feature Polygon Name

81 Reed Lake

Natural Subregion(s)
Foothills Fescue

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Chenopodium leptophyllum	narrow-leaved goosefoot	1	4
Danthonia californica	California oat grass	1	3
Danthonia unispicata	one-spoke oat grass	2	4
Hymenopappus filifolius	tufted hymenopappus	3	4
Mertensia lanceolata	lance-leaved lungwort	2	3
Plantago canescens	western ribgrass	3	4
Populus angustifolia	narrow-leaf cottonwood	2	4
Sphenopholis obtusata	prairie wedge grass	2	5

82 Glenwood Erratic

Natural Subregion(s)
Foothills Fescue

Site Name	Landform Element Name	Subelement	ERank	PARep
Glenwood Area	Erratics		1	4

83 St. Mary River Incised Meanders

Natural Subregion(s)
Foothills Fescue

Site Name	Landform Element Name	Subelement	ERank	PARep
St. Mary Dam Area	River Meanders	Incised	1	3

84 Mud Butte

Natural Subregion(s)
Northern Fescue

Site Name	Landform Element Name	Subelement	ERank	PARep
Monitor Area	Hill-hole Pairs		1	5

85 Neutral Hills

Natural Subregion(s)
Northern Fescue

Site Name	Landform Element Name	Subelement	ERank	PARep
Neutral Hills Area	Hill-hole Pairs		1	5

86 Craigmyle/Clear Lake/Victoria Lake

Natural Subregion(s)
Northern Fescue

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Bryum marratii		4	5
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Lobelia spicata	spiked lobelia	3	5
Potentilla plattensis	low cinquefoil	3	2

87 Mudspring Lake Soapholes

Natural Subregion(s)
Central Parkland
Northern Fescue

Site Name	Landform Element Name	Subelement	ERank	PARep
Mudspring Lake Area	Soapholes		1	5

88 Drumheller Badlands

Natural Subregion(s)
Northern Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Bufo hemiophrys	Canadian toad	2	
Falco peregrinus	Peregrine Falcon	2	
Rana pipiens	northern leopard frog	2	

ID Special Feature Polygon Name

88 Drumheller Badlands

Natural Subregion(s)

Northern Fescue

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Atriplex canescens	saltbush	1	5
Atriplex powellii	Powell's saltbush	3	5
Polygonum watsonii	Watson's knotweed	4	4
Townsendia exscapa	low townsendia	3	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Drumheller Area	Badlands		1	4

90 Horseshoe Lake

Natural Subregion(s)

Central Parkland

Northern Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

Site Name	Landform Element Name	Subelement	ERank	PARep
Czar Area	Drift Basins	Saline/Alkaline Lake	1	4

91 Eagle Butte Impact Structure

Natural Subregion(s)

Mixedgrass

Site Name	Landform Element Name	Subelement	ERank	PARep
Eagle Butte	Impact Structures		4	5

92 Ribstone Creek

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Carpodacus cyprinus	quillback	2	5
Microtus ochrogaster	prairie vole	2	4

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Phascum cuspidatum	cuspidate earth moss	2	5
Pterygoneurum subsessile		3	5
Weissia controversa	green-cushioned weissia	3	3

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Acer negundo	Manitoba maple	2	4
Oenothera serrulata	shrubby evening-primrose	2	5
Physostegia ledinghamii		4	4
Spergularia marina	salt-marsh sand spurry	2	4

Vegetation Community Element Name
Festuca hallii alliance

93 Fabyan

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Asclepias ovalifolia	low milkweed	2	3
Chenopodium leptophyllum	narrow-leaved goosefoot	1	4
Houstonia longifolia	long-leaved bluets	3	5
Lycopus americanus	American water-horehound	2	5

Vegetation Community Element Name
Festuca hallii alliance

ID Special Feature Polygon Name

94 David Lake Ecological Reserve Extension Natural Subregion(s)
Central Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex rostrata	beaked sedge	2	2
Drosera anglica	oblong-leaved sundew	2	4
Drosera linearis	slender-leaved sundew	3	3
Eleocharis compressa var borealis	flattened spike-rush	1	4

95 Reflex Lake/Salt Springs Natural Subregion(s)
Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodius	Piping Plover	2	

Element Name (Other Vertebrates)
shorebird staging area

Site Name	Landform Element Name	Subelement	ERank	PARep
Chauvin Area	Salt Depositing Springs		1	3

96 Edgerton Landslide Natural Subregion(s)
Central Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Edgerton Landslides	Rock Slides		1	3

97 Edgerton Dunes Natural Subregion(s)
Central Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Edgerton Sand Hills	Dune Ridges	North Battleford Ridge	4	4
Edgerton Area	Non-Patterned Fens without Internal Lawns	Stream Fen	4	5

98 Lloydminster Crevasse Fillings Natural Subregion(s)
Central Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Lloydminster Area	Crevasse Fillings		1	4

99 Kinsella Tufa and Ice-walled Channel Natural Subregion(s)
Central Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Kinsella Area	Meltwater Channels	Ice-walled	1	5
Kinsella Area	Tufa Depositing Springs		1	4

100 Oliva Lake Natural Subregion(s)
Central Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Oliva Lake	Drift Basins	Saline/Alkaline Lake	1	4
Kinsella Area	Meltwater Channels	Ice-walled	1	5

101 Driedmeat Lake Natural Subregion(s)
Central Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Coal Lake Area	Meltwater Channels	Subglacial	1	5

ID Special Feature Polygon Name

101 Driedmeat Lake

Natural Subregion(s)

Central Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Driedmeat Lake	Deltas	Unilobate	4	5

102 Coal Lake

Natural Subregion(s)

Central Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Coal Lake	Glacial Tunnel Lakes		3	5

103 Jacknife Springs

Natural Subregion(s)

Lower Foothills

Site Name	Landform Element Name	Subelement	ERank	PARep
Lodgepole Area	Tufa Depositing Springs		1	4

104 Maqua Lake

Natural Subregion(s)

Boreal Highlands

Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex pauciflora	few-flowered sedge	2	4
Coptis trifolia	goldthread	2	4
Isoetes echinospora	northern quillwort	3	5
Juncus stygius var americanus	marsh rush	2	5

105 Mameo Beach/Pigeon Lake

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex heleonastes	Hudson Bay sedge	3	4
Carex lacustris	lakeshore sedge	2	3
Carex retrorsa	turned sedge	2	4
Carex tineta	tinged sedge	4	5
Carex vulpinoidea	fox sedge	2	5
Festuca altaica	northern rough fescue	1	2
Geranium carolinianum	Carolina wild geranium	2	3
Lactuca biennis	tall blue lettuce	2	5
Oryzopsis canadensis	Canadian rice grass	3	5
Potamogeton praelongus	white-stem pondweed	2	4

106 Edmonton Ravines

Natural Subregion(s)

Central Parkland

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Brachythecium albicans		2	4
Brachythecium rutabulum		2	5
Bryum turbinatum		1	4
Bryum uliginosum		3	5
Conardia compacta		3	4
Pohlia atropurpurea		3	5
Rhodobryum ontariense		3	4
Scouleria aquatica		3	2

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Artemisia tilesii	Herriot's sagewort	2	4
Asclepias ovalifolia	low milkweed	2	3
Aster umbellatus	flat-topped white aster	2	4
Bromus altissimus	Canada brome	3	4
Carex hookerana	Hooker's sedge	3	3
Carex maritima var incurviformis	seaside sedge	4	2
Malaxis monophylla	white adder's-mouth	2	3
Muhlenbergia racemosa	marsh muhly	3	4
Osmorhiza longistylis	smooth sweet cicely	2	5

ID Special Feature Polygon Name

106 Edmonton Ravines

Natural Subregion(s)

Central Parkland

107 Fort Saskatchewan

Natural Subregion(s)

Central Parkland

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Aloina rigida	aloe-like rigid screw moss	3	4
Bryohaplocladium virginianum		1	5
Leskea obscura		3	5
Rhodobryum ontariense		3	4
Thuidium philibertii		3	5
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Artemisia filifolia	Henriot's sagewort	2	4
Asclepias ovalifolia	low milkweed	2	3
Aster umbellatus	flat-topped white aster	2	4
Botrychium campestre	field grape fern	4	5
Botrychium multifidum var intermedium	leather grape fern	4	4
Botrychium simplex	dwarf grape fern	3	1
Botrychium spathulatum		4	2
Carex backii	Back's sedge	3	3
Carex hookerana	Hooker's sedge	3	3
Carex retrorsa	turned sedge	2	4
Carex umbellata	umbellate sedge	2	4
Dichanthelium oligosanthos	sand millet	3	5
Houstonia longifolia	long-leaved bluets	3	5
Lycopus americanus	American water-horehound	2	5
Oryzopsis canadensis	Canadian rice grass	3	5
Physostegia ledinghamii		4	4

108 Blackfoot Reserve

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Non-vascular Plants)		Common Name	ERank	PARep
Conardia compacta			3	4
Desmatodon hibernici		long-stalked beardless moss	2	5
Drepanocladus crassicosatus		brown moss	4	4
Phascum cuspidatum		cuspidate earth moss	2	5
Physcomitrium pyriforme		urn moss	3	5
Rhizomnium andrewsianum			4	4
Weissia controversa		green-cushioned weissia	3	3
Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Botrychium multifidum var intermedium		leather grape fern	4	4
Carex trisperma		three-seeded sedge	2	3
Carex vulpinoidea		fox sedge	2	5
Dryopteris cristata		crested shield fern	3	4
Malaxis monophylla		white adder's-mouth	2	3
Najas flexilis		slender naiad	3	4
Potamogeton foliosus		leafy pondweed	3	4
Potamogeton obtusifolius		blunt-leaved pondweed	2	5
Potamogeton praelongus		white-stem pondweed	2	4
Wolffia columbiana		watermeal	2	3
Site Name	Landform Element Name	Subelement	ERank	PARep
Cooking Lake Area	Megablocks		3	5

109 Lac St. Anne North

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Brachythecium rutabulum		2	5
Splachnum ampullaceum	flagon-fruited splachnum	2	5
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Aster umbellatus	flat-topped white aster	2	4
Barbarea orthoceras	American winter cress	2	3
Carex backii	Back's sedge	3	3
Carex heleonastes	Hudson Bay sedge	3	4
Carex lacustris	lakeshore sedge	2	3

ID Special Feature Polygon Name

109 Lac St. Anne North

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex loliacea	rye-grass sedge	2	4
Carex retrorsa	turned sedge	2	4
Carex trisperma	three-seeded sedge	2	3
Carex vulpinoidea	fox sedge	2	5
Danthonia californica	California oat grass	1	3
Lactuca biennis	tall blue lettuce	2	5
Malaxis paludosa	bog adder's-mouth	4	4
Potamogeton natans	floating-leaf pondweed	2	3
Potamogeton obtusifolius	blunt-leaved pondweed	2	5
Potamogeton praelongus	white-stem pondweed	2	4
Potamogeton robbinsii	Robbins' pondweed	3	4
Sparganium glomeratum	bur-reed	4	5
Viola macloskeyi var pallens	Macloskey's violet	3	2

110 Pine Creek

Natural Subregion(s)

Lower Foothills

Upper Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Schistostega pennata	luminous moss	4	5

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex houghtoniana	sand sedge	2	5
Carex loliacea	rye-grass sedge	2	4
Coptis trifolia	goldthread	2	4
Lactuca biennis	tall blue lettuce	2	5
Oplopanax horridus	devil's-club	3	4

111 Windfall Creek

Natural Subregion(s)

Lower Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Pogonatum dentatum	hair-like pogonatum	4	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex umbellata	umbellate sedge	2	4
Oplopanax horridus	devil's-club	3	4
Phegopteris connectilis	northern beech fern	2	4
Stellaria crispa	wavy-leaved chickweed	2	3

112 Smoke Lake

Natural Subregion(s)

Central Mixedwood

Lower Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Schistostega pennata	luminous moss	4	5

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex trisperma	three-seeded sedge	2	3
Carex umbellata	umbellate sedge	2	4
Coptis trifolia	goldthread	2	4
Oplopanax horridus	devil's-club	3	4
Phegopteris connectilis	northern beech fern	2	4
Ranunculus uncinatus	hairy buttercup	2	2
Scirpus clintonii	Clinton's bulrush	4	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Fox Creek Area	Marl Bogs		3	2

ID Special Feature Polygon Name

113 Goose Mountain Ecological Reserve Extension Natural Subregion(s)

Lower Foothills

Upper Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Brachythecium rutabulum		2	5
Dicranella crispa	curl-leaved fork moss	4	5
Dicranella heteromalla	silky fork moss	4	5
Diselium nudum	naked weissia	4	5
Fontinalis neomexicana		3	5
Pogonatum dentatum	hair-like pogonatum	4	4
Pogonatum urnigerum	urn-like pogonatum	2	2
Polytrichum longisetum	slender hairy-cap	3	5
Sphagnum compactum	neat bog moss	2	4
Sphagnum lindbergii	Lindberg's bog moss	2	4
Splachnum vasculosum	large-fruited splachnum	4	5

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Cardamine umbellata	mountain cress	4	1
Carex heleonastes	Hudson Bay sedge	3	4
Carex houghtoniana	sand sedge	2	5
Carex loliacea	rye-grass sedge	2	4
Carex pauciflora	few-flowered sedge	2	4
Carex trisperma	three-seeded sedge	2	3
Coptis trifolia	goldthread	2	4
Cystopteris montana	mountain bladder fern	2	3
Drosera anglica	oblong-leaved sundew	2	4
Epilobium lactiflorum	willowherb	2	1
Epilobium leptocarpum	willowherb	3	4
Glyceria elata	tufted tall manna grass	2	4
Juncus brevicaudatus	short-tail rush	3	4
Juncus filiformis	thread rush	2	4
Juncus stygius var americanus	marsh rush	2	5
Lycopodium sitchense	ground-fir	2	4
Oplopanax horridus	devil's-club	3	4
Prenanthes alata	white lettuce	3	5
Sparganium hyperboreum	northern bur-reed	3	4
Stellaria crispa	wavy-leaved chickweed	2	3
Streptopus streptopoides	twisted-stalk	3	5

114 Wolf Lake

Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Non-vascular Plants)		Common Name	ERank	PARep
Brachythecium rutabulum			2	5
Conardia compacta			3	4
Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Carex heleonastes		Hudson Bay sedge	3	4
Carex retrorsa		turned sedge	2	4
Site Name	Landform Element Name	Subelement	ERank	PARep
Wolf Lake Area	Hill-hole Pairs		1	5

116 Crow Lake Extension

Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex oligosperma	few-fruited sedge	4	4
Carex vesicaria	blister sedge	2	2
Juncus filiformis	thread rush	2	4
Lycopodium sitchense	ground-fir	2	4
Scirpus pallidus	pale bulrush	3	4

118 Gregoire Lake Provincial Park Extension Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Brachythecium rutabulum		2	5

ID Special Feature Polygon Name

118 Gregoire Lake Provincial Park Extension Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex petasata	pasture sedge	2	2
Lactuca biennis	tall blue lettuce	2	5
Potamogeton natans	floating-leaf pondweed	2	3

120 Cameron Hills Natural Subregion(s)
Boreal Highlands
Sub-Arctic

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Spizella arborea	American tree sparrow	3	5

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Arctagrostis arundinacea	polar grass	4	4
Carex loliacea	rye-grass sedge	2	4
Isoetes echinospora	northern quillwort	3	5
Lycopodium selago	mountain club-moss	1	1
Pinguicula villosa	small butterwort	4	4

Site Name	Landform Element Name	Subelement	ERank	PARep
Cameron Hills	Flutings	Giant	3	5

121 Caribou Mountains (Yates River) Natural Subregion(s)
Boreal Highlands
Sub-Arctic

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Boschniakia rossica	ground-cone	3	5
Drosera anglica	oblong-leaved sundew	2	4
Pedicularis sudetica	purple rattle	3	5
Pinguicula villosa	small butterwort	4	4

122 Thistle Creek-Brazeau Bluehole Springs Natural Subregion(s)
Sub-Alpine
Upper Foothills

Site Name	Landform Element Name	Subelement	ERank	PARep
Thistle Creek-Brazeau River Area	Blue hole Springs		4	4

123 Thunder Lake Eskers Natural Subregion(s)
Upper Foothills

Site Name	Landform Element Name	Subelement	ERank	PARep
Cardinal/Brazeau Confluence Area	Eskers		1	4

124 Grassy Mountain Nordegg Natural Subregion(s)
Upper Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Anomobryum filiforme		3	4
Brachythecium nelsonii		4	3
Bryum arcticum		4	5
Didymodon rigidulus	rigid screw moss	2	3
Seligeria campylopoda		3	2
Tayloria splachnoides	splachnoid cyrtodon	5	5

ID Special Feature Polygon Name

125 McGregor Lake

Natural Subregion(s)

Upper Foothills

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Pelecanus erythrorhynchos	American White Pelican	4	
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex loliacea	rye-grass sedge	2	4
Cystopteris montana	mountain bladder fern	2	3
Osmorhiza purpurea	purple sweet cicely	3	2

126 Stevens Creek

Natural Subregion(s)

Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Anemone quinquefolia	wood anemone	3	5
Cystopteris montana	mountain bladder fern	2	3
Oplopanax horridus	devil's-club	3	4

127 Shunda Water Gap

Natural Subregion(s)

Upper Foothills

Site Name	Landform Element Name	Subelement	ERank	PARep
Shunda Area	Water Gaps		1	3

129 Mercoal

Natural Subregion(s)

Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Barbarea orthoceras	American winter cress	2	3
Carex capitata	capitate sedge	2	3
Epilobium lactiflorum	willowherb	2	1
Epilobium saximontanum	Rocky Mountain willowherb	2	3
Eriophorum scheuchzeri	one-spoke cotton grass	2	1

130 Sundance Hoodoos

Natural Subregion(s)

Lower Foothills

Upper Foothills

Site Name	Landform Element Name	Subelement	ERank	PARep
Sundance Lake Area	Hoodoos		1	2

132 Genessee Bridge

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Aloina brevirostris	short-beaked rigid screw moss	3	2
Aloina rigida	aloe-like rigid screw moss	3	4
Aongstroemia longipes		4	5
Bryobrittonia longipes		3	3
Entodon concinnus		3	5

133 Kilini Creek

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Meesia longiseta		4	5
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex pseudocyperus	cyperus-like sedge	2	3
Potamogeton natans	floating-leaf pondweed	2	3
Rhynchospora capillacea	slender beak-rush	3	4

ID Special Feature Polygon Name

133 Kilini Creek

Natural Subregion(s)

Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Heatherdown Area	Patterned Fens	Spring Fen	3	3

134 Sturgeon River Delta

Natural Subregion(s)

Central Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
St. Albert Area	Deltas	Stable Channel-Mouth Bar	1	4

135 Cold Lake Baymouth Bars

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Cold Lake Area	Baymouth Bars		4	4

136 Muriel Lake hill/hole pair

Natural Subregion(s)

Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Muriel Lake Area	Hill-hole Pairs		1	5

137 Pakan Bog Iron Springs

Natural Subregion(s)

Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Pakan Area	Iron Depositing Springs		1	3

138 Whitefish Lake Rubble Terrain

Natural Subregion(s)

Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Whitefish Lake Area	Ice-Thrust Moraine		1	5

139 Muddy Creek/Nose Mountain

Natural Subregion(s)

Sub-Alpine
Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Agrostis exarata	spike redtop	2	3
Salix raupii	Raup's willow	5	4

140 Calahoo Creek Warm Springs

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Calahoo Creek-Wapiti River Area	Warm Springs		4	4

141 Sweathouse Fire Tower

Natural Subregion(s)

Central Mixedwood
Lower Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Schistostega pennata	luminous moss	4	5

ID Special Feature Polygon Name

141 Sweathouse Fire Tower

Natural Subregion(s)

Central Mixedwood
Lower Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex pauciflora	few-flowered sedge	2	4
Carex trisperma	three-seeded sedge	2	3
Luzula rufescens	reddish wood-rush	3	5
Lycopodium selago	mountain club-moss	1	1

142 Swan River

Natural Subregion(s)

Upper Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Fontinalis neomexicana		3	5

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Barbarea orthoceras	American winter cress	2	3
Luzula acuminata	wood-rush	3	5

143 Athabasca Flutings

Natural Subregion(s)

Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Athabasca Town Area	Flutings	Giant	3	5

144 Island Lake

Natural Subregion(s)

Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Island Lake	Drift Basins	Holm Lake	1	5

145 Bourque Lake Tunnel Lake

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Bourque Lake	Glacial Tunnel Lakes		3	5

146 Wappau Lake

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Wappau Lake	Patterned Fens	Net Fen	3	3

147 Pelican Lake Wetland

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Pelican Lake Area	Wooded Bogs with Internal Lawns	Northern Plateau Bog	1	5

148 Marten Mountain Ribbed Fen

Natural Subregion(s)

Lower Foothills

Site Name	Landform Element Name	Subelement	ERank	PARep
Marten Mountain Area	Patterned Fens	Northern Ribbed Fen	1	4

ID Special Feature Polygon Name

149 Lesser Slave Lake Provincial Park Extension Natural Subregion(s)
Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Lesser Slave Lake Area	Aeolian Beach Ridges		1	3

150 McLennan Sloping Fens Natural Subregion(s)
Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
McLennan Area	Non-Patterned Fens without Internal Lawns	Slope Fen	4	5

151 Little Smoky Landslide Natural Subregion(s)
Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Guy Area	Rock Slides		1	3

153 Bear River Sandhills Natural Subregion(s)
Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Grande Prairie Area	Dunes	Parabolic	1	4

154 Cherry Point Earth Flows Natural Subregion(s)
Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Cherry Point Area	Earth Flows		1	5

155 Rycroft Earth Slide Natural Subregion(s)
Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Rycroft Area	Earth Slides		1	4

156 Fairview Marl Lake Natural Subregion(s)
Peace River Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Fairview Area	Marl Lakes		3	3

Vegetation Community Element Name				
Peace River Parkland remnant grasslands				

157 Montagneuse River Earth Slide Natural Subregion(s)
Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Montagneuse River	Earth Slides		1	4

159 Muskeg River Bog Natural Subregion(s)
Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Muskeg River Area	Wooded Bogs with Internal Lawns	Northern Plateau Bog	1	5

ID Special Feature Polygon Name

159 Muskeg River Bog

Natural Subregion(s)

Central Mixedwood

161 Algar Bog

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Algar Lake	Wooded Bogs with Internal Lawns	Flat Bog	1	5

162 Clearwater Patterned Fen

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Fort McMurray Area	Patterned Fens	Spring Fen	3	3

164 Whitemud Falls Ecological Reserve Extension

Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Eupatorium maculatum	spotted Joe-pye weed	3	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Whitemud Falls Area	Stacks		4	4

165 Muskeg Mountain Channel Fens

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Muskeg Mountain	Non-Patterned Fens without Internal Lawns	Channel Fen	1	5

166 Chelsea Creek Flutings

Natural Subregion(s)

Boreal Highlands

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Chelsea Creek Area	Flutings		1	4

167 Ells River Incised Meanders

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Fort MacKay	River Meanders	Incised	1	3

168 Mackay River Incised Meanders

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Fort MacKay Area	River Meanders	Incised	1	3

169 Fort Hills

Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Brachythecium nelsonii		4	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Fort Hills Area	Kames	Kame Delta	5	5

ID Special Feature Polygon Name

169 Fort Hills

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
McClelland Lake	Patterned Fens	Northern Ribbed Fen	5	4

170 Hawk Hills Slope Fens

Natural Subregion(s)

Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Hawk Hills Area	Non-Patterned Fens without Internal Lawns	Slope Fen	4	5

171 Wolverine River Sand Hills

Natural Subregion(s)

Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Wolverine River Sand Hills	Dune Ridges	Lacadena Ridge	4	5

172 LaCrete Sand Hills

Natural Subregion(s)

Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
La Crete Sand Hills	Dune Ridges	Lacadena Ridge	4	5
La Crete Sand Hills	Dunes	Transverse	4	3

173 Mikkwa River Wooded Bog

Natural Subregion(s)

Sub-Arctic

Site Name	Landform Element Name	Subelement	ERank	PARep
Birch Mountains	Wooded Bogs without Internal Lawns	Northern Plateau Bog	1	5

174 Alice Creek

Natural Subregion(s)

Sub-Arctic

Site Name	Landform Element Name	Subelement	ERank	PARep
Elk Lake Area	Non-Patterned Fens with Internal Lawns	Horizontal Fen	1	5
Elk Lake Area	Non-Patterned Fens without Internal Lawns	Channel Fen	1	5

175 McLelland Lake Sinkholes

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
McClelland Lake Area	Dolines	Collapse	1	1

176 Ronald Lake Sandhills

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Lake Athabasca Area	Dunes	Parabolic	4	4
Lake Athabasca Area	Dune Ridges	Lake Claire Ridge	4	4

177 Vermilion Chutes

Natural Subregion(s)

Central Mixedwood

Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Vermilion Chutes Area	Rapids		1	4

ID Special Feature Polygon Name

177 Vermilion Chutes

Natural Subregion(s)

Central Mixedwood
Dry Mixedwood

178 Fort Vermilion Sandhills

Natural Subregion(s)

Dry Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Fort Vermilion Sand Hills	Dunes	Transverse	3	3

179 Zama Lakes

Natural Subregion(s)

Wetland Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Zama Lakes Area	Levee Dammed Lakes		4	4

180 Hay Lake Thermokarst Lake

Natural Subregion(s)

Wetland Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Hay Lake Area	Thermokarst Lakes		4	5

182 Zama City Patterned Fen

Natural Subregion(s)

Wetland Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Zama City Area	Patterned Fens	Net Fen	3	3

183 Indian Cabins Peat Plateaux

Natural Subregion(s)

Wetland Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Indian Cabins Area	Peat Plateaux		1	5

184 Bistcho Lake Peat Plateaux

Natural Subregion(s)

Sub-Arctic

Site Name	Landform Element Name	Subelement	ERank	PARep
Bistcho Lake Area	Peat Plateaux		1	5

186 Richardson River

Natural Subregion(s)

Athabasca Plain
Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Cypripedium acaule	stemless lady's-slipper	2	4
Sarracenia purpurea	pitcher-plant	2	4
Utricularia cornuta	horned bladderwort	3	4

Site Name	Landform Element Name	Subelement	ERank	PARep
Lake Athabasca Area	Dunes	Parabolic	5	4
Lake Athabasca Area	Dune Ridges	Lake Claire Ridge	5	4
Lake Athabasca Area	Dune Ridges	Cree Lake Ridge	5	4

ID Special Feature Polygon Name

188 Wylie Lake

Natural Subregion(s)

Kazan Uplands

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Leskeella nervosa		2	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex heleonastes	Hudson Bay sedge	3	4
Carex lenticularis var dolia	lens-fruited sedge	4	4
Carex loliacea	rye-grass sedge	2	4
Potentilla multifida	branched cinquefoil	3	4

190 Andrew Lake

Natural Subregion(s)

Kazan Uplands

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Larus canus	Mew Gull	3	5

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex houghtoniana	sand sedge	2	5
Carex kelloggii	Kellogg's sedge	2	4
Carex umbellata	umbellate sedge	2	4
Isoetes echinospora	northern quillwort	3	5
Pinguicula villosa	small butterwort	4	4
Polypodium virginianum	rock polypody	2	3
Potamogeton robbinsii	Robbins' pondweed	3	4
Potentilla hookeriana	Hooker's cinquefoil	4	1

Site Name	Landform Element Name	Subelement	ERank	PARep
Swinnerton Lake Area	Fault-line Scarps		1	5
Andrew Lake Area	Raised Beaches		1	3
Waugh Lake	Stocks		4	5

191 Slave River Islands

Natural Subregion(s)

Kazan Uplands

Peace River Lowlands

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Falco peregrinus	Peregrine Falcon	2	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Polypodium virginianum	rock polypody	2	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Fort Fitzgerald Area	River Islands	Bedrock Island	1	5

192 Fort Smith (Slave River Rapids)

Natural Subregion(s)

Peace River Lowlands

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Gavia pacifica	Pacific Loon	3	5
Lampetra japonica	Arctic lamprey	4	5
Microtus xanthognathus	yellow-cheeked vole	4	5
Pelecanus erythrorhynchos	American White Pelican	4	5

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex capitata	capitate sedge	2	3
Erigeron hyssopifolius	wild daisy fleabane	3	5
Pyrola grandiflora	Arctic wintergreen	2	2

Site Name	Landform Element Name	Subelement	ERank	PARep
Fitzgerald Area	Rapids		1	4

ID Special Feature Polygon Name

193 Audet Lake Patterned Fens

Natural Subregion(s)
Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Audet Lake Area	Patterned Fens	Northern Ribbed Fen	1	4

194 Richardson/Marguerite Rivers Dissected Kame Natural Subregion(s)
Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Johnson Lake-Marguerite River Area	Kames	Kame Moraine	1	5

197 Lake Athabasca South Shore Natural Subregion(s)
Athabasca Plain

Site Name	Landform Element Name	Subelement	ERank	PARep
Lake Athabasca Area	Beaches		1	1

202 Leland Lake/Tulip Lake Natural Subregion(s)
Kazan Uplands

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Gavia pacifica	Pacific Loon	3	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Leland Lakes Area	Plutons		5	5
Leland Lakes Area	Tectonic Lake Basins	Fault Lake	5	4

205 Many Island Lake Natural Subregion(s)
Dry Mixedgrass

Element Name (Other Vertebrates)
migratory bird nesting area

Site Name	Landform Element Name	Subelement	ERank	PARep
Walsh Area	Playa Lakes		4	4

Vegetation Community Element Name
Sarcobatus vermiculatus alliance

206 Beaverhills Lake Natural Subregion(s)
Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	4	5
Pelecanus erythrorhynchos	American White Pelican	4	5

Element Name (Other Vertebrates)
migratory bird nesting area
shorebird staging area

207 Sounding Lake Natural Subregion(s)
Central Parkland
Northern Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

ID Special Feature Polygon Name

207 Sounding Lake

Natural Subregion(s)

Central Parkland

Northern Fescue

<i>Element Name (Other Vertebrates)</i>
shorebird staging area

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Mimulus glabratus	smooth monkeyflower	3	5

208 Killarney Lake

Natural Subregion(s)

Central Parkland

<i>Element Name (Other Vertebrates)</i>
shorebird staging area

209 Buffalo Lake

Natural Subregion(s)

Central Parkland

<i>Scientific Element Name (Vertebrate Animals)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Charadrius melodus	Piping Plover	4	5

<i>Element Name (Other Vertebrates)</i>
migratory bird nesting area
shorebird staging area

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Aster pauciflorus	few-flowered aster	4	4
Chenopodium leptophyllum	narrow-leaved goosefoot	1	4
Osmorhiza longistylis	smooth sweet cicely	2	5

<i>Site Name</i>	<i>Landform Element Name</i>	<i>Subelement</i>	<i>ERank</i>	<i>PARep</i>
Buffalo Lake Area	Moraine Plateaux		1	4

211 Pakowki Lake

Natural Subregion(s)

Dry Mixedgrass

<i>Scientific Element Name (Vertebrate Animals)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Centrocercus urophasianus	Sage Grouse	3	
Plegadis chihi	White-faced Ibis	3	5

<i>Element Name (Other Vertebrates)</i>
migratory bird nesting area

<i>Site Name</i>	<i>Landform Element Name</i>	<i>Subelement</i>	<i>ERank</i>	<i>PARep</i>
Pakowki Lake	Playa Lakes		4	4

213 Chappice Lake

Natural Subregion(s)

Dry Mixedgrass

<i>Element Name (Other Vertebrates)</i>
shorebird staging area

<i>Site Name</i>	<i>Landform Element Name</i>	<i>Subelement</i>	<i>ERank</i>	<i>PARep</i>
Chappice Lake	Drift Basins	Saline/Alkaline Lake	1	4

214 Namaka Lake

Natural Subregion(s)

Mixedgrass

<i>Scientific Element Name (Vertebrate Animals)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Charadrius melodus	Piping Plover	2	

ID Special Feature Polygon Name

214 Namaka Lake

Natural Subregion(s)

Mixedgrass

Element Name (Other Vertebrates)

shorebird staging area

215 Grassy Island Lake

Natural Subregion(s)

Northern Fescue

Element Name (Other Vertebrates)

shorebird staging area

216 Gooseberry Lake

Natural Subregion(s)

Northern Fescue

Scientific Element Name (Vertebrate Animals)

Charadrius melodus

Common Name

Piping Plover

ERank

2

PARep

Element Name (Other Vertebrates)

shorebird staging area

Vegetation Community Element Name

Festuca hallii alliance

218 Sunken Lake

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vertebrate Animals)

Charadrius melodus

Common Name

Piping Plover

ERank

2

PARep

Element Name (Other Vertebrates)

shorebird staging area

220 Gillespie Lake

Natural Subregion(s)

Central Parkland

Element Name (Other Vertebrates)

shorebird staging area

221 Baxter Lake

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vertebrate Animals)

Charadrius melodus

Common Name

Piping Plover

ERank

4

PARep

5

Element Name (Other Vertebrates)

shorebird staging area

223 Bittern Lake

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vertebrate Animals)

Charadrius melodus

Common Name

Piping Plover

ERank

4

PARep

5

Element Name (Other Vertebrates)

shorebird staging area

ID Special Feature Polygon Name

224 Kimiwan Lake

Natural Subregion(s)

Dry Mixedwood

Element Name (Other Vertebrates)

shorebird staging area

228 Belly River

Natural Subregion(s)

Foothills Fescue

Mixedgrass

<i>Scientific Element Name (Vertebrate Animals)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Athene cunicularia	Burrowing Owl	3	

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Onosmodium molle	western false gromwell	3	4
Populus angustifolia	narrow-leaf cottonwood	2	4

Vegetation Community Element Name

Riparian cottonwoods

229 St. Mary's River Cottonwood Forests

Natural Subregion(s)

Foothills Fescue

<i>Scientific Element Name (Vertebrate Animals)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Cottus bairdi	mottled sculpin	3	5
Rana pipiens	northern leopard frog	2	4

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Oenothera psammophila		3	5
Populus angustifolia	narrow-leaf cottonwood	2	4

Vegetation Community Element Name

Riparian cottonwoods

230 Bow River Cottonwood Forests

Natural Subregion(s)

Foothills Fescue

Mixedgrass

<i>Scientific Element Name (Vertebrate Animals)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Rana pipiens	northern leopard frog	2	

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Elymus virginicus	Virginia wild rye	3	4
Onosmodium molle	western false gromwell	3	4

Vegetation Community Element Name

Riparian cottonwoods

231 Lower Red Deer River

Natural Subregion(s)

Dry Mixedgrass

<i>Scientific Element Name (Vertebrate Animals)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Crotalus viridis	prairie rattlesnake	1	
Heterodon nasicus nasicus	plains hognose snake	2	
Pituophis melanoleucus	bull snake	1	
Rana pipiens	northern leopard frog	2	

<i>Scientific Element Name (Non-vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Campyium polygamum		1	4
Leskea gracilescens		3	5

ID Special Feature Polygon Name

231 Lower Red Deer River

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Carex retrorsa		turned sedge	2	4
Centunculus minimus		chaffweed	3	5
Elymus virginicus		Virginia wild rye	3	4
Site Name	Landform Element Name	Subelement	ERank	PARep
Patricia Area	Badlands		4	4
Wardlow Area	Alluvial Fans	Coalescing	4	4
Vegetation Community Element Name				
Riparian cottonwoods				

236 Cypress Hills

Natural Subregion(s)

Mixedgrass

Montane

Scientific Element Name (Vertebrate Animals)		Common Name	ERank	PARep
Rana pipiens		northern leopard frog	2	
Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Danthonia californica		California oat grass	1	3
Mimulus guttatus		yellow monkeyflower	1	2
Psoralea argophylla		silverleaf psoralea	2	4
Site Name	Landform Element Name	Subelement	ERank	PARep
Cypress Hills Area	Erosional Remnants		1	4

240 Bain Bluff

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)		Common Name	ERank	PARep
Rana pipiens		northern leopard frog	2	
Site Name	Landform Element Name	Subelement	ERank	PARep
Medicine Hat Area	Earth Slides		1	4

241 Vauxhall

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Polygonum watsonii		Watson's knotweed	4	4
Spergularia marina		salt-marsh sand spurry	2	4

242 Driftwood Bend Megablock

Natural Subregion(s)

Dry Mixedgrass

Site Name	Landform Element Name	Subelement	ERank	PARep
Taber Area	Megablocks		3	5

243 Turin Dunes

Natural Subregion(s)

Dry Mixedgrass

Mixedgrass

Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Astragalus lotiflorus		low milk vetch	2	5
Chenopodium subglabrum		smooth narrow-leaved goosefoot	4	5
Draba reptans		whitlow-grass	3	5
Polanisia dodecandra		clammyweed	3	5

ID Special Feature Polygon Name

243 Turin Dunes

Natural Subregion(s)

Dry Mixedgrass
Mixedgrass

244 Kipp Megablock

Natural Subregion(s)

Mixedgrass

Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Ellisia nyctelea		waterpod	2	3
Rorippa sinuata		spreading yellow cress	2	5
Site Name	Landform Element Name	Subelement	ERank	PARep
Kipp Area	Megablocks		3	5
Lethbridge Area	Aligned Coulees		3	5
Vegetation Community Element Name				
Riparian cottonwoods				

247 Okotoks Erratic

Natural Subregion(s)

Foothills Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Okotoks Area	Erratics		1	4

248 Cavendish

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Chenopodium subglabrum		smooth narrow-leaved goosefoot	4	5

249 Thordason Creek

Natural Subregion(s)

Lower Foothills
Upper Foothills

Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Carex loliacea		rye-grass sedge	2	4
Juncus filiformis		thread rush	2	4
Luzula acuminata		wood-rush	3	5

250 Pearce

Natural Subregion(s)

Mixedgrass

Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Sisyrinchium septentrionale		pale blue-eyed grass	4	4

