

HIGHER LEVEL PLAN ORDER
AND
SUBSEQUENT AMENDMENTS

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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.¹

1. Biodiversity Emphasis:

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

¹ 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 ^a	I ^b	H ^c	L ^d	I	H
ICH ^e	>17	>34	>51	>4.3	>13	>19
ESSF ^f	>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 ^a	I ^b	H ^c	L ^d	I	H
ICH ^e	>15	>31	>46	>3	>9	>13
ESSF ^f	>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 ^a	I ^b	H ^c	L ^d	I	H
MS ^g	>14	>26	>39	>4.7	>14	>21
ESSF ^f	>14	>23	>34	>4.7	>14	>21
ICH ^e	>14	>23	>34	>4.7	>14	>21

^a L = Low Biodiversity Emphasis

^b I = Intermediate Biodiversity Emphasis

^c H = High Biodiversity Emphasis

^d 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.

^e ICH = Interior Cedar Hemlock

^f ESSF = Engelmann Spruce - Subalpine Fir

^g 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 ^c	L ^d	Old	
	L ^a	I ^b			I	H
ICH ^e	>17	>34	>51	>4.3	>13	>19
IDF ^h	>17	>34	>51	>4.3	>13	>19
PP ⁱ	>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) ^j	Old (yrs) ^j
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

^jThe 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.**

^a L = Low Biodiversity Emphasis

^b I = Intermediate Biodiversity Emphasis

^c H = High Biodiversity Emphasis

^d 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.

^e ICH = Interior Cedar Hemlock

^h IDF = Interior Douglas Fir

ⁱ PP = Ponderosa Pine

3. Caribou:

To retain seasonal habitats for mountain caribou in order to contribute to maintaining viability of the existing subpopulations² 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

Biogeoclimatic Zone	Forest Cover and Forest Practice Requirements
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.

² 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'³ 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

³ 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.

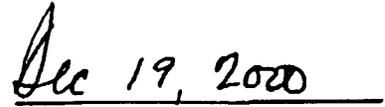
It is intended that this formal review be undertaken in the first 6 months of 2004, with results submitted to Ministers no later than July 1st of that year.

Part 4 – Filing the Order

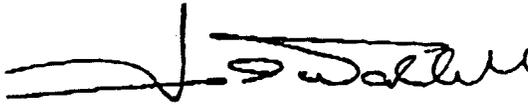
**This order will be filed with the regional manager, Nelson Forest Region
and will take effect on January 31, 2001**



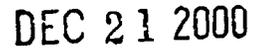
**The Honourable Gordon F. D. Wilson
Minister of Forests**



Date



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



Date



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



Date

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
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

The Kootenay-Boundary Higher Level Plan Order is being revised to reflect the required balance of social, economic and environmental values and is consistent with a request by the citizens of the Kootenay-Boundary region. These changes to the Kootenay-Boundary Higher Level Plan Order should be viewed as transitional, and are consistent with government's work on the Results Based Code, the Forest Investment Vote processes and the new land use planning initiatives being developed by the Ministry of Sustainable Resource Management.

This Kootenay-Boundary Higher Level Plan Order establishes new Resource Management Zones and Objectives and cancels the previous Kootenay-Boundary Higher Level Plan Order dated January 31, 2001.

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), are 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.

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.

PART 1

Establishment of Resource Management Zones

This Kootenay-Boundary Higher Level Plan establishes new Resource Management Zones and cancels the previous Kootenay-Boundary Higher Level Plan dated January 31, 2001. 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; and
- F** Kootenay Lake Resource Management Zone.

PART 2

Resource Management Zone Objectives

This Kootenay-Boundary Higher Level Plan establishes new Resource Management Objectives and cancels the previous Kootenay-Boundary Higher Level Plan dated January 31, 2001. Pursuant to Section 3(2) of the Act, objectives 1 to 10 in Part 2 of this order are established effective October 1, 2002, as Resource Management Zone objectives for the RMZs established above. In regards to Section 10 of the *Forest Practices Code of British Columbia* act, forest development plans submitted after October 26, 2002 for district manager's approval or given affect by the district manager, must be consistent with new Resource Management Objectives.

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, Forest Practices Code Guidebooks as well as the definitions, processes and procedures in the Landscape Unit Planning Guide 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.^a

1. Biodiversity Emphasis:

To contribute to the conservation of biodiversity, biodiversity emphasis is assigned to each landscape unit defined on Map 1.1 as outlined on Map 1.1.

^a 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 forests in those areas identified in objective 2 (2) and old forests to the level indicated in Tables 2.1 through 2.4 to all landscape units and associated biodiversity emphasis as defined in objective 1. Mature and old forests are defined in Table 2.6.

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

Biogeoclimatic unit	Seral stage					
	Mature + Old			Old		
	L ^b	I ^c	H ^d	L ^{b,e}	I ^c	H ^d
ICH ^f	>17	>34	>51	>4.3	>13	>19
ESSF ^g	>19	>36	>54	>6.3	>19	>28

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

Biogeoclimatic unit	Seral stage					
	Mature + Old			Old		
	L ^b	I ^c	H ^d	L ^{b,e}	I ^c	H ^d
ICH ^f	>15	>31	>46	>3	>9	>13
ESSF ^g	>14	>28	>42	>3	>9	>13

^b L =Low Biodiversity Emphasis

^c I = Intermediate Biodiversity Emphasis

^d H=High Biodiversity Emphasis

^e 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.

^f ICH = Interior Cedar Hemlock

^g ESSF = Englemann Spruce – Subalpine Fir

^h MS = Montane Spruce

ⁱ IDF = Interior Douglas Fir

^j PP = Ponderosa Pine

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

Biogeoclimatic unit	Seral stage					
	Mature + Old			Old		
	L ^b	I ^c	H ^d	L ^{b,e}	I ^c	H ^d
MS ^h	>14	>26	>39	>4.7	>14	>21
ESSF ^g	>14	>23	>34	>4.7	>14	>21
ICH ^f	>14	>23	>34	>4.7	>14	>21

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

Biogeoclimatic unit	Seral stage					
	Mature + Old			Old		
	L ^b	I ^c	H ^d	L ^{b,e}	I ^c	H ^d
ICH ^f	>17	>34	>51	>4.3	>13	>19
IDF ⁱ	>17	>34	>51	>4.3	>13	>19
PP ^j	>17	>34	>51	>4.3	>13	>19

(2) Mature forests will be managed in the following areas (as defined in Table 2.5):

Table 2.5. Areas to be managed for Mature forest targets

RMZ	Landscape Unit	BEC subzone/variant	BEO
Arrow			
	N501 Sheep Creek	ICH dw	Intermediate
	N504 Pend' Oreille	ICH dw	Intermediate
	N505 Stagleap	ICH dw	Intermediate
	N508 Blueberry	ICH dw	Intermediate
	N509 Dog	ICH dw	Intermediate
	N511 Cayuse	ICH dw	Intermediate
	N513 Pedro	ICH dw	Intermediate
	N514 Perry	ICH dw	Intermediate
	N518 Gladstone	ICH dw	Intermediate
RMZ	Landscape Unit	BEC subzone/variant	BEO
Arrow con't			
	N515 Lemon	ESSF wc1	High
		ESSF wc4	High
		ICH dw	High
		ICH mw2	High
	N525 Wilson	ESSF wc1	High
		ESSF wc4	High
		ICH dw	High
		ICH mw2	High
		ICH wk1	High

	N528 Kuskanax	ESSF wc1	High
		ESSF wc4	High
	N529 Halfway	ESSF wc1	High
		ESSF wc4	High
	N530 Trout	ESSF wc1	High
		ESSF wc4	High
		ICH mw2	High
		ICH vk1	High
		ICH wk1	High
Boundary			
	B10 Burrell	ESSF wc4	High
	B11 Rendell	ESSF dc1	High
Cranbrook			
	C02 Perry/Moyie	ESSF wm	High
	C04 Hellroaring/Meachen	ESSF wm	High
	C09 Yahk River	ESSF wm	Low
		ICHmk1	Low
	C14 Wigwam River	ESSF dk	High
		MS dk	High
	C15 Lodgepole/Bighorn	ICH mk1	High
		MS dk	High
	C18 East Flathead	MS dk	Intermediate
	C22 Upper Elk	MS dk	Intermediate
		ESSF dk	Intermediate
	C23 West Elk	ESSF dk	High
Golden			
	G1	ESSF wc2	High
		ICH wk1	High
	G6	ESSF wc2	High
		ICH mw1	High
		ICH wk1	High
	G12	ESSF vc	High
		ESSF wc2	High
		ICH wk1	High
	G13	ESSF vc	High
		ESSF wc2	High
		ESSF wm	High
		ICH mw1	High
		ICH wk1	High
	G24	ESSF wm	High
		ICH mw1	High
	G26	MS dk	High

	G27	ESSF dk	High
		MS dk	High
Invermere			
	I01 Findlay	ESSF dk	High
	I02 Buhl/Bradford	ESSF dk	High
		MS dk	High
	I11 Kootenay	ESSF dk	High
		MS dk	High
	I16 Jumbo	ESSF dk	High
		ESSF wm	High
		MS dk	High
	I17 Goldie	ESSF dk	High
		MS dk	High
	I19 Fenwick	MS dk	Intermediate
	I20 Palliser	MS dk	Intermediate
	I22 Albert	ESSF dk	High
		MS dk	High
	I24 Pedley	MS dk	Intermediate
Kootenay Lake			
	K05 Kid Creek	ICH dw	Intermediate
	K06 Goat River	ICH dw	Intermediate
	K08 Gray Creek	ICH dw	Intermediate
	K10 West Arm	ICH dw	Intermediate
	K12 Kaslo River	ICH dw	Intermediate
RMZ	Landscape Unit	BEC subzone/ Variant	BEO
Kootenay Lake con't			
	K25 Duck Lake	ICH dw	Intermediate
	K17 Goat Range	ESSF wc4	High
		ICH mw2	High
		ICH wk1	High
	K18 Lardeau River	ESSF wc4	High
		ICH mw2	High
		ICH wk1	High
	K23 Westfall Creek	ICH wk1	High

- (3) Old and mature forests will be maintained at the subzone/variant level within the landscape units defined in objective 1.

- (4) In the MS^h and IDFⁱ biogeoclimatic units, mature seral Lodgepole pine stands may be substituted for old seral Lodgepole pine stands where a forest health strategy for managing mountain pine beetle is in place which indicates that harvesting the stand is necessary to reduce the risk of epidemic losses from beetles. In the MS^h and IDFⁱ biogeoclimatic units, younger seral Lodgepole pine stands (minimum age 61 years) may be substituted for mature Lodgepole pine stands where a forest health strategy for managing mountain pine beetles is in place which indicates that harvesting the stand is necessary to reduce the risk of epidemic losses from mountain pine beetles.
- (5) Where recruitment is required to meet old and/or mature targets, recruitment strategies should generally be designed to achieve the targets in the shortest time frame. A registered professional forester may propose an alternate strategy provided the strategy is documented; and the strategy maintains or improves benefits for old growth conservation or it can be shown that objectives 2, 3, 5, 8, or 9 would be better met.

Definition of Mature and Old forests by NDT and Biogeoclimatic Ecosystem Classification (BEC) Unit is outlined in Table 2.6.

Table 2.6. “Mature” and “Old” forests by NDT and BEC Unit

Natural Disturbance Type	BEC unit	Mature (yrs) ^k	Old (yrs) ^k
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

^k Where a registered professional forester determines that a forest stand has sufficient biological value to be a mature or old considering the stand age, successional status, presence of old growth attributes, size of stand (ha), the amount of human impact, dispersion/connectivity of the stand and rarity of the stand; that stand may be used in meeting the targets as opposed to solely using age.

3. Caribou:

- (1) To retain seasonal habitats for mountain caribou in order to contribute to maintaining viability of the existing subpopulations¹ according to the forest cover requirements shown in Table 3.1, within the caribou habitat areas shown on Map 3.1.
- (2) 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.

Table 3.1: Caribou Habitat Requirements

Biogeoclimatic Unit	Forest Cover and Forest Practice Requirements
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.

