



APPENDIX 6.3.2-A

Rare Plants, Rare Plant Potential, Traditional Use Plant Potential, and Weeds

APPENDIX 6.3.2-A: Rare Plants, Rare Plant Potential, and Traditional Use Plant Potential

1. Rare Plants

Rare plant species are defined for the purposes of this report to include:

- those species listed by the Saskatchewan Conservation Data Centre (SKCDC) on the tracking lists for vascular and non-vascular plants which are typically ranked from S1-S3 (SKCDC 2011a and 2011b);
- those species listed as Special Concern, Threatened, or Endangered under the federal Species at Risk Act (SARA) (Government of Canada 2009) and the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

No federally listed plant species were documented during field surveys. Table C-1 provides a definition of the SKCDC ranking system.

Table C-1: Explanation of Element Ranking System Used by SKCDC (SKCDC 2007)

Rank	Description
S1	Extremely rare in Saskatchewan. Usually 5 or fewer occurrences in the province, or very few remaining hectares; often especially vulnerable to extirpation.
S2	S2 - Very rare in Saskatchewan. Usually between 5 and 20 occurrences in the province, or few remaining hectares, or with many individuals in fewer occurrences; often susceptible to extirpation.
S3	Rare to uncommon in Saskatchewan. Usually between 20 and 100 occurrences in the province; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances. Most species with an S3 rank are assigned to the watch list, unless they have a relatively high global rank.
S4	Common and apparently secure in Saskatchewan; usually with more than 100 occurrences in the province.
S5	Common to widespread in Saskatchewan and demonstrably secure.
SH	Historically known from Saskatchewan, but not verified recently (typically not recorded in the province in the last 20 years); however suitable habitat is thought to be still present in the province and there is reasonable expectation that the species may be rediscovered.
SX	Apparently extirpated from Saskatchewan, with little likelihood of rediscovery; typically not seen in the province for many decades, despite searches at known historic sites.
SNA	Not of practical conservation concern in as much as there are no clearly definable occurrences or the species/taxon is not native to the province; applies to long distance migrants, winter vagrants, and eruptive species, which are too transitory and/or dispersed in their distribution to be reliably mapped; most such species are non-breeders, however, some may occasionally breed. Also applies to alien invasive species.
SNR	Not Ranked. SNR species have not yet had a rank assigned.

Rank	Description
SU	Unrankable, often because of low search effort or cryptic nature of the species, there is insufficient information available to assign a more accurate rank; more data is needed.
C	Captive/Cultivated. Existing in the province only in a cultivated state; introduced population not yet fully established and self-sustaining.
S?	Rank Uncertain. A question mark following a rank indicates ranking has not been completed at this time (e.g. S3?).

The search of the SKCDC element occurrence database (SKCDC 2010) provided existing occurrence records for twelve rare plant species (Table C-2). There was one species (*Salix planifolia* ssp. *Tyrrellii*) within the vicinity of the RSA that is ranked by COSEWIC as “not at risk”.

Table C-2: Rare Plant Species Documented in the SKCDC database in the Vicinity of the RSA

Scientific Name	Common Name	Provincial Rank	SARA Rank	COSEWIC Rank
<i>Adoxa moschatellina</i>	Musk-root	S3	n/a	n/a
<i>Astragalus aboriginum</i>	Indian Milk-vetch	S2	n/a	n/a
<i>Botrychium hesperium</i>	Western Moonwort	S1	n/a	n/a
<i>Botrychium multifidum</i>	Leathery Grape-fern	S3	n/a	n/a
<i>Campanula aparinoides</i>	Marsh Bellflower	S2S3	n/a	n/a
<i>Cardamine pratensis</i>	Cuckooflower	S2	n/a	n/a
<i>Cypripedium arietinum</i>	Ram's-head Lady's-slipper	S1	n/a	n/a
<i>Erigeron strigosus</i>	White-top	S2S3	n/a	n/a
<i>Leucophysalis grandiflora</i>	Large White-flowered Ground-cherry	S2	n/a	n/a
<i>Luzula acuminata</i>	Hairy Wood-rush	S1S2	n/a	n/a
<i>Rosa blanda</i>	Smooth Wild Rose	S1S2	n/a	n/a
<i>Salix planifolia</i> ssp. <i>Tyrrellii</i>	Tyrrell's Willow	S2	n/a	Not at risk

A literature search also suggested the potential for several rare plant species occurring in the study areas, some of which have been documented and some of which have not (Table C-3).

Table C-3: Potential Rare Plants Based on Literature Review

Common Name	Latin Name	Provincial Rank ²	Habitat	Vegetation Type
musk-root	<i>Adoxa moschatellina</i>	S3	moist woods and thickets (Moss and Packer 1994)	Moist vegetation types dominated by either Balsam Poplar, Trembling Aspen, Black Spruce or White Spruce, Shrubby Swamp
narrow-leaved water plantain	<i>Alisma gramineum</i>	S3	river shores	Riparian areas
glaucous-leaved bog-rosemary	<i>Andromeda polifolia</i> var. <i>glaucophylla</i>	S2	open to treed bogs and shrubby fens (University of Saskatchewan 2010)	Treed Bog, Treed Swamp, Treed, Shrubby and Open Fen
spear-leaved arnica	<i>Arnica lonchophylla</i> ssp. <i>lonchophylla</i>	S2S3	sunny, exposed sandy areas	Exposed areas in dry to fresh vegetation types dominated by either Jack Pine or Trembling Aspen, Brushland, Grassland
indian milk-vetch	<i>Astragalus aboriginum</i>	S2	open areas (Moss and Packer 1994); gravel banks along rivers and slopes (Looman and Best 1987), eroded slope along cutback of Saskatchewan River (SKCDC 2010c)	Riparian areas
tall beggar's-ticks	<i>Bidens frondosa</i>	S2S3	moist ground and ditches, in wet or occasionally rather dry waste places (Kershaw et al. 2001)	Treed, Shrubby and Open Fen, Marsh, Shrubby Swamp, Unclassified Wetland-Non-Forested
common moonwort	<i>Botrychium lunaria</i>	S1	semi open to open woods, drying prairie sloughs and moist meadows associated with <i>Achillea millefolium</i> , <i>Antennaria parvifolia</i> , <i>Astragalus crassicaarpus</i> , <i>Carex aurea</i> , <i>Halenia deflexa</i> , <i>Hesperostipa comata</i> , <i>Parnassia palustris</i> , <i>Picea glauca</i> , <i>Pulsatilla patens</i> ssp. <i>patens</i> , <i>Salix</i> sp, <i>Sheperdia canadensis</i> (University of Saskatchewan 2010)	Treed Fen, Open Fen, Treed Swamp, Marsh, Shrubby Swamp, Jack Pine: Dry to Fresh
leathery grape-fern	<i>Botrychium multifidum</i>	S3	wet meadows and bogs to lakesides and sand dunes. Moist meadows, shrub lands, shores, open woods.	Brushland, Grassland, Jack Pine: Dry to Fresh, Shrub Swamp, Shrubby Fen, Open Fen, Riparian areas, Marsh, Unclassified Wetland-Non-Forested

