

**ORDER – Wildlife Habitat Areas**  
**#8-338, 8-339, 8-343 to 8-345, and 8-347 to 8-349**  
**Antelope-brush/Needle-and-thread grass –Okanagan Shuswap Forest District**

This order is given under the authority of sections 9(2) and 10(1) of the *Government Actions Regulation* (B.C. Reg. 582/2004) (GAR).

1. The Deputy Minister of Environment, being satisfied that
  - i. the following area contains habitat that is necessary to meet the habitat requirements for the antelope-brush/needle-and-thread grass (*Purshia tridentata/Hesperostipa comata*) plant community; and
  - ii. the habitat requires special management that is not otherwise provided for under GAR or another enactment;orders that
  - a) the area shown in the map set out in the attached Schedule As (8-338, 8-339, 8-343 to 8-345, and 8-347 to 8-349) and contained in the wildlife habitat areas (WHAs) spatial layer stored in the Geographic Warehouse (*twha\_bc*) are established as wildlife habitat areas 8-338, 8-339, 8-343 to 8-345, and 8-347 to 8-349 for the antelope-brush/needle-and-thread grass plant community. The centre point of the line on the attached Schedule As is what establishes the WHA boundary; and
  - b) if there is a discrepancy between the areas shown in the map set out in the attached Schedule As and the WHA spatial layer stored in the Geographic Warehouse (*twha\_bc*), the areas as detailed in the WHA spatial layer will take precedent.
2. The Deputy Minister of Environment, being satisfied that
  - i. the general wildlife measures (GWMs) described below are necessary to protect and conserve the antelope-brush/needle-and-thread grass plant community; and
  - ii. GAR or another enactment does not otherwise provide for that protection or conservation;orders that
  - a) the GWMs outlined in Schedule 1 are established for WHAs 8-338, 8-339, 8-343 to 8-345, and 8-347 to 8-349.

### *Definitions*

Words and expressions not defined in this order have the meaning given to them in the *Forest and Range Practices Act* (FRPA) and the regulations made under it, unless context indicates otherwise.

**Livestock attractants:** a substance or structure that draws livestock, including salt/minerals, supplements, water developments and cattle oilers.

### Schedule 1 – General Wildlife Measures

#### *Access*

1. Do not construct (including blasting) access structures.

#### *Pesticides*

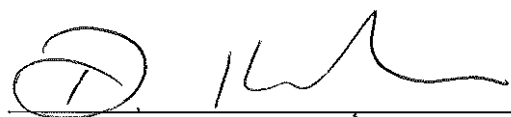
2. Do not use pesticides, except for the application of herbicides to control for invasive plants or noxious weeds.

#### *Range*

3. Implement livestock grazing (timing, distribution and level of use) in order to:
  - a) Maintain or restore to a late seral stage, maintaining a mosaic of various seral stages and structure expected in natural conditions of this community; and
  - b) Minimize soil disturbance to maintain or re-establish cryptogamic soil crust.
4. Do not place livestock attractants within WHA.

#### *Recreation*

5. Do not develop recreational sites, trails or facilities.



Signed this 23 day of July, 2009  
Doug Konkin, Deputy Minister  
Ministry of Environment

## Appendix 1:

The following information is provided by the Ministry of Environment (MoE) as background information and support to the order establishing WHAs 8-338, 8-339, 8-343 to 8-345, and 8-347 to 8-349. This appendix is not part of the order.

**1. Activities to which the order does not apply:** Section 2(2) of the *Government Actions Regulation* states

An order under any of sections 5 to 15 does not apply in respect of

(a) any of the following entered into before the order takes effect:

(i) a cutting permit;

(ii) a road permit;

(iii) a timber sale licence that does not provide for cutting permits;

(iv) a forestry licence to cut issued by a timber sales manager under section 47.6 (3) of the Forest Act;

(v) subject to subsection (3), a minor tenure,

(b) a declared area,

(c) areas described in section 196 (1) of the Act, and

(d) areas referred to in section 110 of the Forest Planning and Practices Regulation.

2. Authority to consider an exemption from these GWMs is provided in section 92(1) of the FPPR, section 79(1) of the *Woodlot Licenses Planning and Practices Regulation* and section 36(3) of the *Range Planning and Practices Regulation*. An exemption may be provided if the Minister's delegate is satisfied that the intent of the GWM will be achieved or that compliance with the provision is not practicable, given the circumstances or conditions applicable to a particular area.

