

Bulkley Valley Wildlife Habitat Management Areas and Fish & Wildlife Reserves

The Cabinet approved Bulkley LRMP directed government agencies to come up with a publicly supported process for land designation for the remaining portions of public lands (outside of Parks & Protected Areas) within the Agriculture/Wildlife Zone. Land designation emphasis was for either agriculture/farm land development (crop production) or for wildlife habitat protection/conservation. This direction was made legal under the Bulkley LRMP Higher Level Plan Order in December, 2000.

A Bulkley Valley agriculture-wildlife project ensued with lands being assessed for agriculture capability and moose/deer suitability/capability with consideration of other wildlife habitat values. Representatives from the Cattlemen's Association, Community Resources Board, Ministry of Agriculture, Food & Fisheries, BC Asset & Lands, and the Ministry of Water, Land & Air Protection collectively participated in a working group and came to consensus with respect to proposed land designations. Public lands that had known current agriculture leases and grazing leases overlap were not tabled for discussion - these parcels of public lands will either be further developed for agriculture or transitioned for wildlife habitat conservation (future discussions will be required on a case by case basis).

The package proposed by the working group was subsequently taken forward for public review and comment concurrently with the Bulkley Valley Sustainable Resource Management Plan (SRMP) prepared by the Ministry of Sustainable Resource Management.

Through the Bulkley LRMP, the Agriculture/Wildlife working group, and the Bulkley Valley Landscape (SRMP), social choice with government endorsement has been made with respect to Wildlife Habitat Management Area (WHMA) and Agriculture Development Area (ADA) designations. The highest and best use of remaining public lands within the Agriculture/Wildlife Zone has thus been determined.

Ministry of Environment and Ministry of Agriculture & Lands determined that a S.17 Land Act Reserve was the most appropriate designation for WHMAs in meeting the management intent as specified in the Bulkley LRMP. Land Act Reserves under S.16 still apply for Fish & Wildlife Reserves. Some WHMAs may be changed to S.16 Fish & Wildlife Reserves upon further assessment. It is the expectation of the Ministry of Environment that S.16 & S.17 Land Act designations for Fish & Wildlife Reserves and WHMAs remain in place in perpetuity; if this is not to be the case, other designations may have to be explored.

The primary objective for WHMAs and Fish & Wildlife reserves is to provide wildlife habitat attributes for wintering ungulates, passerines and other birds, and small mammals. Habitat maintenance or enhancement of these land parcels will drive land stewardship activities such as forestry or ranging of livestock. The proposed management conditions attached reflect this objective while recognizing some potentially compatible uses.

The Minister responsible for the Land Act has imposed terms and conditions considered necessary or advisable on S.17 land use designations (under separate cover as part of the formal approval of the land parcels).

Forestry & Range Activities

1. Livestock Range Activity

1.1 Fish & Wildlife Reserve

1. No new Range Act tenures will be permitted in Fish and Wildlife Reserves.
2. Grazing tenures that are surrendered or cancelled will not be re-advertised.
3. No increase in authorized Animal Unit Months (AUM) within existing grazing tenures.
4. When a new Fish & Wildlife Reserve is established adjacent to an existing grazing tenure, the onus is on the Ministry of Forests, Lands and Natural Resource Operations (MFLRNO) to restrict livestock access into the Fish & Wildlife Reserve.
5. When a new grazing tenure is established adjacent to a Fish & Wildlife Reserve, the onus is on the tenure holder to prevent entry of livestock into the Fish & Wildlife Reserve.