Common Name	Latin Name	Provincial Rank ²	Habitat	Vegetation Type
fairy slipper	<i>Calypso bulbosa</i> var. <i>americana</i>	S3	usually coniferous forest, in litter associated with <i>Aquilegia brevistyla</i> , <i>Circaea alpina</i> , <i>Cornus canadensis</i> , <i>Goodyera repens</i> , <i>Linnaea borealis</i> , <i>Mitella nuda</i> , <i>Picea glauca</i> , <i>Pinus banksiana</i> , <i>Picea mariana</i> , <i>Populus tremuloides</i> , <i>Rosa arkansana</i> , <i>Vaccinium vitis-idaea</i> , <i>Viburnum edule</i> (University of Saskatchewan 2010)	White Spruce: Fresh, White Spruce: Moist, Black Spruce: Moist
marsh bellflower	<i>Campanula aparinoides</i>	S2S3	wet meadows and marshes (Looman and Best 1987). Wet woods and new clearing (SKCDC 2010c)	Black Spruce: Moist, Treed Fen, Shrubby Fen, Open Fen, Treed Swamp, Shrubby Swamp, Marsh
large northern aster	<i>Canadanthus modestus</i>	S2	moist, well-drained woods and clearings and roadsides associated with <i>Achillea sibirica</i> , <i>Bromus ciliatus</i> , <i>Carex atherodes</i> , <i>Carex aurea</i> , <i>Chamerion angustifolium</i> , <i>Juncus balticus</i> , <i>Larix laricina</i> , <i>Lycopus americanus</i> , <i>Mertensia paniculata</i> , <i>Salix candida</i> (University of Saskatchewan 2010)	Treed Fen, Shrubby Fen, Open Fen, Treed Swamp, Unclassified Wetland – Non-Forested
cuckoo flower	<i>Cardamine pratensis</i>	S2	moist meadows and swamps, also in calcareous shallow water, springs, swampy woods, calcareous meadows and thickets, wet places and along creeks (Kershaw et al. 2001). Peaty pool in bog forest (SKCDC 2010c)	Treed Fen, Shrubby Fen, Open Fen, Treed Swamp, Shrubby Swamp
brown sedge	<i>Carex buxbaumii</i>	S2	fens, bogs, muskegs, wet shrubland, sloughs and pond margins associated with <i>Bromus ciliatus</i> , <i>Carex pellita</i> , <i>Carex vaginata</i> , <i>Deschampsia caespitosa</i> , <i>Eleocharis compressa</i> , <i>Juncus balticus</i> , <i>Menyanthes trifoliata</i> , <i>Muhlenbergia glomerata</i> , <i>Picea mariana</i> , <i>Trichophorum caespitosum</i> , <i>Triglochin maritima</i> (University of Saskatchewan 2010)	Treed Fen, Shrubby Fen, Open Fen, Treed Swamp, Shrubby Swamp, Unclassified Wetland – Non-Forested

Common Name	Latin Name	Provincial Rank ²	Habitat	Vegetation Type
bristle-leaved sedge	<i>Carex eburnea</i>	S2	woods or shrublands in association with <i>Anemone canadensis</i> , <i>Carex aurea</i> , <i>Carex capillaris</i> , <i>Carex concinna</i> , <i>Elymus trachycaulus</i> ssp. <i>trachycaulus</i> , <i>Festuca saximontana</i> , <i>Juncus balticus</i> , <i>Oryzopsis asperifolia</i> , <i>Poa glauca</i> (University of Saskatchewan 2010)	Balsam Poplar-Spruce: Moist; Balsam Poplar-Trembling Aspen: Moist, Black Spruce: Moist, Jack Pine: Dry to Fresh, Brushland, Grassland,
prickly sedge	<i>Carex echinata</i> ssp. <i>echinata</i>	S1	bogs, marshes, swamps, peaty or sandy shores usually in acidic soils in association with <i>Agrostis scabra</i> , <i>Carex chordorrhiza</i> , <i>Carex limosa</i> , <i>Carex livida</i> , <i>Potentilla norvegica</i> (University of Saskatchewan 2010)	Treed Fen, Open Fen, Treed Swamp, Shrub Swamp
Garber's sedge	<i>Carex garberi</i>	S2	boggy or marshy areas, sometimes calcareous shores and depressions in association with <i>Betula nana</i> , <i>Carex aquatilis</i> , <i>Carex buxbaumii</i> , <i>Carex capillaris</i> , <i>Carex interior</i> , <i>Carex vaginata</i> , <i>Carex viridula</i> ssp. <i>viridula</i> , <i>Picea mariana</i> , <i>Salix planifolia</i> (University of Saskatchewan 2010)	Treed Fen, Shrubby Fen, Treed Swamp, Shrubby Swamp
swamp thistle	<i>Cirsium muticum</i>	S2	wet woods, clearings, sloughs and lakeshores in association with <i>Dryopteris austriaca</i> , <i>Lactuca biennis</i> , <i>Prenanthes alba</i> , <i>Rudbeckia hirtella</i> , <i>Sanicula marilandica</i> , <i>Solidago canadensis</i> (University of Saskatchewan 2010)	Balsam Poplar-Spruce: Moist, Balsam Poplar-Trembling Aspen: Moist, Trembling Aspen: Moist, Shrub Swamp
striped coral-root	<i>Corallorhiza striata</i> var. <i>striata</i>	S2S3	aspen woods in association with <i>Betula papyrifera</i> , <i>Lathyrus</i> spp, <i>Picea glauca</i> , <i>Populus balsamifera</i> (University of Saskatchewan 2010)	Trembling Aspen: Moist, Trembling Aspen-Spruce: Dry to Fresh, Balsam Poplar-Trembling Aspen: Moist, Balsam Poplar-Spruce: Moist
ram's-head lady's-slipper	<i>Cypripedium arietinum</i>	S1	pine woods in association with <i>Arctostaphylos uva-ursi</i> and <i>Pinus banksiana</i> (University of Saskatchewan 2010)	Jack Pine: Dry to Fresh

Common Name	Latin Name	Provincial Rank ²	Habitat	Vegetation Type
sparrow's-egg lady's-slipper	<i>Cypripedium passerinum</i>	S2	peaty bogs	Treed Swamp, Shrubby Swamp
northern bush-honeysuckle	<i>Diervilla lonicera</i>	S3	sandy pinelands	Jack Pine; Dry to Fresh
slenderleaf sundew	<i>Drosera linearis</i>	S1	wet bogs or fens associated with <i>Campyllum stellatum</i> , <i>Carex lasiocarpa</i> , <i>Carex limosa</i> , <i>Carex livida</i> , <i>Limprichta revolvens</i> , <i>Menyanthes trifoliata</i> , <i>Sarracenia purpurea</i> , <i>Scorpidium scorpioides</i> , <i>Trichophorum caespitosum</i> (University of Saskatchewan 2010)	Treed Fen, Unclassified Wetland – Non-Forested, Shrub Swamp
crested shield-fern	<i>Dryopteris cristata</i>	S3	swampy places	Treed Swamp, Shrub Swamp
flat-stemmed spike-rush	<i>Eleocharis elliptica</i> var. <i>elliptica</i>	S2	wet open or treed bogs and fens with <i>Carex capillaris</i> , <i>Carex lasiocarpa</i> , <i>Carex livida</i> , <i>Carex vaginata</i> , <i>Galium trifidum</i> , <i>Juncus alpinoarticulatus</i> ssp. <i>nodulosus</i> , <i>Lobelia kalmii</i> , <i>Parnassia glauca</i> , <i>Rubus arcticus</i> ssp. <i>acaulis</i> , <i>Triglochin maritima</i> , <i>Triglochin palustre</i> (University of Saskatchewan 2010)	Treed Fen, Shrubby Fen, Treed Swamp, Shrubby Swamp, Unclassified Wetland – Non-Forested
various-glumed wild rye	<i>Elymus diversiglumis</i>	S2	moist rich deciduous woods and thickets (University of Saskatchewan 2010)	Balsam Poplar-Trembling Aspen: Moist, Balsam Poplar-Spruce: Moist
hyssop-leaved fleabane	<i>Erigeron hyssopifolius</i> var. <i>hyssopifolius</i>	S2	wet soil in bogs, muskegs and fens associated with <i>Carex</i> sp., <i>Dasiphora fruticosa</i> ssp. <i>floribunda</i> , <i>Larix laricina</i> , <i>Picea glauca</i> , <i>Picea mariana</i> , <i>Pinus banksiana</i> , <i>Sphagnum</i> sp., <i>Triantha glutinosa</i> ssp. <i>glutinosa</i> (University of Saskatchewan 2010)	Treed Fen, Shrubby Fen, Open Fen, Treed Swamp, Shrubby Swamp, Unclassified Wetland: Non-Forested
white-top	<i>Erigeron strigosus</i>	S2S3	sandy, clay, shale and alkaline soils in grassy prairies, shores, and forest clearings (University of Saskatchewan 2010)	All upland vegetation types
narrow-leaved fringed gentian	<i>Gentianopsis procera</i> ssp. <i>procera</i>	S2	fens	Treed Fen, Shrubby Fen, Open Fen

