Rationale – Approval of UWR U-4-014
Mountain Caribou (*Rangifer tarandus caribou*)
Central Kootenay Planning Unit

In approving this ungulate winter range (UWR) U-4-014 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 (grandpartenting specified designations) and S. 181 (grandparenting objectives) including visual quality, recreation sites and recreation trails objectives.

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 one of these objectives are fully consistent with this order. The one objective that may not be fully consistent is found within the Kootenay Boundary Higher Level Plan Order and relates to Section 3 "Caribou", specifically objective 3. For this objective, I have assumed that it will be rescinded prior to this order coming into effect.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 this objective from the Kootenay Boundary 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 Central Kootenay 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 WHA for mountain caribou in the area of the Central Kootenay planning unit. I am guided by relevant policies that have been completed over time that apply to this decision.

In the area of the Central Kootenay planning unit, government's previous timber supply impact policy relating to the management of mountain caribou is established by the Kootenay Boundary High Level Plan Order dated October 2002 plus subsequent related variances [in particular variance 04 in March 2005]. The Higher Level Plan identifies caribou habitat in each of several Resource Management Zones [these RMZs are generally based on Forest Districts]. The caribou habitat in the RMZs is divided into 8 "zones" each with a different level of constraint on harvesting ranging from 100% no harvest to greater than 33% retention of the 'crown forested land base' with Age Class 5 or greater.

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 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 protecting 2.2 million ha of forested habitat, capturing 95% of mountain caribou's high suitability winter habitat, and 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 generally based on the TSR 2 definition of THLB. 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).

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 habitat target for the Central Kootenay planning unit is 19,985 ha of THLB based on TSR 2. The Kootenay Habitat Team considered options for the location of the incremental habitat in the THLB. Additional information pertaining to the identification of incremental habitat for the Kootenay Habitat planning unit can be obtained from the report titled "Second Progress Report for the Planning Units 1A, 1B and 2B" dated March 2008.

I note that in the spring of 2008 the Ministry of Forest and Range completed a "Timber Supply Risk Assessment" which in combination with *Forest Act* agreement holder and government staff comments suggested the licensees operating primarily in the Kootenay Lake TSA were at significant economic risk if the incremental habitat were to be protected for caribou. As a result government committed to working with *Forest Act* agreement holders to develop mitigative options for incremental habitat in the Kootenay Lake TSA. Between May 2008 and December 2008 staff from SaRCO, the Ministry of Forest and Range as well as the herd experts have been working with *Forest Act* agreement holders to identify options primarily for completing the incremental habitat identification in the Kootenay Lake TSA. I note that final meetings in December resulted in the final UWR U-4-014.

I understand that a November 2008 government decision identified a set of options for the Kootenay Lake TSA that would ensure the fibre shortfall for the *Forest Act* agreement holders (Interior Lumber Manufacturing Association (ILMA) members and Meadow Creek Cedar Ltd) caused by the incremental habitat would be fully mitigated in the short term. This set of options included:

- Increasing the area of 'no harvest' in TFL 23 and decreasing the area of no harvest along Trout Lake.
- Meeting with ILMA members and Meadow Creek Cedar to discuss impacts on caribou and on the industry and negotiating some line work changes.
- Allowing some harvest of caribou habitat for the next 20 years and recruiting replacement habitat where necessary.

- Transfer of harvesting rights between management units under section 18 of the *Forest Act*.

The final area of THLB included in U-4-014 is 19,883 ha, although 3,206 ha of this THLB are available for harvest over the next 20 years. Excluding the 3,206 ha available for harvesting over the next 20 years, this is a decrease of 3,308 ha under the habitat team target of 19,985 ha. In assessing the final THLB numbers I note that the final UWR for U-4-014 has been developed with the support of *Forest Act* agreement holders and that agreement holders have had significant opportunity to review UWR line work and have developed mitigative options that were accepted by government for the incremental habitat in the Kootenay Lake TSA. As part of the work to mitigate the impacts of incremental habitat, areas of high value THLB were made available for harvesting within the previous draft UWR and traded for other less economic areas of the THLB. I am satisfied that this decrease in THLB [3,308] will not generate an impact on the timber supply. I am also satisfied that the incremental habitat as a whole within the Central Kootenay planning unit has been expressly developed to reduce short term timber supply impacts for operators, specifically in the Kootenay Lake TSA.

