

**Rationale – Approval of UWR U-3-005
Mountain Caribou (*Rangifer tarandus caribou*)
Revelstoke Shuswap Planning Unit**

In approving this ungulate winter range (UWR) U-3-005 each of the tests under the *Government Actions Regulation* (GAR) was considered.

GAR 2 – Limitations on Actions

1. The order is consistent with established objectives.

In my review of objectives established by government under the *Forest and Range Practices Act*, I find the order consistent with Section 180 (grandparenting specified designations) and S. 181 (grandparenting objectives) including recreation sites, recreation trails, and scenic areas.

In my review of objectives established by government under the *Forest Planning and Practices Regulation*, I find the order is consistent with Section 5 (soils), S.6 [timber; as outlined below in my rationale relevant to the *Government Action Regulation* section 2(1)(b) and 2(1)(c)], S.8 (water, fish, wildlife and biodiversity in riparian areas), S.8.1 (fish habitat in fisheries sensitive watersheds), S.8.2 (community watersheds), S.9 (wildlife and biodiversity – landscape level), S.9.1 (wildlife and biodiversity – stand level), S.9.2 (visual quality), and S.10 (cultural heritage resources).

In my review of existing objectives established by *Land Act*, *Land Use Objectives Regulation*, and *Government Action Regulation* orders, I have determined that all but six of these objectives are fully consistent with this order. The six objectives that may not be fully consistent are found within the Revelstoke Higher Level Plan Order and relate to Section 3 “Caribou” objectives (a) through to (f), inclusive. For these objectives, I have assumed that they will be rescinded prior to this order coming into effect. I am comfortable with this assumption given this was an interagency collaborative process and staff have informed me that the minister responsible for the *Land Act* will imminently rescind these objectives from the Revelstoke Higher Level Plan Order to facilitate this order’s approval and implementation. Therefore, I find this order is consistent with all relevant objectives established by order.

Having considered all available information pertaining to this order, I find that there are no elements of this order that would be inconsistent with established objectives applicable to forest and range practices and planning within the Revelstoke Shuswap Planning Unit.

2. *The order would not unduly reduce the supply of timber from British Columbia's forests.*

The *Forest and Range Practices Act* (FRPA) does not define “unduly” so I will consider dictionary definitions of “unduly”, such as “excessive”, “disproportionate” and “unwarranted”, when assessing the test under section 2(1)(b).

The test of whether an action will unduly reduce the supply of timber from British Columbia's forests needs to be considered in light of government's timber supply impact policy for the establishment of UWR for mountain caribou. I am guided by relevant policies that have been completed over time that apply to this decision.

In the area of the Revelstoke Shuswap planning unit, government's previous timber supply impact policy relating to the management of mountain caribou is established by a series of High Level Plan Order (HLPO) objectives for mountain caribou (Revelstoke HLPO and Kootenay Boundary HLPO), the Kamloops Land and Resource Management Plan (LRMP) and associated legal orders as well as direction from the Okanagan Shuswap LRMP. In the area of the Revelstoke and Kootenay HLPs, mountain caribou are managed through a series of Resource Management Zone objectives. In the Kamloops LRMP mountain caribou are managed by way of the Timber Harvesting Guidelines for Caribou Habitat in Appendix 10 of the LRMP. UWR U-8-004 established in July 2006 is consistent with the management direction for mountain caribou contained in the Okanagan Shuswap LRMP.

The document titled “Memorandum Of Understanding On Establishment Of Ungulate Winter Ranges And Related Objectives” and dated 2003, provides guidance with respect to governments timber supply impact policy for the establishment of UWR; impacts are based on Timber Supply Review (TSR) 1, TSR 2 or approved strategic land use plans, as well as the TSR 2 non timber harvesting land base (NTHLB).

The document titled “Considerations for the Selection of LUOR and GAR: Using the Land Use Objectives Regulation (LUOR) and the Government Actions Regulation(GAR) in a complementary manner”, approved by the FRPA Joint Steering Committee and dated October 17, 2008, provides guidance with respect to assessing “Corporate government” direction for land and resource decisions. The document indicates that Corporate government direction for the implementation of land and resource may be provided by Cabinet in their approval of a land and resource use decision. This approval may then be used as a basis for implementing the mountain caribou decision under the GAR provided the GAR tests are met.