Common Name	Latin Name	Provincial Rank ²	Habitat	Vegetation Type
yellow touch-me-not	<i>Impatiens noli-tangere</i>	S3S4	in creek beds	Lakes, Rivers and Flooded Land
large white-flowered ground-cherry	<i>Leucophysalis grandiflora</i>	S2	disturbed areas, open woodlands, especially on sandy soils (Looman and Best 1987). Jack pine forest on sand; sandy roadside (SKCDC 2010c)	Jack Pine: Dry to Fresh
western red lily	<i>Lilium philadelphicum var. andinum</i>	S3S4	moist to dry woods and moist prairies	All upland vegetation types
yellow twayblade	<i>Liparis loeselii</i>	S1S2	wet, seepy depressions in meadows, fens and sloughs (University of Saskatchewan 2010)	Open Fen, Marsh
northern twayblade	<i>Listera borealis</i>	S1	wet mossy spruce woods (University of Saskatchewan 2010)	Treed Swamp, White Spruce: Moist
heart-leaved twayblade	<i>Listera cordata var. cordata</i>	S2	wet mossy spruce woods (University of Saskatchewan 2010)	Treed Swamp, White Spruce: Moist
marsh felwort	<i>Lomatogonium rotatum</i>	S2	moist meadow depressions and marshy shores associated with <i>Almutaster pauciflorus</i> , <i>Gentianopsis macounii</i> , <i>Juncus alpinoarcticus</i> ssp. <i>nodulosus</i> , <i>Parnassia palustris</i> , <i>Salix candida</i> , <i>Viola nephrophylla</i> (University of Saskatchewan 2010)	Marsh, Treed Fen, Open Fen, Treed Swamp, Shrubby Swamp
swamp fly honeysuckle	<i>Lonicera oblongifolia</i>	S2	wet shaded woods and muskegs in association with <i>Larix laricina</i> , <i>Lonicera caerulea</i> , <i>Picea mariana</i> , <i>Rhamnus alnifolia</i> , <i>Rubus idaeus</i> , <i>Salix</i> sp., <i>Tofieldia glutinosa</i> (University of Saskatchewan 2010)	Treed Fen, Open Fen, Treed Swamp, Shrubby Swamp
hairy wood-rush	<i>Luzula acuminata</i> var. <i>acuminata</i>	S1S2	woods and shrubby fens in association with <i>Betula nana</i> , <i>Carex foenea</i> var. <i>foenea</i> , <i>Carex vaginata</i> , <i>Cornus canadensis</i> , <i>Equisetum scirpoides</i> , <i>Larix laricina</i> , <i>Maianthemum canadense</i> , <i>Mitella nuda</i> , <i>Viola renifolia</i> (University of Saskatchewan 2010)	Treed Fen, Shrubby Fen, Treed Swamp, Shrubby Swamp

Common Name	Latin Name	Provincial Rank ²	Habitat	Vegetation Type
many-flowered woodrush	<i>Luzula multiflora</i> ssp. <i>multiflora</i>	S2	fields, meadows and open woods in association with <i>Carex aquatilis</i> , <i>Carex backii</i> , <i>Carex foenea</i> var. <i>foenea</i> , <i>Carex rostrata</i> , <i>Mertensia paniculata</i> , <i>Picea mariana</i> (University of Saskatchewan 2010)	All wetland vegetation types
white bog adder's-mouth Orchid	<i>Malaxis monophyllos</i> var. <i>brachypoda</i>	S1S2	moist shaded coniferous woods (University of Saskatchewan 2010)	White Spruce: Moist, Black Spruce: Moist, Treed Swamp
whorled water-milfoil	<i>Myriophyllum verticillatum</i>	S3	oxbow aquatic	Lakes, Rivers and Flooded Land
small white water-lily	<i>Nymphaea leibergii</i>	S2	aquatics in quiet waters of lakes and streams (University of Saskatchewan 2010)	Lakes, Rivers and Flooded Land
glaucous grass-of-parnassus	<i>Parnassia glauca</i>	S2	wet calcareous fens or sedge meadows associated with <i>Carex viridula</i> , <i>Equisetum variegatum</i> , <i>Galium trifidum</i> , <i>Gentianopsis macounii</i> , <i>Juncus nodosus</i> , <i>Lobelia kalmii</i> , <i>Muhlenbergia glomerata</i> , <i>Oligoneuron album</i> , <i>Parnassia palustris</i> , <i>Rubus arcticus</i> ssp. <i>acaulis</i> , <i>Salix candida</i> (University of Saskatchewan 2010)	Marsh, Treed Fen, Shrubby Fen, Open Fen, Treed Swamp, Shrub Swamp
purple lousewort	<i>Pedicularis macrodonta</i>	S2	wet marshy fens and bogs in association with <i>Betula nana</i> , <i>Eleocharis compressa</i> , <i>Larix laricina</i> , <i>Menyanthes trifoliata</i> , <i>Plantanthera dilatata</i> , <i>Trichophorum alpinum</i> , <i>Trichophorum caespitosum</i> (University of Saskatchewan 2010)	Treed Fen, Shrubby Fen, Treed Swamp, Shrubby Swamp
common butterwort	<i>Pinguicula vulgaris</i>	S2S3	springy areas, marly fens and northern lake shorelines in association with <i>Carex aquatilis</i> , <i>Carex viridula</i> , <i>Larix laricina</i> , <i>Muhlenbergia glomerata</i> , <i>Parnassia palustris</i> , <i>Picea mariana</i> , <i>Trichophorum caespitosum</i> , <i>Vaccinium uliginosum</i> , <i>Viola nephyrophylla</i> (University of Saskatchewan 2010)	All wetland vegetation types

Common Name	Latin Name	Provincial Rank ²	Habitat	Vegetation Type
scentbottle	<i>Platanthera dilatata</i> var. <i>dilatata</i>	S2	moist woods and bog margins (University of Saskatchewan 2010)	Black Spruce: Moist, White Spruce: Moist, Treed Swamp, Shrubby Swamp, Unclassified Wetland Non-Forested
large roundleaf orchid	<i>Platanthera orbiculata</i>	S2S3	bogs	Treed Swamp, Shrubby Swamp, Unclassified Wetland Non-Forested
pink fringed milkwort	<i>Polygala paucifolia</i>	S2S3	moist open woods and fens in association with <i>Carex capillaris</i> , <i>Fragaria virginiana</i> , <i>Picea mariana</i> , <i>Salix</i> sp, <i>Trichophorum caespitosum</i>	White Spruce: Moist, Black Spruce: Moist, Treed Fen, Shrubby Fen, Treed Swamp, Shrubby Swamp, Unclassified Wetland Non-Forested
upright narrow-leaved pondweed	<i>Potamogeton strictifolius</i>	S2	in shallow water of protected lake bays, ponds and slow streams in association with <i>Schoenoplectus acutus</i> var. <i>acutus</i>	Lakes, Rivers and Flooded Land
five-foliolate cinquefoil	<i>Potentilla nivea</i> var. <i>pentaphylla</i>	S2	dry sandy prairie and open pine woods	Jack Pine: Dry to Fresh, Grassland
bushy cinquefoil	<i>Potentilla paradoxa</i>	S2S3	river shores	Riparian areas
bird's-eye primrose	<i>Primula mistassinica</i>	S3	marl bogs	Shrubby Fen, Open Fen
hair-like beaked-rush	<i>Rhynchospora capillacea</i>	S2	calcareous bogs in southern boreal forests in association with <i>Carex limosa</i> , <i>Carex scirpoidea</i> , <i>Carex sterilis</i> , <i>Carex viridula</i> , <i>Drosera anglica</i> , <i>Eleocharis quinqueflora</i> , <i>Eriophorum angustifolium</i> , <i>Gentianopsis macounii</i> , <i>Lobelia kalmii</i> , <i>Muhlenbergia glomerata</i> , <i>Parnassia glauca</i> , <i>Symphyotrichum boreale</i> , <i>Tofieldia glutinosa</i> , <i>Trichophorum caespitosum</i> , <i>Triglochin palustre</i> (University of Saskatchewan 2010)	Treed Fen, Shrubby Fen, Treed Swamp, Shrubby Swamp

