



ORDER – STONE’S SHEEP UNGULATE WINTER RANGE # U-7-028

Mackenzie Forest District

This order is given under the authority of sections 9(1), 9(2) and 12(1) of the *Government Actions Regulation* (B.C. Reg. 582/2004).

1. The Regional Executive Director, Omineca Region, Ministry of Forests, Lands and Natural Resource Operations, being satisfied that
 - i. the following area contains habitat that is necessary to meet the winter habitat requirements for Stone’s sheep (*Ovis dalli stonei*); and
 - ii. the habitat requires special management that is not otherwise provided for under GAR or another enactment;orders that
 - a) the areas shown in the map set out in the attached Schedule A (Ungulate Winter Range U-7-028) and contained in the ungulate winter range (UWR) spatial layer stored in the Land and Resource Data Warehouse (WHSE_WILDLIFE_MANAGEMENT.WCP_UNGULATE_WINTER_RANGE_SP) are established as ungulate winter range U-7-028 for Stone’s sheep. The centre point of the line on the attached Schedule A is what establishes the UWR boundary; and
 - b) if there is a discrepancy between the areas shown in the map set out in the attached Schedule A and the UWR spatial layer stored in the Land and Resource Data Warehouse (WHSE_WILDLIFE_MANAGEMENT.WCP_UNGULATE_WINTER_RANGE_SP), the areas as detailed in the UWR spatial layer will take precedent.
2. The Regional Exective Director, Omineca Region, Ministry of Forests, Lands and Natural Resource Operations, being satisfied that
 - i. the general wildlife measures (GWMs) described below are necessary to protect and conserve Stone’s sheep and Stone’s sheep habitat; 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 UWR U-7-028.
 - b) the GWMs 4, 5, 6, 7 and 8 outlined in Schedule 1 are applied to the areas specified in those GWMs.

Schedule 1 – General Wildlife Measures

Definitions

In this schedule:

- a) Words and expressions not defined in this Order have the meaning to them in the *Forest and Range Practices Act* and regulations made thereunder, unless context indicates otherwise,
- b) “primary forest activity” is defined as in the Forest Planning and Practices Regulation,
- c) “decommission” refers to either partial or complete treatment of roads and trails with the intent to prevent, as much as possible, motor vehicle access while taking into account site-specific operating constraints; where practicable this activity will include right-of-way revegetation activities to manage long-term access,
- d) “mineral exploration activity” means an activity involving the cutting of trees or construction and/or maintenance of roads and trails related to the exploration and development of a mineral or placer tenure under the *Mineral Tenures Act* and which requires a Notice of Work permit under the *Mines Act*,
- e) “mineral cell” means a Mineral Titles Online claim acquisition unit and is 16 to 21 hectares, depending on latitude,
- f) “Stone’s sheep core winter range” are those winter range units established by way of this Order, and
- g) “Stone’s sheep specified area” are those specified area Units SA1, SA2, SA3 and SA4 established by way of this Order.

Harvesting:

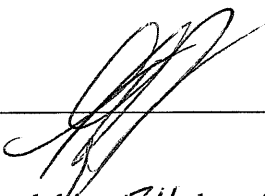
- 1. Primary forest activities must not result in the removal of forest cover within a Stone’s sheep core winter range, except as provided in GWM 2 or GWM 3.
- 2. GWM 1 does not apply where:
 - a) guyline anchors and tailholds are required to facilitate timber harvesting adjacent to the Stone’s sheep core winter range; or,
 - b) trees felled for the purposes in (a) that fall within the designated Stone’s sheep core winter range are retained on-site
- 3. GWM 1 does not apply for the purposes of mineral exploration activities if:
 - a) exploration activities occur outside of the critical late winter and lambing period of January 15th – July 15th;
 - b) exploration activities use existing clearings, trails and roads unless it is not practicable to do so;
 - c) any necessary tree harvesting avoids mature stands (≥ 80 years old) and avoids the removal of lichen-bearing trees, unless it is not practicable to do so;