On October 16, 2007, government announced a plan to recover mountain caribou. The plan included a provincial commitment to protect 2.2 million ha of forested habitat, capturing 95% of mountain caribou's high suitability winter habitat, with an incremental amount of 380,000 ha of which 77,000 ha was expected to be in the timber harvesting land base (THLB); impacts to the THLB are based on TSR 2. This decision and

specifically the incremental THLB commitment have established government's current timber supply impact policy for the management of mountain caribou habitat. The test of unduly impacting the timber supply from British Columbia's forest for the establishment of mountain caribou habitat protection must be considered in the context of this government direction.

I note that as background information to the October 16, 2007 decision government developed a final recovery implementation plan for mountain caribou that focused habitat protection measures on high suitability winter habitat within a government sanctioned budget of 1% of THLB throughout the range (approximately 115,000 ha), with the caveat that the viability of individual operators be maintained. Analyses suggested that 95% of high suitability winter habitat throughout the range where recovery was deemed feasible could be protected within the budget and without creating a timber supply issue (although the need for further economic analyses was acknowledged). This will result in the protection of 2.2 million ha of forested land, with approximately 77,000 ha coming from the THLB. Within this context, the 77,000 ha of incremental THLB is government's target, but it is also considered the minimum incremental amount, given government's previous accepted impacts of 1% THLB throughout the range (approximately 115,000 ha).

I am mindful of the strategic nature of timber supply models and that analysis, information and assumptions are never certain and change over time. For the purpose of this decision I am satisfied short-term timber supply impacts are expected to be minimal, however I expect this will be monitored over time through adaptive management and future timber supply reviews.

Based on the provincial target of 77,000 ha of incremental THLB, targets were developed for each of the eight planning units where habitat management actions are planned. The incremental THLB target for the Revelstoke Shuswap planning unit is 10,000 ha of THLB, based on TSR 3. UWR U-3-005 has been developed consistent with this direction. The Revelstoke Shuswap Habitat Team considered options for the location of the incremental habitat in the THLB and also the location of the NTHLB and potential future operability. UWR U-3-005 is within the incremental THLB target with an incremental impact of 10,010 ha THLB. Additional information pertaining to the identification of incremental habitat for the Revelstoke Shuswap planning unit can be obtained from the report titled "Final Report on The Allocation Of Incremental Habitat in the Revelstoke/Shuswap (3-A) Caribou Planning Unit" and dated May 28, 2008".

I am satisfied that this order will not unduly reduce the supply of timber from British Columbia's forests.

3. *The benefits to the public derived from the order would outweigh any material adverse impact of the order on the delivered wood costs of a holder of any agreement under the Forest Act that would be affected by the order.*

The FRPA does not define "material adverse impact". The test under section 2(1)(c)(i) is a "material adverse impact" not just an "adverse impact". A "material" effect is often defined as a "highly important" or "significant" effect.

In a letter dated March 4, 2008, and reiterated in an e-mail dated November 12, 2008, Downie Timber Ltd has provided information to suggest that UWR U-3-005 will have a material adverse impact on the delivered wood costs of their operations. They state that the spatial deployment of the incremental and status quo habitat constraints have resulted in increased fragmentation of the land base resulting in numerous smaller areas becoming uneconomic to harvest and generally increasing delivered wood costs for the remaining land base. They recognize that this was considered as much as possible through the work of the Revelstoke Shuswap Habitat Team, Ministry of Forests and Range (MFR) and licensees in spatializing the status quo habitat and adding the incremental habitat. They state that the exact amount of this impact has not been quantified and is difficult to measure. Downie Timber Ltd. has provided information to suggest that their delivered wood costs are expected to increase by \$9.00/cubic meter, although no specific analytical details of the estimate are provided.