Common Name	Latin Name	Provincial Rank ²	Habitat	Vegetation Type
white beaked-rush	<i>Rhynchospora alba</i>	S2S3	shore fens and treed bogs in association with <i>Carex lasiocarpa</i> , <i>Carex limosa</i> , <i>Carex livida</i> , <i>Carex michauxiana</i> , <i>Drosera anglica</i> , <i>Drosera rotundifolia</i> , <i>Eleocharis quinqueflora</i> , <i>Juncus brevicaudatus</i> , <i>Juncus stygius</i> , <i>Picea mariana</i> , <i>Rhynchospora fusca</i> , <i>Trichophorum caespitosum</i> , <i>Triglochin maritima</i> (University of Saskatchewan 2010)	Treed Fen, Shrubby Fen, Treed Swamp, Shrubby Swamp, Unclassified Wetland: Non-Forested
blunt-leaved yellow-cress	<i>Rorippa curvipes</i> var. <i>truncata</i>	S2S3	non-alkaline, drying mudflats and edges of sloughs in sandy or clay soils in association with <i>Alopecurus aequalis</i> , <i>Beckmannia syzigachne</i> , <i>Gnaphalium palustre</i> , <i>Limosella aquatica</i> , <i>Polygonum</i> sp., <i>Rumex</i> sp., <i>Spergularia salina</i> , <i>Veronica peregrina</i> (University of Saskatchewan 2010)	Treed Fen, Open Fen, Shrubby Swamp
smooth wild rose	<i>Rosa blanda</i>	S1S2	riparian woods and shrub thickets (University of Saskatchewan 2010)	Riparian areas
Tyrrell's willow	<i>Salix planifolia</i> ssp. <i>tyrellii</i>	S2	rivers and lakeshores, meadows, muskegs, moist coniferous woods, marl bogs, and active sand dunes (Moss and Packer 1994). Mixedwood along clearing RoW (SKCDC 2010c)	Riparian areas, Open Fen, White Spruce: Moist, Black Spruce: Moist
low spike-moss	<i>Selaginella selaginoides</i>	S2	receding shorelines and calcareous bogs in association with <i>Andromeda polifolia</i> , <i>Betula nana</i> , <i>Carex scirpoidea</i> , <i>Larix laricina</i> , <i>Menyanthes trifoliata</i> , <i>Picea mariana</i> , <i>Tofieldia glutinosa</i> , <i>Viola nephrophylla</i> (University of Saskatchewan 2010)	Treed Fen, Shrubby Fen, Treed Swamp, Shrubby Swamp
prairie ragwort	<i>Senecio plattensis</i>	S3S4	Burned over woods, mesic grassland, sloughs, shores, woods (SKCDC 2010c)	All upland and wetland vegetation types
cascade mountain ash	<i>Sorbus scopulina</i> var. <i>scopulina</i>	S2	parklands, boreal forest (Looman and Best 1987)	All upland vegetation types

Common Name	Latin Name	Provincial Rank ²	Habitat	Vegetation Type
horned dandelion	<i>Taraxacum officinale ssp. ceratophorum</i>	S2	open woods, rocky slopes, thickets, drying meadows and muskegs in association with <i>Picea mariana</i> , <i>Poa glauca</i> , <i>Salix planifolia</i> , <i>Saxifraga tricuspidata</i> (University of Saskatchewan 2010)	Black Spruce: Moist, Treed Fen, Shrubby Fen, Treed Swamp, Shrub Swamp, Unclassified Wetland: Non-Forested
lesser bladderwort	<i>Utricularia minor</i>	S2S3	aquatics of bogs and shallow water (Looman and Best 1987); ponds, bogs and ditches (Moss and Packer 1994)	Lakes, Rivers and Flooded Land, Treed Swamp, Shrubby Swamp, Unclassified Wetland: Non-Forested

Forty-seven rare species were identified at various locations during field surveys. Those species are listed in Table C-4.

Table C-4: Rare Plants in the Study Areas

Scientific Name	Common Name	Provincial Rank	Growth form	Datum	Zone	UTM Easting	UTM Northing	Ecosite	Study Area
<i>Arthonia patellulata</i>	Comma lichen	S2	Lichen	Nad27	13	500930	5911230	BP25 Willow shrubby rich fen	RSA
<i>Botrychium multifidum</i>	Leathery Grape-fern	S3	Forb	Nad27	13	497362	5909445	BP04 Jack pine - trembling aspen/feathermoss	RSA
<i>Bryoria fuscescens</i>	Pale-footed horsehair lichen	S3	Lichen	Nad27	13	500920	5911000	BP03 Jack pine/feathermoss	RSA
		S3	Lichen	Nad27	13	495130	5909529	BP03 Jack pine/feathermoss	RSA
		S3	Lichen	Nad27	13	507830	5907180	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S3	Lichen	Nad27	13	497362	5909445	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S3	Lichen	Nad27	13	496690	5908930	BP05 Trembling aspen/prickly rose/grass	RSA
		S3	Lichen	Nad27	13	504020	5909530	BP09 White birch - trembling aspen/feathermoss	RSA
		S3	Lichen	Nad27	13	505390	5908190	BP18 Black spruce - tamarack treed swamp	RSA
<i>Bryoria simplicior</i>	Horsehair lichen	S3	Lichen	Nad27	13	505690	5906860	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S3	Lichen	Nad27	13	497749	5909492	BP16 Balsam poplar - trembling aspen/prickly rose	RSA
<i>Calamagrostis lapponica</i>	Lapland Reed-grass	S2S3	Graminoid	Nad27	13	518925	5896554	BP28a Riparian meadow	LSA
<i>Campanula aparinoides</i>	Marsh Bellflower	S2S3	Forb	Nad27	13	500920	5911000	BP03 Jack pine/feathermoss	RSA
		S2S3	Forb	Nad27	13	518491	5905118	BP18a Deciduous mixedwood swamp	RSA
<i>Canadanthus modestus</i>	Large Northern Aster	S2	Forb	Nad27	13	518491	5905118	BP18a Deciduous mixedwood swamp	RSA
<i>Carex hystericina</i>	Porcupine Sedge	S2	Graminoid	Nad27	13	511196	5895316	BP18a Deciduous mixedwood swamp	LSA
		S2	Graminoid	Nad27	13	518925	5896554	BP28a Riparian meadow	LSA
<i>Carex pseudocyperus</i>	Cyperus-like Sedge	S2S3	Graminoid	Nad27	13	514888	5896523	BP18a Deciduous mixedwood swamp	LSA
		S2S3	Graminoid	Nad27	13	511196	5895316	BP18a Deciduous mixedwood swamp	LSA
<i>Chenopodium desiccatum</i>	Dry goosefoot	S2	Forb	Nad27	13	516426	5898562	BP04 Jack pine - trembling aspen/feathermoss	LSA
<i>Chenopodium pratericola</i> ssp. <i>Dessicatum</i>	Desert Goosefoot	S2	Forb	Nad27	13	516426	5898562	BP01a Dry shrubland	LSA
		S2	Forb	Nad27	13	516109	5896393	BP28a Riparian meadow	LSA
<i>Cladonia cenotea</i>	Powdered funnel lichen	S3	Lichen	Nad27	13	505390	5908190	BP18 Black spruce - tamarack treed swamp	RSA
<i>Cladonia coniocraea</i>	Common powderhorn	S2	Lichen	Nad27	13	494657	5911311	BP01 June grass - mountain goldenrod grassland	RSA
		S2	Lichen	Nad27	13	507830	5907180	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S2	Lichen	Nad27	13	500950	5910910	BP09 White birch - trembling aspen/feathermoss	RSA
		S2	Lichen	Nad27	13	516696	5913163	BP10 Trembling aspen - white spruce/feathermoss	RSA
		S2	Lichen	Nad27	13	505390	5908190	BP18 Black spruce - tamarack treed swamp	RSA
<i>Cladonia crispata</i>	Organ-pipe lichen	S3	Lichen	Nad27	13	494951	5911314	BP01 June grass - mountain goldenrod grassland	RSA
		S3	Lichen	Nad27	13	494657	5911311	BP01 June grass - mountain goldenrod grassland	RSA
		S3	Lichen	Nad27	13	494573	5911307	BP01 June grass - mountain goldenrod grassland	RSA
		S3	Lichen	Nad27	13	492853	5907538	BP02 Jack pine/lichen	RSA
		S3	Lichen	Nad27	13	495177	5911238	BP02 Jack pine/lichen	RSA