4. Green-up:

- (1) *To provide for more cost-effective timber harvesting based on Section 68(4) of the Operational Planning Regulation (OPR), establish 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 District Manager, Ministry of Forests (MOF), 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).*

5. Grizzly Bear Habitat and Connectivity Corridors:

- (1) To maintain mature and/or old forests adjacent to important grizzly bear habitat (avalanche tracks, denning sites, etc.) as shown on Map 5.1^m subject to objectives 5(5) and 5(6).
- (2) Transition: Objective 5 (1) takes effect four months after mapping of important grizzly bear habitat is completed and made available.
- (3) To maintain mature and/or old forests within connectivity corridors shown on Map 5.2, for purposes of regional forest ecosystem connectivity subject to objectives 5(5) and 5(6).

- (4) Forests situated on slopes greater than 80 percent do not contribute to the connectivity component of this objective.
- (5) Where applicable, mature targets must be used to address this objective if connectivity corridors and/or grizzly bear habitat have been identified. Protected areas must first be used to reduce the mature target where available within the biogeoclimatic unit.
- (6) Old targets should be used to address this objective unless other conservation values such as protection of rare or under represented old growth forests would be adversely affected. Protected areas must first be used to reduce the old target where available within the biogeoclimatic unit.

m Currently important grizzly bear areas have not been mapped but will be added when available.

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 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 a water intake is shown on Map 6.1. (Intakes shown are licensed for human consumption.)
 - c) The provisions do not apply where:
 - i. the stream is within the Enhanced Resource Development Zones - Timber areas under objective 7 (Map 7.1); or
 - ii. it has been established that a licensed intake is not being utilized for human consumption.

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 Enhanced Resource Development Zones – Timber (ERDZ-T) emphasis is assigned as outlined on map 7.1.
- (2) Pursuant to Section 68(4) of the OPR, the green-up height for ERDZ-T's as shown on Map 7.1 is established as successful regeneration 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.
- (3) This objective does not apply within connectivity corridors.
- (4) Where consumptive use water licences are issued within an ERDZ-T area after this order comes into effect those areas will remain ERDZ-T areas and Objective 6 will not apply.

8. Fire-Maintained Ecosystems:

To restore and maintain the ecological integrity of fire-maintained ecosystems, provide for treatments to the areas identified on Map 8.1ⁿ 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 towards biodiversity targets is not tree stocking dependent.

ⁿ Currently fire maintained ecosystem mapping is not available but will be added when available.

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. Social and Economic Stability:

- (1) To ensure that there are no unintended outcomes of the bringing into force objectives 1 to 9 on the social and economic stability of communities located within the area of the higher level plan, the Ministry of Sustainable Resource Management in consultation with communities, forest licensees and other interests will create thresholds for timber supply, costs and timber profiles that will initiate a review of these objectives
- (2) 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.
- (3) Government may modify objectives prior to the 2004 review, where it is deemed that timber supply, costs and profiles have potentially unintended outcomes on communities and/or licensees.

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. The First Nations will be consulted throughout the monitoring and review process.

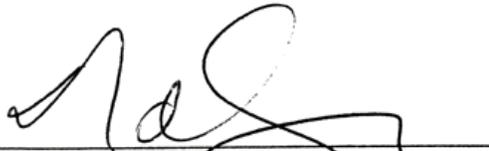
Furthermore, it is government's intention to undertake a formal review that will:

- 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 the Ministers no later than July 1st 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 October 26, 2002.



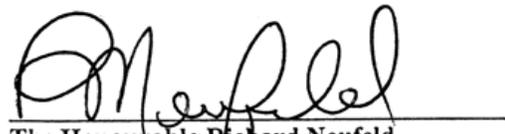
The Honourable Michael de Jong
Minister of Forests

OCT 26 2002
Date



The Honourable Stan Hagen
Minister of Sustainable Resource Management

OCT 26 2002
Date

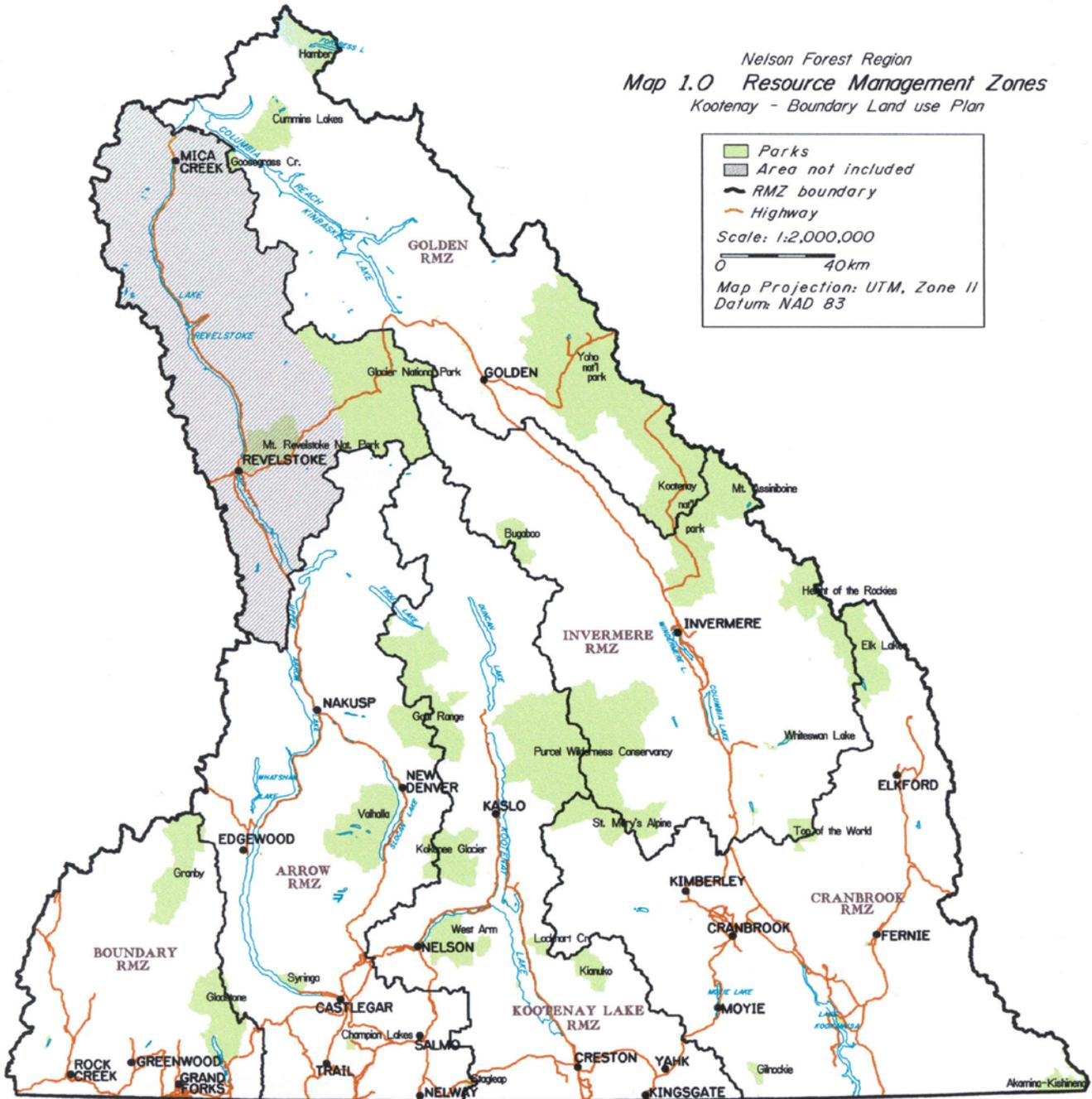


The Honourable Richard Neufeld
Minister of Energy and Mines

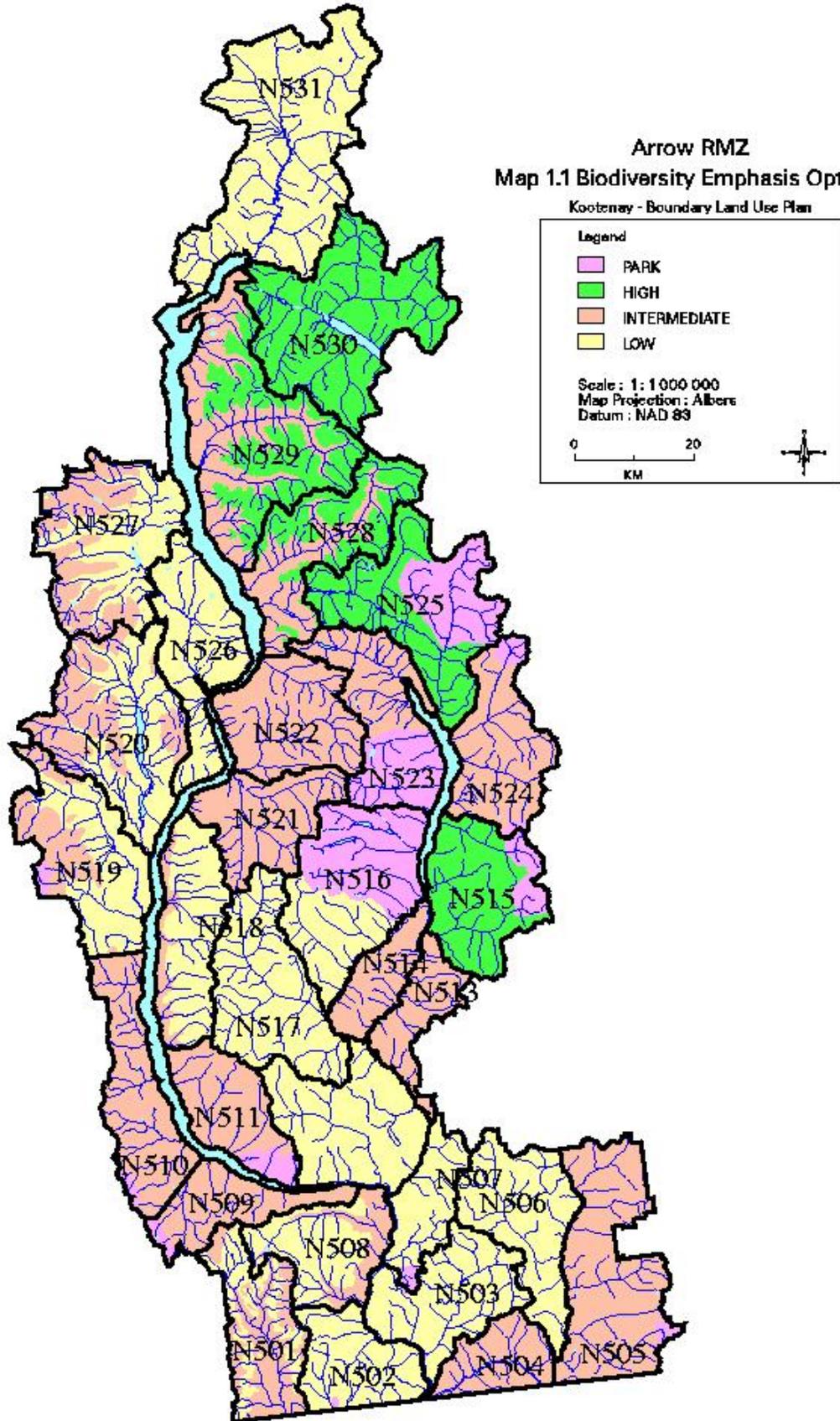
OCT 26 2002
Date

Nelson Forest Region
Map 1.0 Resource Management Zones
 Kootenay - Boundary Land use Plan

Parks
 Area not included
 RMZ boundary
 Highway
 Scale: 1:2,000,000
 0 40km
 Map Projection: UTM, Zone 11
 Datum: NAD 83



Arrow RMZ
Map 1.1 Biodiversity Emphasis Options
Kootenay - Boundary Land Use Plan