An exemption application should be submitted to the Minister's delegate (Regional Manager – MoE, for the Region that the WHA is located) with a rationale describing the nature of the problem and options to integrate WHA conservation with proposed forest and/or range practices. This submission will assist in timely consideration of the matter, and will inform the conditions, if any, of the exemption that may be granted prior to commencement of activities. Upon receipt of a complete exemption application, a determination will normally be made within 14 days of arrival. Incomplete packages will be returned to the proponent for re-submission.

3. With respect to GWM 3, fencing may be required due to the high fragility of the antelope brush/ needle-and-thread grass community. Should it be determined that fencing is required, MoE and the Ministry of Forests and Range will work collaboratively with the range tenure holder to explore opportunities for funding assistance and to determine areas of responsibility for fence construction and maintenance.
4. With respect to GWM 3, the natural plant composition in the late seral stage of the antelope-brush/needle-and-thread grass plant community is expected to have a moderate

cover of bluebunch wheatgrass (*Pseudoroegneria spicata*) and junegrass (*Koeleria macrantha*), with needle-and-thread grass (*Hesperostipa comata*), brittle prickly-pear cactus (*Opuntia fragilis*), red three-awn (*Aristida purpurea* var. *longiseta*), and sand dropseed (*Sporobolus cryptandrus*); the shrub layer consists of antelope-brush (*Purshia tridentata*), with lesser amounts of big sagebrush (*Artemisia tridentata*) and rabbit-brush (*Ericameria nauseosus*). The moss layer may contain a low percent cover of *Tortula ruralis*.

The natural state of this plant community consists of the shrub and herb layers described above, and is supported by a natural disturbance regime involving frequent low-intensity fires and low intensity grazing.

The cryptogam crust at climax should consist of a variety of lichen and moss species, be well-developed, and provide moderate to high cover.

The fragility of the antelope-brush/needle-and-thread grass plant community is high to very high and is slow to recover from disturbance. The community is susceptible to intensive grazing as exposure of the wind-blown soils frequently associated with this community means that these sites are susceptible to erosion. Maintaining a high cover of cryptogam crust may require reducing livestock use and managing distribution to minimize damage from trampling.

5. General wildlife measure goals:

- For most sites, maintain or restore to a late seral stage. For larger WHAs, maintain a mosaic of various seral stages and structure expected in natural conditions of this community.
- Maintain or restore plant community to a natural state (i.e., same physical structure, and ecological processes as natural examples of the plant community) and natural plant composition of this plant community (see "Description").
- Minimize or avoid access.
- Minimize soil disturbance. Maintain or re-establish cryptogamic soil crust.
- Minimize the introduction and spread of invasive species.

6. Additional Management Considerations:

- Minimize impacts to vegetation, soils and hydrology when operating adjacent to a WHA, particularly during road development and maintenance.
- Restrict recreational use (i.e., dirt bikes, mountain bikes, and other off-road vehicles).
- A prescribed fire program that approximates the natural fire regime could assist in the recovery of this plant community provided it is planned and implemented carefully. However, it may be difficult to duplicate historical fire patterns with only small fragments of the community remaining.

7. Description:

- Antelope-brush/needle-and-thread grass is a shrub-steppe community that has a shrub layer consisting of antelope-brush (*Purshia tridentata*), with lesser amounts of big sagebrush (*Artemisia tridentata*) and rabbit-brush (*Ericameria nauseosus*). The herb layer is dominated by needle-and-thread grass (*Hesperostipa comata*), with brittle prickly-pear cactus (*Opuntia fragilis*), red three-awn (*Aristida purpurea* var.

- longiseta*), and sand dropseed (*Sporobolus cryptandrus*). The moss layer may contain a low percent cover of *Tortula ruralis*. This community at climax is expected to have a moderate cover of bluebunch wheatgrass (*Pseudoroegneria spicata*) and junegrass (*Koeleria macrantha*) (Lea and Maxwell 1995). The cryptogam crust at climax should consist of a variety of lichen and moss species, be well-developed, and provide moderate to high cover.
- Much of the area that originally supported this community has been converted for agricultural use or is now dominated by early seral plant communities. These early seral communities can be identified by the high cover of introduced species (e.g., *Bromus tectorum*), low cover (or absence) of needle-and-thread grass, sand dropseed, bluebunch wheatgrass, and junegrass, a reduction in forb diversity and lack of a cryptogam crust.
  - This community occurs at lower elevations, on all aspects, from mid to lower slopes, mainly on gently sloping areas (occasionally steeper slopes). Soils consist of rapidly drained coarse-textured materials, derived from glacio-fluvial materials and often with a capping of eolian sands. In general, soils are classified as Brown Chernozems. Sites are dry to very dry (relative within subzone), often with drought conditions. Nutrient conditions, however, can range from poor to medium.