Scientific Name	Common Name	Provincial Rank	Growth form	Datum	Zone	UTM Easting	UTM Northing	Ecosite	Study Area
		S3	Lichen	Nad27	13	494917	5911260	BP02 Jack pine/lichen	RSA
		S3	Lichen	Nad27	13	496690	5908930	BP05 Trembling aspen/prickly rose/grass	RSA
<i>Cladonia cristatella</i>	British soldiers	S3	Lichen	Nad27	13	494657	5911311	BP01 June grass - mountain goldenrod grassland	RSA
<i>Cladonia macilenta</i>	Lipstick powderhorn	S2	Lichen	Nad27	13	494657	5911311	BP01 June grass - mountain goldenrod grassland	RSA
		S2	Lichen	Nad27	13	494917	5911260	BP02 Jack pine/lichen	RSA
		S2	Lichen	Nad27	13	505690	5906860	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S2	Lichen	Nad27	13	496690	5908930	BP05 Trembling aspen/prickly rose/grass	RSA
<i>Cladonia squamosa</i>	Dragon cladonia	S1	Lichen	Nad27	13	505690	5906860	BP04 Jack pine - trembling aspen/feathermoss	RSA
<i>Coeloglossum viride var. virescens</i>	Long-bracted Green Bog Orchid	S3S4	Forb	Nad27	13	517635	5912245	BP18 Black spruce - tamarack treed swamp	RSA
		S3S4	Forb	Nad27	13	512010	5898588	BP25 Willow shrubby rich fen	LSA
<i>Cypripedium parviflorum var. makasin</i>	Small Yellow Lady's-slipper	S2S4	Forb	Nad27	13	518845	5896604	BP06 Trembling aspen/beaked hazel/sarsaparilla	LSA
		S2S4	Forb	Nad27	13	494573	5911307	BP18 Black spruce - tamarack treed swamp	RSA
		S2S4	Forb	Nad27	13	494657	5911311	BP23 Tamarack treed fen	RSA
<i>Elymus lanceolatus ssp. psammophilus</i>	Sand-dune Wheatgrass	S2	Graminoid	Nad27	13	516430	5918255	BP09 White birch - trembling aspen/feathermoss	RSA
<i>Lactuca biennis</i>	Tall Blue Lettuce	S2	Forb	Nad27	13	517753	5908797	BP18b Wet meadow	RSA
<i>Lecanora allophana</i>	Brown-eyed rim-lichen	S1	Lichen	Nad27	13	493160	5907250	BP02 Jack pine/lichen	RSA
		S1	Lichen	Nad27	13	504020	5909530	BP09 White birch - trembling aspen/feathermoss	RSA
<i>Lecanora pulicaris</i>	Lecanora lichen	A	Lichen	Nad27	13	501190	5909400	BP04 Jack pine - trembling aspen/feathermoss	RSA
		A	Lichen	Nad27	13	501190	5909400	BP04 Jack pine - trembling aspen/feathermoss	RSA
<i>Leucophysalis grandiflora</i>	Large White-flowered Ground-cherry	S2	Forb	Nad27	13	518491	5905118	BP18a Deciduous mixedwood swamp	RSA
		S2	Forb	Nad27	13	513064	5902915	BP04 Jack pine - trembling aspen/feathermoss	LSA
		S2	Forb	Nad27	13	512942	5902975	BP05 Trembling aspen/prickly rose/grass	LSA
		S2	Forb	Nad27	13	515108	5896680	BP04 Jack pine - trembling aspen/feathermoss	LSA
<i>Lilium philadelphicum var. andinum</i>	Western Red Lily	S3S4	Forb	Nad27	13	494573	5911307	BP01 June grass - mountain goldenrod grassland	RSA
		S3S4	Forb	Nad27	13	516961	5898360	BP02 Jack pine/lichen	LSA
		S3S4	Forb	Nad27	13	516050	5903807	BP02 Jack pine/lichen	RSA
		S3S4	Forb	Nad27	13	493160	5907250	BP02 Jack pine/lichen	RSA
		S3S4	Forb	Nad27	13	495177	5911238	BP02 Jack pine/lichen	RSA
		S3S4	Forb	Nad27	13	494917	5911260	BP02 Jack pine/lichen	RSA
		S3S4	Forb	Nad27	13	510690	5903560	BP02 Jack pine/lichen	RSA
		S3S4	Forb	Nad27	13	517535	5904796	BP03 Jack pine/feathermoss	RSA
		S3S4	Forb	Nad27	13	526635	5890554	BP03 Jack pine/feathermoss	RSA
		S3S4	Forb	Nad27	13	515373	5897630	BP04 Jack pine - trembling aspen/feathermoss	LSA
S3S4	Forb	Nad27	13	513946	5904698	BP04 Jack pine - trembling aspen/feathermoss	RSA		