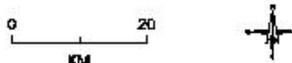
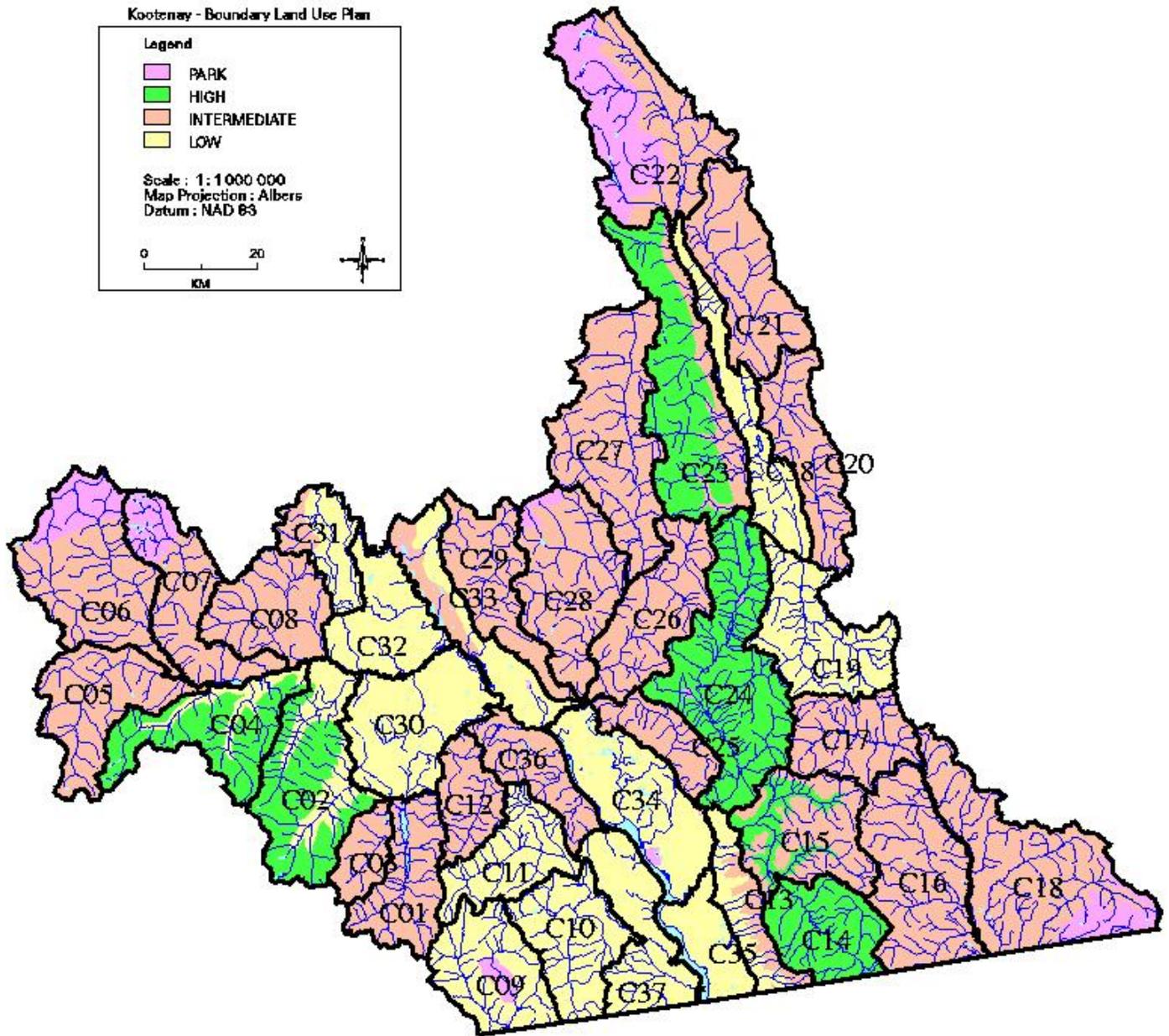
Cranbrook RMZ
Map 1.1 Biodiversity Emphasis Options

Kootenay - Boundary Land Use Plan

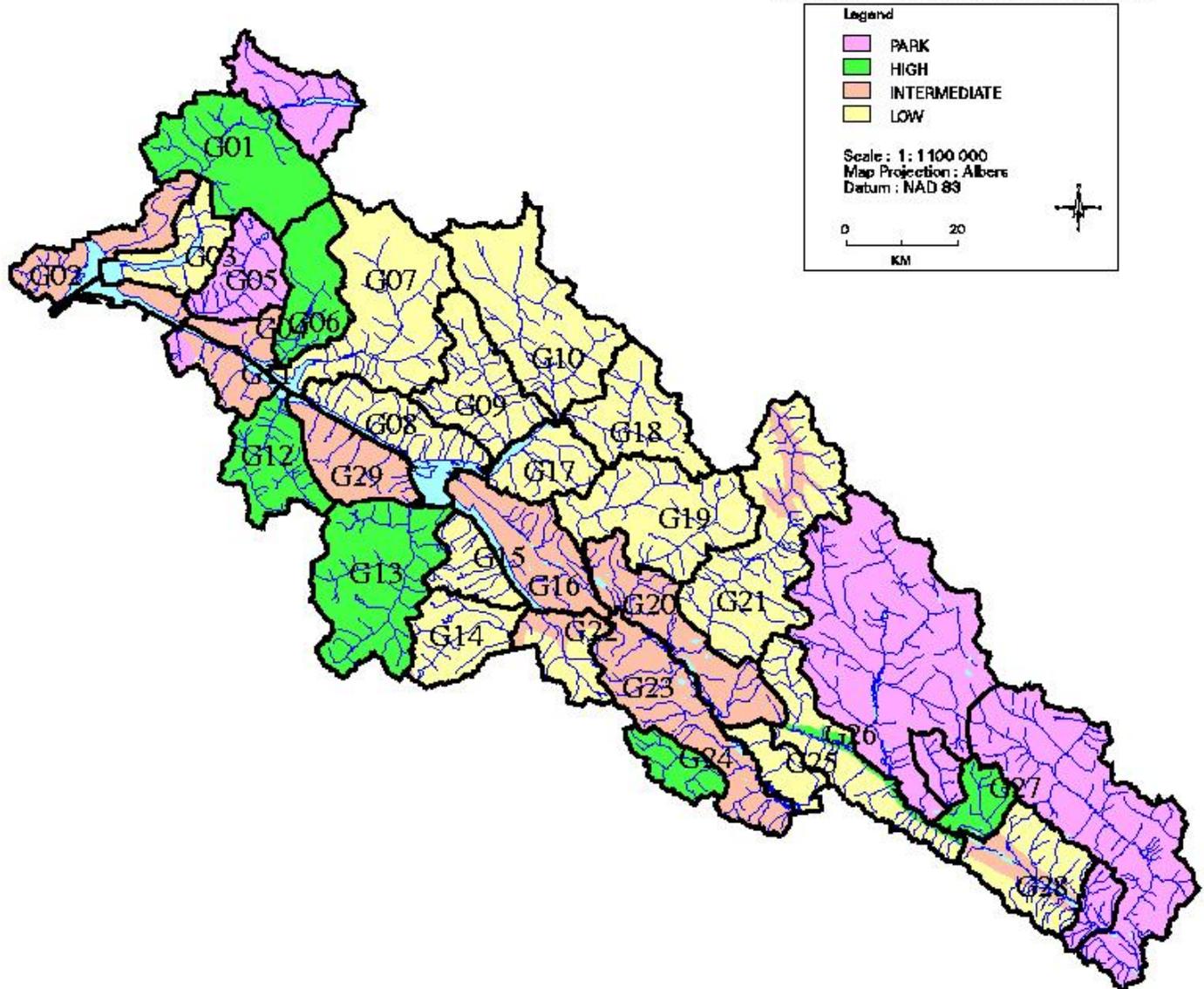
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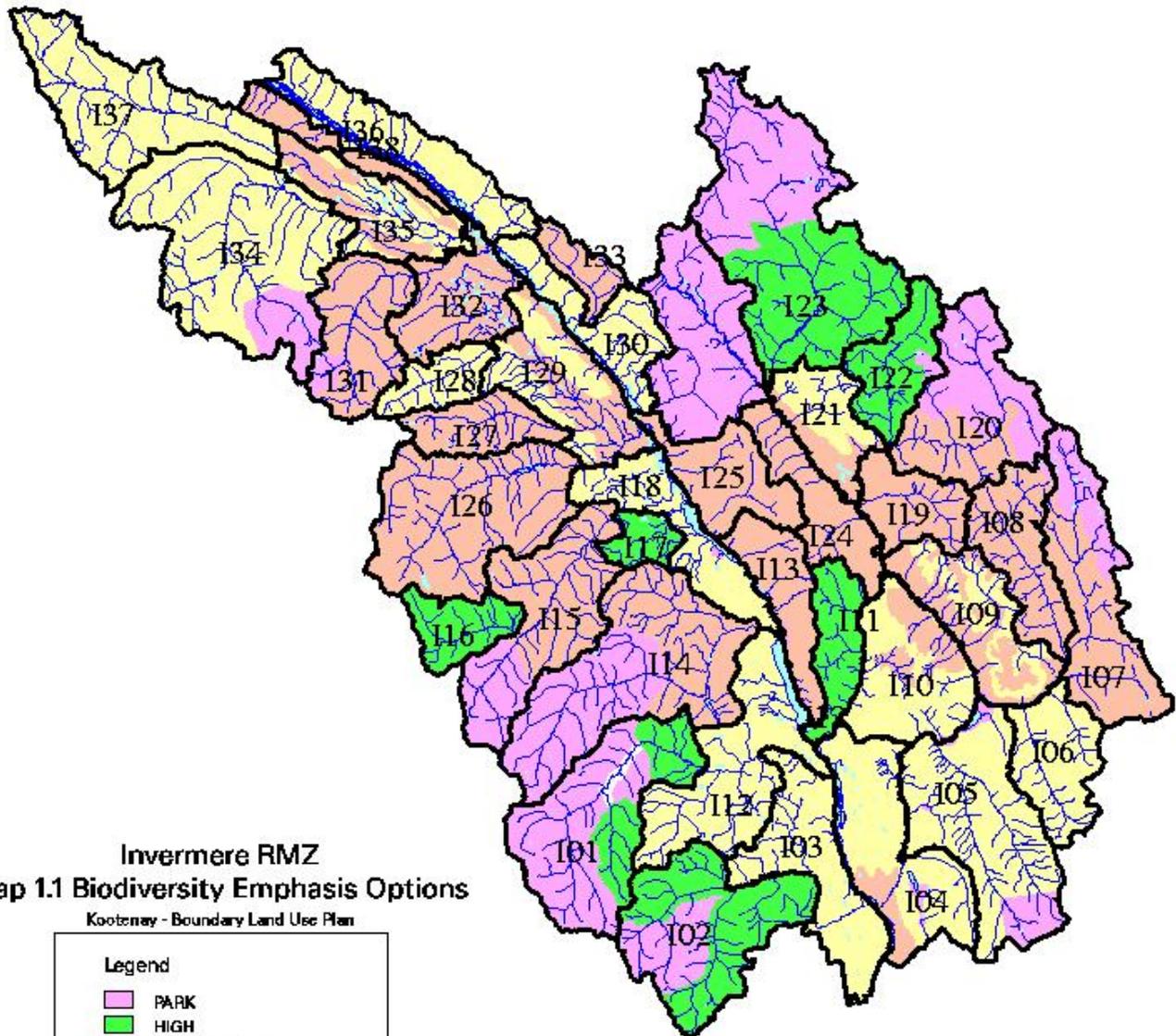
- PARK
- HIGH
- INTERMEDIATE
- LOW

Scale : 1 : 1 000 000
 Map Projection : Albers
 Datum : NAD 83

Golden RMZ
Map 1.1 Biodiversity Emphasis Option
Kootenay - Boundary Land Use Plan





