

# **KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER**

## **ORDER ESTABLISHING RESOURCE MANAGEMENT ZONES AND RESOURCE MANAGEMENT ZONE OBJECTIVES WITHIN THE AREA COVERED BY THE KOOTENAY-BOUNDARY LAND USE PLAN IMPLEMENTATION STRATEGY AS A HIGHER LEVEL PLAN PURSUANT TO SECTIONS 3(1), 3(2), AND 9.1 OF THE *FOREST PRACTICES CODE OF BRITISH COLUMBIA ACT* (THE ACT)**

### **Preamble**

**This preamble is meant to provide the context in which the Ministers made their decision and does not form part of the higher level plan order.**

The Kootenay-Boundary Land Use Plan Implementation Strategy (KBLUP-IS), approved by government in 1997, includes a large number of provisions to address a wide array of resource values. Only some of these provisions were selected for establishment as a higher level plan under Part 2 of the Act. Other provisions were not included in the higher level plan order, because:

- they are already satisfactorily addressed by the Forest Practices Code;
- they have no bearing on operational plans under the Forest Practices Code and will thus remain as policy guidance;
- they will be addressed through provisions and procedures of other legislation; or
- analysis suggested that proceeding with higher level plan objectives for these provisions could have an unacceptable impact on local communities and the economic interest of the region, province, and forest industry.

Statutory decision-makers (SDMs) exercise their statutory authority within a recognised legislative framework. Within this framework, SDMs are legally obligated to ensure that decisions they make, such as the approval of a forest development plan (FDP), must be consistent with all relevant legislation (including regulations), binding policy (such as chief forester's direction), and an approved higher level plan order. In addition, SDMs, under Section 41(1)(b) of the *Forest Practices Code of British Columbia Act*, are obligated to ensure that any proposed FDP will adequately "...manage and conserve the forest resource..." before they can legally approve it. In determining whether a proposed FDP will adequately manage and conserve the forest resource, SDMs must exercise independent judgement in regard to what information to consider and how to consider it. In this regard, no person has authority to direct, require or demand that SDMs consider any specific information, beyond what is legally required. Therefore, it is the judgement and decision of SDMs as to whether and/or how they should, or should not, consider the remainder of the KBLUP-IS that has not been captured under this higher level plan order when approving a proposed FDP.

Government has established a goal of maintaining full access outside of protected areas for subsurface resource exploration and development. Consequently, the objectives established by this higher level plan order are not intended to have an impact on the permitting of subsurface resource exploration and development. Furthermore, this higher level plan order does not restrict the authority of the Chief Inspector of Mines to approve the issuance of a Special Use Permit under the Act to the holder of a mineral title, the owner of a Crown granted 2 post claim, or a coal

licensee, for the construction of appropriate access to the area of that mineral title, Crown granted 2 post claim, or coal licence. It is expected that permitting officials with the Ministry of Energy and Mines and the Oil and Gas Commission will consider the guidelines of the 1997 KBLUP-IS in all permitting decisions.

## **Part 1**

### **Establishment of Resource Management Zones**

**Pursuant to Section 3(1) of the Act, the following zones as presented on Map 1.0 (attached) are established as Resource Management Zones (RMZs):**

- A** Arrow Resource Management Zone;
- B** Boundary Resource Management Zone;
- C** Cranbrook Resource Management Zone;
- D** Golden Resource Management Zone;
- E** Invermere Resource Management Zone;
- F** Kootenay Lake Resource Management Zone.

## **Part 2**

### **Resource Management Zone Objectives**

**Pursuant to Section 3(2) of the Act, objectives 1 to 10 in Part 2 of this order are established as Resource Management Zone objectives for the RMZs established above.**

The following objectives do not affect operational plans required for construction of trails or roads, or for other exploration, development, and production activities when these activities have been authorized for purposes of subsurface resource exploration, development, or production by the *Mineral Tenure Act*, the *Coal Act*, the *Mines Act*, the *Petroleum and Natural Gas Act*, the *Pipeline Act*, or the *Geothermal Resources Act*.

Definitions in the Act, Regulations, Landscape Unit Planning Guide and Forest Practices Code Guidebooks at the time this order takes effect or as amended from time to time apply, unless otherwise noted in this higher level plan order.