No other *Forest Act* agreement holders, either prior to the review and comment period or during the review and comment period, provided information to suggest that the amended order for UWR U-3-005 would create a material adverse impact on delivered wood costs. Additional comments were made by licensees, however many of those comments were related to the "planning" process, building flexibility into the order, creating future processes, dealing with mitigation, and other management levers. None of these comments directly relate to this test.

In considering the information submitted by Downie Timber Ltd. I have considered that an increase of \$9.00/cubic meter may represent a material adverse impact to delivered wood costs. I also note that Downie Timber Ltd. recognizes that the true nature of this increase cannot be fully modeled or accounted for. I have also considered that the Revelstoke Shuswap Habitat Team and *Forest Act* agreement holders, when developing the final recommendation for UWR U-3-005, considered the location of mountain caribou line work in relation to the THLB and potential timber isolation and economic impacts. Furthermore, future operability was considered when placing line work in the NTHLB and *Forest Act* agreement holders were given the opportunity to review and adjust the UWR boundaries in the NTHLB based on a five year projection of future operability. The order for U-3-005 has been specifically drafted with provisions to allow *Forest Act* agreement holders to make adjustments around UWR boundaries under specific circumstances without requiring an exemption from the Ministry of Environment (MOE). All of these actions will serve to minimize the possibility of the order creating a material adverse impact on delivered wood costs.

In addition to considering the potential for this order to have a material adverse impact on delivered wood costs, I have considered the public benefits that will be derived from this order. Mountain caribou are currently listed as “threatened” under the federal *Species at Risk Act* and are “red-listed” (endangered or threatened) in British Columbia. The provincial Conservation Framework ranking lists this southern population as a high priority¹ for conservation action. The Kootenay Boundary Land Use Plan, Revelstoke Higher Level Plan Order, Kamloops LRMP and Okanagan Shuswap LRMP have previously identified mountain caribou management as being in the public interest and include habitat management objectives for mountain caribou. The Species at Risk Coordination Office conducted extensive stakeholder consultation on the 2006 Draft Mountain Caribou Recovery Implementation Plan. This stakeholder consultation informed government’s October 16, 2007 announcement to recover mountain caribou. This announcement establishes the public interest for mountain caribou management.

The information I have considered, including comments from affected *Forest Act* agreement holders, specifically Downie Timber Ltd., does indicate that this order may create a material adverse impact on delivered wood costs. Although I have no information before me to directly support or refute Downie Timber’s cost estimate I do find that the public benefits gained from this order to be significant. I find the public benefit of this order to be compelling relative to the potential for any material adverse impact on the delivered wood costs of a holder of any agreement under the *Forest Act* that would be affected by the order. As a result I am satisfied that further analysis with respect to this test is not warranted.

I also note that government commits to implementation monitoring and a review of the status quo habitat over the next three years. The purpose of this activity will be to determine if any no harvest areas should be relocated for the benefit of both mountain caribou and licensees. Details and terms of reference for this process will be developed in the future in partnership with MOE, MFR, Integrated Land Management Bureau, the herd expert and licensee representatives.

4. *The benefits to the public derived from the order would outweigh any undue constraint on the ability of a holder of an agreement under the Forest Act or the Range Act that would be affected by the order to exercise the holder's rights under the agreement.*

The FRPA does not define “undue” so I will consider dictionary definitions of “undue”, such as “excessive”, “disproportionate” and “unwarranted” when assessing the test under section 2(1)(c)(ii).

There are no affected *Range Act* agreement holders; the general wildlife measures (GWMs) do not speak to range practices.

¹ Ranked out as high priority “2” for Goal 1 (global conservation efforts) and Goal 3 (maintaining native diversity).

Forest Act agreement holders have cited the report titled "Summary Report of Mountain Caribou Recovery Plan: Timber Risk Assessment" and dated June 2008 to suggest that UWR U-3-005 will create a viability risk for operators in the Revelstoke Shuswap planning unit.

I understand that the report has raised a cautionary flag to indicate that the proposed actions in the Revelstoke Shuswap planning unit are approaching a level that may impact the viability of operations within, specifically relating to the availability of spruce and cedar. However, the report is clear that there is no current risk to viability for the planning unit.