Invermere RMZ
Map 1.1 Biodiversity Emphasis Options

Kootenay - Boundary Land Use Plan

Legend

- PARK
- HIGH
- INTERMEDIATE
- LOW

Scale : 1 : 1 000 000
 Map Projection : Alberta
 Datum : NAD 83

0 20
 KM



Kootenay Lake RMZ Map 1.1 Biodiversity Emphasis Option

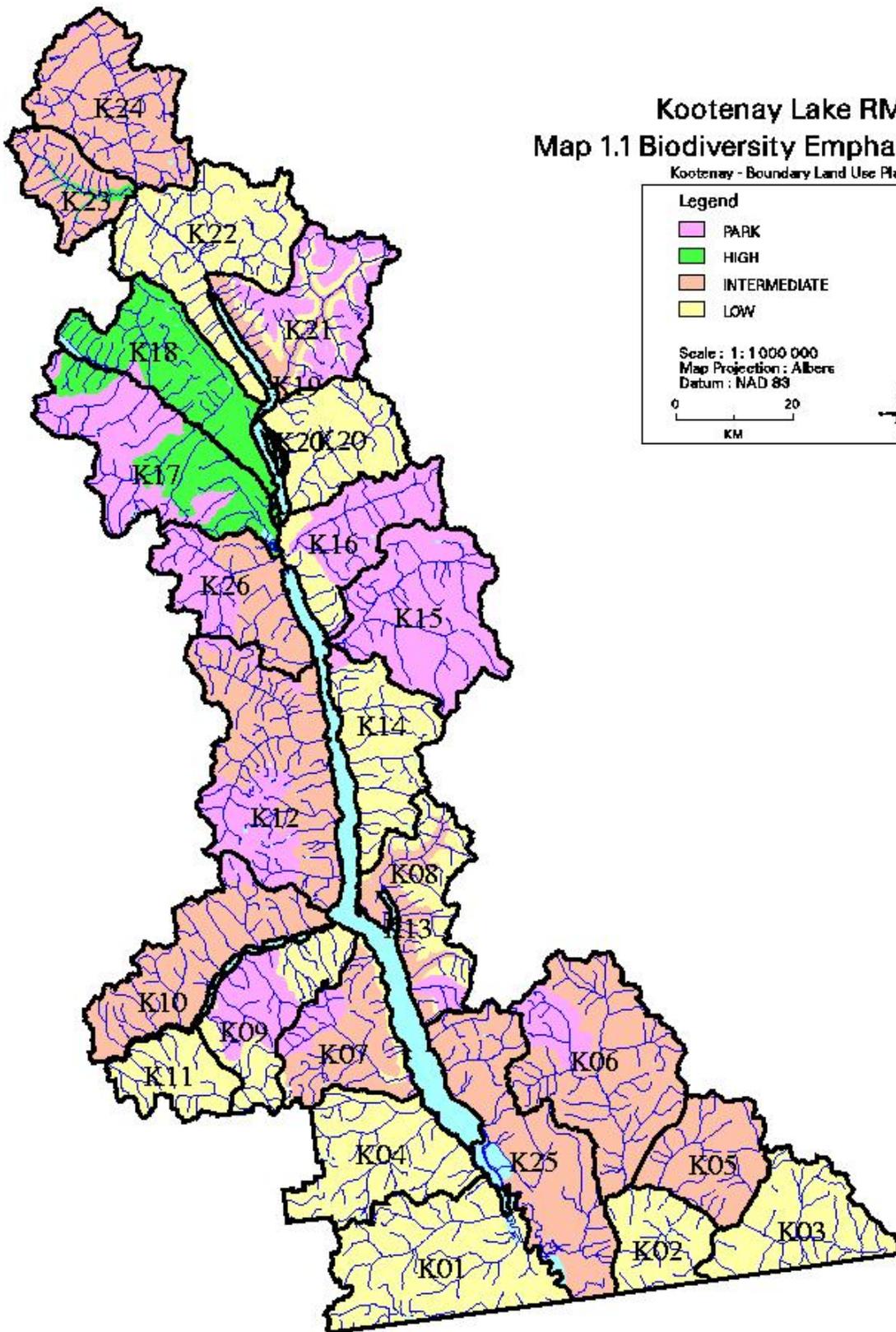
Kootenay - Boundary Land Use Plan

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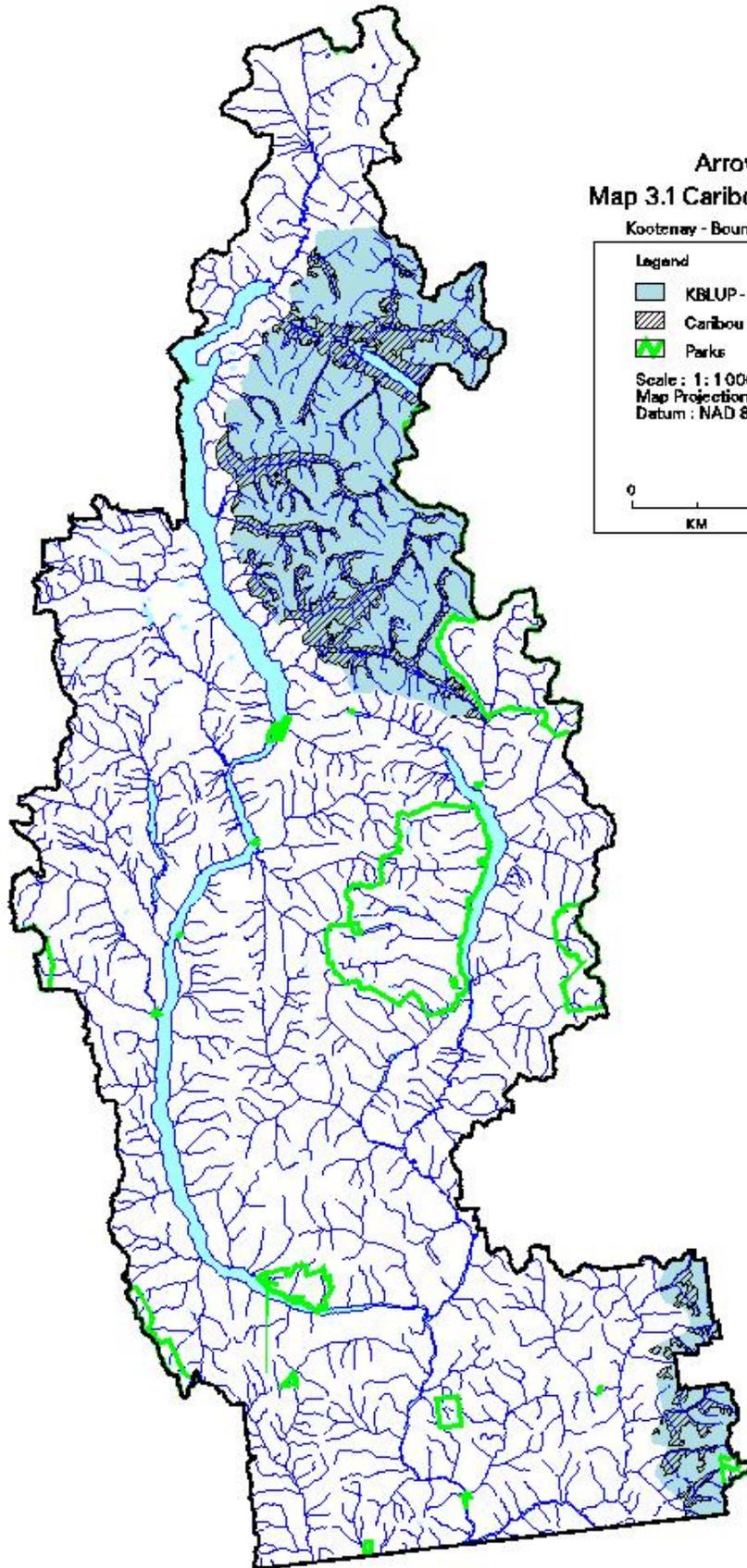
- PARK
- HIGH
- INTERMEDIATE
- LOW

Scale : 1 : 1 000 000
Map Projection : Albers
Datum : NAD 83

0 20
KM



Arrow RMZ
Map 3.1 Caribou Habitat Areas
Kootenay - Boundary Land Use Plan



Legend

- Light Blue Box: KBLUP - Caribou Habitat Areas
- Hatched Box: Caribou Line
- Green Box with Arrow: Parks