251 Clear Hills

Natural Subregion(s)

Lower Foothills
Upper Foothills

Scientific Element Name (Vascular Plants)		Common Name	ERank	PARep
Juncus filiformis		thread rush	2	4
Site Name	Landform Element Name	Subelement	ERank	PARep
Clear Hills	Iron Depositing Springs		1	3
Clear Hills	Patterned Fens	Northern Ribbed Fen	1	4

ID Special Feature Polygon Name

252 Wapiabi Cave

Natural Subregion(s)

Sub-Alpine
Upper Foothills

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Myotis volans	long-legged bat	2	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Nordegg Area	Karst Caves	Bedding	3	2

253 Moose Point

Natural Subregion(s)

Athabasca Plain

Site Name	Landform Element Name	Subelement	ERank	PARep
Moose Point Area	Moraine	de Geer	3	4

254 Mackay River Palsa

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Mackay River Area	Palsa Bogs		5	5

255 Ft. Chipewyan

Natural Subregion(s)

Kazan Uplands

Site Name	Landform Element Name	Subelement	ERank	PARep
Fort Chipewyan Area	Raised Beaches		1	3

256 Charles Lake

Natural Subregion(s)

Kazan Uplands

Site Name	Landform Element Name	Subelement	ERank	PARep
Charles Lake	Tectonic Lake Basins	Fault Lake	3	4

257 Crowsnest Volcanics

Natural Subregion(s)

Montane
Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Crepis atriobarba	hawk's-beard	2	2
Eriogonum ovalifolium var ovalifolium	silver-plant	4	3
Phacelia linearis	linear-leaved scorpionweed	2	4

Site Name	Landform Element Name	Subelement	ERank	PARep
Coleman Area	Volcanic Rocks		4	5

258 Ma Butte

Natural Subregion(s)

Sub-Alpine

Site Name	Landform Element Name	Subelement	ERank	PARep
Ma Butte Area	Volcanic Rocks		4	5

259 Goosequill Lake

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

ID Special Feature Polygon Name

259 Goosequill Lake

Natural Subregion(s)

Central Parkland

260 Oldman River

Natural Subregion(s)

Foothills Fescue

Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Athene cunicularia	Burrowing Owl	3	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Astragalus kentrophyta var kentrophyta		4	4
Draba reptans	whitlow-grass	3	5
Elisia nyctelea	waterpod	2	3
Nemophila breviflora	small baby-blue-eyes	2	2
Onosmodium molle	western false gromwell	3	4
Phacelia linearis	linear-leaved scorpionweed	2	4
Populus angustifolia	narrow-leaf cottonwood	2	4
Spartina pectinata	prairie cord grass	3	4

Site Name	Landform Element Name	Subelement	ERank	PARep
	Aligned Coulees		3	5
Monarch Area	Reverse Faults		1	2

Vegetation Community Element Name
Riparian cottonwoods
Schizachyrium scoparium - Poa interior

261 Red Deer Lake

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

263 Keho Lake

Natural Subregion(s)

Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Athene cunicularia	Burrowing Owl	3	
Charadrius melodus	Piping Plover	2	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Downingia laeta	downingia	3	4

264 St. Mary River and Reservoir

Natural Subregion(s)

Foothills Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	
Cottus confusus	St. Mary River shorthead sculpin	3	

265 Little Fish Lake

Natural Subregion(s)

Northern Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

ID Special Feature Polygon Name

266 Handhills Lake

Natural Subregion(s)

Northern Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

267 Chain & Dowling Lakes

Natural Subregion(s)

Northern Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	4	5

Vegetation Community Element Name
Festuca hallii alliance

268 Spiers Lake

Natural Subregion(s)

Northern Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

269 Miquelon Lake

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Pelecanus erythrorhynchos	American White Pelican	4	

Element Name (Other Vertebrates)
migratory bird nesting area

271 Muriel Lake

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

272 Birch Lake

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	4	5

273 Junction Lake

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

274 Greenlee Lake

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

Element Name (Other Vertebrates)
shorebird staging area

ID Special Feature Polygon Name

274 Greenlee Lake Natural Subregion(s)
Central Parkland

275 Foster Lake Natural Subregion(s)
Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

276 Piper Lake Natural Subregion(s)
Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

277 Metiskow Lake Natural Subregion(s)
Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

Element Name (Other Vertebrates)
shorebird staging area

278 Neutral Hills #1 Natural Subregion(s)
Northern Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

279 Neutral Hills #4 Natural Subregion(s)
Northern Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	2	

281 Red Deer #2 Natural Subregion(s)
Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Falco peregrinus	Peregrine Falcon	2	

282 Red Deer #3 Natural Subregion(s)
Northern Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Falco peregrinus	Peregrine Falcon	2	

284 Bow River (E of San Francisco) #5 Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Falco peregrinus	Peregrine Falcon	2	
Rana pipiens	northern leopard frog	2	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Chenopodium desiccatum	goosefoot	2	5
Polygonum watsonii	Watson's knotweed	4	4

ID Special Feature Polygon Name

284 Bow River (E of San Francisco) #5 Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Psilocarphus elatior	woollyheads	3	4

285 Redcliff West Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Crotalus viridis	prairie rattlesnake	1	
Pituophis melanoleucus	bull snake	1	

286 Eagle Butte Natural Subregion(s)
Montane

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	

287 Sunnynook Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Athene cunicularia	Burrowing Owl	3	

288 Dorothy Natural Subregion(s)
Dry Mixedgrass
Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Athene cunicularia	Burrowing Owl	3	

289 Richdale Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Athene cunicularia	Burrowing Owl	3	

290 Berry Creek Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Athene cunicularia	Burrowing Owl	3	

291 Ft. McMurray Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Bufo hemiophrys	Canadian toad	2	

292 Suffield South Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Bufo cognatus	Great Plains Toad	2	5
Crotalus viridis	prairie rattlesnake	1	
Pituophis melanoleucus	bull snake	1	
Rana pipiens	northern leopard frog	2	

ID Special Feature Polygon Name

292 Suffield South

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Abronia micrantha	sand verberna	2	5
Acer negundo	Manitoba maple	2	4
Astragalus lotiflorus	low milk vetch	2	5
Bidens frondosa	common beggarticks	3	5
Cryptantha minima	small cryptanth	3	5
Eriogonum cernuum	nodding umbrella-plant	2	2
Franseria acanthicarpa	bur ragweed	2	4
Lycopus americanus	American water-horehound	2	5
Munroa squarrosa	false buffalo grass	3	5
Oryzopsis micrantha	little-seed rice grass	2	5
Osmorhiza longistylis	smooth sweet cicely	2	5
Parietaria pensylvanica	American pellitory	2	4
Polanisia dodecandra	clammyweed	3	5
Potentilla paradoxa	bushy cinquefoil	2	4
Psoralea argophylla	silverleaf psoralea	2	4
Schizachyrium scoparium var scoparium	little bluestem	4	5
Veronica catenata	water speedwell	3	4

Site Name	Landform Element Name	Subelement	ERank	PARep
Medicine Hat Area	Neck Cutoffs		1	5

293 Prince's Springs

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	

Site Name	Landform Element Name	Subelement	ERank	PARep
Bindloss Area	Salt Depositing Springs		1	3

294 Bow Island

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Phrynosoma douglasii var brevirostre	short-horned lizard	2	4

296 Margaret Lake

Natural Subregion(s)

Sub-Arctic

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Catharus minimus	Gray-cheeked Thrush	3	5
Gavia stellata	Red-throated Loon	3	5
Larus canus	Mew Gull	3	5
Spizella arborea	American Tree Sparrow	3	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Caribou Mountains	Veneer Bogs		1	5

297 Lousana Canyon

Natural Subregion(s)

Central Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Lousana Area	Gorges/Canyons		1	4

298 Kleskun Hills

Natural Subregion(s)

Peace River Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Botrychium multifidum var intermedium	leather grape fern	4	4
Danthonia californica	California oat grass	1	3
Sisyrinchium septentrionale	pale blue-eyed grass	4	4

ID Special Feature Polygon Name

298 Kleskun Hills

Natural Subregion(s)
Peace River Parkland

Site Name	Landform Element Name	Subelement	ERank	PARep
Kleskun Hill Area	Erosional Remnants		1	4
<i>Vegetation Community Element Name</i>				
Peace River Parkland remnant grasslands				

299 Hand Hills

Natural Subregion(s)
Northern Fescue

<i>Scientific Element Name (Vertebrate Animals)</i>		<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Rana pipiens		northern leopard frog	2	
<i>Scientific Element Name (Vascular Plants)</i>		<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Danthonia californica		California oat grass	1	3
Site Name	Landform Element Name	Subelement	ERank	PARep
Drumheller Area	Erosional Remnants		1	4
<i>Vegetation Community Element Name</i>				
Festuca hallii alliance				

300 Porcupine Hills

Natural Subregion(s)
Foothills Fescue
Montane

<i>Scientific Element Name (Vertebrate Animals)</i>		<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Rana pipiens		northern leopard frog	2	
<i>Scientific Element Name (Non-vascular Plants)</i>		<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Dicranum tauricum		broken-leaf moss	4	5
<i>Scientific Element Name (Vascular Plants)</i>		<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Aster eatonii		Eaton's aster	2	2
Poa leptocoma		bog bluegrass	2	2
Site Name	Landform Element Name	Subelement	ERank	PARep
Porcupine Hills	Erosional Remnants		1	4
<i>Vegetation Community Element Name</i>				
Pinus flexilis alliance				

301 Newman volcanics

Natural Subregion(s)
Alpine
Sub-Alpine

<i>Scientific Element Name (Vascular Plants)</i>		<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Lithophragma glabrum		rockstar	3	2
Site Name	Landform Element Name	Subelement	ERank	PARep
Newman Peak Area	Volcanic Rocks		4	5

302 Barrow Lake

Natural Subregion(s)
Kazan Uplands

<i>Scientific Element Name (Vertebrate Animals)</i>		<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Coregonus zenithicus		shortjaw cisco	5	5
Falco peregrinus		Peregrine Falcon	2	

ID Special Feature Polygon Name

303 Steen River

Natural Subregion(s)
Wetland Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Potentilla multifida	branched cinquefoil	3	4

304 Negus Meadow

Natural Subregion(s)
Wetland Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Scirpus rufus	Red Bulrush	3	5

305 Sand Point

Natural Subregion(s)
Athabasca Plain

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Artemisia borealis	northern wormwood	2	2
Barbarea orthoceras	American winter cress	2	3
Botrychium multifidum var intermedium	leather grape fern	4	4
Isoetes echinospora	northern quillwort	3	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Fort Chipewyan Area	Spits		3	1

307 La Saline West

Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Seligeria calcarea	chalk brittle moss	4	4

308 Tar Island

Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Polygala pauciflora	tinged milkwort	5	5

309 Beaver River

Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Luzula rufescens	reddish wood-rush	3	5

310 Gravina Creek

Natural Subregion(s)
Lower Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Astragalus bodinii	Bodin's milk vetch	4	5

311 Notikewin

Natural Subregion(s)
Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Artemisia tilesii	Herriot's sagewort	2	4
Cardamine parviflora	small bitter cress	3	5

ID Special Feature Polygon Name

312 Chinchaga River

Natural Subregion(s)

Lower Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Astragalus bodinii	Bodin's milk vetch	4	5

313 Hotchkiss Airfield

Natural Subregion(s)

Lower Foothills

Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Juncus filiformis	thread rush	2	4
Luzula acuminata	wood-rush	3	5

314 Halverson River

Natural Subregion(s)

Lower Foothills

Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Juncus filiformis	thread rush	2	4
Luzula acuminata	wood-rush	3	5

315 Hamlin Creek

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Puccinellia distans ssp hauptiana		4	5

316 Dunvegan

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Artemisia tilesii	Herriot's sagewort	2	4
Atriplex truncata	saltbush	3	5

Vegetation Community Element Name
Peace River Parkland remnant grasslands

317 Peace River Parkland

Natural Subregion(s)

Dry Mixedwood

Peace River Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Artemisia tilesii	Herriot's sagewort	2	4
Asclepias ovalifolia	low milkweed	2	3

Vegetation Community Element Name
Peace River Parkland remnant grasslands

318 Ft. McMurray West

Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Warnstorfia pseudostraminea	brown moss	5	5

ID Special Feature Polygon Name

319 Clearwater River Spring

Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Plantago maritima	sea-side plantain	3	5
Scirpus rufus	Red Bulrush	3	5

320 Marie Lake

Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Percina caprodes	logperch	3	5

321 Cold Lake

Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Percina caprodes	logperch	3	5

Site Name	Landform Element Name	Subelement	ERank	PARep
Cold Lake	Ice Scour Lakes		1	4

322 Sand River

Natural Subregion(s)

Central Mixedwood

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Polygala paucifolia	fringed milkwort	3	5

323 Goodwin Lake

Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex adusta	browned sedge	2	3
Juncus brevicaudatus	short-tail rush	3	4

324 Sakwatanau River

Natural Subregion(s)

Lower Foothills

Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Luzula rufescens	reddish wood-rush	3	5

325 Lower Sakwatanau River

Natural Subregion(s)

Central Mixedwood

Lower Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex arcta	narrow sedge	3	4
Lactuca biennis	tall blue lettuce	2	5

326 Whitecourt

Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Salix sitchensis	Sitka willow	3	5

ID Special Feature Polygon Name

327 Marshead Creek

Natural Subregion(s)

Lower Foothills

Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Deschampsia elongata	slender hair grass	3	4

328 Two Creek

Natural Subregion(s)

Lower Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Schistostega pennata	luminous moss	4	5

329 Smoky-Kakwa

Natural Subregion(s)

Central Mixedwood

Lower Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Streptopus roseus	rose mandarin	3	5

330 Simonette Tower

Natural Subregion(s)

Lower Foothills

Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Streptopus roseus	rose mandarin	3	5

331 Muddy Creek

Natural Subregion(s)

Lower Foothills

Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Calamagrostis lapponica	Lapland reed grass	3	4

332 Grande Prairie Parkland

Natural Subregion(s)

Dry Mixedwood

Peace River Parkland

Vegetation Community Element Name
Peace River Parkland remnant grasslands

333 Dunvegan Parkland

Natural Subregion(s)

Dry Mixedwood

Vegetation Community Element Name
Peace River Parkland remnant grasslands

334 Ft. Vermilion Parkland

Natural Subregion(s)

Dry Mixedwood

Vegetation Community Element Name
Peace River Parkland remnant grasslands

ID Special Feature Polygon Name

335 Jean D'Or Parkland

Natural Subregion(s)

Dry Mixedwood

Vegetation Community Element Name

Peace River Parkland remnant grasslands

336 Mumm Creek

Natural Subregion(s)

Alpine

Sub-Alpine

Upper Foothills

<i>Scientific Element Name (Non-vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Amblyodon dealbatus		3	4
Didymodon johansenii		4	4
Schistidium tenerum	thread bloom moss	4	4

337 Brule Lake

Natural Subregion(s)

Lower Foothills

Montane

Upper Foothills

<i>Scientific Element Name (Vertebrate Animals)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Prosopium coulteri	pygmy whitefish	3	4

<i>Scientific Element Name (Non-vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Entodon concinnus		3	5
Tayloria hornschurchii	small-kettle moss	4	4

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Pellaea glabella	smooth cliff brake	1	3
Woodsia glabella	smooth woodsia	3	4

<i>Site Name</i>	<i>Landform Element Name</i>	<i>Subelement</i>	<i>ERank</i>	<i>PARep</i>
Brule Lake	Dunes	Parabolic	1	4

338 Clip Lake

Natural Subregion(s)

Dry Mixedwood

Lower Foothills

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Luzula acuminata	wood-rush	3	5

339 Horne

Natural Subregion(s)

Dry Mixedwood

<i>Scientific Element Name (Non-vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Sphagnum balticum	peat moss	4	5

340 Thunder Lake

Natural Subregion(s)

Dry Mixedwood

<i>Scientific Element Name (Non-vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Leskeella nervosa		2	4

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Nymphaea tetragona ssp leibergii		3	5

ID Special Feature Polygon Name

341 Barrhead

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Rhodobryum ontariense		3	4
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex hookerana	Hooker's sedge	3	3

342 Manola

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Scirpus fluviatilis	river bulrush	3	5

343 Lisburne

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Scirpus clintonii	Clinton's bulrush	4	5

344 Gunn

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Scirpus fluviatilis	river bulrush	3	5

345 Noyes Crossing

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Physcomitrium pyriforme	urn moss	3	5
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Oryzopsis canadensis	Canadian rice grass	3	5

346 Moonlight Bay

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Falco peregrinus	Peregrine Falcon	2	
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex hystricina	porcupine sedge	3	5
Flodea longivaginata	Canada waterweed	4	5

347 Fallis

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Polytrichum longisetum	slender hairy-cap	3	5
Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex hystricina	porcupine sedge	3	5

ID Special Feature Polygon Name

348 Seba

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex retrorsa	turned sedge	2	4
Muhlenbergia racemosa	marsh muhly	3	4
Sagittaria latifolia	broad-leaved arrowhead	3	4

349 Opal

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex pauciflora	few-flowered sedge	2	4
Juncus brevicaudatus	short-tail rush	3	4

350 Little Mountain (Edmonton)

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Oryzopsis canadensis	Canadian rice grass	3	5

351 Moose Hills Lake

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Polygala paucifolia	fringed milkwort	3	5

352 Elk Point

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Polygala paucifolia	fringed milkwort	3	5

354 Hind Lake

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name
Festuca hallii alliance

355 McLaughlin

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name
Festuca hallii alliance

356 Rough Lake Fescue

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Aster pauciflorus	few-flowered aster	4	4
Carex crawei	Crawe's sedge	2	3

Vegetation Community Element Name
Festuca hallii alliance

ID Special Feature Polygon Name

357 Black Creek Natural Subregion(s)
Central Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Potentilla finitima	sandhills cinquefoil	4	5

358 Hardisty 5 Natural Subregion(s)
Central Parkland

Vegetation Community Element Name
Festuca hallii alliance

361 Minburn Natural Subregion(s)
Central Parkland

Vegetation Community Element Name
Festuca hallii alliance

362 Ribstone Fescue Natural Subregion(s)
Central Parkland

Vegetation Community Element Name
Festuca hallii alliance

363 Blackmud Creek Natural Subregion(s)
Central Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Scirpus fluviatilis	river bulrush	3	5

364 Camrose Fescue Natural Subregion(s)
Central Parkland

Vegetation Community Element Name
Festuca hallii alliance

365 Whitemud Creek Natural Subregion(s)
Central Parkland

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Aloina rigida	aloe-like rigid screw moss	3	4
Weissia controversa	green-cushioned weissia	3	3

366 Devonian Gardens North Natural Subregion(s)
Central Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Cynoglossum boreale	wild comfrey	4	5

367 Strawberry Creek Natural Subregion(s)
Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Scirpus clintonii	Clinton's bulrush	4	5

ID Special Feature Polygon Name

368 Pembina River

Natural Subregion(s)
Upper Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Cardamine pratensis	meadow bitter cress	3	4

369 Brown Creek

Natural Subregion(s)
Upper Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Grimmia pilifera	hair giboshi moss	4	4