Scientific Name	Common Name	Provincial Rank	Growth form	Datum	Zone	UTM Easting	UTM Northing	Ecosite	Study Area
		S3S4	Forb	Nad27	13	510739	5898948	BP05 Trembling aspen/prickly rose/grass	LSA
		S3S4	Forb	Nad27	13	511649	5907344	BP05 Trembling aspen/prickly rose/grass	RSA
		S3S4	Forb	Nad27	13	515958	5896646	BP05 Trembling aspen/prickly rose/grass	LSA
		S3S4	Forb	Nad27	13	515899	5896898	BP06 Trembling aspen/beaked hazel/sarsaparilla	LSA
		S3S4	Forb	Nad27	13	518105	5897875	BP09 White birch - trembling aspen/feathermoss	LSA
		S3S4	Forb	Nad27	13	525354	5885206	BP09 White birch - trembling aspen/feathermoss	RSA
		S3S4	Forb	Nad27	13	514912	5896574	BP12 Jack pine - spruce/feathermoss	LSA
		S3S4	Forb	Nad27	13	515511	5897210	BP13 White spruce - balsam fir/feathermoss	LSA
		S3S4	Forb	Nad27	13	517700	5908659	BP14 Black spruce/Labrador tea/feathermoss	RSA
		S3S4	Forb	Nad27	13	517962	5908820	BP15 Balsam poplar - white spruce/feathermoss	RSA
		S3S4	Forb	Nad27	13	515302	5897830	BP16 Balsam poplar - trembling aspen/prickly rose	LSA
		S3S4	Forb	Nad27	13	517874	5901476	BP17 Manitoba maple - balsam poplar/ostrich fern	LSA
		S3S4	Forb	Nad27	13	513358	5896460	BP18 Black spruce - tamarack treed swamp	LSA
<i>Listera cordata var. cordata</i>	Heart-leaved Twayblade	S2	Forb	Nad27	13	514753	5897966	BP13 White spruce - balsam fir/feathermoss	LSA
		S2	Forb	Nad27	13	514628	5898174	BP18 Black spruce - tamarack treed swamp	LSA
		S2	Forb	Nad27	13	514703	5898063	BP18 Black spruce - tamarack treed swamp	LSA
		S2	Forb	Nad27	13	509402	5904035	BP18 Black spruce - tamarack treed swamp	RSA
<i>Lonicera oblongifolia</i>	Swamp Fly Honeysuckle	S2	Shrub	Nad27	13	513169	5900363	BP04 Jack pine - trembling aspen/feathermoss	LSA
		S2	Shrub	Nad27	13	513095	5900185	BP10 Trembling aspen - white spruce/feathermoss	LSA
<i>Melanelia albertana</i>	Powder-rimmed camouflage lichen	S3	Lichen	Nad27	13	507830	5907180	BP04 Jack pine - trembling aspen/feathermoss	RSA
<i>Melanelia exasperata</i>	Camouflage lichen	S1	Lichen	Nad27	13	497364	5909433	BP06 Trembling aspen/beaked hazel/sarsaparilla	RSA
<i>Melanelia subaurifera</i>	Abraded camouflage lichen	S2S3	Lichen	Nad27	13	504020	5909530	BP09 White birch - trembling aspen/feathermoss	RSA
<i>Pedicularis macrodonta</i>	Purple Lousewort	S2	Forb	Nad27	13	494657	5911311	BP23 Tamarack treed fen	RSA
<i>Peltigera malacea</i>	Veinless pelt	S3	Lichen	Nad27	13	492853	5907538	BP02 Jack pine/lichen	RSA
		S3	Lichen	Nad27	13	505690	5906860	BP04 Jack pine - trembling aspen/feathermoss	RSA
<i>Peltigera polydactylon</i>	Many-fruited pelt	S2	Lichen	Nad27	13	505390	5908190	BP18 Black spruce - tamarack treed swamp	RSA
<i>Physcia stellaris</i>	Star rosette lichen	S3S4	Lichen	Nad27	13	504130	5909470	BP07 Trembling aspen - white birch/sarsaparilla	RSA
<i>Polygala paucifolia</i>	Pink Fringed Milkwort	S2S3	Forb	Nad27	13	500920	5911000	BP03 Jack pine/feathermoss	RSA
		S2S3	Forb	Nad27	13	500950	5910910	BP09 White birch - trembling aspen/feathermoss	RSA
		S2S3	Forb	Nad27	13	513977	5901108	Burn	LSA
<i>Polygala senega</i>	Seneca Snakeroot	S3S4	Forb	Nad27	13	525911	5889063	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S3S4	Forb	Nad27	13	515958	5896646	BP05 Trembling aspen/prickly rose/grass	LSA
<i>Ramalina dilacerata</i>	Punctured ramalina	S3	Lichen	Nad27	13	496690	5908930	BP05 Trembling aspen/prickly rose/grass	RSA
		S3	Lichen	Nad27	13	501190	5909400	BP06 Trembling aspen/beaked hazel/sarsaparilla	RSA

Scientific Name	Common Name	Provincial Rank	Growth form	Datum	Zone	UTM Easting	UTM Northing	Ecosite	Study Area
		S3	Lichen	Nad27	13	508200	5907170	BP07 Trembling aspen - white birch/sarsaparilla	RSA
		S3	Lichen	Nad27	13	504020	5909530	BP09 White birch - trembling aspen/feathermoss	RSA
<i>Ramalina farinacea</i>	Dotted ramalina	S1	Lichen	Nad27	13	500920	5911000	BP03 Jack pine/feathermoss	RSA
<i>Rhynchospora alba</i>	White Beaked-rush	S2S3	Graminoid	Nad27	13	517635	5912245	BP18 Black spruce - tamarack treed swamp	RSA
		S2S3	Graminoid	Nad27	13	516970	5912580	BP18 Black spruce - tamarack treed swamp	RSA
<i>Scirpus pallidus</i>	Pale Bulrush	S2	Graminoid	Nad27	13	511196	5895316	BP18a Deciduous mixedwood swamp	LSA
<i>Stellaria longipes var. subvestita</i>	Hairy Long-stalked Stitchwort/Sand Chickweed	S2	Forb	Nad27	13	518491	5905118	BP18a Deciduous mixedwood swamp	RSA
<i>Thalictrum occidentale var. occidentale</i>	Western Meadow-rue	S1S2	Forb	Nad27	13	518105	5897875	BP09 White birch - trembling aspen/feathermoss	LSA
<i>Tuckermannopsis americana</i>	Fringed wrinkle-lichen	S3	Lichen	Nad27	13	500920	5911000	BP03 Jack pine/feathermoss	RSA
		S3	Lichen	Nad27	13	505690	5906860	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S3	Lichen	Nad27	13	497362	5909445	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S3	Lichen	Nad27	13	496690	5908930	BP05 Trembling aspen/prickly rose/grass	RSA
		S3	Lichen	Nad27	13	504130	5909470	BP07 Trembling aspen - white birch/sarsaparilla	RSA
		S3	Lichen	Nad27	13	508200	5907170	BP07 Trembling aspen - white birch/sarsaparilla	RSA
		S3	Lichen	Nad27	13	504020	5909530	BP09 White birch - trembling aspen/feathermoss	RSA
		S3	Lichen	Nad27	13	505390	5908190	BP18 Black spruce - tamarack treed swamp	RSA
<i>Usnea lapponica</i>	Powdered beard lichen	S3	Lichen	Nad27	13	500920	5911000	BP03 Jack pine/feathermoss	RSA
		S3	Lichen	Nad27	13	497362	5909445	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S3	Lichen	Nad27	13	496690	5908930	BP05 Trembling aspen/prickly rose/grass	RSA
		S3	Lichen	Nad27	13	508200	5907170	BP07 Trembling aspen - white birch/sarsaparilla	RSA
		S3	Lichen	Nad27	13	500950	5910910	BP09 White birch - trembling aspen/feathermoss	RSA
		S3	Lichen	Nad27	13	505390	5908190	BP18 Black spruce - tamarack treed swamp	RSA
<i>Usnea scabiosa</i>	Beard lichen	S1	Lichen	Nad27	13	497362	5909445	BP04 Jack pine - trembling aspen/feathermoss	RSA
<i>Usnea subfloridana</i>	Beard lichen	S3S4	Lichen	Nad27	13	493160	5907250	BP02 Jack pine/lichen	RSA
		S3S4	Lichen	Nad27	13	500920	5911000	BP03 Jack pine/feathermoss	RSA
		S3S4	Lichen	Nad27	13	495130	5909529	BP03 Jack pine/feathermoss	RSA
		S3S4	Lichen	Nad27	13	505690	5906860	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S3S4	Lichen	Nad27	13	507830	5907180	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S3S4	Lichen	Nad27	13	497362	5909445	BP04 Jack pine - trembling aspen/feathermoss	RSA
		S3S4	Lichen	Nad27	13	505390	5908190	BP05 Trembling aspen/prickly rose/grass	RSA
		S3S4	Lichen	Nad27	13	501190	5909400	BP06 Trembling aspen/beaked hazel/sarsaparilla	RSA
		S3S4	Lichen	Nad27	13	504130	5909470	BP07 Trembling aspen - white birch/sarsaparilla	RSA
		S3S4	Lichen	Nad27	13	508200	5907170	BP07 Trembling aspen - white birch/sarsaparilla	RSA
S3S4	Lichen	Nad27	13	504020	5909530	BP09 White birch - trembling aspen/feathermoss	RSA		



Scientific Name	Common Name	Provincial Rank	Growth form	Datum	Zone	UTM Easting	UTM Northing	Ecosite	Study Area
<i>Xanthoria candelaria</i>	Shrubby sunburst lichen	S3	Lichen	Nad27	13	497364	5909433	BP06 Trembling aspen/beaked hazel/sarsaparilla	RSA



2. *Rare Plant Potential*

The number of sites where rare plant species were observed in the study area was used as the basis for ranking each vegetation type for rare plant potential (Table C-5). Rare plant occurrences for both the detailed vegetation plot and rare plant survey data were used wherever a location had been recorded.