Scale : 1 : 1 000 000
Map Projection : Albers
Datum : NAD 83

0 20
KM



Cranbrook RMZ
Map 3.1 Caribou Habitat Areas

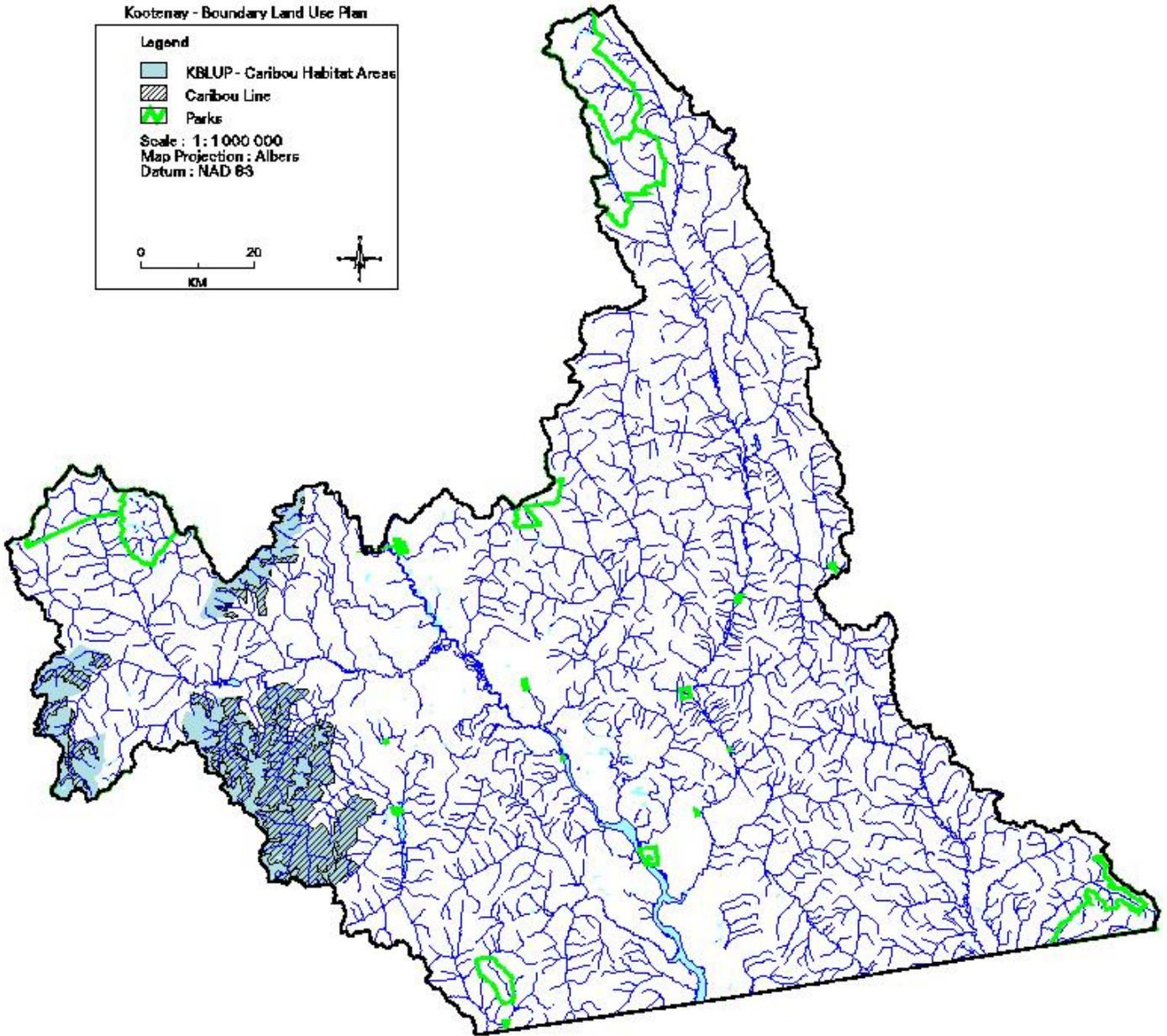
Kootenay - Boundary Land Use Plan

Legend

-  KBLUP - Caribou Habitat Areas
-  Caribou Line
-  Parks

Scale : 1 : 1 000 000
Map Projection : Albers
Datum : NAD 83

0 20
KM



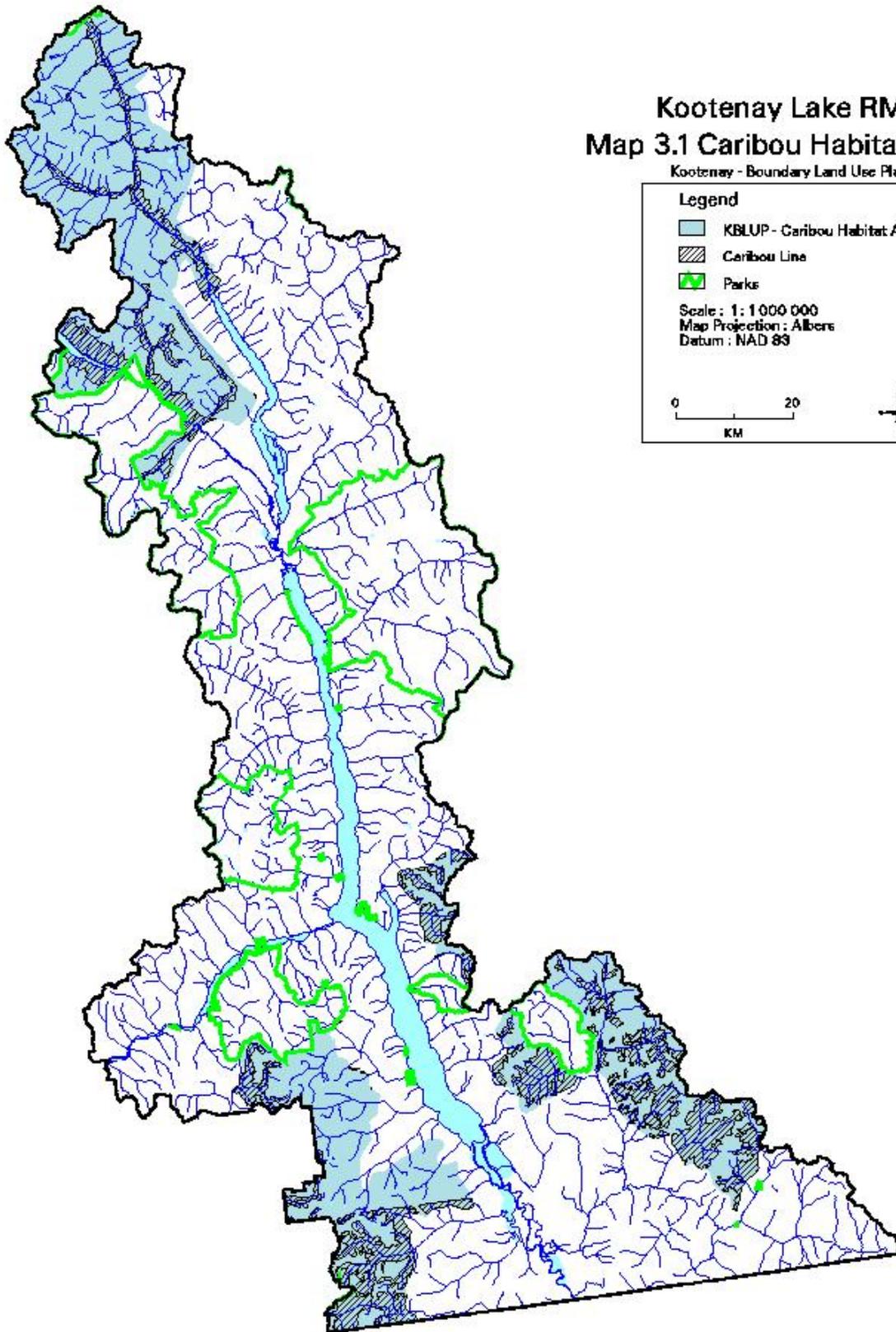
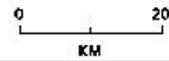
Kootenay Lake RMZ Map 3.1 Caribou Habitat Areas