I note that Meadow Creek Cedar Ltd. has submitted information to government to suggest that their timber supply shortfall is considerably larger than the Ministry of Forest and Range's original estimate of the impact of the caribou plan on Meadow Creek Cedar Ltd. Although supportive of the line work changes that were made in the area of the Kootenay Lake TSA, the proposed line work does not meet Meadow Creek Cedar's expectations to maintain their timber supply over the next 10 years.

I am satisfied that as a result of the collaborative work with *Forest Act* agreement holders that UWR U-4-014 does not represent a significant impact to the timber supply in the area of the Central Kootenay planning unit.

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.

No information was provided by *Forest Act* agreement holders, either prior to the review and comment period or during the review and comment period, to suggest that the order for UWR U-4-014 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 the absence of information from *Forest Act* agreement holders I have considered that when the Kootenay Habitat Team developed the initial drafts of UWR U-4-014 the location of the THLB and potential timber isolation and economic impacts were considered. The subsequent work by government and *Forest Act* agreement holders between May and December 2008 and resulting line work revisions have specifically been made with express interest in minimizing both delivered wood costs and the isolation of timber.

I recognize that this order will restrict access to certain merchantable stands and may increase the cost of delivering timber to processing facilities, however, given the opportunity given to *Forest Act* agreement holders to influence the location of the incremental habitat, combined with the lack of input relative to this test, I am satisfied that impacts on delivered wood costs have been minimized and are not significantly material in nature.

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 priority[1] for conservation action. 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 not indicate that this order would create a material adverse impact on delivered wood costs. I find the public benefit of this order to be compelling relative to the lack of an indication of a materially adverse impact on the delivered wood costs of a holder of any agreement under the *Forest Act* that would be affected by the order.

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).

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

There are no affected *Range Act* agreement holders; the GWMs do not speak to range practices.

Comments have been received by *Forest Act* agreement holders both prior to and during the GAR review and comment to suggest that UWR U-4-014 would have an undue constraint on the ability of a holder of an agreement under the *Forest Act* to exercise the holder's rights under the agreement within the area of the Kootenay Lake TSA. Furthermore, I note that in the spring of 2008 the Ministry of Forest and Range completed a "Timber Supply Risk Assessment" which in combination with *Forest Act* agreement holder and government staff comments suggested the licensees operating primarily in the Kootenay Lake TSA were at significant economic risk if the incremental habitat were to be protected for caribou..

As a result government committed to working with *Forest Act* agreement holders to develop mitigative options for incremental habitat in the Kootenay Lake TSA. Between May 2008 and December 2008 staff from SaRCO, the Ministry of Forest and Range as well as the herd experts have been working with *Forest Act* agreement holders to identify options for completing the incremental habitat identification. I note that final meetings in December 2008 resulted in the final UWR U-4-014 and that the final UWR has been developed with the support of *Forest Act* agreement holders and that agreement holders have had significant opportunity to review UWR line work and have developed mitigative options that are accepted by government. I am confident that as a result of the collaborative work with *Forest Act* agreement holders and their support for the resultant UWR line work that previous concerns related to the viability of operators in the Kootenay Lake TSA have been addressed. I note that there was no information provided to suggest that UWR U-4-014 would create an undue constraint in areas outside of the Kootenay Lake TSA. As such I do not believe that UWR U-4-014 will create an undue constraint on the ability of a holder of an agreement under the *Forest Act* to exercise the holder's rights under the 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 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 priority[2] for conservation action. 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 not indicate that this order would unduly constrain the ability of a holder of an agreement under the *Forest Act* or the *Range Act* to exercise the holder's

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

rights under the agreement. I find the public benefit of this order to be compelling relative to the lack of an 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.

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.*

I note that between October 2007 and March 2008 the Kootenay 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 Central Kootenay planning unit. In May 2008 the Species at Risk Coordination Office offered face to face meetings with affected parties to discuss the draft maps for inclusion into the draft order. These meetings resulted in many minor line work changes and several major line work changes that were neutral or positive for mountain caribou.

In May 2008 government requested that the ILMA, with the support of the Ministry of Forest and Range and the Integrated Land Management Bureau provide, by the end of August, a list of mitigating options to ensure continued fibre supply to maintain viability of ILMA members.