- d) an individual forest opening (defined as the total tree harvested area created for the purposes of mineral exploration and mining activity) is not greater than 1 ha, not including forest openings for the purposes of building trails and roads;
 - e) the total of individual forest openings (defined as the total tree harvested area created for the purposes of mineral exploration activity), including those created for the purposes of building trail and roads does not exceed:
 - i. 10 percent of the mineral cell, OR
 - ii. 10 percent of any defined aggregate of mineral cells up to a maximum of 25 mineral cells;
 - f) new trails and roads do not have a running width greater than 3.5metres except for the purposes of safety or culvert placement; and
 - g) actions are taken on newly constructed or reconstructed trails and roads to restrict access. This will be site-specific and could include, but is not limited to:
 - i. use of signage and gates on active trails and open roads where practicable,
 - ii. use of signage and safe (defined as large and clearly visible), impassable barricades across seasonal or permanently deactivated road surface widths.
4. All helicopter logging activities conducted within 2000 metres line-of-sight of a Stone's sheep core winter range must take place during the period starting July 15 and ending October 31.
5. Within 500 metres of Stone's sheep core winter range, primary forest activities must take place during the period starting July 15 and ending October 31.
6. GWM 5 does not apply if:
- a) it is determined by a qualified professional knowledgeable in Stone's sheep ecology that the Stone's sheep core winter range units and the adjacent 500 metres referred to in GWM 5 is unoccupied by Stone's sheep; and
 - b) all primary forest activities cease if the presence of Stone's sheep are indicated within the Stone's sheep core winter range unit referred to in a) or within 500 metres of the Stone's sheep core winter range; and
 - c) any indication of Stone's sheep occupation during primary forest activities is reported to the Ministry of Forests, Lands and Natural Resource Operations, Director of Resource Management, (Omineca Region) within 72 hours of the work stoppage; and
 - d) continuous ground monitoring of the Stone's sheep core winter range unit referred to in a) and the adjacent 500 metres occurs during primary forest activities by the license holder or their appointed contractors to document winter range occupation or non-detection of Stone's sheep, and
 - e) the planned timing of works within the 500 metre specified area referred to in GWM 5 are provided to the Director of Resource Management (Omineca Region), two weeks prior to the commencement of primary forest activities associated with the works, and
 - f) all monitoring reports are submitted to Ministry of Forests, Lands and Natural Resource Operations, Director of Resource Management (Omineca Region) within three months of harvest completion date.

7. All roads or access structures within 500 metres of Stone's sheep core winter range must be decommissioned within three years following harvest completion date.

Range:

8. Within Stone's sheep core winter range or Stone's sheep specified area Units SA1, SA2, SA3 or SA4;
- a) salt or mineral supplement blocks placed for the purposes of improving or maintaining domestic cattle and/or horse nutrition must be in an unused condition and must not have been predisposed to contact with domestic sheep, goats, llamas or alpacas,
 - b) no use of domestic sheep or goats for vegetation management, and
 - c) no use of domestic sheep, goats, llamas or alpacas within existing or new Range tenures.



Signed this 24 day of May, 2016
Greg Rawling, Regional Executive Director
Ministry of Forests, Lands and Natural Resource Operations

Appendix 1

These appendices are not part of the legal Order for U-7-028. They are intended to provide guidance for meeting the General Wildlife Measures addressed in the Order.