370 Prairie Creek

Natural Subregion(s)
Sub-Alpine
Upper Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Anoetangium aestivum		4	4

371 Prentice Creek West

Natural Subregion(s)
Lower Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Bryum purpurascens		4	5

372 Blindman River

Natural Subregion(s)
Central Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Muhlenbergia racemosa	marsh mulity	3	4

373 Ghostpine

Natural Subregion(s)
Central Parkland

Vegetation Community Element Name
Festuca hallii alliance

374 Buffalo Lake #2

Natural Subregion(s)
Central Parkland

Vegetation Community Element Name
Festuca hallii alliance

375 Donalda Fescue

Natural Subregion(s)
Central Parkland

Vegetation Community Element Name
Festuca hallii alliance

377 Alkali Ponds

Natural Subregion(s)
Northern Fescue

Vegetation Community Element Name
Festuca hallii alliance

ID Special Feature Polygon Name

378 Killarney Lake #2

Natural Subregion(s)
Central Parkland

Vegetation Community Element Name
Festuca hallii alliance

380 Wainwright

Natural Subregion(s)
Central Parkland

Vegetation Community Element Name
Festuca hallii alliance

381 Bodo West

Natural Subregion(s)
Northern Fescue

Vegetation Community Element Name
Festuca hallii alliance

382 New Brigden Fescue

Natural Subregion(s)
Dry Mixedgrass
Northern Fescue

Vegetation Community Element Name
Festuca hallii alliance

383 Dowling Fescue

Natural Subregion(s)
Northern Fescue

Vegetation Community Element Name
Festuca hallii alliance

384 Kirkpatrick Fescue

Natural Subregion(s)
Northern Fescue

Vegetation Community Element Name
Festuca hallii alliance

385 Kirkpatrick

Natural Subregion(s)
Northern Fescue

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Linaria canadensis	field toad-flax	4	5

386 Antelope Lake

Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Thellungiella salsuginea	mouse-ear cress	4	4

387 Hand Hills Fescue

Natural Subregion(s)
Northern Fescue

Vegetation Community Element Name
Festuca hallii alliance

ID Special Feature Polygon Name

388 Munson Fescue

Natural Subregion(s)

Northern Fescue

Vegetation Community Element Name

Festuca hallii alliance

389 Torrington

Natural Subregion(s)

Central Parkland

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Puccinellia pauciflora	few-flowered salt-meadow grass	4	4

390 Sprav Lakes

Natural Subregion(s)

Alpine

Sub-Alpine

<i>Scientific Element Name (Non-vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Bryum muehlenbeckii		4	4

391 Chiniki

Natural Subregion(s)

Alpine

Sub-Alpine

<i>Scientific Element Name (Non-vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Bryum muehlenbeckii		4	4

392 Elbow Falls

Natural Subregion(s)

Lower Foothills

Sub-Alpine

<i>Scientific Element Name (Non-vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Jaffuelobryum raui		4	4

393 McLean Creek

Natural Subregion(s)

Lower Foothills

<i>Scientific Element Name (Non-vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Dichelyma falcatum		4	4

394 Beaupre Creek

Natural Subregion(s)

Montane

<i>Scientific Element Name (Non-vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Bryum muehlenbeckii		4	4

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Carex crawei	Crawe's sedge	2	3
Parnassia parviflora	small northern grass-of-parnassus	3	2

395 Phantom Crag

Natural Subregion(s)

Sub-Alpine

Upper Foothills

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Woodsia glabella	smooth woodsia	3	4

ID Special Feature Polygon Name

396 Cochrane

Natural Subregion(s)

Foothills Parkland

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Schistidium pulvinatum		3	4

397 Bragg Creek

Natural Subregion(s)

Lower Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Botrychium minganense		3	1
Cardamine pratensis	meadow bitter cress	3	4
Carex capitata	capitate sedge	2	3

398 Robinson Hill

Natural Subregion(s)

Lower Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Bryum muchlenbeckii		4	4
Bryum turbinatum		1	4

399 Priddis

Natural Subregion(s)

Foothills Parkland

Lower Foothills

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	4

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Physcomitrium pyriforme	urn moss	3	5

400 Calgary

Natural Subregion(s)

Foothills Fescue

Foothills Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Falco peregrinus	Peregrine Falcon	2	
Rana pipiens	northern leopard frog	2	

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Desmatodon cernuus	narrow-leaved chain-teeth moss	4	4
Desmatodon heimii	long-stalked beardless moss	2	5
Physcomitrium hookeri	bladder-cap moss	4	5
Weissia controversa	green-cushioned weissia	3	3

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Barbarea orthoceras	American winter cress	2	3
Carex parryana var parryana	Parry's sedge	3	3
Carex umbellata	umbellate sedge	2	4
Ellisia nyctelea	waterpod	2	3
Lomatogonium rotatum	marsh felwort	2	3
Potentilla fruticosa	sandhills cinquefoil	4	5
Sisyrinchium septentrionale	pale blue-eyed grass	4	4

401 Wintering Hills Fescue

Natural Subregion(s)

Northern Fescue

Vegetation Community Element Name
Festuca hallii alliance

ID Special Feature Polygon Name

402 Bull Pound Creek

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Chenopodium watsonii	Watson's goosefoot	3	5

403 Finnegan

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Pterygoneurum ovatum	hairy-leaved beardless moss	3	5

404 Patricia

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Atriplex powellii	Powell's saltbush	3	5
Bidens frondosa	common beggarticks	3	5

407 Drowning Ford

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Crotalus viridis	prairie rattlesnake	1	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Astragalus kentrophyta var kentrophyta		4	4
Elymus virginicus	Virginia wild rye	3	4
Lycopus americanus	American water-horehound	2	5
Oryzopsis micrantha	little-seed rice grass	2	5
Potentilla paradoxa	bushy cinquefoil	2	4
Sitanion hystrix	squirreltail	2	3

408 Bow City East

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Bacopa rotundifolia	water hyssop	3	5

409 Harrington

Natural Subregion(s)

Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Amaranthus californicus	Californian amaranth	4	5

410 High River

Natural Subregion(s)

Foothills Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Amaranthus californicus	Californian amaranth	4	5

411 Livingstone Falls

Natural Subregion(s)

Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Salix sitchensis	Sitka willow	3	5
Saxifraga odontoloma	saxifrage	3	4

ID Special Feature Polygon Name

411 Livingstone Falls Natural Subregion(s)
Sub-Alpine

412 Chain Lakes Natural Subregion(s)
Foothills Parkland

<i>Vegetation Community Element Name</i>
Pinus flexilis alliance

414 Chapel Butte Natural Subregion(s)
Montane

<i>Vegetation Community Element Name</i>
Pinus flexilis alliance

415 Big Coulee Natural Subregion(s)
Foothills Fescue
Montane

<i>Vegetation Community Element Name</i>
Pinus flexilis alliance

416 Willow Creek Little Bluestem Natural Subregion(s)
Foothills Fescue
Mixedgrass

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Schizachyrium scoparium var scoparium	little bluestem	4	5

<i>Vegetation Community Element Name</i>
Schizachyrium scoparium - Poa interior

417 Little Bow Natural Subregion(s)
Dry Mixedgrass

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Lycopus americanus	American water-horehound	2	5
Muhlenbergia asperifolia	scratch grass	2	4
Sagittaria latifolia	broad-leaved arrowhead	3	4

418 Cranford Natural Subregion(s)
Dry Mixedgrass

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Rorippa truncata	blunt-leaved yellow cress	3	5

419 Coaldale Natural Subregion(s)
Mixedgrass

<i>Scientific Element Name (Vascular Plants)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Bahia oppositifolia	picradeniopsis	3	5

420 Grand Forks Natural Subregion(s)
Dry Mixedgrass

<i>Scientific Element Name (Vertebrate Animals)</i>	<i>Common Name</i>	<i>ERank</i>	<i>PARep</i>
Bufo cognatus	Great Plains Toad	2	5

ID Special Feature Polygon Name

420 Grand Forks

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Cuscuta gronovii	common dodder	3	5

421 Medicine Hat West

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Moxostoma anisurum	silver redhorse	2	5
Phrynosoma douglasii var brevirostre	short-horned lizard	2	4
Rana pipiens	northern leopard frog	2	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Atriplex powellii	Powell's saltbush	3	5
Coreopsis tinctoria	common tickseed	3	5
Cryptantha minima	small cryptanthe	3	5
Linanthus septentrionalis	linanthus	3	3
Polanisia dodecandra	clammyweed	3	5
Potentilla paradoxa	bushy cinquefoil	2	4
Scirpus pallidus	pale bulrush	3	4
Thelesperma marginatum	greenthread	3	5

422 Redcliff NW

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Athene cunicularia	Burrowing Owl	3	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Centunculus minimus	chaffweed	3	5

423 Elkwater Lake West

Natural Subregion(s)

Montane

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Lomatium cous	biscuit-root	3	3

426 Buffalo Trail Lake

Natural Subregion(s)

Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Danthonia unispicata	one-spike oat grass	2	4
Juncus confusus	few-flowered rush	2	4
Potentilla plattensis	low cinquefoil	3	2
Sisyrinchium septentrionale	pale blue-eyed grass	4	4
Spartina pectinata	prairie cord grass	3	4
Townsendia exscapa	low townsendia	3	5

427 Bare Creek

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Astragalus purshii	Pursh's milk vetch	2	4
Boisduvalia glabella	smooth boisduvalia	2	3
Centunculus minimus	chaffweed	3	5
Danthonia unispicata	one-spike oat grass	2	4
Marsilea vestita	hairy pepperwort	3	5
Oenothera flava	low yellow evening-primrose	3	4
Polygonum watsonii	Watson's knotweed	4	4

ID Special Feature Polygon Name

428 Sage Creek #3

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Atriplex truncata	saltbush	3	5

429 Craigowai

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Lilaea scilloides	flowering-quillwort	4	4

430 Pinhorn Yucca

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Yucca glauca	soapweed	3	5

Vegetation Community Element Name
Yucca glauca/ Calamovilfa longifolia shrub herbaceous

431 Philip Coulee

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Spartina pectinata	prairie cord grass	3	4

432 Manyberries

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Lilaea scilloides	flowering-quillwort	4	4

433 Foremost

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Downingia lacta	downingia	3	4

434 Milk River Town

Natural Subregion(s)

Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Lagurus curtatus	sagebrush vole	1	4
Rana pipiens	northern leopard frog	2	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Astragalus kentrophyta var kentrophyta		4	4

435 Pothole Creek

Natural Subregion(s)

Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Downingia lacta	downingia	3	4

ID Special Feature Polygon Name

435 Pothole Creek

Natural Subregion(s)
Mixedgrass

436 Beaverdam Lake SE

Natural Subregion(s)
Foothills Parkland
Montane

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Alopecurus occidentalis	alpine foxtail	2	3
Trisetum canescens	tall trisetum	4	4

437 Carway

Natural Subregion(s)
Foothills Fescue

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Iris missouriensis	western blue flag	3	4

438 Burmis

Natural Subregion(s)
Montane

Vegetation Community Element Name
Pinus flexilis alliance

439 Con Creek

Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Spiranthes lacera	northern slender ladies'-tresses	3	5

440 Ft. McMurray Northeast

Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Schistidium agassizii	elf bloom moss	4	4

441 Inglis Island

Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Polygala paucifolia	fringed milkwort	3	5

442 Ft. McMurray City

Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Astragalus bodinii	Bodin's milk vetch	4	5

443 Many Islands Lake West

Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Munroa squarrosa	false buffalo grass	3	5

ID Special Feature Polygon Name

444 Hilda North

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Bufo cognatus	Great Plains Toad	2	5

445 Empress hibernacula

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Crotalus viridis	prairie rattlesnake	1	
Rana pipiens	northern leopard frog	2	

446 Sage Creek #1

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Athene cunicularia	Burrowing Owl	3	
Centrocercus urophasianus	Sage Grouse	3	
Charadrius montanus	Mountain Plover	5	5
Phrynosoma douglasii var brevirostre	short-horned lizard	2	4
Rana pipiens	northern leopard frog	2	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Astragalus purshii	Pursh's milk vetch	2	4
Atriplex canescens	saltbush	1	5
Boisduvalia glabella	smooth boisduvalia	2	3
Crepis atriobarba	hawk's-beard	2	2
Crepis occidentalis	small-flowered hawk's-beard	2	3
Danthonia unispicata	one-spike oat grass	2	4
Psilocarphus elatior	woollyheads	3	4

447 Wildhorse #2

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Centrocercus urophasianus	Sage Grouse	3	

448 Hoople Lake

Natural Subregion(s)

Dry Mixedwood

Lower Foothills

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex pedunculata	sedge	4	5

449 Wabasca River

Natural Subregion(s)

Central Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Astragalus bodinii	Bodin's milk vetch	4	5

450 Diamond City

Natural Subregion(s)

Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Cuscuta gronovii	common dodder	3	5

ID Special Feature Polygon Name

451 Scotford

Natural Subregion(s)
Central Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Dichanthelium oligosanthos	sand millet	3	5

452 Goat Creek

Natural Subregion(s)
Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Epilobium luteum	willowherb	3	4
Parnassia parviflora	small northern grass-of-parnassus	3	2

453 Cloudy Ridge

Natural Subregion(s)
Montane

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Festuca subulata	fescue	3	5
Trisetum canescens	tall trisetum	4	4

454 Halfway Lake

Natural Subregion(s)
Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Malaxis paludosa	bog adder's-mouth	4	4

455 Wakomao Lake

Natural Subregion(s)
Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex rostrata	beaked sedge	2	2
Drosera anglica	oblong-leaved sundew	2	4
Drosera linearis	slender-leaved sundew	3	3
Malaxis paludosa	bog adder's-mouth	4	4
Scirpus pumilus var rollandii	dwarf bulrush	4	2

456 Pincher Creek

Natural Subregion(s)
Foothills Fescue

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Danthonia californica	California oat grass	1	3
Juncus confusus	few-flowered rush	2	4
Oenothera flava	low yellow evening-primrose	5	4
Plantago canescens	western ribgrass	3	4

457 Bob Creek

Natural Subregion(s)
Montane

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Conimitella williamsii	conimitella	4	3

458 Coleman

Natural Subregion(s)
Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Carex umbellata	umbellate sedge	2	4
Draba densifolia	whitlow-grass	2	3
Lewisia pygmaea var pygmaea	dwarf bitter-root	2	2
Lithophragma glabrum	rockstar	3	2
Lupinus minimus	least lupine	4	3
Penstemon fruticosus var scouleri	shrubby beardtongue	4	3

ID Special Feature Polygon Name

458 Coleman

Natural Subregion(s)
Sub-Alpine

459 Akasu Lake

Natural Subregion(s)
Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	4	5

460 Albert Lake

Natural Subregion(s)
Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius melodus	Piping Plover	4	5

461 Cutbank Creek

Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Charadrius montanus	Mountain Plover	5	5

462 Namur Lake

Natural Subregion(s)
Boreal Highlands

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Pelecanus erythrorhynchos	American White Pelican	4	5

463 Snipe Creek

Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Pelecanus erythrorhynchos	American White Pelican	4	5

464 Utikuma Lake

Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Pelecanus erythrorhynchos	American White Pelican	4	5

465 Pelican Lake

Natural Subregion(s)
Central Mixedwood

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Pelecanus erythrorhynchos	American White Pelican	4	5

466 Door Jam

Natural Subregion(s)
Montane

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Pellaea gastonyi		4	4

467 Rossington

Natural Subregion(s)
Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Physostegia ledinghamii		4	4

ID Special Feature Polygon Name

467 Rossington Natural Subregion(s)
Dry Mixedwood

468 Manola #2 Natural Subregion(s)
Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Physostegia ledinghamii		4	4

469 Naman Natural Subregion(s)
Central Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Physostegia ledinghamii		4	4

470 Astotin Creek Natural Subregion(s)
Central Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Physostegia ledinghamii		4	4

471 Clover Bar Natural Subregion(s)
Central Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Asclepias ovalifolia	low milkweed	2	3
Carex retrorsa	turned sedge	2	4
Physostegia ledinghamii		4	4

472 Lea Park Natural Subregion(s)
Central Parkland
Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Physostegia ledinghamii		4	4

473 Grassy Mountain Crowsnest Natural Subregion(s)
Montane
Sub-Alpine

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Artemisia tridentata	big sagebrush	2	4
Aster campestris	meadow aster	2	5
Polygonum watsonii	Watson's knotweed	4	4

Site Name	Landform Element Name	Subelement	ERank	PARep
Crowsnest Pass	Flatirons		1	3

474 Pakowki Lake Polygonum Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Polygonum watsonii	Watson's knotweed	4	4

ID Special Feature Polygon Name

476 Manyberries Creek

Natural Subregion(s)

Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Puccinellia cusickii	Cusick's salt-meadow grass	3	5

477 Vicary Creek

Natural Subregion(s)

Sub-Alpine

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pretiosa	spotted frog	4	

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Ranunculus uncinatus	natry buttercup	2	2

478 Savanna Creek

Natural Subregion(s)

Montane

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pretiosa	spotted frog	4	

479 Galwey Creek

Natural Subregion(s)

Foothills Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	4
Rana pretiosa	spotted frog	4	

481 Glenmore Park

Natural Subregion(s)

Foothills Parkland

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Sisyrinchium septentrionale	pale blue-eyed grass	4	4

482 Calgary Bow River

Natural Subregion(s)

Foothills Fescue

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Sisyrinchium septentrionale	pale blue-eyed grass	4	4

483 Conrich

Natural Subregion(s)

Foothills Fescue

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Sisyrinchium septentrionale	pale blue-eyed grass	4	4

484 Kirriemuir

Natural Subregion(s)

Northern Fescue

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Sisyrinchium septentrionale	pale blue-eyed grass	4	4

485 Lessard Lake

Natural Subregion(s)

Dry Mixedwood

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Najas flexilis	slender naiad	3	4
Sisyrinchium septentrionale	pale blue-eyed grass	4	4

ID Special Feature Polygon Name

485 Lessard Lake

Natural Subregion(s)

Dry Mixedwood

486 Sage Creek #2

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Sisyrinchium septentrionale	pale blue-eyed grass	4	4

487 Hidden Creek

Natural Subregion(s)

Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Pohlia longicolla		4	4

Vegetation Community Element Name

Pinus flexilis alliance

488 Gould Dome

Natural Subregion(s)

Alpine

Sub-Alpine

Vegetation Community Element Name

Pinus flexilis alliance

489 Cabin Ridge

Natural Subregion(s)

Sub-Alpine

Vegetation Community Element Name

Pinus flexilis alliance

490 Beaver Creek

Natural Subregion(s)

Sub-Alpine

Vegetation Community Element Name

Pinus flexilis alliance

491 Lac Tremble

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

492 Albert Lake Fescue

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

493 Torlea Fescue

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

ID Special Feature Polygon Name

494 Viking #3 Fescue

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

495 Strome

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

496 Viking #2 Fescue

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

497 Viking #1 Fescue

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

498 Amisk #3 Fescue

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

499 Hardisty #8

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

500 Hardisty #6 Fescue

Natural Subregion(s)