Implementation of this higher level plan order is highly dependent upon technical inventory. The inventories are continually updated to incorporate new information and improve the level of accuracy. New information will be utilized as soon as practicable, for example, for meeting the targets referred to in this higher level plan order.<sup>1</sup>

#### **1. Biodiversity Emphasis:**

**To contribute to the conservation of biodiversity, emphasis is assigned as outlined on Map 1.1.**

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<sup>1</sup> It is expected that landscape unit planning will set procedures on how consistency between higher level plan percent targets and landscape unit plan area targets is to occur. It is anticipated that the procedures will address the need for periodic assessment and revision of landscape unit plan area targets.

## 2. Old and Mature Forest:

- (1) To contribute to the conservation of biodiversity, maintain mature and old forests (as defined in Table 2.5) to the level indicated in Tables 2.1 through 2.4.

**Table 2.1. Seral stage distribution for Natural Disturbance Type (NDT) 1 (percentage of forest area within the landscape unit)**

Biogeoclimatic zone	Seral stage					
	Mature + Old			Old		
	L <sup>a</sup>	I <sup>b</sup>	H <sup>c</sup>	L <sup>d</sup>	I	H
ICH <sup>e</sup>	>17	>34	>51	>4.3	>13	>19
ESSF <sup>f</sup>	>19	>36	>54	>6.3	>19	>28

**Table 2.2. Seral stage distribution for NDT 2 (percentage of forest area within the landscape unit)**

Biogeoclimatic zone	Seral stage					
	Mature + Old			Old		
	L <sup>a</sup>	I <sup>b</sup>	H <sup>c</sup>	L <sup>d</sup>	I	H
ICH <sup>e</sup>	>15	>31	>46	>3	>9	>13
ESSF <sup>f</sup>	>14	>28	>42	>3	>9	>13

**Table 2.3. Seral stage distribution for NDT 3 (percentage of forest area within the landscape unit)**

Biogeoclimatic zone	Seral stage					
	Mature + Old			Old		
	L <sup>a</sup>	I <sup>b</sup>	H <sup>c</sup>	L <sup>d</sup>	I	H
MS <sup>g</sup>	>14	>26	>39	>4.7	>14	>21
ESSF <sup>f</sup>	>14	>23	>34	>4.7	>14	>21
ICH <sup>e</sup>	>14	>23	>34	>4.7	>14	>21

<sup>a</sup> L = Low Biodiversity Emphasis

<sup>b</sup> I = Intermediate Biodiversity Emphasis

<sup>c</sup> H = High Biodiversity Emphasis

<sup>d</sup> Tables 2.1 to 2.4 show the targets employing 2/3 draw-down for the "Old" seral stage component in low biodiversity emphasis. As per the Landscape Unit Planning Guidebook, a recruitment strategy must be developed that describes how to meet the full target. The full target will be achieved by the end of the third rotation.

<sup>e</sup> ICH = Interior Cedar Hemlock

<sup>f</sup> ESSF = Engelmann Spruce - Subalpine Fir

<sup>g</sup> MS = Montane Spruce

**Table 2.4. Seral stage distribution for NDT 4 (percentage of forest area within the landscape unit)**

Biogeoclimatic zone	Serai stage					
	Mature + Old		H <sup>c</sup>	L <sup>d</sup>	Old	
	L <sup>a</sup>	I <sup>b</sup>			I	H
ICH <sup>e</sup>	>17	>34	>51	>4.3	>13	>19
IDF <sup>h</sup>	>17	>34	>51	>4.3	>13	>19
PP <sup>i</sup>	>17	>34	>51	>4.3	>13	>19

**Table 2.5. “Mature” and “Old” forests by NDT and Biogeoclimatic Ecosystem Classification (BEC) Zone**

Natural Disturbance Type	BEC zone	Mature (yrs) <sup>j</sup>	Old (yrs) <sup>j</sup>
NDT 1	ICH	>100	>250
	ESSF	>120	>250
NDT 2	ICH	>100	>250
	ESSF	>120	>250
NDT3	ICH	>100	>140
	ESSF	>120	>140
	MS	>100	>140
NDT4	ICH	>100	>250
	IDF	>100	>250
	PP	>100	>250

<sup>j</sup>The presence of sufficient stand structure attributes can be used in meeting the targets as opposed to solely using age criteria, provided there is agreement between the District Manager, Ministry of Forests (DM) and the Designated Environmental Official, Ministry of Environment, Lands & Parks (DEO).