Kootenay - Boundary Land Use Plan

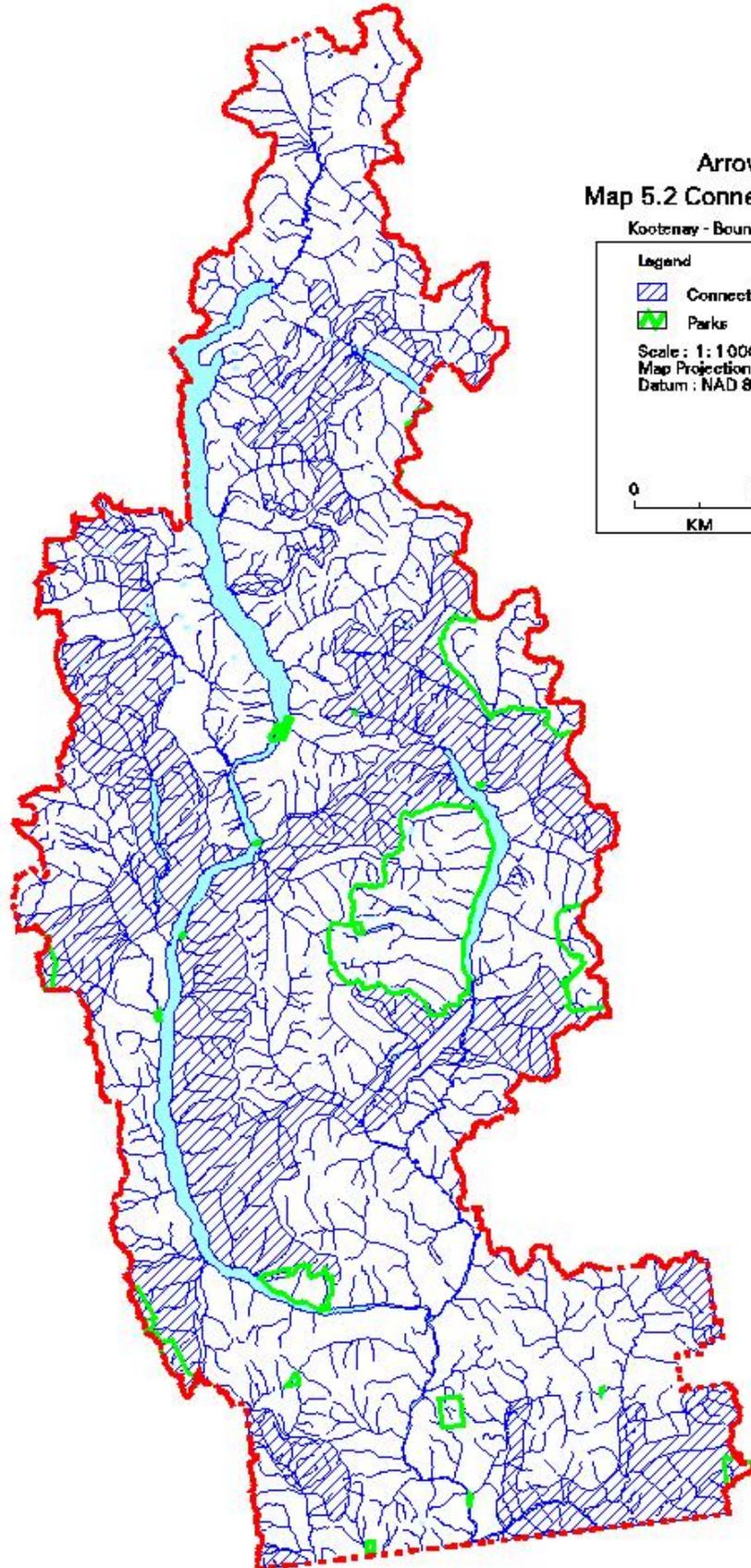
Legend

-  KBLUP - Caribou Habitat Areas
-  Caribou Line
-  Parks

Scale : 1 : 1 000 000
Map Projection : Albers
Datum : NAD 83



Arrow RMZ
Map 5.2 Connectivity Corridors
Kootenay - Boundary Land Use Plan



Legend

- Connectivity Corridors
- Parks

Scale : 1 : 1 000 000
Map Projection : Albers
Datum : NAD 83

0 20
KM



Cranbrook RMZ
Map 5.2 Connectivity Corridors

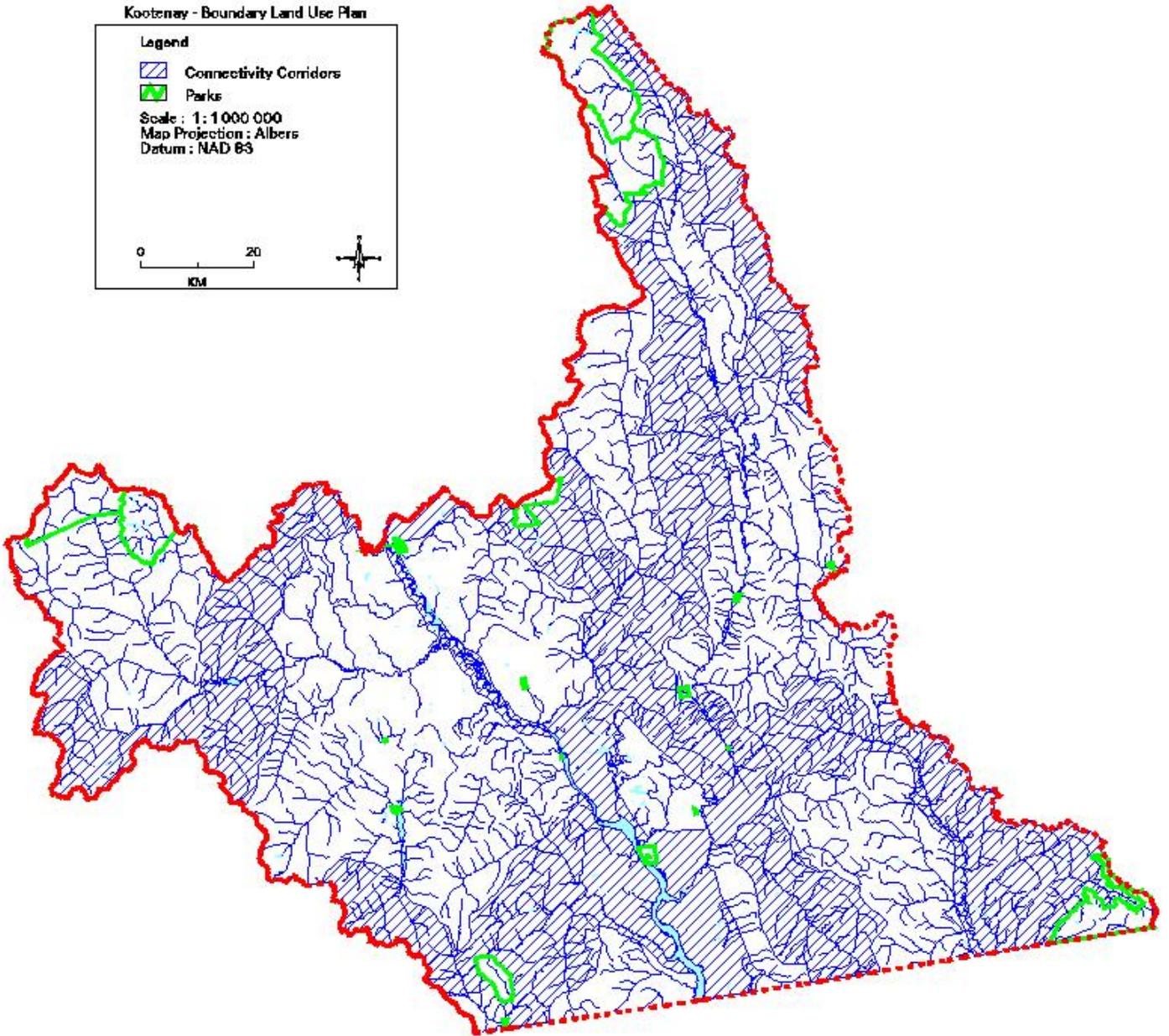
Kootenay - Boundary Land Use Plan

Legend

-  Connectivity Corridors
-  Parks

Scale : 1 : 1 000 000
Map Projection : Albers
Datum : NAD 83

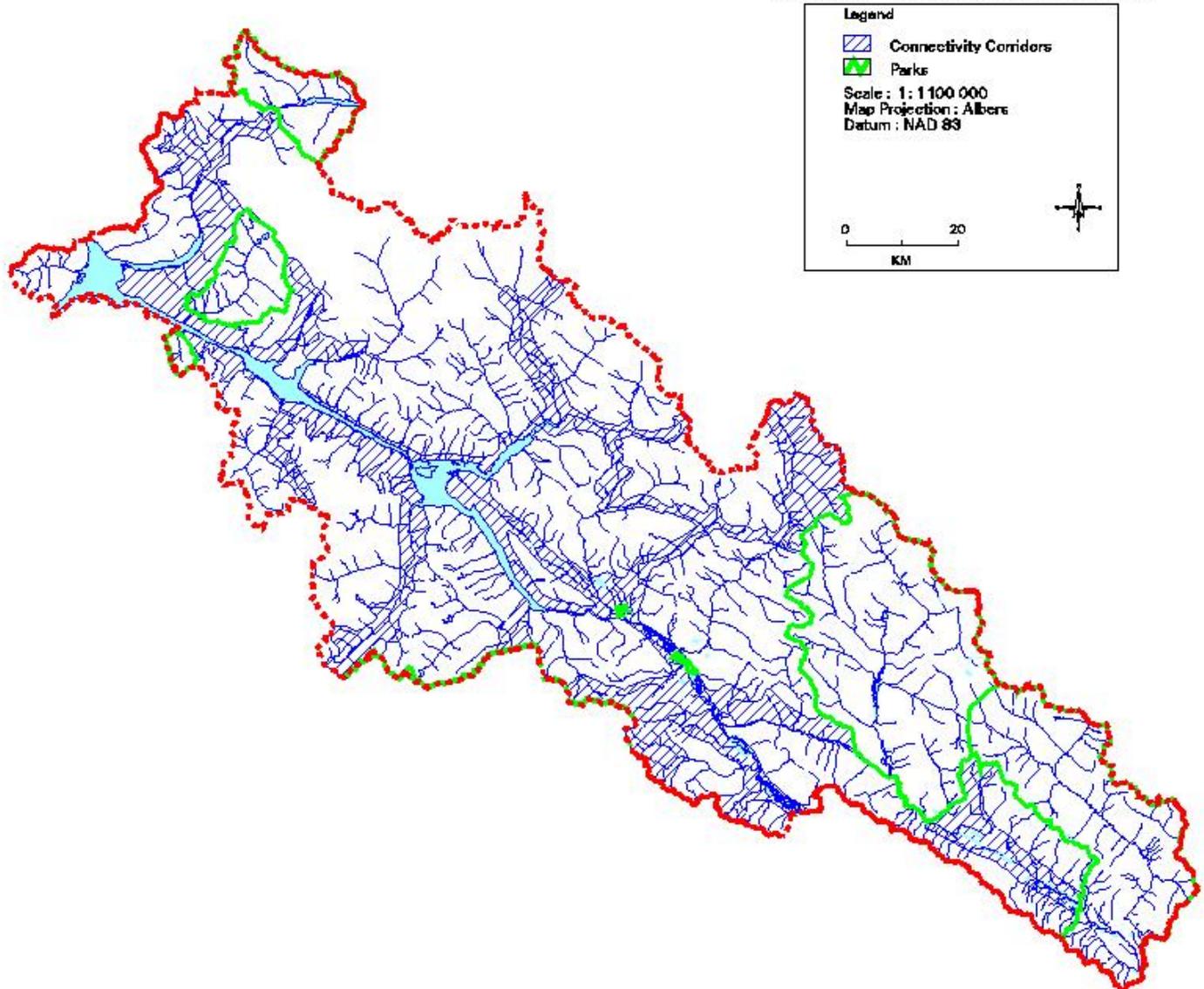
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KM



Golen RMZ

Map 5.2 Connectivity Corridors

Kootenay - Boundary Land Use Plan



Legend

- Connectivity Corridors
- Parks

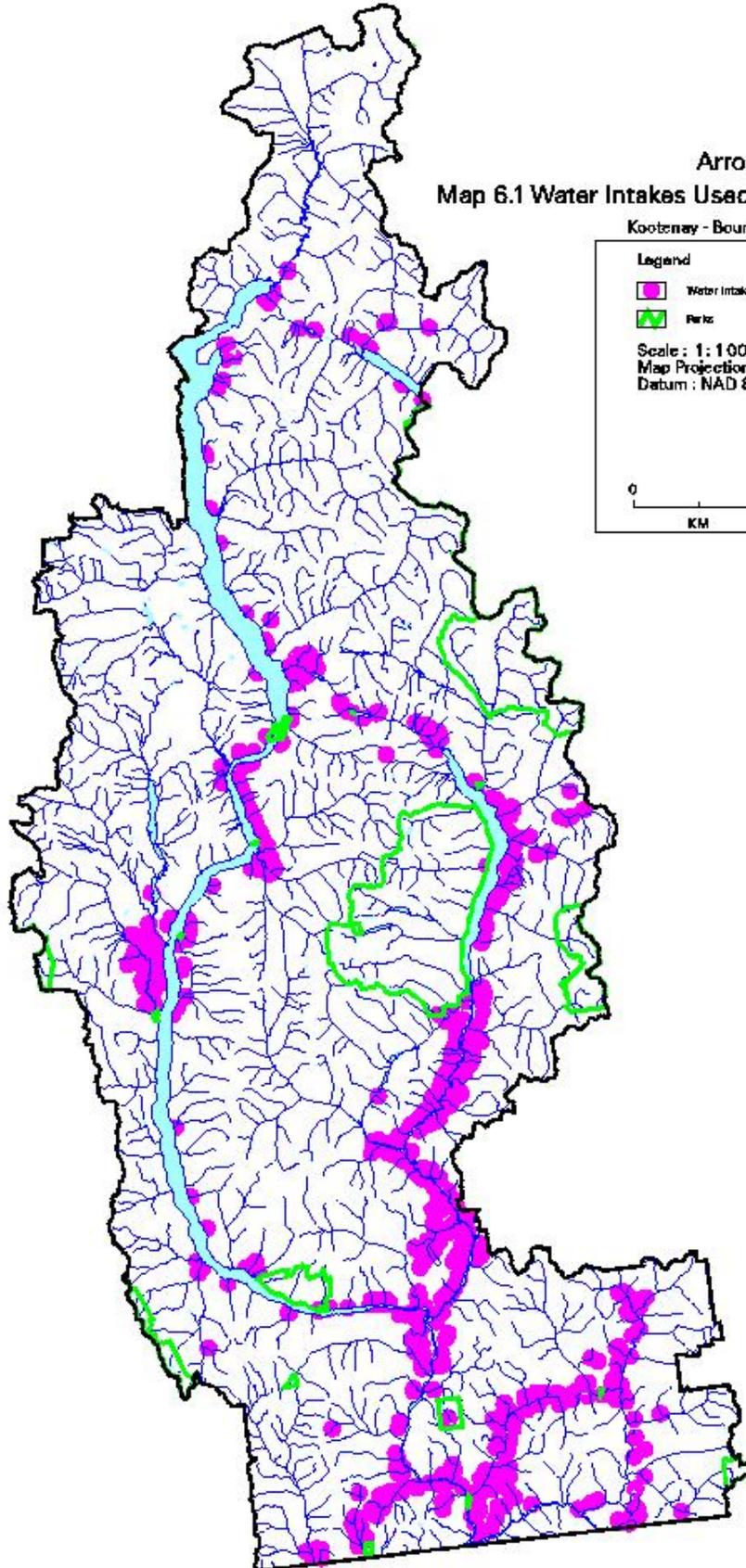
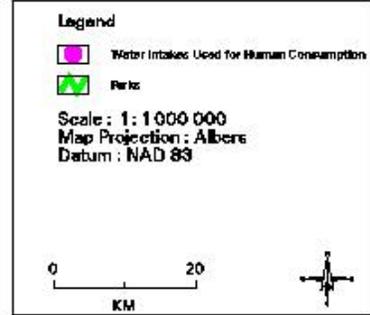
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Datum : NAD 83

0 20
KM



Arrow RMZ
Map 6.1 Water Intakes Used for Human Consumption

Kootenay - Boundary Land Use Plan

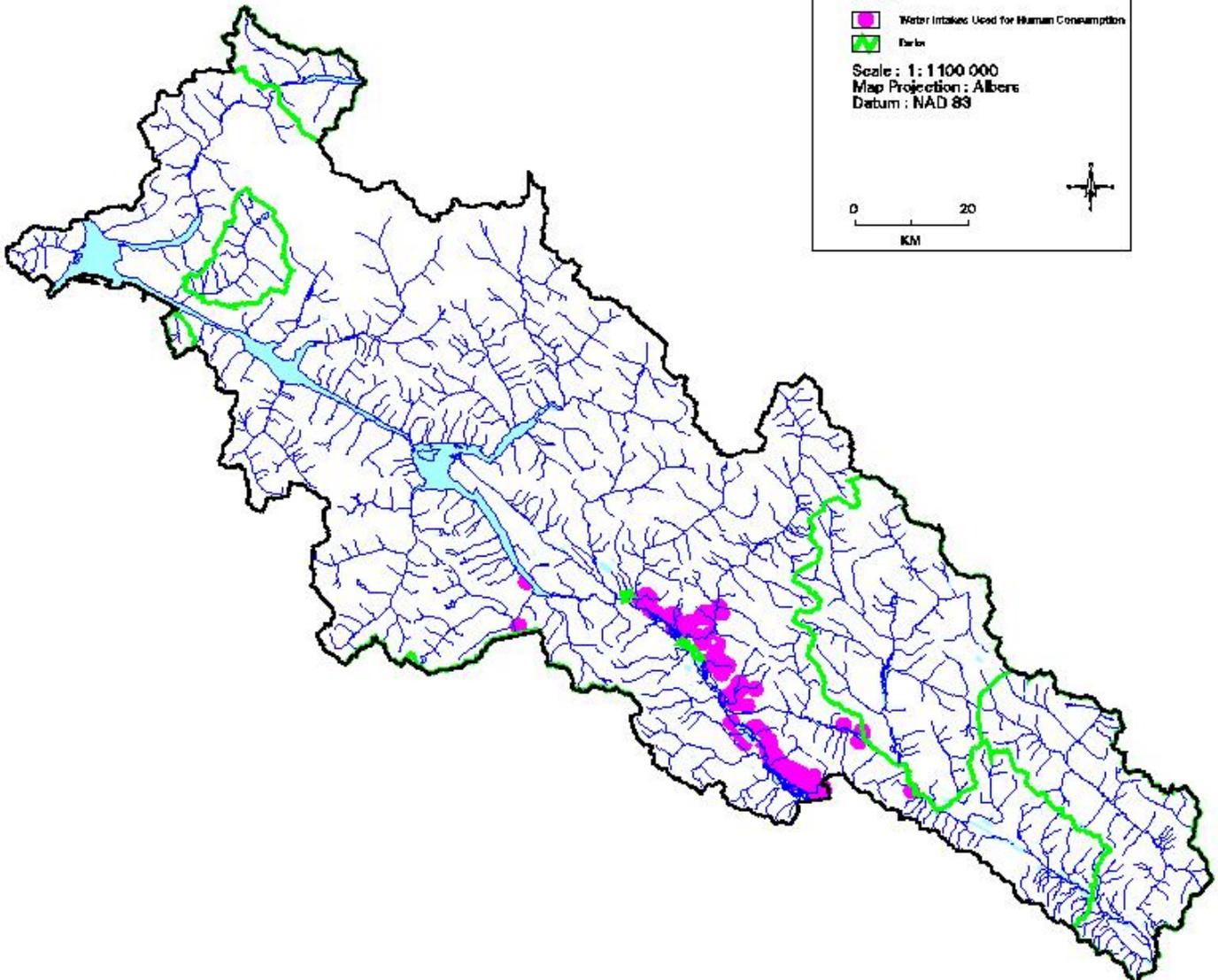
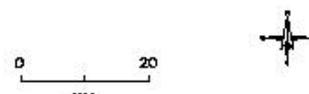