On June 20, 2008, all holders of agreements under the *Forest Act* that would potentially be affected by UWR U-4-014 were given an opportunity to review and comment on the proposed UWR line work as well as the proposed GWMs for UWR U-4-014. Comments were received from Wyndell Box, Atco and Wood Products, Interfor and Meadow Creek Cedar Ltd.

In August 2008 the ILMA delivered on government's request and submitted their report on mitigation options to the Minister of Forests and Range. In early November 2008 government chose a set of options for the Kootenay Lake Forest District that would ensure the short term fibre shortfall for the ILMA and Meadow Creek Cedar caused by the incremental habitat would be fully mitigated. Between May 2008 and December 2008 staff from the Species at Risk Coordination Office, the Ministry of Forest and Range as well as the herd experts collaborated with *Forest Act* agreement holders to identify options for completing the incremental habitat identification. Final meetings in December resulted in the final proposed GAR line work which has been supported by all *Forest Act* agreement holders.

The following comments have been either received through the GAR review and comment period or subsequent consultation with *Forest Act* agreement holders.

1. *Forest Act* agreement holders want to be fully mitigated and/or compensated for economic expenditures in the no harvest area (e.g. roads and permitted development). They want a commitment from government before the GAR orders are 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 lead a process after the order is established.

2. *Forest Act* agreement holders do not believe that the tests in GAR section 2 around impacts to timber supply, delivered wood costs and undue constraint on an agreement holder are met.
   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. *Forest Act* agreement holders are unclear about how forest health will be addressed.
   Government response: General wildlife measures 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.

4. *Forest Act* agreement holders want greater assurances that the "other management levers" such as herd augmentation and helicopter and snow machine control will be effectively managed concurrent with habitat implementation.
   Government response: Government is working to ensure that all sectors are functioning under a regulated approach and that all management levers identified in the October 2007 recovery plan are being implemented.

5. *Forest Act* agreement holders would like assurances that if herd populations do not grow the habitat will be returned to them for potential harvesting.
   Government response: Accompanying the implementation of the GAR orders will be an adaptive management framework to assist with evaluating the effectiveness of recovery implementation actions. Should actions prove to be ineffective, government will consider options.

6. Meadow Creek Cedar Ltd. has expressed concerns related to accessing a 10 year wood supply.
   Government response: Government has worked extensively with Meadow Creek to develop mitigation options for the incremental habitat. Meadow Creek's estimate of their timber supply shortfall is considerably larger than Ministry of Forests and Range's original estimate of the impact of the caribou plan on Meadow Creek. The proposed line work does not meet Meadow Creek's expectations but exceeds MFR's shortfall estimate. If additional analyses suggest

that Meadow Creek's supply shortfall due to the incremental habitat is not fully mitigated than this can be addressed through non-GAR tools (e.g., recharting).

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 December 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 or conserve the species at risk.*

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-4-014 are consistent with government's October 2007 commitment of no timber harvesting and road building while meeting government's commitment around operator viability. 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 general wildlife measures established by this order are necessary to protect and conserve mountain caribou to meet the recovery plan population targets. The measures are consistent with current standards and are supported by the current best available science.

1. *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 19,985 ha of incremental high suitability winter habitat within the THLB requires protection from timber harvesting and road building in the Central Kootenay 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 Central Kootenay 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).

The development of UWR U-4-014 has been guided by the Science Team habitat suitability model to inform their work to identify the proposed location of incremental habitat. The Kootenay Habitat Team also used the best available local information and expertise from herd experts. Additional information pertaining to the identification of incremental habitat for the Kootenay Habitat planning unit can be obtained from the report titled "Second Progress Report for the Planning Units 1A, 1B and 2B" dated March 2008. UWR U-4-014 represents a collaborative effort to maintain high value winter caribou habitat while also maintaining operator viability and timber supply in the Kootenay Lake TSA.

I am satisfied that UWR U-4-014 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 19,985 ha of incremental high suitability winter habitat within the THLB requires protection from timber harvesting and road building in the Central Kootenay 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 Central Kootenay 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.

Joan Hesketh

Signed this 19 day of December, 2008
Joan Hesketh, Deputy Minister
Ministry of Environment