

Uncommon Plant Communities SOP

1.0 Purpose:

The purpose of this SOP is to outline operational procedures that address known and unknown uncommon plant communities (UPC) found on the Hinton FMA. Known UPCs are those mapped in the HWP Ecological Land Classification, while unknown UPCs are those that may exist on the FMA, but whose location is currently unknown. This SOP describes systems put in place to ensure known uncommon plant communities are identified before field layout begins, so that they can be avoided or conserved as appropriate. This SOP is also intended to provide the planner with detailed information regarding all uncommon plant communities on the FMA so that unknown (i.e. those not mapped in the ELC) UPCs can be identified in the field during layout.

2.0 Definitions

- a. Ecological Land Classification (ELC) – The West-Central Alberta ecosite classification (Beckingham et al. 1996) system uses “Natural Subregions”, “Ecosites”, “Ecosite Phases”, and “Plant Community Types” to identify ecosystems. Using this West-Central Alberta ecosite classification system, ecological landscape classification and mapping for the FMA was completed to the Ecosite Phase level in 2004 by Timberline Natural Resource Group. HWP calls this product the “Ecological Land Classification” (ELC). The ELC for the Hinton FMA has portions of four Natural Subregions, 14 Ecosites, and 43 Ecosite Phases, for a total of 103 Natural Subregion/Ecosite/Ecosite Phase combinations.

- b. Uncommon Plant Community – A plant community is a unique combination of “Natural Subregion”, “Ecosite”, and “Ecosite Phase” as described in the Field Guide to Ecosites of West-Central Alberta (Beckingham et al. 1996). The Field Guide to Ecosites recognizes a “plant community” type as a subdivision of an ecosite phase, but the subdivision will not be used because the maximum resolution of the ELC inventory is to the ecosite phase. HWP used area (hectares) to define uncommon plant communities on the FMA. Therefore, an “uncommon plant community” is a Natural Subregion/Ecosite/Ecosite Phase that occurs on the FMA, and:
 1. For the Lower Foothills, Upper Foothills, and Subalpine Natural Subregions, has a total area of less than 1,000 hectares (approximately 0.1% of the FMA).
 2. For the Montane Natural Subregion, has a total area of less than 225 ha (approximately 1.0% of the FMA Montane area).

Table 1 outlines the hectares and names of the uncommon plant communities found on the Hinton FMA. These communities are all mapped in HWP’s ELC:

Table 1 – Uncommon plant communities on the Forest Management Area (Jan 1, 2013)

Plant Community*	Ecosite	Ecosite Phase	Area (ha)
Montane-A-1	122.6	shrubby grassland	120.2
Montane-A-2	148.2	graminoid grassland	156.6
Montane-B-1	0.3	bearberry Fd	0.3
Montane-B-2	91.9	bearberry Pl	65.0
Montane-C-1	4.3	hairy wild rye Fd	3.3
Montane-E-1	72.4	shrubby meadow	60.3
Montane-E-2	33.1	forb meadow	24.8
Montane-F-1	181.0	horsetail Pb-Aw	59.1
Montane-G-2	141.7	shrubby fen	116.5
Montane-G-3	216.5	graminoid fen	213.8
Montane-H-1	2.9	marsh	2.9
Montane Natural Subregion Total			1014.8
Lower Foothills-A-1	113.7	shrubby grassland	113.1
Lower Foothills-B-1	185.9	bearberry/lichen Pl	155.1

Plant Community*	Ecosite	Ecosite Phase	Area (ha)
Lower Foothills-C-4	826.4	hairy wild rye Sw	851.7
Lower Foothills-G-2	599.3	forb meadow	590.8
Lower Foothills-K-2	248.1	shrubby bog	250.3
Lower Foothills-N-1	114.3	marsh	114.2
Lower Foothills Natural Subregion Total			2087.8
Upper Foothills-A-1	252.9	shrubby grassland	247.7
Upper Foothills-B-1	870.7	bearberry/lichen Pl	730.2
Upper Foothills-K-2	203.0	shrubby bog	201.1
Upper Foothills Natural Subregion Total			1326.6
Subalpine-A-1	242.9	shrubby grassland	242.2
Subalpine-A-2	109.9	graminoid grassland	109.9
Subalpine-C-2	358.5	hairy wild rye Pl-Aw	335.2
Subalpine-E-2	265.2	forb meadow	239.5
Subalpine-H-1	588.8	treed bog	587.1
Subalpine-H-2	2.9	shrubby bog	2.8
Subalpine-I-3	689.4	graminoid fen	679.4
Subalpine Natural Subregion Total			2257.7
Forest Management Area Total			6686.8

3.0 Application

The SOP applies to all HWP lay-out. Every Final Harvest Plan will be checked against the uncommon plant community database to determine if known uncommon plant communities are within areas being proposed for harvesting or road construction.

4.0 Uncommon Plant Community Awareness

There are a number of different mechanisms for HWP staff to learn about the uncommon plant communities that occur on the FMA. These mechanisms include:

- The Uncommon Plant Community Guidebook – This Guidebook describes in detail the different uncommon plant communities on the FMA. Information on the Natural Subregion, ecosite, and ecosite phase are described for each UPC, including information on the leading indicator plant species and how to identify them.
- Staff Training – All field staff will be required to undergo uncommon plant community training to ensure awareness of the uncommon plant communities and what to do when they are encountered.

5.0 Stand Operating Procedure

This section outlines the procedures to ensure uncommon plant communities are identified and, wherever possible, conserved.

5.1 Known Uncommon Plant Community Assessment

Before Final Harvest Plan layout, road layout, or other disposition layout (e.g. gravel pit, etc.) is commenced, HWP staff will refer to the uncommon plant community GIS layer to determine whether or not there are known UPCs in the compartment and, if so, determine where they are located. The location of known UPCs will be verified during layout.

5.2 Unknown Uncommon Plant Community Assessment

During field layout, HWP staff will keep an eye out for unknown uncommon plant communities (i.e. those that may not have been mapped as part of the ELC). Indicators associated with uncommon plant communities that may warrant further investigation include:

- Steep unvegetated slopes (i.e. grass or shrub is the dominant layer).
- Any natural grass, herb, or shrub dominated opening
- Any wetland – (e.g. swamp, bog, fen, lake, etc.)
- Any microsite that seems uncommon (e.g. tufa spring, mineral lick, very dry sites, very wet sites, etc.)

5.3 Develop a Plan to Conserve UPCs

Any known or discovered uncommon plant community will be mapped at the Final Harvest Plan.

The first strategy to conserve UPCs will be to avoid them wherever possible. This strategy is likely to prevail in most situations, as most of the UPCs are either non-forested or poor productivity sites, where harvesting is unlikely to occur.

Where UPCs will not be avoided (e.g. site is part of the active landbase and can be conserved over the long term), the planner will develop, as part of the FHP, a prescription with the objective (wherever possible) of re-establishing the UPC over time. Harvesting may take place in some forested UPCs (e.g. B1 – Bearberry/Lichen PI), given the sites are reforested to the pre-harvest vegetation.

6.0 Silviculture

For Final Harvest Plans where UPCs have been identified and harvesting has been proposed, before submission to ESRD, the HWP planner will first review the prescription with HWP's silviculture department to ensure the proposed prescription is feasible.

7.0 Monitoring and Reporting

Any change to the status of uncommon plant communities (as defined in Table 1) will be updated annually in HWP's Stewardship Report and reported on every five years as a part of HWP's DFMP Performance Stewardship Report.

8.0 Other Documentation

- Uncommon Plant Communities guidebook