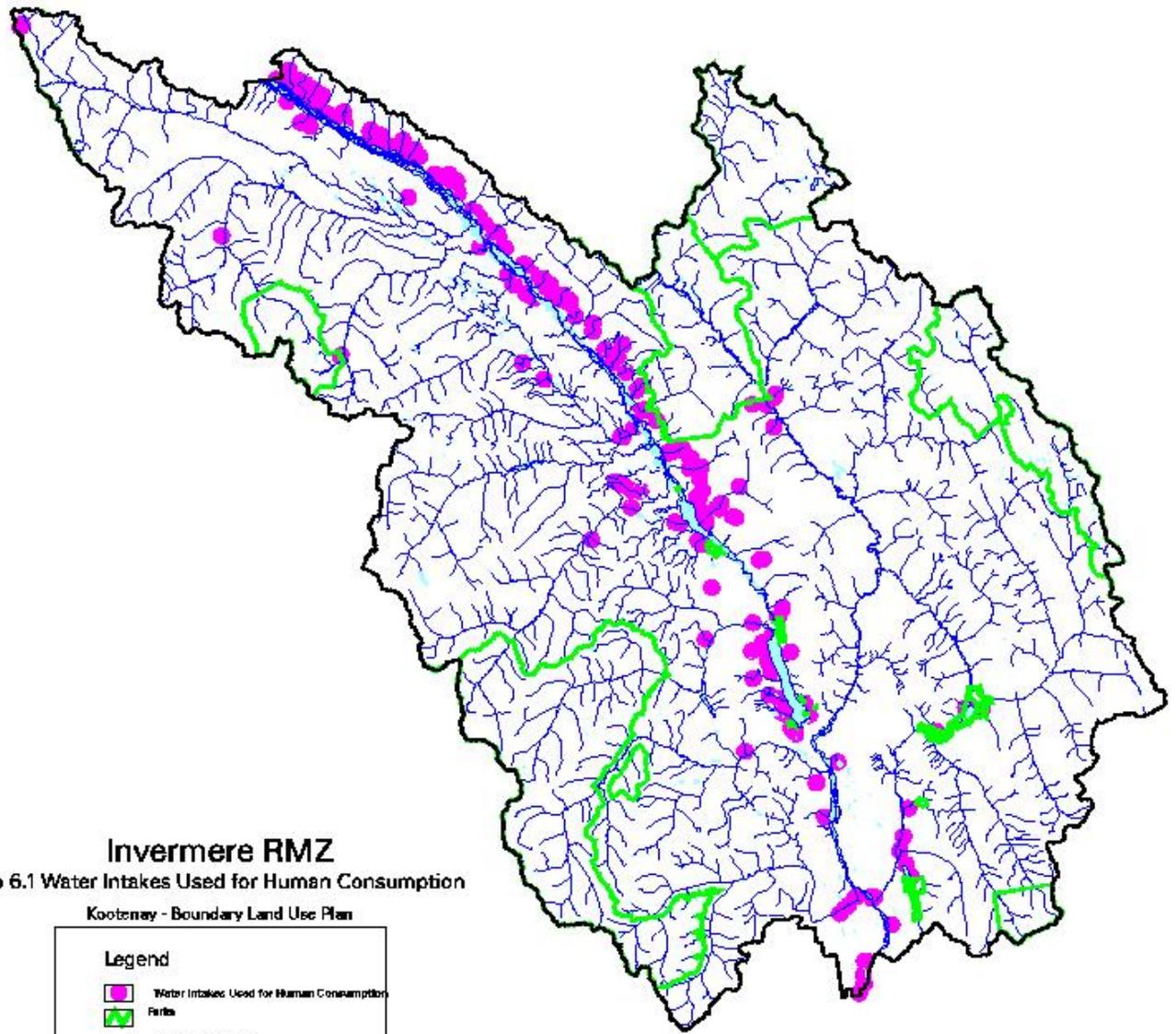
Golan RMZ
Map 6.1 Water Intakes Used for Human Consumption
Kootenay - Boundary Land Use Plan

Legend

- Water Intakes Used for Human Consumption
- Dams

Scale : 1 : 1 100 000
Map Projection : Albers
Datum : NAD 83





Invermere RMZ
 Map 6.1 Water Intakes Used for Human Consumption
 Kootenay - Boundary Land Use Plan

Legend

- Water Intakes Used for Human Consumption
- Farms

Scale : 1 : 1 000 000
 Map Projection : Albers
 Datum : NAD 83

0 ————— 20

KM



Arrow RMZ
 Map 7.1 Enhanced Resource Development Zone

Kootenay - Boundary Land Use Plan

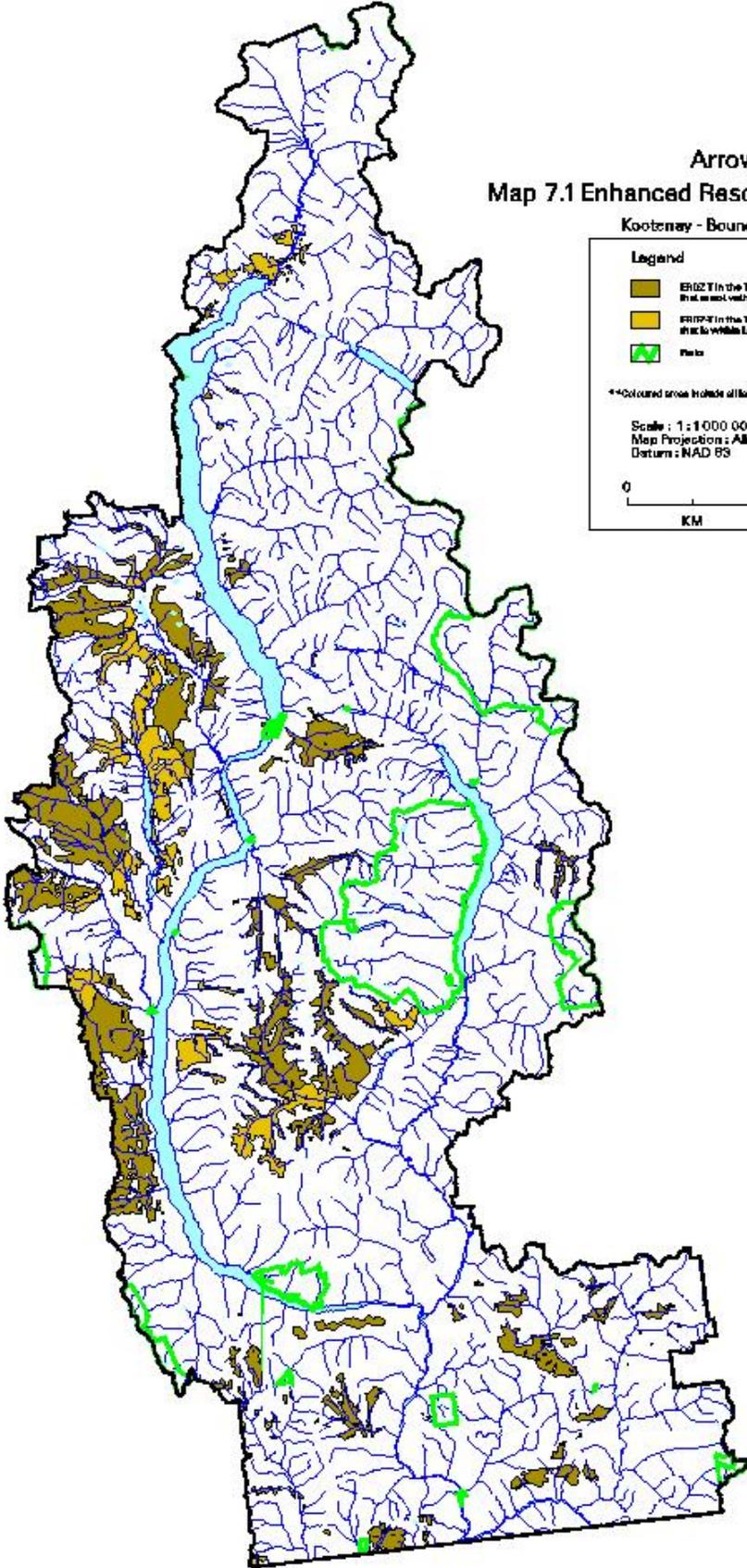
Legend

-  ERDZ T in the Winter Snowmelt Land Base (T1B5) that meet within Low BLD Connectivity Corridors.
-  ERDZ F in the Winter Snowmelt Land Base (T1B5) that do not meet within Low BLD Connectivity Corridors.
-  Parks

**Coloured areas include all lands not explicitly noted out.

Scale : 1 : 1 000 000
 Map Projection : Albers
 Datum : NAD 83

0 20
 KM

Boundary RMZ
Map 7.1 Enhanced Resource Development Zone

Kootenay - Boundary Land Use Plan

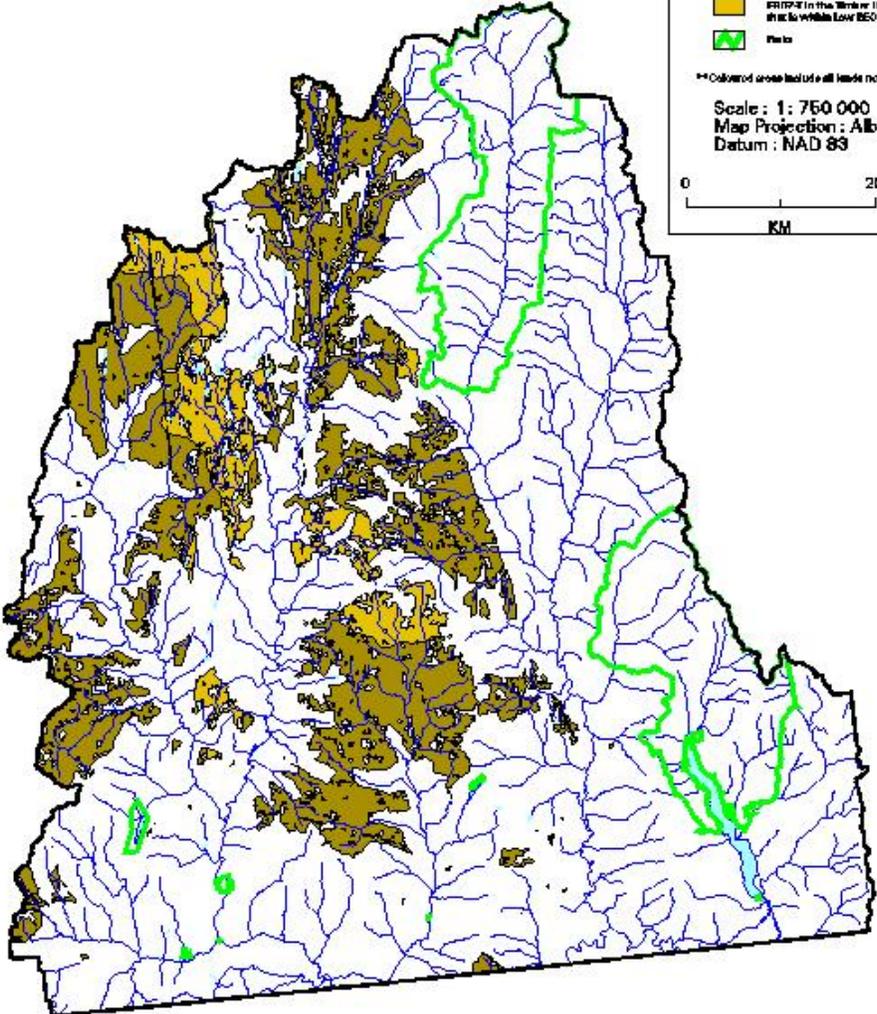
Legend

-  ERDZ T in the Winter Harvesting Land Base (TLRB) that meet with Low BLD Connectivity Corridors.
-  ERDZ F in the Winter Harvesting Land Base (TLRB) that do not meet with Low BLD Connectivity Corridors.
-  Parks