1. As per section 2(2) of the *Government Actions Regulation*, the order entitled “ORDER – Stone’s sheep Ungulate Winter Range U-7-028” 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 forest 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 *Forest and Range Practices Act*; and
 - d. areas referred to in section 110 of the *Forest Planning and Practices Regulation*.
2. Authority to consider an exemption from these general wildlife measures is provided in Section 92(1) of the Forest Planning and Practices Regulation. In instances where it is not practicable to comply with these measures, a person proposing to conduct forestry activities should consider seeking an exemption from the requirements to comply with the applicable General Wildlife Measures.
3. An exemption application should be submitted to the Minister’s delegate (Director, Resource Management – Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) for the Omineca Region) with a rationale describing the nature of the problem and options to integrate winter range conservation with proposed forest practices (a template for exemption requests is available at: <http://www.env.gov.bc.ca/wld/frpa/index.html>). 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 for timing window exemptions will be processed within 10 calendar days, all other exemptions will be handled within 15 working days of arrival at the MFLNRO Regional office. Incomplete packages will be returned to the proponent for resubmission.
4. Exemptions for salvage of dead timber (non-infectious) resulting from severe natural disturbance may only be considered if the proposal is a net benefit to the Ungulate Winter Range species being managed for, as opposed to taking no action.
5. These GWMs do not apply to persons who must comply with the *Worker’s Compensation Act* and the regulations under that Act (e.g. danger tree felling).

Appendix 2 – Supporting information

Guidelines for Stone's sheep Ungulate Winter Range U-7-028, Mackenzie Forest District (Mackenzie Natural Resource District)

These guidelines are important practices to consider while planning and operating within and around the Stone's sheep UWR. Professionals preparing operational plans have site-specific discretion and flexibility in prescribing methods to achieve desired habitat condition. *A Compendium of Wildlife Guidelines for Industrial Development Projects in the North Area, British Columbia*¹ summarizes best available science and best practices literature in a results-based, professional reliance approach, and is available to forest licensees to provide guidance and best management practises for activities within and adjacent to sensitive ungulate populations such as Stone's sheep. This document includes specific recommendations to consider for avoiding risk to Stone's sheep through the management of access and disturbance.

To manage disease risk from domestic sheep and goats:

Further to GWM 8:

Stone's sheep is a subspecies of thinhorn sheep (*Ovis dalli stonei*). Recent research indicates that British Columbia supports all of the world's Stone's sheep population (Helen Schwantje, Wildlife Veterinarian, FLNRO; Personal communication). As it is generally acknowledged that thinhorn sheep in Alaska and northwestern Canada have likely seen little exposure to disease organisms carried by domestic sheep and goats (compared to other wild sheep in southern Canada and the US), it is essential that no association occurs between thinhorn sheep and domestic sheep and goats (Wild Sheep Working Group 2012; Dimarchi and Hartwig, 2004). To this end, specified area units SA1, SA2, SA3 and SA4 comprise a 30km buffer around Stone's sheep core UWR units, as well as UWR units where Stone's sheep occur as a secondary species. These other UWR units are listed in Appendix 3.

The risk of overlap and disease transmission during vegetation management practises by domestic sheep is only likely to occur during the summer period. During this time, Stone's sheep may travel beyond winter range areas to summer range habitat. While 30km is proposed as the legal minimum buffer between Stone's sheep and domestic sheep and goats, *a 50 km buffer is recommended as a Best Management Practise* for these northern BC Stone's sheep populations (Bill Jex, Wildlife Biologist, and Helen Schwantje, Wildlife Veterinarian, FLNRO; Personal communication).

While the use of livestock (eg. horse) attractants is not restricted within U-7-028, the intent of GWM 8 is to ensure that attractants such as salt blocks have not come into contact with domestic sheep, goats or domestic camelids (llamas or alpacas). This is to reduce the risk of transmission of the parapoxvirus, Contagious Ecthyma (also known as soremouth or orf). The virus can survive for years in the environment and is highly contagious to wild sheep and goats.