Central Parkland

Scientific Element Name (Vascular Plants)

Oenothera serrulata

Common Name

shrubby evening-primrose

ERank

2

PARep

5

Vegetation Community Element Name

Festuca hallii alliance

501 Amisk Fescue

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

ID Special Feature Polygon Name

502 Bruce Lake

Natural Subregion(s)

Central Parkland

Northern Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	

Vegetation Community Element Name

Festuca hallii alliance

503 Salt Lake

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

504 Paintearth

Natural Subregion(s)

Central Parkland

Vegetation Community Element Name

Festuca hallii alliance

505 Bodo West #2

Natural Subregion(s)

Northern Fescue

Vegetation Community Element Name

Festuca hallii alliance

506 Bodo East

Natural Subregion(s)

Northern Fescue

Vegetation Community Element Name

Festuca hallii alliance

507 Watts Lake Fescue

Natural Subregion(s)

Northern Fescue

Vegetation Community Element Name

Festuca hallii alliance

508 Bodo

Natural Subregion(s)

Northern Fescue

Vegetation Community Element Name

Festuca hallii alliance

509 Hell's Gate Water Gap

Natural Subregion(s)

Upper Foothills

Site Name	Landform Element Name	Subelement	ERank	PARep
Hell's Gate Area	Water Gaps		1	3

ID Special Feature Polygon Name

510 Highland Park

Natural Subregion(s)

Dry Mixedwood

Vegetation Community Element Name

Peace River Parkland remnant grasslands

511 Peace River Many Island

Natural Subregion(s)

Dry Mixedwood

Vegetation Community Element Name

Peace River Parkland remnant grasslands

512 Grassi Lake

Natural Subregion(s)

Subalpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Stegonia pilifera		4	3

Site Name	Landform Element Name	Subelement	ERank	PARep
Canmore Area	Rock-Shelters		1	2
Canmore Area	Disappearing Streams		1	2

513 Burning Sulphur

Natural Subregion(s)

Central Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Muddy River Area	Burning sulphur		4	5

514 Hot Pot

Natural Subregion(s)

Wetland Mixedwood

Site Name	Landform Element Name	Subelement	ERank	PARep
Lutose Creek Area	Burning gas		4	5

517 Bow Valley

Natural Subregion(s)

Montane

Sub-Alpine

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Fissidens grandifrons		3	5

518 Glenmore

Natural Subregion(s)

Foothills Fescue

Foothills Parkland

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Fissidens grandifrons		3	5

519 Macleod/Moose Creek

Natural Subregion(s)

Lower Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Fontinalis missourica		2	5

ID Special Feature Polygon Name

520 Edson South Natural Subregion(s)
Lower Foothills

Scientific Element Name (Non-vascular Plants)	Common Name	ERank	PARep
Barbula coreensis		4	5

521 Purple Springs South Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Bufo cognatus	Great Plains Toad	2	5

522 Purple Springs North Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Bufo cognatus	Great Plains Toad	2	5

523 Lake Newell Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Bufo cognatus	Great Plains Toad	2	5

524 Little Rolling Hills Natural Subregion(s)
Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Bufo cognatus	Great Plains Toad	2	5

525 Actna Natural Subregion(s)
Foothills Fescue

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Lagurus curtatus	sagebrush vole	1	4
Rana pipiens	northern leopard frog	2	4

Scientific Element Name (Vascular Plants)	Common Name	ERank	PARep
Allium geoyi	Geyer's onion	3	3
Alopecurus occidentalis	alpine foxtail	2	3
Amaranthus californicus	California amaranth	4	5
Camassia quamash var quamash	blue camas	2	4
Oxytropis lagopus var conjugans	hare-footed locoweed	3	4
Populus angustifolia	narrow-leaf cottonwood	2	4

526 Racehorse Creek Natural Subregion(s)
Subalpine

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pretiosa	spotted frog	4	

527 Meinsinger Creek Natural Subregion(s)
Foothills Parkland

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pretiosa	spotted frog	4	

ID Special Feature Polygon Name

528 St. Agnes

Natural Subregion(s)

Kazan Upland

Site Name	Landform Element Name	Subelement	ERank	PARep
St. Agnes Lake Area	Crag-and-Tail		4	4

529 Jenner Springs

Natural Subregion(s)

Dry Mixedgrass

Scientific Element Name (Vertebrate Animals)	Common Name	ERank	PARep
Rana pipiens	northern leopard frog	2	

Note: No ERank or PARep available for "Vegetation Communities"

Table 2. Special Feature Polygons, Selection Factors, Evaluation Scores and Conservation Priority Levels. (*Ownership is public and environmental integrity is intact*).

ID	Special Feature Polygon Name	Selection Factor(s)				Evaluation Scores							Priority
		Rare	Outstanding	At Risk	Assemblage	ERank	EnSig	#SE	#SEG	Evol	Threat	PARep	Level
4	West Castle	Y	Y		Y	4	4	5	4	5	5	3	4
5	Front Canyons	Y	Y		Y	4	4	5	3	5	4	2	4
6	Big Sagebrush	Y	Y		Y	4	4	5	4	5	4	3	4
7	Ptolemy Creek	Y	Y		Y	4	4	5	3	5	4	3	4
8	Beavermines Valley	Y	Y		Y	4	3	5	3	4	4	3	4
9	Carbondale Valley	Y			Y	4	2	5	1	5	4	2	4
10	Lynx Creek	Y			Y	4	3	5	3	5	4	3	4
11	Hillcrest Mountain	Y			Y	4	2	5	2	5	4	3	4
12	Crowsnest River	Y	Y		Y	4	4	5	2	5	4	3	4
13	Pincher Creek South	Y			Y	4	2	4	2	4	4	3	4
14	Pollhaven				Y	2	2	3	1	4	4	2	2
15	Mokowan Butte		Y		Y	4	4	4	2	4	4	3	4
16	Sugarloaf Mountain	Y			Y	4	2	4	1	5	3	3	4
17	Livingstone Gap	Y	Y		Y	3	2	3	3	5	4	4	3
18	Plateau Mountain Ecological Reserve Extension	Y	Y		Y	4	2	5	4	2	3	3	4
19	Pekisko	Y	Y		Y	4	3	4	3	4	4	4	4
20	Upper Highwood				Y	4	2	4	1	2	3	2	4
21	Sheep River	Y		Y	Y	3	2	4	3	3	4	3	3
22	Forgetmenot Mountain		Y		Y	4	3	3	2	3	4	3	4
23	Moose Mountain	Y	Y		Y	4	3	4	2	2	3	3	4
24	Canmore Corridor/Lac des Arcs		Y		Y	4	2	4	3	4	4	3	4
25	Mt. Lorette	Y			Y	5	4	5	3	2	3	3	5
26	Lower Kananskis River				Y	4	2	4	2	4	4	3	4
27	Clearwater River West				Y	4	1	4	1	3	3	2	4
28	Ram Mountain	Y			Y	4	4	5	1	3	3	3	4
29	Ya Ha Tinda	Y	Y		Y	4	3	4	2	4	4	3	4
30	Kootenay Plains Ecological Reserve Extension				Y	4	2	4	2	4	4	4	4
31	White Goat Lakes		Y	Y	Y	4	3	4	3	4	4	4	4
32	Cardinal Divide Natural Area Extension	Y	Y	Y	Y	5	3	5	2	2	3	3	5
33	Cardinal River Headwaters	Y			Y	4	4	5	2	2	3	3	4
34	Cadomin Cave	Y	Y		Y	5	4	5	4	2	3	4	5
35	Coliseum-Shunda Mountain	Y	Y	Y	Y	4	3	5	3	3	3	3	4
36	Brazeau Tufa	Y	Y		Y	4	2	4	3	3	3	4	4
37	Ambler Mountain/Copton Ridge/Mt. Hamell	Y			Y	5	3	5	2	4	4	4	5
38	Kakwa North	Y	Y		Y	4	2	5	3	3	3	2	4
39	Blood Timber Limit	Y	Y		Y	4	3	5	2	4	4	3	4
40	Beauvais Lake Provincial Park Extension	Y			Y	4	2	3	2	4	4	4	4
41	Crowsnest Mountain		Y			3	3	1	1	5	3	2	3
42	Mt. Livingstone Natural Area Extension	Y				4	2	2	1	4	4	2	4
43	Black Mountain	Y	Y		Y	4	4	4	2	4	4	4	4

<i>ID</i>	<i>Special Feature Polygon Name</i>	<i>Selection Factor(s)</i>				<i>Evaluation Scores</i>							<i>Priority</i>
		<i>Rare</i>	<i>Outstanding</i>	<i>At Risk</i>	<i>Assemblage</i>	<i>ERank</i>	<i>EnSig</i>	<i>#SE</i>	<i>#SEG</i>	<i>Evol</i>	<i>Threat</i>	<i>PARep</i>	<i>Level</i>
44	Upper Oldman Rock Cut Terraces		Y			3	3	3	3	4	4	4	3
45	Fisher Creek at Maclean Trail	Y			Y	3	2	3	1	3	4	4	3
46	Fortress Mountain	Y	Y		Y	5	4	4	2	2	3	2	5
47	Ratsnest Cave	Y	Y		Y	3	3	3	2	4	4	2	3
49	Morley Drumlins		Y			1	3	1	1	4	4	4	3
50	Devil's Head Klippe		Y			3	2	1	1	2	3	2	3
51	Lonepine Creek Dendritic Eskers		Y			1	3	1	1	4	5	5	3
52	Baseline Fire Tower	Y				4	3	3	1	3	3	2	4
53	Ram River Falls/Canyon	Y	Y		Y	4	3	3	2	3	3	3	4
54	Bighorn Mountains/South Ram				Y	4	2	3	1	3	3	3	4
55	Landslide Lake		Y			3	2	1	1	2	3	1	3
57	Payne-Beaverdam				Y	4	2	3	1	4	4	2	4
58	Police Outpost Provincial Park Extension	Y			Y	4	2	4	1	4	4	3	4
59	Whiskey Gap	Y	Y	Y	Y	4	4	5	3	3	4	4	4
60	Del Bonita Uplands/Shanks Lake	Y	Y		Y	5	4	3	2	3	5	5	5
61	Ross Grassland Natural Area Extension	Y				4	4	2	1	3	4	4	4
62	Sweetgrass Hills West (base)		Y	Y	Y	2	4	4	2	5	5	4	4
63	Sweetgrass Hills East		Y		Y	4	4	3	2	5	5	3	4
64	Willow Creek		Y			4	2	3	2	3	5	4	4
65	Water Valley	Y			Y	4	2	3	2	4	4	4	4
66	Airdrie Murdlins		Y			4	3	1	1	3	4	5	4
68	Milk River Valley - Pinhorn	Y	Y	Y	Y	4	4	5	4	5	3	4	4
69	Lost River	Y	Y		Y	5	4	5	4	5	3	5	5
70	Manyberries Creek Badlands		Y		Y	3	4	4	4	5	5	4	4
71	Pakowki Dunes	Y	Y	Y	Y	4	4	5	3	5	3	5	4
72	City of Lethbridge and area	Y	Y	Y	Y	3	3	5	3	3	5	5	3
73	Brockett		Y			3	3	3	2	3	3	4	3
74	Hilda Sand Dunes	Y			Y	4	2	4	1	5	3	4	4
75	Middle Sand Hills	Y	Y	Y	Y	5	4	5	3	5	3	4	5
76	Dune Point	Y	Y		Y	3	4	4	4	5	3	4	4
77	Wildhorse #1	Y	Y	Y	Y	4	4	4	3	5	3	4	4
78	Black Butte	Y	Y			4	4	1	1	3	5	5	4
80	Verdigris Coulee		Y	Y		3	4	2	2	5	3	5	4
81	Reed Lake				Y	3	2	4	2	3	4	4	3
82	Glenwood Erratic		Y			1	3	1	1	3	4	4	3
83	St. Mary River Incised Meanders		Y			1	3	1	1	3	4	3	3
84	Mud Butte		Y			1	3	1	1	3	5	5	3
85	Neutral Hills		Y			1	3	1	1	3	5	5	3
86	Craigmyle/Clear Lake/Victoria Lake	Y	Y			4	3	3	2	3	5	5	4
87	Mudspring Lake Soapholes		Y			3	3	1	1	4	5	5	3
88	Drumheller Badlands	Y	Y	Y	Y	4	3	4	3	3	5	5	4
90	Horseshoe Lake	Y	Y			2	2	2	2	4	5	5	2
91	Eagle Butte Impact Structure	Y				4	3	1	1	3	5	5	4

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		<i>Rare</i>	<i>Outstanding</i>	<i>At Risk</i>	<i>Assemblage</i>	<i>ERank</i>	<i>EnSig</i>	<i>#SE</i>	<i>#SEG</i>	<i>Evol</i>	<i>Threat</i>	<i>PARep</i>	<i>Level</i>
92	Ribstone Creek	Y		Y	Y	4	2	4	4	4	5	4	4
93	Fabyan			Y	Y	3	2	4	2	4	5	5	4
94	David Lake Ecological Reserve Extension	Y			Y	3	2	3	1	4	5	4	3
95	Reflex Lake/Salt Springs	Y	Y			3	4	3	2	4	5	5	4
96	Edgerton Landslide		Y			1	3	1	1	4	5	3	3
97	Edgerton Dunes		Y			4	3	2	1	4	5	5	4
98	Lloydminster Crevasse Fillings		Y			1	3	1	1	4	5	4	3
99	Kinsella Tufa and Ice-walled Channel		Y			1	3	2	1	4	5	5	3
100	Oliva Lake		Y			1	3	2	1	4	5	5	3
101	Driedmeat Lake	Y	Y			4	2	2	1	4	5	5	4
102	Coal Lake		Y			3	2	1	1	4	5	5	3
103	Jacknife Springs		Y			1	3	1	1	3	4	4	3
104	Maqua Lake	Y			Y	3	3	3	1	2	3	5	3
105	Mameo Beach/Pigeon Lake	Y			Y	4	3	4	1	2	4	4	4
106	Edmonton Ravines	Y			Y	4	2	5	2	4	5	4	4
107	Fort Saskatchewan	Y			Y	4	4	5	2	4	5	4	4
108	Blackfoot Reserve	Y	Y		Y	4	3	5	3	2	4	4	4
109	Lac St. Anne North	Y			Y	4	2	5	2	2	4	4	4
110	Pine Creek	Y			Y	4	3	4	2	3	4	5	4
111	Windfall Creek				Y	4	2	4	2	3	4	4	4
112	Smoke Lake	Y	Y		Y	4	2	4	3	3	4	4	4
113	Goose Mountain Ecological Reserve Extension	Y			Y	4	2	5	2	3	4	4	4
114	Wolf Lake		Y		Y	3	3	4	3	2	3	4	3
116	Crow Lake Extension	Y			Y	4	2	4	1	2	3	4	4
118	Gregoire Lake Provincial Park Extension				Y	2	1	3	2	2	3	4	2
120	Cameron Hills	Y	Y		Y	4	4	4	2	4	3	4	4
121	Caribou Mountains (Yates River)	Y			Y	4	3	3	1	4	3	5	4
122	Thistle Creek-Brazee Bluehole Springs		Y			4	3	1	1	3	3	4	4
123	Thunder Lake Eskers		Y			1	3	1	1	3	3	4	3
124	Grassy Mountain Nordegg	Y			Y	5	4	4	1	3	3	4	5
125	McGregor Lake		Y		Y	4	3	3	2	3	3	3	4
126	Stevens Creek	Y			Y	3	3	3	1	3	3	3	3
127	Shunda Water Gap		Y			1	4	1	1	3	3	3	4
129	Mercoal				Y	2	1	4	1	3	3	3	3
130	Sundance Hoodoos		Y			1	3	1	1	3	4	2	3
132	Genessee Bridge				Y	4	3	4	1	2	4	4	4
133	Kilini Creek	Y	Y		Y	4	3	4	3	2	4	3	4
134	Sturgeon River Delta		Y			1	3	1	1	4	5	3	3
135	Cold Lake Baymouth Bars	Y	Y			4	3	1	1	2	3	5	4
136	Muriel Lake hill/hole pair		Y			1	2	1	1	2	4	5	2
137	Pakan Bog Iron Springs		Y			1	2	1	1	2	4	3	2
138	Whitefish Lake Rubble Terrain		Y			1	3	1	1	2	4	5	3
139	Muddy Creek/Nose Mountain	Y				3	4	2	1	3	3	4	5

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		<i>Rare</i>	<i>Outstanding</i>	<i>At Risk</i>	<i>Assemblage</i>	<i>ERank</i>	<i>EnSig</i>	<i>#SE</i>	<i>#SEG</i>	<i>Evol</i>	<i>Threat</i>	<i>PARep</i>	<i>Level</i>
139	Muddy Creek/Nose Mountain	Y				5	4	2	1	3	3	4	5
140	Calahoo Creek Warm Springs		Y			4	2	1	1	2	3	4	4
141	SweatHouse Fire Tower	Y			Y	4	3	4	2	3	4	4	4
142	Swan River	Y			Y	3	2	3	2	3	3	5	3
143	Athabasca Flutings		Y			3	3	1	1	2	4	5	3
144	Island Lake		Y			4	2	1	1	2	4	5	4
145	Bourque Lake Tunnel Lake		Y			3	2	1	1	2	3	5	3
146	Wappau Lake		Y			3	2	1	1	2	3	3	3
147	Pelican Lake Wetland		Y			1	3	1	1	2	3	5	3
148	Marten Mountain Ribbed Fen		Y			1	2	1	1	3	4	4	2
149	Lesser Slave Lake Provincial Park Extension		Y			1	3	1	1	2	4	4	3
150	McLennan Sloping Fens		Y			4	2	1	1	2	4	5	4
151	Little Smoky Landslide		Y			1	2	1	1	2	4	3	2
153	Bear River Sandhills		Y			1	3	1	1	2	4	4	3
154	Cherry Point Earth Flows		Y			4	3	1	1	2	4	5	4
155	Rycroft Earth Slide		Y			1	3	1	1	2	4	5	3
156	Fairview Marl Lake		Y	Y		3	2	2	2	5	5	3	3
157	Montaganeuse River Earth Slide		Y			1	4	1	1	2	4	5	4
159	Muskeg River Bog		Y			1	3	1	1	2	3	5	3
161	Algar Bog		Y			1	3	1	1	2	3	5	3
162	Clearwater Patterned Fen		Y			3	3	1	1	2	3	5	3
164	Whitemud Falls Ecological Reserve Extension	Y	Y			4	3	2	2	2	3	4	4
165	Muskeg Mountain Channel Fens		Y			1	3	1	1	2	3	5	3
166	Chelsea Creek Flutings		Y			1	4	1	1	2	3	4	4
167	Ells River Incised Meanders		Y			1	3	1	1	2	3	3	3
168	Mackay River Incised Meanders		Y			1	3	1	1	2	3	5	3
169	Fort Hills		Y		Y	5	3	3	2	2	3	4	5
170	Hawk Hills Slope Fens		Y			4	3	1	1	2	4	5	4
171	Wolverine River Sand Hills	Y	Y			4	3	1	1	2	4	5	4
172	LaCrete Sand Hills	Y	Y			4	4	2	1	2	4	5	4
173	Mikkwa River Wooded Bog		Y			1	3	1	1	4	2	5	3
174	Alice Creek		Y			4	3	2	1	4	2	5	4
175	McLelland Lake Sinkholes		Y			1	2	1	1	2	3	1	2
176	Ronald Lake Sandhills	Y	Y			4	3	2	1	2	3	4	4
177	Vermilion Chutes		Y			1	3	1	1	2	4	4	3
178	Fort Vermilion Sandhills		Y			3	4	1	1	2	4	5	4
179	Zama Lakes		Y			4	3	1	1	2	2	5	4
180	Hay Lake Thermokarst Lake		Y			4	3	1	1	2	2	5	4
182	Zama City Patterned Fen		Y			3	2	1	1	2	2	3	3
183	Indian Cabins Peat Plateaux		Y			1	3	1	1	2	2	5	3
184	Bistcho Lake Peat Plateaux		Y			1	3	1	1	4	2	5	3
186	Richardson River	Y	Y		Y	5	4	4	2	5	3	4	5
188	Wythe Lake	Y			Y	4	3	4	2	2	1	4	4