Ranking Method

- High ratio of sample sites to rare plant observations of > 45 %
- Medium ratio of sample sites to rare plant observations of 22 to 45 %
- Low ratio of sample sites to rare plant observations of < 22 %

Eight out of 20 vegetation types have low rare plant potential, and 6 have medium rare plant potential. The 6 vegetation types that have high rare plant potential are Black Spruce: Moist, Jack Pine: Dry to Fresh, Treed Fen, Treed Swamp, Treed Swamp – Treed Fen, and White Spruce: Moist.



3. Traditional Use (TU) Plant Potential

Three measurements of plant species richness were used to assess capability of each ELC to support TU plant species:

- Mean number of TU Plant occurrences;
- TU Species Richness; and
- Unique and Uncommon TU Plant Species Richness.

The first measure is the mean number of TU plant occurrences within sample plots. This value provides us with the expected number of TU plants that should be found at any particular site. TU Species richness provides the number of TU plant species that occurred in each vegetation type among all plots sampled. Unique and uncommon richness is the count of all TU plant species that occur within only one to two vegetation types. Unique and uncommon TU plant species (Table C-6) are important because they are at a greater risk of being impacted if the vegetation type in which they are found is disturbed. Species documented as being important for traditional use, but which were not found during field surveys are listed in Table C-7.

The three measurements described above were combined to assess the capability for each vegetation type to support potential TU plant species. Vegetation plot data was first reorganised to include only the TU plant species. Table C-8 shows the number of occurrences of each TU plant species for each vegetation type.

Table C-6: Unique or uncommon TU plant species in the LSA

Scientific Name	Common Name(s)	Ecosite Count
<i>Abies balsamea</i>	Balsam Fir	1
<i>Helenium autumnale</i>	Sneezeweed	1
<i>Heracleum maximum</i>	Cow Parsnip, Wild Rhubarb	2
<i>Medicago sativa</i>	Alfalfa	1
<i>Polygala senega</i>	Seneca Root	2
<i>Sarracenia purpurea</i>	Pitcher Plant	1
<i>Sium suave</i>	Water-parsnip	2
<i>Typha latifolia</i>	Cattail, Bulrush	2

Table C-7: Species cited as important for traditional use but not found within the study area.

Scientific Name	Common Name(s)
<i>Acorus americanus</i>	Ratroot, Wild Ginger, Sweet Flag
<i>Allium textile</i>	Prairie Onion
<i>Brassica rapa var. rapa</i>	Turnip
<i>Carum carvi</i>	Caraway
<i>Nuphar lutea</i>	Yellow Pond-lily
<i>Prunus virginiana</i>	Chokecherry
<i>Rosa acicularis</i>	Prickly Rose
<i>Rubus idaeus</i>	Wild Red Raspberry
<i>Sagittaria cuneata</i>	Arrowhead
<i>Salicornia rubra</i>	Red Samphire
<i>Sorbus americana</i>	Western Mountain Ash
<i>Thuja occidentalis</i>	White Cedar
<i>Valeriana dioica</i>	Valerian



Scientific Name	Common Name(s)	BP01	BP01a	BP02	BP03	BP04	BP05	BP06	BP07	BP09	BP10	BP11	BP12	BP13	BP14	BP15	BP16	BP17	BP18	BP18a	BP19	BP23	BP24	BP25	BP26	BP28	Agriculture	Burn	Harvest / Silviculture	Nonforest	Other	Salvage	Human disturbance	Lakes / Rivers / Flooded Lands	Ecotone	Total Occurrences	Ecosite Count
<i>Thuja occidentalis</i>	White Cedar																																		0	0	
<i>Typha latifolia</i>	Cattail, Bulrush																			1						1									2	2	
<i>Urtica dioica</i>	Stinging Nettle					2			1					1	1	2			1	7				4		1								1	20	9	
<i>Vaccinium myrtilloides</i>	Blueberry	2	2	2	15	17	7	7	3	3	1		6	1	7	1		1	5	2			1											2	79	18	
<i>Vaccinium vitis-idaea</i>	Dry-ground Cranberry			3	4	5	4					1	1	1	6	2	2		8	2	2	1				1									43	15	
<i>Valeriana dioica</i>	Valerian																																		0	0	
<i>Viburnum opulus</i>	High Bush-cranberry																																		0	0	
Total Occurrence		20	11	92	126	186	138	193	59	116	25	21	70	45	78	1174	1074	26	66	98	5	9	7	38	3	58	0	0	0	0	0	0	0	8	1686	440	
Species Richness		12	7	17	21	25	28	23	19	29	14	12	22	21	22	27	24	17	19	28	3	5	1	13	3	27	0	0	0	0	0	0	0	7	54		
Number plots		4	2	44	26	24	18	26	5	16	5	2	8	6	12	11	15	2	16	12	2	4	1	12	1	9		1						2	286		
Mean #TU plant Species (Total occurrences/#plots)		5	5.5	2.1	4.8	7.8	7.7	7.4	11.8	7.3	5.0	10.5	8.8	7.5	6.5	10.6	7.1	13.0	4.1	8.2	2.5	2.3	7.0	3.2	3.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	5.9		
Unique richness		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	3		0						0	4.0		



TU plant species richness ranking categories are summarised in Table C-9. Overall potential TU plant species capability ranking is shown in Table C-10.

Table C-9: Ranges of TU Plant Species Richness Values Used to Rank TU Capability

Category (weight)*	Mean # TU Plant occurrences Range	TU Plant Species Richness Range	Uncommon TU Plant Species Range	Overall TU Plant Ranking
Low (1)	1.0 to 6.0	0 to 18	0	3 to 6
Medium (3)	6.1 to 13.0	19 to 32	1	7 to 12
High (7)	13.1 or more	33 or more	2 or more	13 to 21