- (2) Where recruitment is required to meet old and mature targets, recruitment strategies should generally be designed to achieve the targets in the shortest time frame. Younger seral stages and protracted time frames can be used to meet targets if the DM and DEO jointly agree that the higher level plan order objectives are better met, or there are other benefits to conservation values (e.g., larger patches, improved interior conditions) in the longer term.**
  
- (3) Prior to establishment of landscape unit objectives for old and mature forests, forest stands one age class (20 years) less than defined in Table 2.5, can contribute up to a maximum 25 percent of the mature component only shown in Tables 2.1 through 2.4, in order to provide short term flexibility for Forest Development Plans.**

<sup>a</sup> L = Low Biodiversity Emphasis

<sup>b</sup> I = Intermediate Biodiversity Emphasis

<sup>c</sup> H = High Biodiversity Emphasis

<sup>d</sup> Tables 2.1 to 2.4 show the targets employing 2/3 draw-down for the "Old" seral stage component in low biodiversity emphasis. As per the Landscape Unit Planning Guidebook, a recruitment strategy must be developed that describes how to meet the full target. The full target will be achieved by the end of the third rotation.

<sup>e</sup> ICH = Interior Cedar Hemlock

<sup>h</sup> IDF = Interior Douglas Fir

<sup>i</sup> PP = Ponderosa Pine

### **3. Caribou:**

**To retain seasonal habitats for mountain caribou in order to contribute to maintaining viability of the existing subpopulations<sup>2</sup> according to the forest cover requirements shown in Table 3.1, within the caribou habitat areas shown on Map 3.1.**

- a) For all zones in Table 3.1, forest cover requirements are determined by applying percentages to the Crown forested landbase within mapped caribou habitat of each landscape unit. For this objective, Crown forested land base excludes Provincial Parks, Protected Areas, Ecological Reserves and Federal Parks. The resultant forest cover area requirements are applied to slopes less than 80 percent.
- b) Stands younger than those mentioned in Table 3.1 may be considered as contributing to the cover retention objectives, provided they have suitable caribou habitat attributes and the DM and DEO are in agreement.
- c) Where recruitment is required, recruitment generally should be designed to meet this objective in the shortest time frame. However, younger stands can be used in recruitment if the DM and DEO jointly agree that there are caribou habitat related benefits in the longer term.

**Table 3.1: Caribou Habitat Requirements**

<b>Biogeoclimatic Zone</b>	<b>Forest Cover and Forest Practice Requirements</b>
Subalpine Parkland	No timber harvesting
ESSF - above Caribou Line (as shown in Map 3.1) and below subalpine parkland	Maintain a minimum 70% of the forested area in age class 8 or older forests. Forested areas exclude the forest cover inventory labels alpine and alpine forest.
ESSF - below Caribou Line (as shown in Map 3.1)	Maintain 30% of the forested area in age class 8 or older. At least one-third of this 30% is to be age class 9. On an additional 20% (minimum) of the area, employ partial cutting prescriptions which maintain suitable caribou habitat attributes.
ICH – above Caribou Line (as shown in Map 3.1)	Maintain a minimum 70% of the forested area in age class 8 or older forests.
ICH - below Caribou Line (as shown in map 3.1)	Maintain a minimum of 40% of the forested area in age class 8 or older. At least a quarter of this 40% is to be age class 9.
MS	Maintain 40% of the forested area in age class 6 or older. One-quarter of this 40% is available for partial cutting prescriptions which maintain suitable habitat attributes.

<sup>2</sup> Subpopulation is defined as a set of individuals that live in the same habitat area and therefore interact with each other (adapted from Hanski and Gilpin, Metapopulation Biology, 1997). The subpopulations referred to in this Higher Level Plan are: South Selkirks; South Purcells; Central Selkirks; Revelstoke; Central Rockies.