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190	Andrew Lake	Y	Y		Y	4	3	5	3	2	1	4	4
191	Slave River Islands	Y	Y		Y	2	3	3	3	2	2	5	3
192	Fort Smith (Slave River Rapids)	Y	Y		Y	4	4	4	3	2	2	5	4
193	Audet Lake Patterned Fens		Y			1	2	1	1	2	3	4	2
194	Richardson/Marguerite Rivers Dissected Kame		Y			1	3	1	1	2	3	5	3
197	Lake Athabasca South Shore		Y			1	3	1	1	5	2	1	3
202	Leland Lake/Tulip Lake	Y	Y			5	3	3	2	2	1	5	5
205	Many Island Lake		Y			4	3	3	3	5	3	4	4
206	Beaverhills Lake	Y	Y		Y	4	5	3	1	4	5	5	5
207	Sounding Lake	Y	Y			3	4	3	2	4	5	5	4
208	Killarney Lake		Y			3	4	1	1	4	5	3	4
209	Buffalo Lake	Y	Y		Y	4	4	4	3	4	5	4	4
211	Pakowki Lake	Y	Y		Y	4	4	3	2	5	3	5	4
213	Chappice Lake		Y			3	3	2	2	5	3	5	3
214	Namaka Lake	Y	Y			3	3	2	1	3	5	5	3
215	Grassy Island Lake		Y			3	3	1	1	3	5	3	3
216	Gooseberry Lake	Y		Y		3	3	3	2	3	5	5	3
218	Sunken Lake	Y				3	2	2	1	4	5	5	3
220	Gillespie Lake		Y			3	2	1	1	4	5	3	3
221	Baxter Lake	Y	Y			4	2	2	1	4	5	5	4
223	Bittern Lake	Y				4	2	2	1	4	5	5	4
224	Kimiwan Lake		Y			4	4	1	1	2	4	3	4
228	Belly River		Y		Y	3	4	3	3	3	5	4	4
229	St. Mary's River Cottonwood Forests	Y	Y		Y	3	3	4	3	3	4	4	3
230	Bow River Cottonwood Forests	Y	Y		Y	3	3	3	3	3	5	4	3
231	Lower Red Deer River	Y	Y	Y	Y	4	2	5	5	5	3	4	4
236	Cypress Hills		Y	Y	Y	2	4	4	3	4	5	4	4
240	Bain Bluff		Y			2	2	2	2	5	3	4	2
241	Vauxhall	Y				4	2	2	1	5	3	4	4
242	Driftwood Bend Megablock		Y			3	3	1	1	5	3	5	3
243	Turin Dunes	Y	Y		Y	4	4	3	1	5	5	5	4
244	Kipp Megablock		Y		Y	3	4	4	3	3	5	5	4
247	Okotoks Erratic		Y			1	5	1	1	4	4	4	5
248	Cavendish	Y				4	2	1	1	5	3	5	4
249	Thordason Creek	Y				3	2	3	1	3	4	4	3
250	Pearce	Y				4	2	1	1	3	5	4	4
251	Clear Hills		Y			2	4	3	2	3	4	4	4
252	Wapiabi Cave		Y			3	2	2	2	3	3	4	3
253	Moose Point		Y			3	3	1	1	5	2	4	3
254	Mackay River Palsa	Y	Y			5	3	1	1	2	3	5	5
255	Ft. Chipewyan		Y			1	3	1	1	2	1	5	3
256	Charles Lake		Y			3	3	1	1	2	1	5	3
257	Crowsnest Volcanics	Y	Y		Y	4	3	3	2	5	4	5	4

<u>ID</u>	<u>Special Feature Polygon Name</u>	<u>Selection Factor(s)</u>				<u>Evaluation Scores</u>							<u>Priority</u>
		<u>Rare</u>	<u>Outstanding</u>	<u>At Risk</u>	<u>Assemblage</u>	<u>ERank</u>	<u>EnSig</u>	<u>#SE</u>	<u>#SEG</u>	<u>Evol</u>	<u>Threat</u>	<u>PARep</u>	<u>Level</u>
257	Crownsnest Volcanics	Y	Y		Y	4	3	3	2	5	4	5	4
258	Ma Butte	Y				4	3	1	1	5	3	5	4
259	Goosequill Lake	Y				2	2	1	1	4	5	5	2
260	Oldman River	Y	Y		Y	4	3	5	4	3	5	4	4
261	Red Deer Lake	Y				2	1	1	1	4	5	5	2
263	Keho Lake	Y				3	3	3	2	3	5	4	3
264	St. Mary River and Reservoir	Y				3	3	2	1	3	4	5	3
265	Little Fish Lake	Y				2	3	1	1	3	5	5	3
266	Handhills Lake	Y	Y			2	3	1	1	3	5	5	3
267	Chain & Dowling Lakes	Y		Y		4	3	2	2	3	5	5	4
268	Spiers Lake	Y				2	2	1	1	3	5	5	2
269	Miquelon Lake		Y			4	3	2	1	2	4	4	4
271	Muriel Lake	Y				2	1	1	1	2	4	5	2
272	Birch Lake	Y				4	3	1	1	4	5	5	4
273	Junction Lake	Y				2	1	1	1	4	5	5	2
274	Greenlee Lake	Y	Y			3	2	2	1	4	5	5	3
275	Foster Lake	Y				2	1	1	1	4	5	5	2
276	Piper Lake	Y				2	2	1	1	4	5	5	2
277	Metiskow Lake	Y				3	2	2	1	4	5	5	3
278	Neutral Hills #1	Y				2	1	1	1	3	5	5	2
279	Neutral Hills #4	Y				2	1	1	1	3	5	5	2
281	Red Deer #2	Y				2	2	1	1	4	5	4	2
282	Red Deer #3	Y				2	2	1	1	3	5	4	2
284	Bow River (E of San Francisco) #5	Y		Y	Y	4	2	4	2	5	3	4	4
285	Redcliff West		Y	Y		1	3	2	1	5	3	4	3
286	Eagle Butte		Y	Y		2	3	1	1	4	5	4	3
287	Sunnynook			Y		3	2	1	1	5	3	4	3
288	Dorothy			Y		3	2	1	1	5	5	4	3
289	Richdale			Y		3	2	1	1	5	3	4	3
290	Berry Creek			Y		3	2	1	1	5	3	4	3
291	Ft. McMurray		Y			2	2	1	1	2	3	3	2
292	Suffield South	Y			Y	4	4	5	3	5	3	5	4
293	Prince's Springs		Y	Y		2	3	2	2	5	3	3	3
294	Bow Island		Y			2	3	1	1	5	3	4	3
296	Margaret Lake	Y			Y	3	3	4	2	4	2	5	3
297	Lousana Canyon		Y			3	3	1	1	4	5	4	3
298	Kleskun Hills	Y		Y	Y	4	4	4	3	5	5	4	4
299	Hand Hills		Y	Y	Y	3	5	3	4	3	5	4	5
300	Porcupine Hills	Y		Y	Y	4	2	4	5	4	4	3	4
301	Newman volcanics		Y			4	3	2	2	5	3	5	4
302	Barrow Lake	Y				5	4	2	1	2	1	5	5
303	Steen River	Y				3	2	1	1	2	2	4	3
304	Negus Meadow	Y				3	3	1	1	2	2	5	3

ID	Special Feature Polygon Name	Selection Factor(s)				Evaluation Scores							Priority
		Rare	Outstanding	At Risk	Assemblage	ERank	EnSig	#SE	#SEG	Evol	Threat	PARep	Level
305	Sand Point	Y			Y	4	3	4	2	5	2	4	4
307	La Saline West	Y				4	3	1	1	2	3	4	4
308	Tar Island	Y				3	2	1	1	2	3	5	3
309	Beaver River	Y				3	2	1	1	2	3	5	3
310	Gravina Creek	Y				4	2	1	1	3	4	5	4
311	Notikewin	Y				3	3	2	1	2	4	5	3
312	Chinchaga River	Y				4	2	1	1	3	4	5	4
313	Hotehkiss Airfield	Y				3	2	2	1	3	4	5	3
314	Halverson River	Y				3	2	2	1	3	4	5	3
315	Hamlin Creek	Y				4	3	1	1	2	4	5	4
316	Dunvegan	Y		Y		3	3	3	2	2	4	5	3
317	Peace River Parkland			Y		3	3	3	2	5	5	4	3
318	Ft. McMurray West	Y				5	4	1	1	2	3	5	5
319	Clearwater River Spring	Y				3	3	2	1	2	3	5	3
320	Marie Lake	Y				3	2	1	1	2	3	5	3
321	Cold Lake	Y				3	3	2	2	2	3	5	3
322	Sand River	Y				3	2	1	1	2	4	5	3
323	Goodwin Lake	Y				3	2	2	1	2	3	4	3
324	Sakwatanau River	Y				3	2	1	1	3	4	5	3
325	Lower Sakwatanau River	Y				3	2	2	1	3	4	5	3
326	Whitcourt	Y				3	2	1	1	2	3	5	3
327	Marshead Creek	Y				3	2	1	1	3	4	4	3
328	Two Creek	Y				4	2	1	1	3	4	5	4
329	Smoky-Kakwa	Y				3	3	1	1	3	4	5	3
330	Simonette Tower	Y				3	3	1	1	3	4	5	3
331	Muddy Creek	Y				3	2	1	1	3	4	4	3
332	Grande Prairie Parkland			Y		3	2	1	1	5	5	4	3
333	Dunvegan Parkland			Y		3	2	1	1	2	4	4	3
334	Ft. Vermilion Parkland			Y		3	2	1	1	2	4	4	3
335	Jean D'Or Parkland		Y	Y		3	3	1	1	2	4	4	3
336	Mumm Creek	Y				4	2	3	1	3	3	4	4
337	Brule Lake	Y			Y	4	3	4	4	4	4	4	4
338	Chip Lake	Y				3	2	1	1	3	4	5	3
339	Horne	Y				4	3	1	1	2	4	5	4
340	Thunder Lake	Y				3	3	2	2	2	4	5	3
341	Barrhead	Y				3	2	2	2	2	4	4	3
342	Manola	Y				3	2	1	1	2	4	5	3
343	Lisburne	Y				4	2	1	1	2	4	5	4
344	Gunn	Y				3	2	1	1	2	4	5	3
345	Noyes Crossing	Y				3	2	2	2	2	4	5	3
346	Moonlight Bay	Y				4	3	3	2	2	4	5	4
347	Fallis	Y				3	3	2	2	2	4	5	3
348	Scuba	Y				3	2	3	1	2	4	4	3

<i>ID</i>	<i>Special Feature Polygon Name</i>	<i>Selection Factor(s)</i>				<i>Evaluation Scores</i>							<i>Priority</i>
		<i>Rare</i>	<i>Outstanding</i>	<i>At Risk</i>	<i>Assemblage</i>	<i>ERank</i>	<i>EnSig</i>	<i>#SE</i>	<i>#SEG</i>	<i>Evol</i>	<i>Threat</i>	<i>PARep</i>	<i>Level</i>
349	Opal	Y				3	2	2	1	2	4	4	3
350	Little Mountain (Edmonton)	Y				3	2	1	1	4	5	5	3
351	Moose Hills Lake	Y				3	2	1	1	2	4	5	3
352	Elk Point	Y				3	2	1	1	2	4	5	3
354	Hind Lake			Y		3	2	1	1	4	5	3	3
355	McLaughlin			Y		3	3	1	1	4	5	3	3
356	Rough Lake Fescue	Y		Y		4	3	3	2	4	5	3	4
357	Black Creek	Y				4	2	1	1	4	5	5	4
358	Hardisty 5			Y		3	2	1	1	4	5	3	3
361	Minburn			Y		3	1	1	1	4	5	3	3
362	Ribstone Fescue			Y		3	3	1	1	4	5	3	3
363	Blackmud Creek	Y				3	2	1	1	4	5	5	3
364	Camrose Fescue			Y		3	2	1	1	4	5	3	3
365	Whitemud Creek	Y				3	2	2	1	4	5	4	3
366	Devonian Gardens North	Y				4	3	1	1	4	5	5	4
367	Strawberry Creek	Y				4	2	1	1	2	4	5	4
368	Pembina River	Y				3	2	1	1	3	3	4	3
369	Brown Creek	Y				4	3	1	1	3	3	4	4
370	Prairie Creek	Y				4	2	1	1	3	3	4	4
371	Prentice Creek West	Y				4	2	1	1	3	4	5	4
372	Blindman River	Y				3	2	1	1	4	5	4	3
373	Ghostpine			Y		3	1	1	1	4	5	3	3
374	Buffalo Lake #2			Y		3	1	1	1	4	5	3	3
375	Donalda Fescue			Y		3	2	1	1	4	5	3	3
377	Alkali Ponds			Y		3	2	1	1	3	5	3	3
378	Killarney Lake #2			Y		3	2	1	1	4	5	3	3
380	Wainwright			Y		3	2	1	1	4	5	3	3
381	Bodo West			Y		3	2	1	1	3	5	3	3
382	New Brigden Fescue		Y	Y		3	4	1	1	5	5	3	4
383	Dowling Fescue			Y		3	1	1	1	3	5	3	3
384	Kirkpatrick Fescue			Y		3	2	1	1	3	5	3	3
385	Kirkpatrick	Y				4	3	1	1	3	5	5	4
386	Antelope Lake	Y				4	3	1	1	5	3	4	4
387	Hand Hills Fescue			Y		3	4	1	1	3	5	3	4
388	Munson Fescue			Y		3	1	1	1	3	5	3	3
389	Torrington	Y				4	3	1	1	4	5	4	4
390	Spray Lakes	Y				4	2	1	1	2	3	4	4
391	Chiniki	Y				4	2	1	1	2	3	4	4
392	Elbow Falls	Y				4	3	1	1	3	4	4	4
393	McLean Creek	Y				4	2	1	1	3	4	4	4
394	Beaupre Creek	Y				4	2	3	2	4	4	3	4
395	Phantom Crag	Y				3	2	1	1	3	3	4	3
396	Cochrane	Y				3	3	1	1	4	4	4	3

<i>ID</i>	<i>Special Feature Polygon Name</i>	<i>Selection Factor(s)</i>				<i>Evaluation Scores</i>							<i>Priority</i>
		<i>Rare</i>	<i>Outstanding</i>	<i>At Risk</i>	<i>Assemblage</i>	<i>ERank</i>	<i>EnSig</i>	<i>#SE</i>	<i>#SEG</i>	<i>Evol</i>	<i>Threat</i>	<i>PARep</i>	<i>Level</i>
397	Bragg Creek	Y				3	2	3	1	3	4	3	3
398	Robinson Hill	Y				4	2	2	1	3	4	4	4
399	Priddis	Y				3	2	2	2	4	4	5	3
400	Calgary	Y			Y	4	2	5	3	4	4	3	4
401	Wintering Hills Fescue			Y		3	2	1	1	3	5	3	3
402	Bull Pound Creek	Y				3	2	1	1	5	3	5	3
403	Finnegan	Y				3	2	1	1	5	3	5	3
404	Patricia	Y				3	2	2	1	5	3	5	3
407	Drowning Ford	Y	Y	Y	Y	4	3	4	2	5	3	4	4
408	Bow City East	Y				3	3	1	1	5	3	5	3
409	Harrington	Y				4	2	1	1	3	5	5	4
410	High River	Y				4	2	2	2	3	4	4	4
411	Livingstone Falls	Y				3	2	2	1	2	3	5	3
412	Chain Lakes			Y		3	2	1	1	4	4	4	3
414	Chapel Butte		Y	Y		3	3	1	1	4	4	4	3
415	Big Coulee			Y		3	2	1	1	4	4	4	3
416	Willow Creek Little Bluestem		Y			4	3	2	2	3	5	5	4
417	Little Bow	Y				3	2	3	1	5	3	4	3
418	Cranford	Y				3	3	1	1	5	3	5	3
419	Coaldale	Y				3	2	1	1	3	5	5	3
420	Grand Forks	Y				3	2	2	2	5	3	5	3
421	Medicine Hat West	Y			Y	3	3	5	2	5	3	5	3
422	Redcliff NW	Y				3	2	2	2	5	3	5	3
423	Elkwater Lake West	Y				3	2	1	1	4	4	3	3
426	Buffalo Trail Lake	Y			Y	4	2	4	1	3	5	4	4
427	Bare Creek	Y			Y	4	4	4	1	5	3	4	4
428	Sage Creek #3	Y				3	3	1	1	5	3	5	3
429	Craigower	Y				4	2	2	2	5	3	4	4
430	Pinhorn Yucca	Y				3	3	2	2	5	3	5	3
431	Philip Coulee	Y				3	2	1	1	5	3	4	3
432	Manyberries	Y				4	2	1	1	5	3	4	4
433	Foremost	Y				3	2	1	1	5	3	4	3
434	Milk River Town	Y			Y	4	2	3	2	3	5	4	4
435	Pothole Creek	Y				3	2	1	1	3	5	4	3
436	Beaverdam Lake SE	Y				4	2	2	1	4	4	4	4
437	Carway	Y	Y			3	4	1	1	3	4	4	4
438	Burmis			Y		3	2	1	1	4	4	4	3
439	Con Creek	Y				3	3	1	1	2	3	5	3
440	Ft. McMurray Northeast	Y				4	3	1	1	2	3	4	4
441	Inglis Island	Y				3	2	1	1	2	3	5	3
442	Ft. McMurray City	Y				4	2	1	1	2	3	5	4
443	Many Islands Lake West	Y				3	2	1	1	5	3	5	3
444	Hilda North			Y		2	2	1	1	5	3	5	2