Note: * weight = value applied to each rank to determine the overall score

Table C-10: TU Plant Species Richness Results

Vegetation Code		N	Mean # occurrences	Mean Ranking	Total Richness	Total Ranking	Unique richness	Unique ranking	Overall Score	Overall Ranking
BP01	June grass - mountain goldenrod grassland	4	5.0	1	12	1	0	1	3	Low
BP01a	Dry shrubland	2	5.5	1	7	1	0	1	3	Low
BP02	Jack pine - lichen	44	2.1	1	17	1	0	1	3	Low
BP03	Jack pine - feathermoss	26	4.8	1	21	3	0	1	5	Low
BP04	Jack pine - trembling aspen - feathermoss	24	7.8	3	25	3	0	1	7	Medium
BP05	Trembling aspen - prickly rose - grass	18	7.7	3	28	3	0	1	7	Medium
BP06	Trembling aspen - beaked hazel - sarsaparilla	26	7.4	3	23	3	0	1	7	Medium
BP07	Trembling aspen - white birch - sarsaparilla	5	11.2	3	19	1	0	1	7	Medium
BP09	White spruce - trembling aspen - feathermoss	16	7.3	3	29	3	0	1	7	Medium
BP10	Trembling aspen - white spruce - feathermoss	5	5.0	1	14	1	0	1	5	Low
BP11	White birch - white spruce - balsam fir	2	10.5	3	12	1	0	1	5	Low
BP12	Jack pine - spruce - feathermoss	8	8.8	3	22	3	0	1	7	Medium
BP13	White spruce - balsam fir - feathermoss	6	7.5	3	21	3	0	1	7	Medium
BP14	Black spruce - Labrador tea - feathermoss	12	6.5	3	22	3	0	1	7	Medium
BP15	Balsam poplar - white spruce - feathermoss	11	10.6	3	27	3	1	3	9	Medium
BP16	Balsam poplar - trembling aspen - prickly rose	15	7.1	3	24	3	0	1	7	Medium
BP17	Manitoba maple - balsam poplar/ostrich fern	1	13.0	3	17	1	1	3	7	Medium
BP18	Black spruce - tamarack - treed swamp	16	4.1	1	19	1	0	1	3	Low
BP18a	Deciduous -mixedwood swamp	12	8.2	3	28	3	0	1	7	Medium
BP19	Black spruce - treed bog	2	2.5	1	3	1	0	1	3	Low
BP23	Tamarack - treed fen	4	2.3	1	5	1	1	3	5	Low
BP24	Leatherleaf - shrubby poor fen	1	7.0	3	1	1	0	1	3	Low
BP25	Willow - shrubby rich fen	12	3.2	1	13	1	0	1	5	Low
BP26	Graminoid fen	1	3.0	1	3	1	0	1	3	Low
BP28	Seaside arrow-grass - marsh	9	6.4	3	27	3	3	7	13	High
	Agricultural Land	0	-	-	-	-	-	-	-	Unranked
	Burn	1	0.0	1	0	1	0	1	3	Low
	Harvest/Silviculture	0	-	-	-	-	-	-	-	Unranked
	Nonforest	0	-	-	-	-	-	-	-	Unranked
	Other (insects/diseases affected)	0	-	-	-	-	-	-	-	Unranked
	Salvage	0	-	-	-	-	-	-	-	Unranked
	Human Disturbance	0	-	-	-	-	-	-	-	Unranked



Vegetation Code		N	Mean # occurrences	Mean Ranking	Total Richness	Total Ranking	Unique richness	Unique ranking	Overall Score	Overall Ranking
	Lakes, Rivers and Flooded Land	0	-	-	-	-	-	-	-	Unranked
BPXX	Ecotone	2	4.0	1	7	1	0	1	3	Low



Twelve vegetation types have a medium overall TU plant species capability rank. Fourteen types have a low ranking, while one type has a high ranking (BP28 Seaside arrow-grass marsh). Seven vegetation types could not be ranked because no field sampling occurred within them.

1.1 WEEDS IN THE STUDY AREAS

Table C-11 provides a list of noxious and invasive weed species identified during field surveys in the study areas. The listing is based on the SKCDC (2011) status for these species.

Table C-11: Weeds in the Study Areas

Scientific Name	Common Name	Provincial Rank ²	Noxious Species	Invasive Species	Occurs in Upland Vegetation	Occurs in Wetland Vegetation
Forbs						
<i>Arctium minus</i>	common burdock	SNA	Yes	Yes		Yes
<i>Chenopodium album</i>	lamb's-quarters	SNA	No	Yes	Yes	Yes
<i>Cirsium arvense</i>	Canada thistle	SNA	Yes	Yes	Yes	Yes
<i>Crepis tectorum</i>	annual hawkweed	SNA	Yes	Yes	Yes	Yes
<i>Daucus carota</i>	wild carrot	SNA	No	Yes	Yes	
<i>Descurainia sophia</i>	flixweed	SNA	No	Yes	Yes	
<i>Galeopsis tetrahit</i>	hemp-nettle	SNA	No	Yes	Yes	Yes
<i>Kochia scoparia</i>	summer-cypress	SNA	Yes	Yes		Yes
<i>Leucanthemum vulgare</i>	ox-eye daisy	SNA	Yes	Yes	Yes	
<i>Matricaria perforata</i>	scentless chamomile	SNA	Yes	Yes	Yes	
<i>Medicago lupulina</i>	black medic	SNA	No	Yes		Yes
<i>Melilotus officinalis</i>	yellow sweet-clover	SNA	No	Yes		Yes
<i>Plantago major</i>	common plantain	SNA	No	Yes	Yes	Yes
<i>Polygonum convolvulus</i>	wild buckwheat	SNA	No	Yes	Yes	Yes
<i>Polygonum persicaria</i>	Lady's-thumb	SNA	No	Yes		Yes
<i>Senecio vulgaris</i>	common groundsel	SNA	No	Yes		Yes

Scientific Name	Common Name	Provincial Rank ^z	Noxious Species	Invasive Species	Occurs in Upland Vegetation	Occurs in Wetland Vegetation
<i>Sonchus arvensis</i>	field sow-thistle	SNA	Yes	Yes	Yes	Yes
<i>Sonchus asper</i>	prickly sow-thistle	SNA	Yes	Yes	Yes	
<i>Tanacetum vulgare</i>	tansy	SNA	Yes	Yes		Yes
<i>Taraxacum officinale ssp. officinale</i>	common dandelion	SNA	No	Yes	Yes	Yes
<i>Thlaspi arvense</i>	stinkweed	SNA	No	Yes	Yes	
<i>Tragopogon dubius</i>	yellow Goat's-beard	SNA	No	Yes	Yes	
<i>Trifolium hybridum</i>	alsike clover	SNA	No	Yes		Yes
<i>Trifolium pratense</i>	red clover	SNA	No	Yes		Yes
<i>Vicia cracca</i>	tufted vetch	SNA	No	Yes		Yes
Graminoids						
<i>Elytrigia repens</i>	creeping wild rye	SNA	No	Yes	Yes	Yes
<i>Hordeum jubatum spp. jubatum</i>	fox-tail barley	SNA	No	Yes	Yes	Yes
<i>Phleum pratense</i>	timothy	SNA	No	Yes	Yes	
<i>Setaria viridis</i>	green foxtail	SNA	No	Yes		Yes

Note: ^z Definitions of provincial S ranks are as follows: SNA - conservation status not yet applicable to the species (SKCDC 2011).

5.0 LITERATURE CITED

- Government of Canada. 2009. Species at Risk Public Registry (SARA). Available at website: <http://www.sararegistry.gc.ca>
- Kershaw, L, J Gould, D. Johnson and J. Lancaster. 2001. Rare vascular plants of Alberta. The University of Alberta Press, Edmonton, Alberta.
- Looman, J and K.F. Best. 1987. Budd's Flora of the Canadian Prairie Provinces. Agriculture Canada Research Branch, Saskatchewan. Publication 1662.
- Moss, E.H. and J.G. Packer. 1994. Flora of Alberta. A manual of flowering plants, conifers, ferns, and fern allies found growing without cultivation in the Province of Alberta, Canada. University of Toronto Press, Toronto, Ontario.
- University of Saskatchewan. 2010. SASK Herbarium: Virtual herbarium of plants at risk in Saskatchewan. Accessed April 2010
http://www.usask.ca/biology/rareplants_sk/root/htm/en/researcher/2_list.php
- Saskatchewan Conservation Data Centre (SKCDC). 2007. CDC Wildlife Application Training Manual. Fish and Wildlife Branch, Saskatchewan Environment. 34 pp.
- Saskatchewan Conservation Data Centre (SKCDC). 2010. Wildlife Mapping Application. Accessed May 2010 and Oct 2010 from
<http://gisweb1.serm.gov.sk.ca/wildlifelogin/form.asp>.
- Saskatchewan Conservation Data Centre (SKCDC). 2011a. Tracked species list for vascular plants. Accessed November 2011 from
<http://www.biodiversity.sk.ca/ftp.htm>
- Saskatchewan Conservation Data Centre (SKCDC). 2011b. Tracked species list for non-vascular plants. Accessed November 2011 from
<http://www.biodiversity.sk.ca/ftp.htm>
- Saskatchewan Conservation Data Centre (SKCDC). 2011. Saskatchewan Noxious Species List. Regina, Saskatchewan. Accessed November 2011.