1.2 Wildlife Habitat Management Area (WHMA)

1. Grazing licences and permits are to be managed for WHMA compatibility.
2. Major range use plan amendments or proposed new tenures within a WHMA will be referred to the Ecosystems Section, MFLNRO.
3. For livestock grazing licences and permits, plans and assessments are to ensure that:
 - i. Specific attention is to be given to the maintenance of desired ungulate browse species. These include red osier dogwood (*Cornus stolonifera*), willow species (*Salix*), Douglas maple (*Acer galbrum*), prickly rose (*Rosa acicularis*), common snowberry (*Symphoricarpos albus*), black twinberry (*Lonicera involucrata*), pin cherry (*Prunus pennsylvanica*), huckleberry/blueberry species (*Vaccinium*), saskatoon (*Amelanchier alnifolia*), high-bush cranberry (*Viburnum edule*), kinnikinnick (*Arctostaphylos uva-ursi*), trembling aspen (*Populus tremuloides*), black cottonwood (*Populus trichocarpa*).

- ii. Range enhancement activities are permitted where compatible as determined by MFLNRO Range personnel in consultation with the Ecosystems Section, MFLNRO.
- iii. Approximate relative abundance of indigenous plant species in accordance with respective site series guide books are to remain unaltered unless plant community rehabilitation is required to achieve the natural relative abundance. If the natural relative abundance of indigenous plant species does not exist, livestock use is not to impede an improving trend into the desired state.
- iv. Plant communities at risk (red & blue listed) are to be protected from livestock damage.
- v. Livestock grazing is to be avoided on steep south-east to west facing slopes (135° to 285°) with slope gradients $\geq 45\%$.
- vi. Fencing is to be maintained by the tenure holder for the duration of the tenure and removed when no longer required.
- vii. Livestock browsing is not to result in cropping of more than 10% of the current year's shrub growth.

2 Forestry Activities

2.1 Fish & Wildlife Reserve

1. The intent of a Fish & Wildlife Reserve is to be managed to ensure the maintenance and enhancement of wildlife habitat attributes and ecosystems, and to ensure risks to the adjacent working forest and private properties are taken into consideration. Forestry activities are permissible tools to meet this management intent but are only to be used to enhance wildlife values.
2. Fish and Wildlife Reserves are to be removed from the Timber Harvesting Landbase.
3. No timber extraction is permitted on ridges associated with steep south-east to west facing slopes (135° to 285°) with slope gradients $\geq 45\%$.

2.2) Wildlife Habitat Management Area (WHMA)

1. $\geq 70\%$ structure and function of a WHMA polygon (parcel) is to be retained in a natural occurring mature forest state, inclusive of dead standing trees post beetle infestation. Where this is not the current condition, the objective is to work towards this mature and old forest target. Where due to insect, disease or fire the WHMA target of $\geq 70\%$ structure and function is not practicably achievable, a stand replacement strategy may be warranted.
2. No timber extraction is permitted on ridges associated with steep south-east to west facing slopes (135° to 285°) with slope gradients $\geq 45\%$.
3. Forest stands containing notable amounts of arboreal lichens (*Bryoria* species & *Alectoria*) are to be maintained wherever possible, for as long as possible to contribute to lichen litterfall, lichen presence on branches within the reach of deer, and lichen on recently downed trees.
4. Logging activities associated with fuel hazard reduction, forest pest and disease control, and WHMA stand maintenance or rejuvenation are to ensure that individual clear cut opening sizes are limited to 3 ha maximum with an average of 1.5 ha if adjacent to partial cuts or 1.5 ha maximum if adjacent to clear cuts or nonforested areas such as fields. Partial logging can be accommodated over a larger area if it removes the prescribed basal area while achieving overall mature stand conditions, inclusive of retaining wildlife structural attributes such as standing dead trees, veteran trees, coarse woody debris, and a range of tree diameter classes. Blocks greater than 3 ha are permitted provided harvest is restricted to extreme mountain pine beetle risk pine types and overstory removal is the preferred method of harvest where applicable. Extreme pine types are defined as sites containing greater than 70% pine by volume.
5. Planning for forest harvesting is to prioritize stands that contain a high percentage of dead trees that begin to exhibit blown down that would limit ungulate movement. Attention to retention of dead standing trees and coarse woody debris within and/or adjacent to the openings is required in the preparation of harvest plans.
6. Exemptions or variances pertaining to logging activities may be considered following a joint field review, with Ecosystems personnel, to accommodate unforeseen circumstances.
7. New road development will be of a temporary nature, designed and deactivated following timber extraction to prevent entry of vehicles, inclusive of off-road vehicles to the best extent possible.