#### **4. Green-up / Patch Size:**

**To contribute to the conservation of biodiversity through the emulation of natural disturbance patterns and to provide for more cost-effective timber harvesting based on the following:**

- a) pursuant to Section 68(4) of the Operational Planning Regulation (OPR), establishing the green-up height as 2.5 metres for areas adequately stocked and 3.0 metres for areas not adequately stocked, based on the criteria in the regulations, except in:
  - i. community watersheds;
  - ii. visually sensitive areas to be defined and determined by the DM, within known scenic areas as identified in objective 9;
  - iii. Enhanced Resource Development Zones - Timber as identified in objective 7; and
  - iv. the specified fire-maintained ecosystems as identified in objective 8(d);
- b) pursuant to Section 11(2)(b) of the OPR, cutblocks may be larger than those specified for the Nelson Forest Region, if the following conditions are met:
  - i. the larger cutblock is designed to be consistent with the structural characteristics and the temporal and spatial distribution of natural openings; and
  - ii. the distribution of early, mature, and old patches as defined and determined by the DM, reflects a balance and integration of biodiversity conservation and timber management over the longer term.

#### **5. Grizzly Bear Habitat (Avalanche Tracks) and Connectivity Corridors:**

**(1) To maintain mature and/or old forests adjacent to avalanche tracks important for grizzly bear habitat as jointly determined by the DM and DEO.**

- a) Transition: Objective 5 (1) takes effect four months after mapping of important avalanche tracks is completed and made available by the DEO.

**(2) To maintain mature and/or old forests within connectivity corridors shown on Map 5.1, for purposes of regional forest ecosystem connectivity.**

**(3) Within the forest targets in objective 2, the amount of old and mature forests available to meet objective 5 will be determined through the following procedure.**

- a) Determine the amount of old and mature forests:
  - i. situated in protected areas and riparian reserves;
  - ii. contributing to ungulate winter range objectives established under Section 69 of the OPR;
  - iii. in portions of community watersheds as jointly determined by the DM and DEO;
  - iv. in rare or under-represented old forest stands as jointly defined and determined by the DM and DEO;
  - v. contributing to objectives 3, and 8;
  - vi. contributing to objectives established for sensitive areas, interpretive forest sites, recreation sites and recreation trails;
  - vii. in mapped wildlife tree patches which are larger than 2 hectares;

- viii. in areas with visual quality objectives pursuant to objective 9, as established by the DM;
  - ix. in other areas jointly agreed to by the DM and DEO.
- b) That portion of the old or mature forest targets remaining available after accounting for the areas noted above will be applied to meet any requirement of objective 5. In the event there is insufficient forest cover target available to fully meet the avalanche track and connectivity parts of this objective, the DM and DEO will jointly decide deployment.
  - c) Forests situated on slopes greater than 80 percent do not contribute to the connectivity component of this objective.

## **6. Consumptive Use Streams:**

### **(1) To reduce the impacts of forest development on streams licensed for human consumption, apply the following stream side management provisions to S5 and S6 streams that meet the stated conditions:**

- a) Stream side management provisions:
  - i. the stream side management zone will extend from the edge of the stream channel bank or the outer edge of the active floodplain, to a minimum distance of 30 metres on each side of the stream, or to the top of the inner gorge, whichever is greater; and
  - ii. specific measures to safeguard water licensed for human consumption must be described for activities in the stream side management zone.
- b) The provisions apply to:
  - i. the segment of a stream between the water intake which is licensed for human consumption and the upstream point where stream order is reduced and, if the intake is located on a first-order stream, the entire stream length above the intake;
  - ii. a stream on which there is a water intake which is licensed for human consumption; and
  - iii. a stream on which the location of the water intake which is licensed for human consumption has been made available.
- c) The provisions do not apply where:
  - i. the stream is within the 'excluded watersheds'<sup>3</sup> of the Enhanced Resource Development Zones - Timber areas under objective 7; or
  - ii. it has been established that a licensed intake is not being utilized for human consumption, and the DM and DEO have jointly agreed to suspend the application of this objective.

### **(2) Transition - This objective comes into effect 4 months after the location of water intakes used for human consumption have been made available by the DEO**

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<sup>3</sup> Excluded watersheds for human consumption are drainages containing high concentrations of ERDZ-T lands but without consumptive watershed licences at the date this order takes effect.

## **7. Enhanced Resource Development Zones – Timber:**

**(1) To support intensive forest management for the purpose of increasing volumes of merchantable timber and to reduce industry costs while maintaining adequate environmental stewardship:**

- a) Pursuant to Section 68(4) of the OPR, the green-up height for Enhanced Resource Development Zones – Timber (ERDZ-T) as shown on Map 7.1 is established as successful regeneration, as defined by the DM, of cutblocks provided this is consistent with any landscape unit patch size objectives that are established for any landscape unit that incorporates the ERDZ-T.
- b) This objective does not apply within connectivity corridors.