ID	Special Feature Polygon Name	Selection Factor(s)				Evaluation Scores							Priority
		Rare	Outstanding	At Risk	Assemblage	ERank	EnSig	#SE	#SEG	Evol	Threat	PARep	Level
445	Empress hibernacula		Y	Y		2	3	2	1	5	3	4	3
446	Sage Creek #1	Y		Y	Y	5	4	5	2	5	3	4	5
447	Wildhorse #2	Y		Y		3	3	1	1	5	3	5	3
448	Hoople Lake	Y				4	3	1	1	3	4	5	4
449	Wabasca River	Y				4	2	1	1	2	3	5	4
450	Diamond City	Y				3	2	1	1	3	5	5	3
451	Scotford	Y				3	3	1	1	4	5	5	3
452	Goat Creek	Y				3	2	2	1	2	3	4	3
453	Cloudy Ridge	Y				4	3	2	1	4	4	5	4
454	Halfway Lake	Y				4	2	1	1	2	4	4	4
455	Wakomao Lake	Y			Y	4	2	4	1	2	4	3	4
456	Pincher Creek	Y			Y	3	2	3	1	3	4	4	3
457	Bob Creek	Y				4	4	1	1	4	4	3	4
458	Coleman	Y			Y	4	2	4	1	5	3	3	4
459	Akasu Lake	Y				4	2	1	1	4	5	5	4
460	Albert Lake	Y				4	1	1	1	4	5	5	4
461	Cutbank Creek	Y				5	4	1	1	5	3	5	5
462	Namur Lake	Y				4	2	1	1	2	3	5	4
463	Snipe Creek	Y				4	2	1	1	2	3	5	4
464	Utikuma Lake	Y				4	4	1	1	2	3	5	4
465	Pelican Lake	Y				4	3	1	1	2	3	5	4
466	Door Jam	Y				4	4	1	1	4	4	4	4
467	Rossington	Y				4	4	1	1	2	4	4	4
468	Manola #2	Y				4	4	1	1	2	4	4	4
469	Namao	Y				4	4	1	1	4	5	4	4
470	Astotin Creek	Y				4	4	1	1	4	5	4	4
471	Clover Bar	Y			Y	4	4	3	2	4	5	4	4
472	Lea Park	Y				4	4	1	1	4	5	4	4
473	Grassy Mountain Crowsnest	Y			Y	4	2	3	2	5	4	4	4
474	Pakowki Lake Polygonum	Y				4	2	1	1	5	3	4	4
476	Manyberries Creek	Y				3	3	1	1	3	5	5	3
477	Vicary Creek	Y				4	2	2	2	5	3	3	4
478	Savanna Creek	Y				4	2	1	1	4	4	3	4
479	Galwey Creek	Y		Y		4	2	2	1	4	4	4	4
481	Glenmore Park	Y				4	2	1	1	4	4	4	4
482	Calgary Bow River	Y				4	2	1	1	3	4	4	4
483	Conrich	Y				4	2	1	1	3	4	4	4
484	Kirriemuir	Y				4	2	1	1	3	5	4	4
485	Lessard Lake	Y				4	2	2	1	2	4	4	4
486	Sage Creek #2	Y				4	2	1	1	5	3	4	4
487	Hidden Creek	Y		Y		4	2	2	2	5	3	4	4
488	Gould Dome			Y		3	2	1	1	5	3	4	3
489	Cabin Ridge			Y		3	2	1	1	2	3	4	3

<u>ID</u>	<u>Special Feature Polygon Name</u>	<u>Selection Factor(s)</u>				<u>Evaluation Scores</u>							<u>Priority</u>
		<u>Rare</u>	<u>Outstanding</u>	<u>At Risk</u>	<u>Assemblage</u>	<u>ERank</u>	<u>EnSig</u>	<u>#SE</u>	<u>#SEG</u>	<u>Evol</u>	<u>Threat</u>	<u>PARep</u>	<u>Level</u>
490	Beaver Creek			Y		3	2	1	1	2	3	4	3
491	Lac Tremble			Y		3	2	1	1	4	5	3	3
492	Albert Lake Fescue			Y		3	2	1	1	4	5	3	3
493	Torlea Fescue			Y		3	3	1	1	4	5	4	3
494	Viking #3 Fescue			Y		3	3	1	1	4	5	4	3
495	Strome			Y		3	3	1	1	4	5	4	3
496	Viking #2 Fescue			Y		3	3	1	1	4	5	4	3
497	Viking #1 Fescue			Y		3	3	1	1	4	5	4	3
498	Amisk #3 Fescue			Y		3	2	1	1	4	5	3	3
499	Hardisty #8			Y		3	2	1	1	4	5	3	3
500	Hardisty #6 Fescue			Y		3	3	2	2	4	5	5	3
501	Amisk Fescue			Y		3	2	1	1	4	5	3	3
502	Bruce Lake			Y		3	2	2	2	4	5	3	3
503	Salt Lake			Y		3	2	1	1	4	5	3	3
504	Paintearth			Y		3	2	1	1	4	5	3	3
505	Bodo West #2			Y		3	2	1	1	3	5	3	3
506	Bodo East			Y		3	2	1	1	3	5	3	3
507	Watts Lake Fescue			Y		3	2	1	1	3	5	3	3
508	Bodo			Y		3	4	1	1	3	5	3	4
509	Hell's Gate Water Gap		Y			1	2	1	1	3	3	3	2
510	Highland Park			Y		3	2	1	1	5	3	4	3
511	Peace River Many Island			Y		3	2	1	1	5	3		3
512	Grassi Lake		Y			4	2	3	2	4	4	2	4
513	Burning Sulphur		Y			4	3	1	1	2	2	5	4
514	Hot Pot		Y			4	3	1	1	2	2	5	4
517	Bow Valley	Y				3	2	1	1	5	4	5	3
518	Glenmore	Y				3	2	1	1	4	4	5	3
519	Macleod/Moose Creek	Y				2	3	1	1	3	3	5	3
520	Edson South	Y				4	3	1	1	3	3	5	4
521	Purple Springs South		Y			2	3	1	1	5	3	5	3
522	Purple Springs North	Y				2	3	1	1	5	3	5	3
523	Lake Newell	Y				2	2	1	1	5	3	5	2
524	Little Rolling Hills	Y				2	2	1	1	5	3	5	2
525	Aetna	Y		Y	Y	4	2	4	2	3	4	4	4
526	Racehorse Creek	Y				4	2	1	1	5	3	2	4
527	Meinsinger Creek	Y				4	2	1	1	5	4	2	4
528	St. Agnes		Y			4	3	1	1	2	1	4	4
529	Jenner Springs			Y		2	3	1	1	5	3	4	3

Table 3. Special Feature Polygons for Immediate Consideration as Protected Areas.*(Ownership is public and environmental integrity is intact).*

<u>Special Feature Polygon Name</u>	<u>ID</u>	<u>Priority</u>	
		<u>Level</u>	<u>Notes</u>
Ambler Mountain/Copton Ridge/Mt. Hamell	37	5	SPNOM
Barrow Lake	302	5	
Beaverhills Lake	206	5	SPCAN, SPNOM; recognized as a RAMSAR site under the Convention of Wetlands of International Importance.
Cadomin Cave	34	5	PNT; SPNOM
Cardinal Divide Natural Area Extension	32	5	SPNOM
Del Bonita Uplands/Shanks Lake	60	5	SPNOM
Fort Hills	169	5	SPNOM
Hand Hills	299	5	SPCAN, SPNOM
Leland Lake/Tulip Lake	202	5	
Lost River	69	5	PNT; SPCAN, SPNOM
Mackay River Palsa	254	5	
Middle Sand Hills	75	5	SPCAN, SPNOM
Mt. Lorette	25	5	SPCAN, SPNOM
Richardson River	186	5	SPCAN, SPNOM.
Sage Creek #1	446	5	SPCAN, SPNOM
Akasu Lake	459	4	
Alice Creek	174	4	SPNOM
Andrew Lake	190	4	
Baseline Fire Tower	52	4	
Beavermines Valley	8	4	SPCAN, SPNOM; portion is PRA
Big Sagebrush	6	4	SPNOM, SPCAN
Black Butte	78	4	SPNOM
Black Mountain	43	4	SPCAN, SPNOM
Bob Creek	457	4	SPCAN, SPNOM
Bodo	508	4	SPCAN, SPNOM.
Brazeau Tufa	36	4	PNT; SPNOM
Burning Sulphur	513	4	PNT
Cameron Hills	120	4	
Cardinal River Headwaters	33	4	SPNOM
Chelsea Creek Flutings	166	4	
Cherry Point Earth Flows	154	4	
Cold Lake Baymouth Bars	135	4	
Coliseum-Shunda Mountain	35	4	SPNOM
Crow Lake Extension	116	4	
Crownsnest Volcanics	257	4	PNT; SPNOM
Dune Point	76	4	SPCAN, SPNOM
Edgerton Dunes	97	4	SPCAN, SPNOM
Forgetmenot Mountain	22	4	SPNOM
Fort Smith (Slave River Rapids)	192	4	SPNOM

<i>Special Feature Polygon Name</i>	<i>ID</i>	<i>Priority Level</i>	<i>Notes</i>
Fort Vermilion Sandhills	178	4	SPNOM
Front Canyons	5	4	SPCAN, SPNOM; portion is PRA
Galwey Creek	479	4	
Hawk Hills Slope Fens	170	4	SPNOM
Hay Lake Thermokarst Lake	180	4	
Hilda Sand Dunes	74	4	SPNOM
Hot Pot	514	4	PNT
Kakwa North	38	4	SPNOM
Kilini Creek	133	4	PNT
Killarney Lake	208	4	SPCAN, SPNOM
Kimiwan Lake	224	4	PNT; SPNOM; Ephemeral lake. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.
Kootenay Plains Ecological Reserve Extension	30	4	SPCAN, SPNOM
LaCrete Sand Hills	172	4	
Many Island Lake	205	4	SPNOM; the lake is a Provincial Bird Sanctuary.
McGregor Lake	125	4	
McLennan Sloping Fens	150	4	SPNOM
Milk River Valley - Pinhorn	68	4	PNT; SPCAN, SPNOM
Mokowan Butte	15	4	SPNOM
Moose Mountain	23	4	PNT; SPNOM
Mt. Livingstone Natural Area Extension	42	4	SPNOM
Mumm Creek	336	4	
Pakowki Dunes	71	4	SPCAN, SPNOM
Pakowki Lake	211	4	SPCAN, SPNOM; the lake is a Provincial Bird Sanctuary.
Payne-Beaverdam	57	4	SPNOM; portion is PRA
Plateau Mountain Ecological Reserve Extension	18	4	SPNOM
Ptolemy Creek	7	4	PNT; SPNOM; portion is PRA
Ram Mountain	28	4	SPNOM
Ram River Falls/Canyon	53	4	SPCAN, SPNOM
Reflex Lake/Salt Springs	95	4	SPCAN, SPNOM
Ronald Lake Sandhills	176	4	
Ross Grassland Natural Area Extension	61	4	SPCAN, SPNOM
Sage Creek #2	486	4	SPCAN, SPNOM
St. Agnes	528	4	
Strawberry Creek	367	4	PNT
Suffield South	292	4	SPNOM
Sweathouse Fire Tower	141	4	
Upper Highwood	20	4	SPNOM
Wakomao Lake	455	4	PNT
West Castle	4	4	SPCAN, SPNOM; portion is PRA
White Goat Lakes	31	4	SPCAN, SPNOM

<i>Special Feature Polygon Name</i>	<i>ID</i>	<i>Priority Level</i>	<i>Notes</i>
Whitemud Falls Ecological Reserve Extension	164	4	SPNOM
Wolverine River Sand Hills	171	4	SPNOM
Wylie Lake	188	4	SPNOM
Ya Ha Tinda	29	4	PNT; SPCAN, SPNOM
Albert Lake Fescue	492	3	
Algar Bog	161	3	
Amisk #3 Fescue	498	3	
Amisk Fescue	501	3	
Bistcho Lake Peat Plateaux	184	3	
Camrose Fescue	364	3	
Chappice Lake	213	3	SPNOM
Clearwater Patterned Fen	162	3	SPNOM
Clearwater River Spring	319	3	SPNOM
Crowsnest Mountain	41	3	SPNOM
Donalda Fescue	375	3	
Eagle Butte	286	3	PNT; SPCAN, SPNOM
Ells River Incised Meanders	167	3	
Fairview Marl Lake	156	3	
Ft. Chipewyan	255	3	
Goat Creek	452	3	SPNOM
Handhills Lake	266	3	SPNOM
Hardisty #6 Fescue	500	3	
Hardisty #8	499	3	
Hardisty 5	358	3	
Hind Lake	354	3	PNT
Indian Cabins Peat Plateaux	183	3	SPNOM
Jean D'Or Parkland	335	3	Two widely separated parkland occurrences.
Killarney Lake #2	378	3	
Lake Athabasca South Shore	197	3	
Landslide Lake	55	3	PNT; SPCAN, SPNOM
Little Fish Lake	265	3	SPCAN, SPNOM
Livingstone Gap	17	3	SPCAN, SPNOM; portion is PRA
Mackay River Incised Meanders	168	3	
Maqua Lake	104	3	SPNOM; portion is PRA
Margaret Lake	296	3	SPNOM
McLaughlin	355	3	
Mikkwa River Wooded Bog	173	3	SPNOM
Moose Point	253	3	
Muskeg Mountain Channel Fens	165	3	
Muskeg River Bog	159	3	
Neutral Hills	85	3	SPNOM

<u>Special Feature Polygon Name</u>	<u>ID</u>	<u>Priority</u>	
		<u>Level</u>	<u>Notes</u>
Peace River Many Island	511	3	
Pelican Lake Wetland	147	3	
Pinhorn Yucca	430	3	PNT; SPCAN, SPNOM
Ribstone Fescue	362	3	SPCAN, SPNOM
Richardson/Marguerite Rivers Dissected Kame	194	3	
Sage Creek #3	428	3	SPCAN, SPNOM
Sakwatanau River	324	3	
Salt Lake	503	3	SPCAN, SPNOM
Sheep River	21	3	PNT; SPCAN, SPNOM
Slave River Islands	191	3	
Strome	495	3	
Sturgeon River Delta	134	3	SPCAN, SPNOM
Sundance Hoodoos	130	3	SPCAN, SPNOM
Torlea Fescue	493	3	PNY
Vermilion Chutes	177	3	SPNOM
Viking #1 Fescue	497	3	
Viking #2 Fescue	496	3	PNT
Viking #3 Fescue	494	3	
Wainwright	380	3	
Wappau Lake	146	3	
Watts Lake Fescue	507	3	
Wildhorse #2	447	3	SPCAN, SPNOM
Wolf Lake	114	3	SPNOM
Zama City Patterned Fen	182	3	
Audet Lake Patterned Fens	193	2	
Gregoire Lake Provincial Park Extension	118	2	PNT; SPNOM
Hell's Gate Water Gap	509	2	SPNOM; adjacent to Willmore Wilderness Park.
Marten Mountain Ribbed Fen	148	2	SPCAN, SPNOM
McLelland Lake Sinkholes	175	2	SPNOM

Codes:

The following codes in the "Notes" column indicate that the Special Feature Polygon is wholly or partly within the indicated land category.

- PNT - Protective Notation Land Use Reservation (for Protected Area)
- PRA - Provincial Recreation Area
- RAMSAR - Wetland of International Significance (Ramsar Convention)
- SPCAN - Special Places Candidate Site
- SPNOM - Special Places Nomination

Table 4. Special Feature Polygons Requiring Further Investigation to Verify Suitability as Protected Areas.

<u>Special Feature Polygon Name</u>	<u>ID</u>	<u>Priority Level</u>	<u>Environmental Integrity</u>	<u>Ownership</u>	<u>Notes</u>
Cutbank Creek	461	5	U	Y	SPCAN, SPNOM; Integrity of site needs verification. Determine fidelity of Mountain Plover to this site.
Fortress Mountain	46	5	U	Y	SPNOM; Determine integrity of elements and feasibility of a protected area designation.
Ft. McMurray West	318	5	U	Y	Integrity of site needs verification.
Grassy Mountain Nordegg	124	5	U	Y	Integrity of site needs verification.
Muddy Creek/Nose Mountain	139	5	U	Y	Integrity of site needs verification.
Aetna	525	4	U	U	Integrity of site needs verification. Determine if elements occur on public land.
Antelope Lake	386	4	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Bare Creek	427	4	U	Y	SPCAN, SPNOM; Integrity of site needs verification. Determine if elements occur off the Express Pipeline ROW.
Baxter Lake	221	4	U	U	Integrity of site needs verification. Determine if elements occur on public land.
Beaverdam Lake SE	436	4	Y	U	SPNOM; Determine if elements occur on public land.
Bighorn Mountains/South Ram	54	4	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Birch Lake	272	4	U	U	Permanant lake with Provincial Bird Sanctuary status.
Bittern Lake	223	4	U	Y	Large permanent lake. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.
Blackfoot Reserve	108	4	U	Y	Blackfoot PRA is on the east end of the polygon. Determine if the moss populations still exist.
Bow River (E of San Francisco) #5	284	4	U	U	Integrity of site needs verification. Determine if elements occur on public land.
Brown Creek	369	4	U	Y	Integrity of site needs verification.
Brule Lake	337	4	U	Y	SPNOM; Integrity of site needs verification. Site inventory may be needed to define areas suitable for protected areas.
Buffalo Lake	209	4	U	Y	Large permanent lake. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.
Buffalo Trail Lake	426	4	U	Y	Integrity of site needs verification. Determine if elements occur off the Express Pipeline ROW.
Calahoo Creek Warm Springs	140	4	U	Y	Integrity of site needs verification.
Canmore Corridor/Lac des Arcs	24	4	U	U	SPCAN, SPNOM. Integrity of site needs verification. Evaluate value of a protected area for the special landform element (alluvial fan dammed lake). Evaluate if the other elements occur on public land.
Carbondale Valley	9	4	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Caribou Mountains (Yates River)	121	4	U	Y	SPNOM; integrity of site needs verification.
Cavendish	248	4	U	Y	SPNOM; Integrity of site needs verification.
Chain & Dowling Lakes	267	4	Y	U	Determine if elements are on public land.
Chinchaga River	312	4	U	Y	SPNOM; Integrity of site needs verification.
Chiniki	391	4	Y	Y	SPCAN, SPNOM
Clear Hills	251	4	U	Y	SPNOM; Integrity of site needs verification.
Clearwater River West	27	4	U	Y	PNT; SPSCAN, SPNOM; Integrity of site needs verification.
Cloudy Ridge	453	4	Y	Y	Determine if elements are within Waterton Lakes NP.

