



Re: New Ungulate Winter Range Order U-4-002 for Mountain Goat in the Selkirk and Rocky Mountain Resource Districts (Cranbrook TSA, Invermere TSA, TFL 14 and Golden TSA)

I am writing to advise you that a new Ungulate Winter Range (UWR) Order for mountain goat (*Oreamnos americanus*) is proposed for the Cranbrook, Invermere and Golden TSAs (timber supply areas) and TFL (timber forest license) 14. Mountain goat winter range was previously managed for within UWR Orders U-4-006 and U-4-008, covering the Cranbrook and Invermere TSAs, respectively, but is now being proposed as its own Order (U-4-002) that also includes the Golden TSA and TFL 14.

Ungulate Winter Range Orders are made under the authority of the *Forest and Range Practices Act* (FRPA) and the *Oil and Gas Activities Act* (OGAA). FLNRORD can establish UWR designations under both the *Government Actions Regulation* (GAR) of FRPA and the *Environmental Protection and Management Regulation* (EPMR) of OGAA. The management requirements outlined under GAR (the General Wildlife Measures (GWMs)) regulate primary forest activities as they relate to access, timber harvesting, silviculture and pesticide use. GWMs may also be established to regulate range activities. UWR designations under EPMR are considered by the Oil and Gas Commission, among the suite of Government's Environmental Objectives¹, when adjudicating oil and gas activity permits. Oil and gas operating areas are not to be located within an UWR unless the operating area will not have a material adverse effect on the habitat within the UWR.

This new Order is proposed for the following reasons:

1. Orders U-4-006 and U-4-008 do not explicitly manage for forest and range activities that can have long-lasting, negative consequences for wintering mountain goats such as increased motorized access into their winter ranges (eg. via snowmobiles on forest service roads), and disturbance from helicopter traffic used to carry-out forestry related activities. Recent mountain goat UWR Orders set a new precedent for managing goat winter range in addressing the components of forest and range activities we now know have negative consequences for wintering goats. Thus, it is timely to develop a new mountain goat UWR Order in Region 4 with the guidance of newly developed Orders elsewhere in the Province (eg. U-6-007).
2. The original spatial delineation of mountain goat winter range in Orders U-4-006 and U-4-008 was modelled by coarse landscape variables (eg. TRIM and Predictive Ecosystem Modelling) and could not be validated at that time with survey data because it did not exist (Neil et al. 2003). In the years since these Orders were legislated, Region 4 has

¹ Government's Environmental Objectives are defined in OGAA as "the prescribed objectives of the government respecting the protection and effective management of the environment."

collected much more winter mountain goat data that can now be used to better understand their winter habitat selection. Accordingly, mountain goat winter habitat selection was modelled and partially validated in 2018/ 2019 for the Cranbrook, Invermere and Golden TSAs using newly acquired data and advanced modelling techniques to support the development of this new UWR Order (Crombie 2020). The development of this model directly aligns with the habitat management recommendation from the Management Plan for Mountain Goat (2010) to “review, update, and validate/ refine habitat suitability modelling.”

3. In 2015, the provincial conservation status of mountain goats changed from no concern (yellow-listed) to a species of special concern (blue-listed). This designation change was largely attributed to population declines in some areas of the province, particularly in the south (B.C. Conservation Data Centre 2015). Accordingly, 64% of mountain goat populations surveyed between 2013 - 2015 in the Kootenay Boundary Region showed declines compared to earlier surveys that took place between 2004 – 2008 (Poole 2015). Small mountain goat population sizes are vulnerable to local extirpation from cumulative factors including inclement winter weather, hunting pressure, disease outbreaks, depredation, and increased energy expenditure during critical periods (eg. winter) resulting from disturbance from human recreation and motorized vehicles (Smith 1984, Fox et al. 1989, Festa-Bianchet and Côté 2008, Shackleton and Wilson 2001, Mountain Goat Management Team 2010, White et al. 2011). Given the heightened conservation status of mountain goats in the Province and increased knowledge on the cumulative factors that affect their demographics and use of habitat, it is timely to develop stronger legislation to protect and manage their winter habitat using the tools available (ie. GAR Orders).

Please find enclosed the GAR and EPMR draft UWR Orders, the corresponding mature timber harvesting land base (THLB) assessment, and a supplementary report for your review. Proposed spatial data can be viewed in the following ways:

1. Proposed UWR spatial linework can be downloaded from <https://catalogue.data.gov.bc.ca/dataset/ungulate-winter-range-proposed> and the shapefiles can be viewed in ArcGIS. The shapefile will have to be filtered by UWR # U-4-002, otherwise all other proposed UWR shapefiles in the Province will also be visible.
2. The proposed UWR shapefile can be loaded into iMap and viewed on a web browser. The link for iMap is here: <https://maps.gov.bc.ca/ess/hm/imap4m/>. Click on the ‘Data Sources’ tab at the top of the iMap browser, select ‘Add Provincial Layers’, and search for ‘Ungulate Winter Range - Proposed’ and load that layer for viewing. Pan to the Kootenay region to see the mountain goat UWR extent.
3. Download a .kml file of U-4-002 from this ftp site: ftp://ftp.geobc.gov.bc.ca/pub/outgoing/KB_Distribution/GoatUWR/ for viewing in Google Earth

FLNRORD is now taking the steps that are necessary to designate U-4-002. As part of this process, we look forward to receiving comments within the next 40 days regarding any edits or concerns you may have regarding this newly proposed UWR Order. I would be pleased to meet with you to answer any questions. If you would like to arrange a meeting, please contact me at 250-420-6405 or by email at Merle.Crombie@gov.bc.ca.

If there is no response within 40 days of when this referral was sent, I will assume you have no concerns and the proposed UWR Order will be moved forward towards a determination.

Thank you for your attention to this matter, I look forward to hearing from you.

Sincerely,



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Habitat Biologist

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