In a letter dated March 4, 2008, and reiterated in an e-mail dated November 12, 2008, Downie Timber Ltd. has provided information to suggest that UWR U-3-005 will have a material adverse impact on the delivered wood costs of their operations. Downie Timber Ltd. has provided information to suggest that their delivered wood costs are expected to increase by \$9.00/cubic meter, although no specific analytical details of the estimate are provided.

In considering the information submitted by Downie Timber Ltd. I have considered that an increase of \$9.00/cubic meter in delivered wood costs may also represent an undue constraint on the ability of Downie Timber Ltd. to exercise the rights of their agreement, by impacting Downie's ability to access the volume of timber specified in their tenure document in an economic manner. I also note that Downie Timber Ltd. recognizes that the true nature of this increase cannot be fully modeled or accounted for. I have also considered that the Revelstoke Shuswap Habitat Team and *Forest Act* agreement holders, when developing the final recommendation for UWR U-3-005, considered the location of mountain caribou line work in relation to the THLB and potential timber isolation and economic impacts. Furthermore, future operability was considered when placing line work in the NTHLB and *Forest Act* agreement holders were given the opportunity to review and adjust the UWR boundaries in the NTHLB based on a five year projection of future operability. The order for U-3-005 has been specifically drafted with provisions to allow *Forest Act* agreement holders to make adjustments around UWR boundaries under specific circumstances without requiring an exemption from the Ministry of Environment (MOE). All of these actions will serve to minimize the possibility of the order creating an undue constraint on the ability of agreement holders to carry out their rights under their agreement.

In addition to considering the potential for this order to unduly constrain the ability of an agreement holder to exercise their rights, I have considered the public benefits that would be derived from this order. Mountain caribou are currently listed as "threatened" under the federal *Species at Risk Act* and are "red-listed" (endangered or threatened) in British Columbia. The provincial Conservation Framework ranking lists this southern population as a high priority² for conservation action. The Kooteany Boundary Land Use Plan, Revelstoke Higher Level Plan Order, Kamloops LRMP and Okanagan Shuswap LRMP

² Ranked out as high priority "2" for Goal 1 (global conservation efforts) and Goal 3 (maintaining native diversity).

have previously identified mountain caribou management as being in the public interest and include habitat management objectives for caribou. The Species at Risk Coordination Office conducted extensive stakeholder consultation on the 2006 Draft Mountain Caribou Recovery Implementation Plan. This stakeholder consultation informed government's October 16, 2007 announcement to recover mountain caribou. This announcement establishes the public interest for mountain caribou management.

The information I have considered, including comments from affected *Forest Act* agreement holders, does indicate that this order may constrain the ability of a holder of an agreement under the *Forest Act* or the *Range Act* to exercise the holder's rights under the agreement. Although I have no information before me to directly support or refute Downie Timber's cost estimate I do find that the public benefits gained from this order to be significant. I find the public benefit of this order to be compelling relative to the lack of a clear indication of an undue constraint on the ability of a holder of an agreement under the *Forest Act* or the *Range Act* to exercise the holder's rights under the agreement. As a result I am satisfied that further analysis with respect to this test is not warranted.

I also note that government commits to implementation monitoring and a review of the status quo habitat over the next three years. The purpose of this activity will be to determine if any no harvest areas should be relocated for the benefit of both mountain caribou and licensees. Details and terms of reference for this process will be developed in the future in partnership with MOE, MFR, Integrated Land Management Bureau, the herd expert and licensee representatives.

GAR 3 – Consultations and Reviews

- 1. An opportunity for review and comment was provided to the holders of agreements under the Forest Act or the Range Act that would potentially be affected by the order.*
- 2. Consultation was carried out with holders on whom the order may have a material adverse effect.*

Between October 2007 and March 2008 the Revelstoke Shuswap Habitat Team and agency representatives on the team held several meetings with *Forest Act* agreement holders to discuss the direction for implementing incremental habitat in the Revelstoke Shuswap planning unit. Adjustments to UWR boundaries were made based on the input received from *Forest Act* agreement holders. Additional information and details are available in the report titled "Final Report on The Allocation Of Incremental Habitat in the Revelstoke/Shuswap (3-A) Caribou Planning Unit" and dated May 28, 2008.