<i>Special Feature Polygon Name</i>	<i>ID</i>	<i>Priority Level</i>	<i>Environmental Integrity</i>	<i>Ownership</i>	<i>Notes</i>
Coleman	458	4	U	Y	SPNOM.
Craigmyle/Clear Lake/Victoria Lake	86	4	U	U	Element reports are old and imprecise. Need to determine if the populations still exist. Integrity of site needs verification.
Craigower	429	4	U	Y	SPCAN, SPNOM; Integrity of site needs verification. Determine if elements still present.
Crowsnest River	12	4	U	Y	SPNOM; Integrity of site needs verification.
Cypress Hills	236	4	U	U	PNT; SPSCAN, SPNOM; Integrity of site needs verification. Determine if elements are on public land.
Door Jam	466	4	U	Y	SPSCAN, SPNOM; Integrity of site needs verification.
Driedmeat Lake	101	4	U	N	The unilobate delta occurs on private land. An interpretive site to view the subglacial channel may be appropriate
Drowning Ford	407	4	Y	U	SPNOM; Determine if hibernacula is still used and its exact location.
Drumheller Badlands	88	4	U	U	SPSCAN, SPNOM; Portions of the area may be suitable for protected area status but this requires further evaluation.
Eagle Butte Impact Structure	91	4	U	U	Public land area too small to adequately represent the feature. An interpretive site to view the impact structure may be appropriate
Edson South	520	4	U	Y	Integrity of site needs verification.
Elbow Falls	392	4	Y	Y	SPNOM; Determine if the nationally significant moss still occurs on site.
Fabyan	93	4	U	U	SPNOM; Integrity of site needs verification. Determine if elements occur on public land.
Fort Saskatchewan	107	4	U	U	Island in the North Saskatchewan River is under PNT. Most of the area is private land. Determine if elements occur on Public land.
Ft. McMurray Northeast	440	4	U	Y	Integrity of site needs verification.
Goose Mountain Ecological Reserve Extension	113	4	U	Y	SPSCAN, SPNOM; integrity of site needs verification.
Grassi Lake	512	4	U	Y	SPSCAN, SPNOM; Integrity of site needs verification.
Grassy Mountain Crowsnest	473	4	U	U	SPNOM; Integrity of site needs verification. Determine if elements occur on public land.
Gravina Creek	310	4	U	Y	Integrity of site needs verification.
Halfway Lake	454	4	U	Y	PNT; Integrity of site needs verification.
Hamlin Creek	315	4	U	Y	Integrity of site needs verification.
Hidden Creek	487	4	U	Y	SPNOM; Integrity of site needs verification.
Hillcrest Mountain	11	4	U	Y	SPSCAN, SPNOM; Integrity of site needs verification.
Horne	339	4	U	Y	Integrity of site needs verification.
Island Lake	144	4	U	Y	Relatively large permanent lake with many islands. Evaluate value of a protected area for this landform element alone (Holm Lake). Surveys may locate additional special elements.
Kipp Megablock	244	4	U	U	Determine if elements are on public land.
Kirkpatrick	385	4	U	U	SPNOM; Integrity of site needs verification. Determine if element occurs on public land.
Kirriemuir	484	4	U	Y	Integrity of site needs verification.
La Saline West	307	4	U	Y	Integrity of site needs verification.
Lac St. Anne North	109	4	U	U	Determine if S1 species are still extant and if they occur on public land.
Lea Park	4/2	4	Y	Y	Determine if element still occurs at site.

<u>Special Feature Polygon Name</u>	<u>ID</u>	<u>Priority Level</u>	<u>Environmental Integrity</u>	<u>Ownership</u>	<u>Notes</u>
Lessard Lake	485	4	U	U	Integrity of site needs verification. Determine if elements occur on public land.
Lower Kananskis River	26	4	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Lower Red Deer River	231	4	Y	Y	SPCAN, SPNOM; Portions of the area may be suitable for protected area status but this requires evaluation.
Lynx Creek	10	4	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Ma Butte	258	4	U	Y	SPNOM; Integrity of site needs verification.
Manyberries	432	4	U	U	SPNOM; Integrity of site needs verification. Determine if element occurs on public land.
Manyberries Creek Badlands	70	4	U	Y	SPCAN, SPNOM; Site needs field assessment to determine if special element protection is feasible
McLean Creek	393	4	U	Y	SPNOM; Integrity of site needs verification.
Miquelon Lake	269	4	Y	Y	Large permanent lake with Wildlife Sanctuary status.
Montaganeuse River Earth Slide	157	4	Y	Y	Evaluate value of a protected area for this landform element alone (earth slide). Surveys may locate additional special elements.
Moonlight Bay	346	4	U	U	
Namur Lake	462	4	Y	Y	Large permanent lake. May want to consider Wildlife Sanctuary status or a lake management plan to protect special elements.
New Brigden Fescue	382	4	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Newman volcanics	301	4	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Oldman River	260	4	U	U	PNT; SPNOM; portion is PRA; Portions may be suitable for protected area status but this requires evaluation.
Pakowki Lake Polygonum	474	4	U	Y	Integrity of site needs verification.
Pekisko	19	4	U	Y	SPNOM; Integrity of site needs verification.
Pelican Lake	465	4	Y	Y	Large permanent lake. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.
Pine Creek	110	4	U	Y	Integrity of site needs verification.
Porcupine Hills	300	4	Y	Y	PNT; SPSCAN, SPNOM; Evaluate value of a protected area for this landform element alone (erosional remnant). Determine exact locations of elements. Surveys may locate additional special elements.
Prairie Creek	370	4	U	Y	SPNOM. Integrity of site needs verification.
Prentice Creek West	371	4	U	Y	Integrity of site needs verification.
Racehorse Creek	526	4	U	Y	Integrity of site needs verification.
Ribstone Creek	92	4	Y	U	PNT; SPNOM; determine if elements are on public land.
Robinson Hill	398	4	U	U	SPNOM; Integrity of site needs verification. Determine if elements still occur at site.
Rough Lake Fescue	356	4	U	Y	SPNOM; Integrity of site needs verification.
Sand Point	305	4	Y	U	Determine which elements occur on public land.
Savanna Creek	478	4	U	Y	SPNOM; Integrity of site needs verification.
Shunda Water Gap	127	4	Y	Y	SPNOM; Evaluate value of a protected area for this landform element alone (water gap). An interpretive sign to view the water gap may be appropriate.
Smoke Lake	112	4	U	Y	Portion is PRA; Integrity of site needs verification.
Snipe Creek	463	4	U	Y	Integrity of site needs verification.
Sounding Lake	207	4	U	Y	SPCAN, SPNOM; integrity of site needs verification. Check location of S1 species.

<u>Special Feature Polygon Name</u>	<u>ID</u>	<u>Priority Level</u>	<u>Environmental Integrity</u>	<u>Ownership</u>	<u>Notes</u>
Spray Lakes	390	4	U	Y	SPNOM. Integrity of site needs verification.
Sugarloaf Mountain	16	4	U	Y	SPNOM; Integrity of site needs verification.
Sweetgrass Hills East	63	4	Y	U	SPNOM; Integrity of site needs verification. Determine if elements occur on public land.
Sweetgrass Hills West (base)	62	4	Y	U	SPNOM; Integrity of site needs verification. Determine if elements occur on public land.
Thistle Creek-Brazeau Bluehole Springs	122	4	U	Y	SPNOM; Integrity of site needs verification.
Turin Dunes	243	4	U	U	Integrity of site needs verification. Determine if elements occur on public land.
Two Creek	328	4	U	Y	Integrity of site needs verification.
Utikuma Lake	464	4	Y	Y	Large permanent lake. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.
Vauxhall	241	4	U	Y	Integrity of site needs verification. Determine if elements still occur at the site.
Verdigris Coulee	80	4	U	Y	PNT; SPNOM; an interpretive site to view the channels may be appropriate; additional work required to document features on the PNT site & other crown blocks.
Vicary Creek	477	4	U	Y	SPNOM; Integrity of site needs verification.
Wabasca River	449	4	U	Y	Integrity of site needs verification.
Water Valley	65	4	U	Y	portion is PRA; Integrity of site needs verification.
Whiskey Gap	59	4	U	U	SPNOM; Integrity of site needs verification. Determine if elements occur on private land.
Wildhorse #1	77	4	U	Y	PNT; SPCAN, SPNOM; Integrity of site needs verification.
Willow Creek	64	4	U	U	SPCAN, SPNOM; Integrity of site needs verification. Determine if elements occur on public land.
Willow Creek Little Bluestem	416	4	U	Y	SPNOM; Integrity of site needs verification.
Windfall Creek	111	4	U	Y	Integrity of site needs verification.
Zama Lakes	179	4	U	Y	Large permanent wetlands. Surveys required to determine presence of other special elements.
Alkali Ponds	377	3	U	Y	SPNOM; Integrity of site needs verification.
Athabasca Flutings	143	3	U	Y	Integrity of site needs verification.
Bear River Sandhills	153	3	U	Y	PNT; SPNOM; some portions impacted by ATV activity.
Beaver Creek	490	3	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Beaver River	309	3	U	Y	Integrity of site needs verification.
Berry Creek	290	3	U	Y	Integrity of site needs verification. Evaluate value of a protected area for this special element alone (burrowing owl).
Bodo East	506	3	U	Y	SPNOM; Integrity of site needs verification.
Bourque Lake Tunnel Lake	145	3	U	Y	Integrity of site needs verification. Evaluate value of a protected area for this special element alone (glacial tunnel lake).
Bow Island	294	3	U	Y	SPNOM; Integrity of site needs verification.
Bow River Cottonwood Forests	230	3	Y	U	PNT; SPNOM; Focus on public land west of the Indian Reserve.
Bow Valley	517	3	U	U	Integrity of site needs verification. Determine if element occurs on public land.
Bruce Lake	502	3	U	Y	Integrity of site needs verification.

<u>Special Feature Polygon Name</u>	<u>ID</u>	<u>Priority Level</u>	<u>Environmental Integrity</u>	<u>Ownership</u>	<u>Notes</u>
Bull Pound Creek	402	3	U	U	Integrity of site needs verification. Determine if element occurs on public land.
Cabin Ridge	489	3	U	Y	SPNOM; Integrity of site needs verification.
Chain Lakes	412	3	U	Y	SPNOM; Integrity of site needs verification.
Charles Lake	256	3	Y	Y	Evaluate value of a protected area for this special element alone (fault lake)
Chip Lake	338	3	U	U	Integrity of site needs verification. Determine if element occurs on public land.
Coal Lake	102	3	U	Y	Portion is PRA; an interpretive site to view the tunnel lakes may be appropriate
Cold Lake	321	3	Y	Y	SPNOM; Large permanent lake. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.
Con Creek	439	3	U	Y	Integrity of site needs verification.
David Lake Ecological Reserve Extension	94	3	U	U	SPNOM; Integrity of site needs verification. Determine if elements occur on public land.
Devil's Head Klippe	50	3	Y	Y	SPCAN, SPNOM; Evaluate value of a protected area for this special element alone (klippe).
Dorothy	288	3	U	Y	SPNOM; Integrity of site needs verification. Evaluate value of a protected area for this special element alone (burrowing owl).
Dunvegan	316	3	U	U	PNT; SPNOM; Determine if elements occur on public land.
Dunvegan Parkland	333	3	U	Y	SPNOM; Integrity of site needs verification.
Empress hibernacula	445	3	U	U	SPNOM; Integrity of site needs verification. Determine if hibernacula occur on public land.
Finnegan	403	3	Y	Y	SPNOM; Determine if element still occurs at the site.
Fisher Creek at Maclean Trail	45	3	U	Y	SPNOM; Integrity of site needs verification.
Ft. Vermilion Parkland	334	3	U	Y	SPNOM; Integrity of site needs verification.
Gillespie Lake	220	3	U	Y	Integrity of site needs verification.
Goodwin Lake	323	3	U	Y	Integrity of site needs verification.
Gooseberry Lake	216	3	U	Y	SPNOM; Permanent lake. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements. Review adjacent public land for fescue remnants
Gould Dome	488	3	U	Y	SPNOM; Integrity of site needs verification.
Grande Prairie Parkland	332	3	U	U	Integrity of site needs verification. Determine if element occurs on public land.
Grassy Island Lake	215	3	U	Y	SPCAN, SPNOM; integrity of site needs verification. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.
Greenlee Lake	274	3	U	U	SPCAN, SPNOM; Integrity of site needs verification. Determine if element occurs on public land.
Gunn	344	3	U	U	Integrity of site needs verification. Determine if element occurs on public land.
Halverson River	314	3	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Highland Park	510	3	U	Y	PNT; Integrity of site needs verification.
Hotchkiss Airfield	313	3	U	Y	Integrity of site needs verification. Confirm location of elements.
Jackknife Springs	103	3	U	Y	PNT; Integrity of site needs verification.
Jenner Springs	529	3	U	Y	Integrity of site needs verification.

<u>Special Feature Polygon Name</u>	<u>ID</u>	<u>Priority Level</u>	<u>Environmental Integrity</u>	<u>Ownership</u>	<u>Notes</u>
Keho Lake	263	3	U	Y	Integrity of site needs verification. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.
Kirkpatrick Fescue	384	3	U	Y	Integrity of site needs verification.
Lac Tremble	491	3	U	Y	PNT; SPNOM; Integrity of site needs verification.
Lesser Slave Lake Provincial Park Extension	149	3	U	Y	SPNOM; Integrity of the beach ridges requires verification. If their integrity is poor, is restoration feasible?
Little Bow	417	3	U	U	Integrity of site needs verification. Determine if S1 element occurs on public land.
Livingstone Falls	411	3	U	Y	SPNOM; Integrity of site needs verification.
Lousana Canyon	297	3	U	Y	SPCAN, SPNOM; portion is PRA
Lower Sakwatanau River	325	3	U	Y	SPNOM; Integrity of site needs verification.
Many Islands Lake West	443	3	U	Y	SPNOM; Integrity of site needs verification.
Manyberries Creek	476	3	Y	Y	SPNOM; Determine if element still occurs at the site.
Marie Lake	320	3	Y	Y	Large permanent lake. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.
Marshead Creek	327	3	U	Y	Determine if the element still occurs on site.
Mercoal	129	3	U	Y	Integrity of site needs verification. Determine if elements still occur on site.
Metiskow Lake	277	3	U	Y	Integrity of site needs verification. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.
Moose Hills Lake	351	3	U	Y	Integrity of site needs verification.
Mud Butte	84	3	U	U	SPNOM; Integrity of site needs verification. Determine if good examples of exposed ice-thrust contorted bedrock occur on public land.
Muddy Creek	331	3	U	Y	Integrity of site needs verification.
Mudspring Lake Soapholes	87	3	U	U	Integrity of site needs verification. Determine if good examples of soapholes occur on public land.
Namaka Lake	214	3	U	Y	Large permanent lake. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.
Negus Meadow	304	3	U	Y	Integrity of site needs verification.
Oliva Lake	100	3	U	U	SPCAN; Integrity of site needs verification. Determine if public land is adequate to represent the landform features.
Opal	349	3	U	Y	Integrity of site needs verification. Adjacent to an established Natural Area.
Paintearth	504	3	U	Y	PNT; Integrity of site needs verification.
Peace River Parkland	317	3	U	U	PNT; SPNOM. Integrity of site needs verification. Determine if elements occur on public land.
Pembina River	368	3	U	Y	Integrity of site needs verification.
Phantom Crag	395	3	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Philip Coulee	431	3	U	U	SPNOM; Integrity of site needs verification. Determine if element occurs on public land.
Prince's Springs	293	3	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Purple Springs South	521	3	U	U	Integrity of site needs verification. Determine if element occurs on public land.
Ratsnest Cave	47	3	U	Y	SPCAN, SPNOM; Already established as an Historic Site. Determine if the S1 element is within the designated area.

<u>Special Feature Polygon Name</u>	<u>ID</u>	<u>Priority Level</u>	<u>Environmental Integrity</u>	<u>Ownership</u>	<u>Notes</u>
Redcliff NW	422	3	U	Y	Integrity of site needs verification.
Redcliff West	285	3	U	U	SPNOM; Integrity of site needs verification. Determine if elements occur on public land.
Richdale	289	3	U	U	Integrity of site needs verification. Evaluate value of a protected area for this special element alone (burrowing owl).
Rycroft Earth Slide	155	3	Y	Y	Determine presence of other special elements and the site's suitability as a protected area.
Sand River	322	3	U	U	SPNOM; Need to determine if element is on public land
Simonette Tower	330	3	U	U	Integrity of site needs verification. Determine if elements occur on public land.
Smoky-Kakwa	329	3	U	Y	SPNOM; verify element locations and integrity of the site.
Steen River	303	3	U	U	Integrity of site needs verification. Determine if element occurs on public land.
Stevens Creek	126	3	U	Y	Verify element locations and integrity of the site.
Sunken Lake	218	3	U	Y	SPCAN, SPNOM; Integrity of site needs verification.
Sunnynook	287	3	U	Y	Integrity of site needs verification. Evaluate value of a protected area for this special element alone (burrowing owl).
Swan River	142	3	U	Y	Integrity of site needs verification.
Thordason Creek	249	3	U	Y	SPNOM; Integrity of site needs verification.
Thunder Lake Eskers	123	3	U	Y	SPNOM; integrity of site needs verification.
Wapiabi Cave	252	3	U	Y	SPCAN, SPNOM; Integrity of site requires verification.
Whitecourt	326	3	Y	Y	SPNOM; Special element restricted to gravels of the river bed. A protected area may not be an appropriate designation.
Whitefish Lake Rubble Terrain	138	3	U	Y	Integrity of site needs verification. Need to identify those portions of the feature most suitable for protection.
Bain Bluff	240	2	Y	Y	SPNOM; Evaluate value of a protected area for this landform element alone (Earth Slides).
Foster Lake	275	2	U	U	SPCAN, SPNOM; Determine value of the lake for Piping Plover.
Ft. McMurray	291	2	U	Y	SPNOM; Integrity of site needs verification.
Goosequill Lake	259	2	U	U	Integrity of site needs verification. Determine if element occurs on public land.
Hilda North	444	2	U	U	SPCAN, SPNOM; Integrity of site needs verification. Determine if element occurs on public land.
Horseshoe Lake	90	2	U	Y	SPCAN; Integrity of site needs verification
Lake Newell	523	2	U	U	Integrity of site needs verification. Determine if Great Plains Toad habitat is on public land.
Little Rolling Hills	524	2	U	U	Integrity of site needs verification. Determine if Great Plains Toad habitat is on public land.
Neutral Hills #1	278	2	U	U	SPNOM; Integrity of site needs verification.
Neutral Hills #4	279	2	U	U	SPNOM; Integrity of site needs verification.
Pakan Bog Iron Springs	137	2	U	U	Integrity of site needs verification. Determine if element occurs on public land.
Piper Lake	276	2	U	U	SPCAN, SPNOM. Integrity of site needs verification.
Pollhaven	14	2	U	Y	SPNOM; Integrity of site needs verification.
Red Deer #3	282	2	U	U	SPCAN, SPNOM; Integrity of site needs verification. Determine if element occurs on public land.

<u>Special Feature Polygon Name</u>	<u>ID</u>	<u>Priority Level</u>	<u>Environmental Integrity</u>	<u>Ownership</u>	<u>Notes</u>
Red Deer Lake	261	2	U	Y	Large permanent lake. Wildlife Sanctuary or lake management plan may be alternatives to conserve special elements.

Codes:

The following codes in the "Notes" column indicate that the Special Feature Polygon is wholly or partly within the indicated land category.

PNT - Protective Notation Land Use Reservation (for Protected Area)

PRA - Provincial Recreation Area

SPCAN - Special Places Candidate Site

SPNOM - Special Places Nomination