¹ Ministry of Forests, Lands and Natural Resource Operations. 2014. A Compendium of Wildlife Guidelines for Industrial Development Projects in the North Area, British Columbia. Interim Guidance. <http://a100.gov.bc.ca/pub/eirs/finishDownloadDocument.do?subdocumentId=9921>

Appendix 3 – Cross reference to Proposed UWRs U-7-025, U-7- 029 and U-7-030

1. Proposed Stone's sheep Ungulate Winter Range specified area units SA1, SA2, SA3 or SA4 within U-7-028 overlap with the following U-7-030 mountain goat core winter range units:

Unit # 2, 6, 9, 10, 11, 12, 13, 14, 15, 17, 19, 27, 32, 37, 38, 47, 48, 52, 53, 58, 65, 68, 71, 75, 76, 81, 92, 101, 104, 108, 109, 110, 111, 113, 117, 118, 128, 129, 131, 138, 141, 144, 147, 162, 178, 189, 255, 260, 278, 285, 293, 295, 309, 310, 317, 319, 326, 327, 328, 329, 332, 335, 341, 346, 350, 356, 359, 362, 363, 365, 367, 374, 378, 382, 392, 394, 401, 402, 411, 420, 421, 558, 578, 580, 595, 626, 637, 648, 653, 659, 660, 677, 685, 690, 707, 728, 730, 737, 741, 749, 791, 799, 801, 918, 919, 920, 921, 983, 1135, 1138, 1146, 1156, 1167, 1204, 1220, 1225, 1311, 1313, 1316, 1323, 1324, 1326

2. Proposed Stone's sheep Ungulate Winter Range specified area units SA1, SA2, SA3 or SA4 within U-7-028 overlap with the following U-7-029 mountain goat core winter range units:

Unit # 77, 78, 79, 80, 81, 82, 83

3. Proposed Stone's sheep Ungulate Winter Range specified area units SA1, SA2, SA3 or SA4 within U-7-028 overlap with the following U-7-025 northern caribou core winter range units:

Unit # 21, 37, 38, 44, 45, 46, 49, 55, 60, 62, 106.

These units have either mountain goat or northern caribou listed as the primary species, and Stone's sheep listed as the secondary species. To reduce the considerable risk of disease introduction from domestic sheep and goats to naïve native Stone's sheep populations, the specified area units SA1, SA2, SA3 or SA4 as identified in U-7-028 will apply adjacent to those mountain goat or northern caribou core winter range units that have Stone's sheep listed as a secondary species.

References and links for more information:

Corbould, F.B. 2001. Abundance and distribution of Stone's sheep and mountain goats on the Russel Range, March 1993. PWFwCP Report No. 243.

http://www.bchydro.com/pwcp/pdfs/reports/pwfwcp_report_no_243.pdf

Dimarchi, R.A. and C.L. Hartwig. 2004. Status of thinhorn sheep in British Columbia. BC Ministry of Water, Land and Air Protection. Wildlife Report B-119.

<http://www.wafwa.org/documents/wswg/BritishColumbia-ThinhornSheep2004.pdf>

Ministry of Environment, Lands and Parks. 2000. Thinhorn sheep in British Columbia. Ecology, Conservation and Management. <http://www.env.gov.bc.ca/wld/documents/thinhorn.pdf>

Ministry of Forests, Lands and Natural Resource Operations. 2013. Draft – Best management practises for helicopter operation and wildlife in the Omineca Region. Landbase Stewardship BMP Series. Feb. 6, 2013.

Ministry of Forests, Lands and Natural Resource Operations. 2014. A Compendium of Wildlife Guidelines for Industrial Development Projects in the North Area, British Columbia. Interim Guidance.

<http://a100.gov.bc.ca/pub/eirs/finishDownloadDocument.do?subdocumentId=9921>

Wild Sheep Working Group. 2012. Recommendations for domestic sheep and goat management in wild sheep habitat. Western Association of Fish and Wildlife Agencies.

Walker, A.B.D., K.L. Parker, M.P. Gillingham, D.D. Gustine and R.J. Lay. 2007. Habitat selection by female Stone's sheep in relation to vegetation, topography and risk of predation. *Ecoscience* 14:55-70.

Watts, Glen. 2013. Identification of critical Stone's sheep winter range habitat in the Mackenzie Forest District. FLNRO. Personal communication.