On June 20, 2008, all holders of agreements under the *Forest Act* that would potentially be affected by UWR U-3-005 were given an opportunity to review and comment on the proposed UWR line work as well as the proposed GWMs for UWR U-3-005.

Comments were received from Downie Timber Ltd., Revelstoke Community Forest Corporation, Bell Pole Ltd., and the Kamloops TSA membership. Government staff held

meetings with the Kamloops TSA membership on September 23, 2008, and the Revelstoke licensees on October 9, 2008, to discuss the comments received on the proposed UWR order.

A number of changes were made to the order to address *Forest Act* agreement holder concerns. There were no outstanding unresolved issues with UWR U-3-005 following the meeting with Kamloops TSA members on September 23, 2008. MOE, acting on behalf of the Species at Risk Coordination Office and MFR, provided a written response to the concerns of the Kamloops TSA members on December 11, 2008.

Following the meeting with Revelstoke licensees, a number of items remained outstanding. Government provided a written response to each of the concerns on December 11, 2008. The unresolved issues and government's response are as follows:

1. Licensees want a commitment to mitigation and an agreed to approach prior to the order being approved.

Government response: Mitigation is a process that will be considered separate from the GAR order. The Ministry of Forests and Range is expected to initiate a process following the establishment of this order.

2. Licensees do not believe that the tests in GAR 2 are met, specifically as they pertain to impacts to timber supply, delivered wood costs and undue constraint on an agreement holder.

Government response: I have considered all the relevant tests. This rationale outlines how each test has been considered. Rationales are available for licensees to review after my consideration.

3. Licensees expressed concern about the level of operational flexibility provided in the GWMs. They want more reliance on professionals and more flexibility around boundaries.

Government response: GWMs were revised from the June 20, 2008, draft to provide clearer direction to operational flexibility around UWR boundaries. These revisions were made with MFR input and specifically to address licensee concerns expressed during review and comment. The resulting GWMs are a balance between flexibility for forest operators and maintaining mountain caribou habitat.

4. Licensees do not support the manner in which forest health is addressed. They want provision in the GWMs to address forest health.

Government response: GWMs related to forest health will be considered for amendment once the forest health report is finalized and adequate time is taken to draft GWM language to indicate where the requirements of no harvesting and no road building should not apply. *Forest Act* agreement holders will be consulted as part of this process.

5. Licensees requested that government formally commit to a review of spatialized status quo area from the Revelstoke Higher Level Plan Order that is incorporated in the GAR order within two to three years to see if efficiencies can be gained for both mountain caribou and forest licensees.

Government response: Government commits to implementation monitoring and a review of the status quo over the short term; i.e., three years. This process will determine if any no harvest areas should be relocated for the benefit of both mountain caribou and licensees. Mitigation in any form is not part of this process, unless it is agreed to allow the overlap of old growth management areas on the incremental habitat. Details and terms of reference for this process are expected to be developed in the future in partnership with MOE, MFR, the herd expert and licensee representatives.

All comments received by MOE during review/comment or consultation were made available for my consideration.

Considering the consultation with *Forest Act* agreement holders between October 2007 and March 2008, as well as the review and comment period on the final line work and proposed GWMs conducted in June 2008, I find that an opportunity for review and comment was provided to the holders of agreements under the *Forest Act* that would potentially be affected by the order and that consultation was carried out with holders on whom the order may have a material adverse effect. There are no affected *Range Act* agreement holders.

GAR 9 - General Wildlife Measures

1. *The general wildlife measures are necessary to protect and conserve mountain caribou.*

The Mountain Caribou Science Team, established in 2005, identified forest harvesting and road building to be significant threats to mountain caribou. The document titled "Mountain Caribou in British Columbia: A Situation Analysis" and dated 2005 provides a detailed assessment of threats to mountain caribou.

In October 2007 government announced a plan to recover mountain caribou and committed to protecting 2.2 million ha of high suitability forested habitat from logging and road building.

http://www.env.gov.bc.ca/sarco/mc/files/MC_Recovery_Implementation_Plan_News_Release_20071016.pdf

The GWMs for UWR U-3-005 are consistent with government's October 2007 commitment of no timber harvesting and road building. The GWMs represent the current best available science pertaining to caribou habitat management.