**(2) Transition: This objective takes effect when:**

- a) the exclusion of existing watersheds licensed for human consumption at the time this order takes effect has been confirmed by the regional manager, Ministry of Forests and regional director, Ministry of Environment, Lands and Parks; and
- b) the “excluded watersheds” containing high concentrations of ERDZ-T lands have been defined by the regional manager, Ministry of Forests and regional director, Ministry of Environment, Lands and Parks.

## **8. Fire-Maintained Ecosystems:**

**To restore and maintain the ecological integrity of fire-maintained ecosystems, provide for treatments to the areas identified by the DM and DEO as shrubland, open range, open forest, and managed forest ecosystem components in NDT 4 so that:**

- a) treatments will contribute to the creation of a complex, ecologically appropriate mosaic of habitats over the long term;
- b) treatments in open range and open forest will remove excess immature and understory trees and emphasize retention of the oldest and/or largest trees;
- c) both open forest and managed forest with suitable attributes will contribute to achieving mature and old targets as defined in objective 2;
- d) pursuant to Section 68(4) of the OPR, green-up height requirements will:
  - i. not apply within open forest or open range;
  - ii. as identified in objective 4, apply within managed forest outside of ERDZ-Ts;
  - iii. as identified in objective 7, apply to managed forest inside ERDZ-Ts; and
- e) the relative contribution of open forest and managed forest towards biodiversity targets is not tree stocking dependent.



## **9. Visuals:**

**To conserve the quality of views from communities, major waterways and major highways by establishing the areas identified on Map 9.1 as known scenic areas consistent with Section 1 of the OPR.**

## **10. Forest Economy:**

**To support the forest economy within the area covered by this higher level plan order by providing for a short-term timber supply of no less than 4.7 million cubic meters per year.**

- a) For the purpose of this objective:
  - i. “short-term” means the period ending 5 years after the date this order takes effect; and
  - ii. “timber supply” means the sum of the allowable annual cuts determined for the timber supply areas and tree farm licences within the area covered by the higher level plan order.
- b) An assessment regarding the achievement of this objective will be undertaken by government staff in 2004 as part of the formal review outlined in Part 3 of this order.

### **Part 3 – Monitoring and Review**

The Ministers recognize that new information will arise regarding the higher level plan order and resulting impacts. Consequently, the implementation of the higher level plan order will be monitored to assess impacts on both the environment and the economy.

As part of the monitoring process for the higher level plan order, government will establish a reference panel consisting of stakeholder representatives and government staff. The reference panel will participate in monitoring on an ongoing basis.

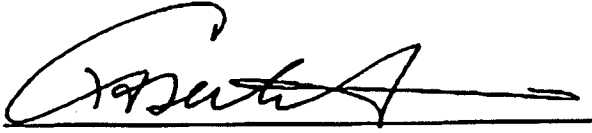
Furthermore, it is government’s intention to undertake a formal review that will:

- examine the impacts that the implementation of this higher level plan order has had on the regional environment and economy;
- examine the impacts that other factors have had on the regional environment and economy over the same period;
- examine the timber supply impacts within each timber supply area, each tree farm licence, and in woodlot licences;
- examine the impacts on timber harvesting costs and timber quality; and
- utilize information provided through spatial forest analyses to help assess trends for both economic and environmental variables.

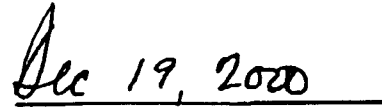
It is intended that this formal review be undertaken in the first 6 months of 2004, with results submitted to Ministers no later than July 1<sup>st</sup> of that year.

**Part 4 – Filing the Order**

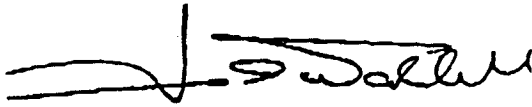
**This order will be filed with the regional manager, Nelson Forest Region  
and will take effect on January 31, 2001**



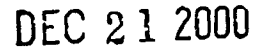
**The Honourable Gordon F. D. Wilson  
Minister of Forests**



**Date**



**The Honourable Ian Waddell  
Minister of Environment, Lands and Parks**



**Date**



**The Honourable Glenn Robertson  
Minister of Energy and Mines**



**Date**