8. With respect to Community Wildfire Protection Plans, deciduous tree promotion and/or lower stand density are eligible variances for tenure holders to apply for in their stocking standards.
9. New forest licences are to be planned, implemented and monitored in collaboration with MFLNRO Ecosystems Biologists to meet the WHMA objectives.

Appendix 1 Management Considerations

Livestock entry in a WHMA will be conditional on range readiness criteria as directed by FRPA.

In drier summers, government officials will assess the need for earlier removal of livestock to ensure plant growth and abundance targets are achieved.

Seasonal range use time frames will be jointly assessed by MFLNRO Range and Ecosystems personnel to establish desired seasonal use restrictions within an identified F&W Reserve or WHMA.

Inspection and/or compliance reports for Range Use Plans or any other applicable livestock management plan pertaining to a F&W Reserve or WHMA will be jointly reviewed between MFLNRO Range and Ecosystems personnel when issues or concerns arise.

It is expected that joint field reviews will occur with the participation of MFLNRO Range and Ecosystems personnel and the tenure holder with respect to Range Use Plan compliance and adherence to the management direction within this document.

Livestock use within Fish & Wildlife Reserves and Wildlife Habitat Management Areas is to avoid riparian vegetation degradation. Where riparian vegetation degradation has occurred, restoration will occur on a priority basis.

Conservation Data Centre to be consulted for current listing of species and ecosystems at risk: <http://www.env.gov.bc.ca/cdc/>

Riparian features, including fish and fish habitat, are to be protected as per FRPA direction.

Grazing licences and permits will only be issued where MFLNRO Range and Ecosystems personnel are in agreement that the Range Use Plan sufficiently addresses wildlife needs and requirements.

In the event of beetle control operations being proposed in a F&W Reserve or WHMA, a joint field visit with Ecosystems personnel is recommended prior to permit approval.

In some cases, a stand replacement assessment may be warranted in the future to encourage the desired habitat attributes for purposes of habitat enhancement which may lead to selective cutting, small openings or controlled burns.

It is recommended that proposed timber harvesting in a WHMA require a joint field visit with Ecosystems personnel prior to permit approval; at that time, exemptions or variances may be considered.

The priority ungulate species for management consideration is mule deer, and to a lesser extent, moose due to dependence on forest cover. Refer to the Bulkley Valley Sustainable Resource Management Plan for objectives and strategies.

Marten and fisher habitat attributes are important considerations for stand management. Promotion and maintenance of wolf trees, witches broom, soft and hard snags, vets – dominate large diameter trees, coarse woody debris, large cottonwood for fisher denning, bird and small mammal habitat (marten prey), and porcupine (fisher prey) require consideration.

The maintenance of seral stages with a mature forest emphasis, inclusive of a deciduous component, and forest structure will assist in ensuring that habitat attributes are in place for resident and migratory birds that depend on the Bulkley Valley.

A stand can meet the mature seral criteria if, after timber harvesting, the residual stand volume (all original diameter classes are represented in proportion to the average stand profile for the subzone and variant) and stand attributes as noted in Appendix 5 of the Biodiversity Guidebook are greater than 70% of the natural stand. Under appropriate stand management, this can be generally achieved in conifer leading stands > 80 years of age and deciduous leading stands > 60 years of age. Mature and old conifer forests are preferred given lack of representation in the Bulkley Valley and their importance in providing security cover, snow interception and thermal cover.

The $\geq 70\%$ structure and function criterion is measured against the entire WHMA polygon. Ideally the intent is to manage each stand within the WHMA polygon to this level of mature and old retention to ensure distribution of associated biological attributes, but this may not be practicable in all cases. In the event that an area based forest licence overlaps a WHMA, the $\geq 70\%$ structure and function criterion must apply to the area of overlap to ensure operational flexibility for the entire WHMA polygon.