An adaptive management framework is currently being developed that will guide the implementation monitoring of recovery actions. Under this model the GWMs will be

monitored to ensure that they are achieving the intended result for caribou while at the same time providing operational flexibility for *Forest Act* agreement holders.

I am satisfied that the GWMs established by this order are necessary to protect and conserve mountain caribou. The measures are consistent with current standards and are supported by the current best available science.

2. *The regulations under the Forest and Range Practices Act or another enactment do not otherwise provide for that protection or conservation.*

In order to meet government's commitment to the protection of 2.2 million ha of high suitability mountain caribou habitat from timber harvesting and road building, a total of 10,000 hectares of incremental high suitability winter habitat within the THLB requires protection from timber harvesting and road building in the Revelstoke Shuswap planning unit. This was based on the stated goal of capturing the entire high suitability habitat within line work proposed by the Mountain Caribou Science Team.

While other regulations under the FRPA or other enactments may deliver some of the special management required for the protection or conservation of mountain caribou in the Revelstoke Shuswap planning unit, these do not provide the necessary protection to meet the commitment to mountain caribou recovery and specifically the requirement of no timber harvesting or road building within high suitability mountain caribou habitat.

I find the GWMs established by this order to be necessary and I am satisfied that the regulations under the FRPA or another enactment do not otherwise provide for the protection or conservation of mountain caribou in the areas addressed by this order.

GAR 12 – Ungulate Winter Ranges

1. *The ungulate winter range is necessary to meet the winter habitat requirements of a category of specified ungulate species.*

The Mountain Caribou Science Team developed a mountain caribou habitat suitability model to identify high suitability winter habitat across the range of mountain caribou. Analyses confirmed that 95% of the high suitability winter habitat could be maintained by protecting 2.2 million ha of forested land. The Science Team model was based on the best available science and expert opinion. Methods and results of Science Team modelling are summarized in two progress reports, dated January 2006 and March 2006 (<http://www.env.gov.bc.ca/sarco/mc/sciencedocs.html>).

From November 2007 to March 2008, the Revelstoke Shuswap Habitat Team was directed to use the Science Team habitat suitability model to inform their work to identify the proposed location of incremental habitat. The Habitat Team also used the best available local information and expertise from herd experts. The Habitat Team reached consensus on the final recommendation and this recommendation was approved by the Mountain Caribou Directors Committee in March 2008. Additional background

information on the work of the Habitat Team can be obtained from the report titled "Final Report on The Allocation Of Incremental Habitat in the Revelstoke/Shuswap (3-A) Caribou Planning Unit" and dated May 28, 2008.

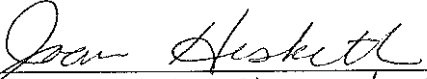
I am satisfied that UWR U-3-005 contains habitat that is necessary to meet the winter habitat requirements of mountain caribou.

2. *The ungulate winter range requires special management that is not otherwise provided for under the Forest and Range Practices Act or another enactment.*

In order to meet Government's commitment to the protection of 2.2 million ha of high suitability mountain caribou habitat from timber harvesting and road building, a total of 10,000 hectares of incremental high suitability winter habitat within the THLB requires protection from timber harvesting and road building in the Revelstoke Shuswap planning unit. This was based on the stated goal of capturing the entire high suitability habitat within line work proposed by the Mountain Caribou Science Team.

While other regulations under the FRPA or other enactments may deliver some of the special management required for the protection or conservation of mountain caribou UWR habitat in the Revelstoke Shuswap planning unit, these do not provide the necessary protection to meet mountain caribou recovery and specifically the protection of high suitability winter habitat.

I find the UWR established by this order to be necessary and I am satisfied that the regulations under the FRPA or another enactment do not otherwise provide for the protection or conservation of mountain caribou winter range habitat in the areas addressed by this order.


Signed this 18 day of December, 2008
Joan Hesketh, Deputy Minister
Ministry of Environment