**Coloured areas that are all lands not completely wooded out.

Scale : 1 : 750 000
Map Projection : Albers
Datum : NAD 83

0 20
KM



Cranbrook RMZ

Map 7.1 Enhanced Resource Development Zone

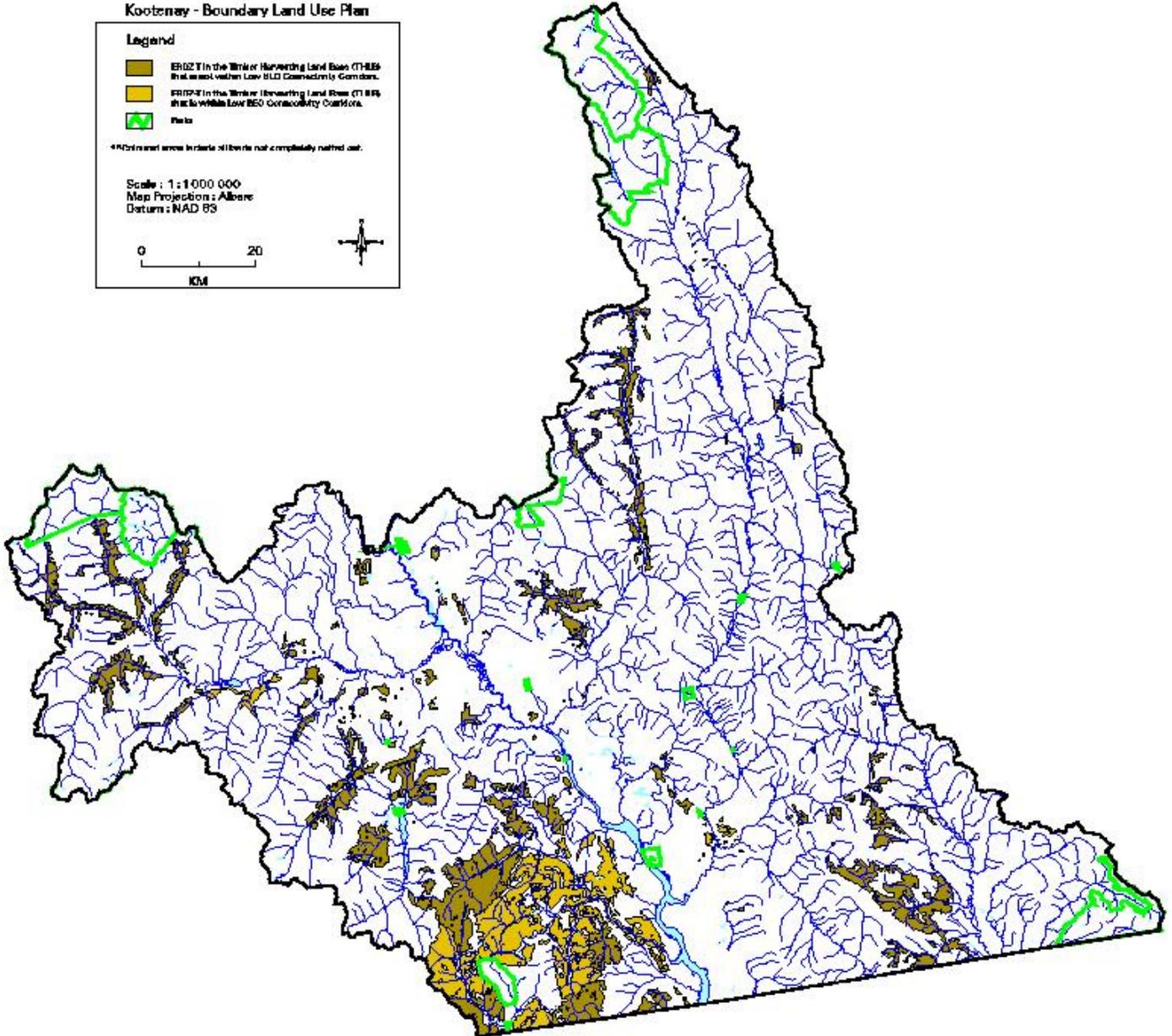
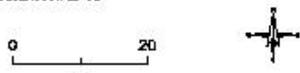
Kootenay - Boundary Land Use Plan

Legend

-  ERDZ T in the Wilder Harvesting Land Base (THBL) that is not within Low BLD Connectivity Corridors.
-  ERDZ F in the Wilder Harvesting Land Base (THBL) that is within Low BLD Connectivity Corridors.
-  Parks

*Not all areas in parks or forests not completely natural cut.

Scale : 1 : 1 000 000
Map Projection : Albers
Datum : NAD 83



Golden RMZ
 Map 7.1 Enhance Resource Development Zone
 Kootenay - Boundary Land Use Plan

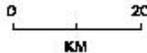
Legend

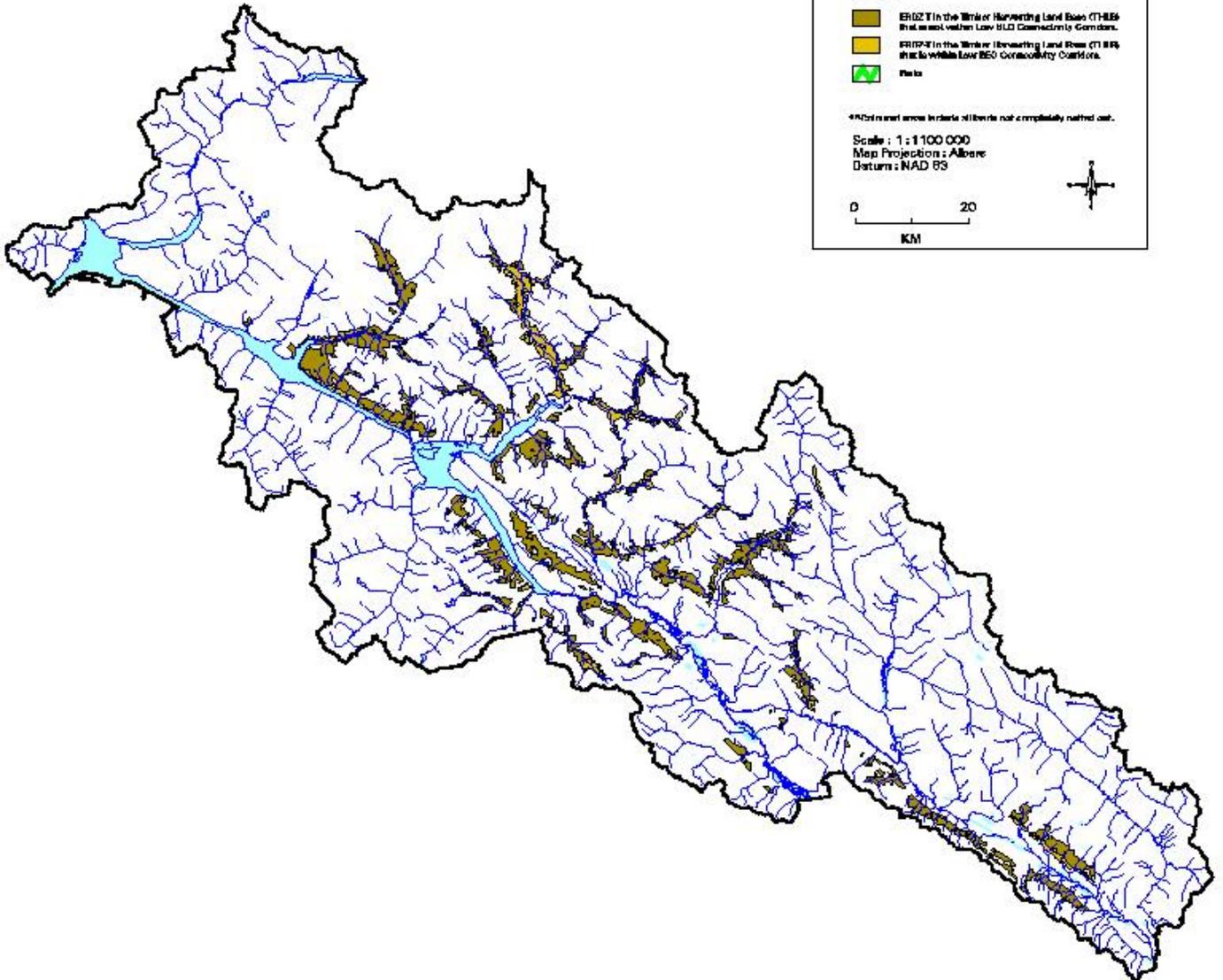
- ERDZ in the Winter Harvesting Land Base (HLB) that meet the Low BLD Connectivity Corridor.
- ERDZ in the Winter Harvesting Land Base (HLB) that do not meet the Low BLD Connectivity Corridor.
- Parks

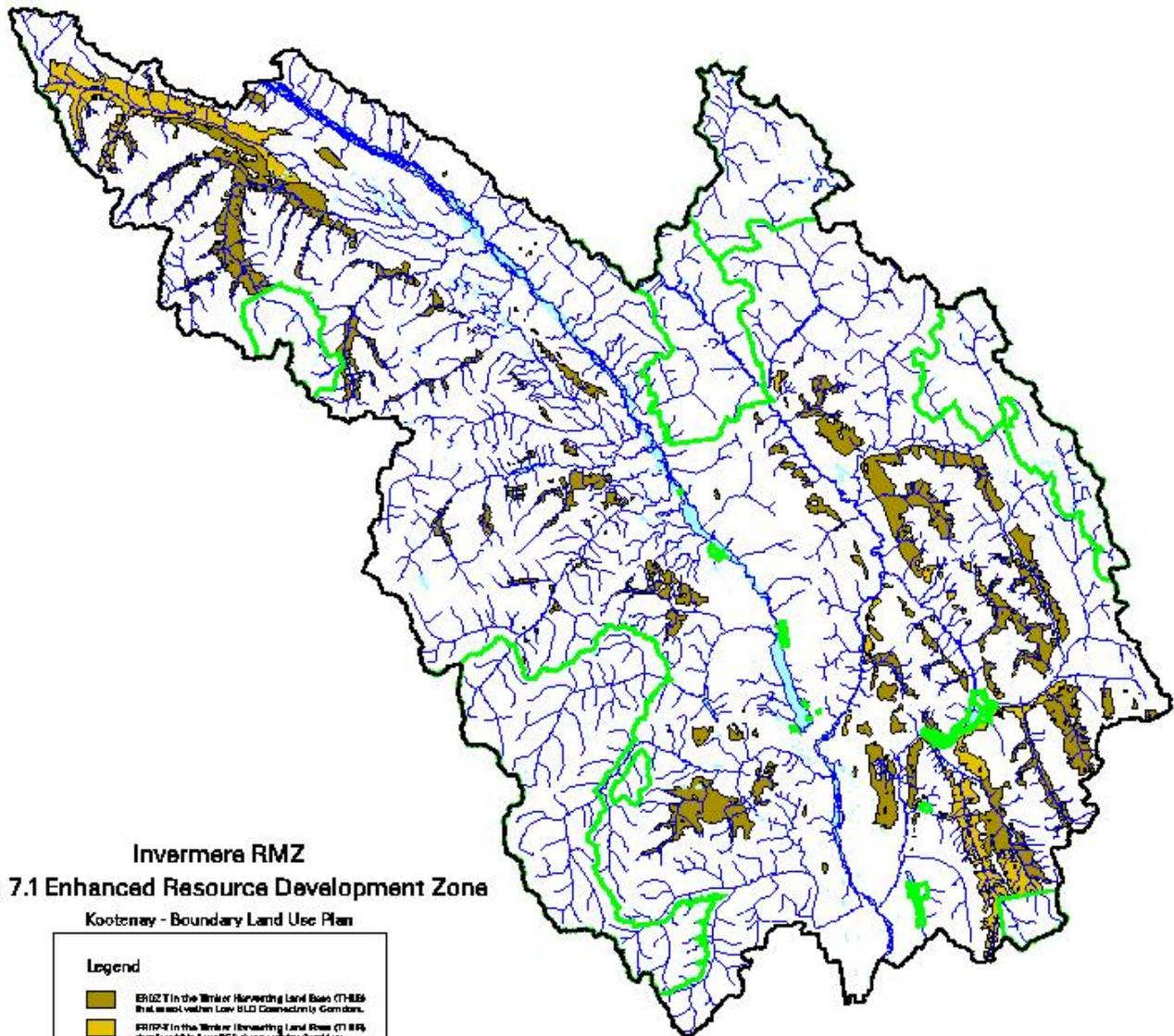
*Not shown since in data all fields not completely defined.

Scale : 1 : 1 000 000
 Map Projection : Albers
 Datum : NAD 83









Invermere RMZ
Map 7.1 Enhanced Resource Development Zone
 Kootenay - Boundary Land Use Plan

Legend

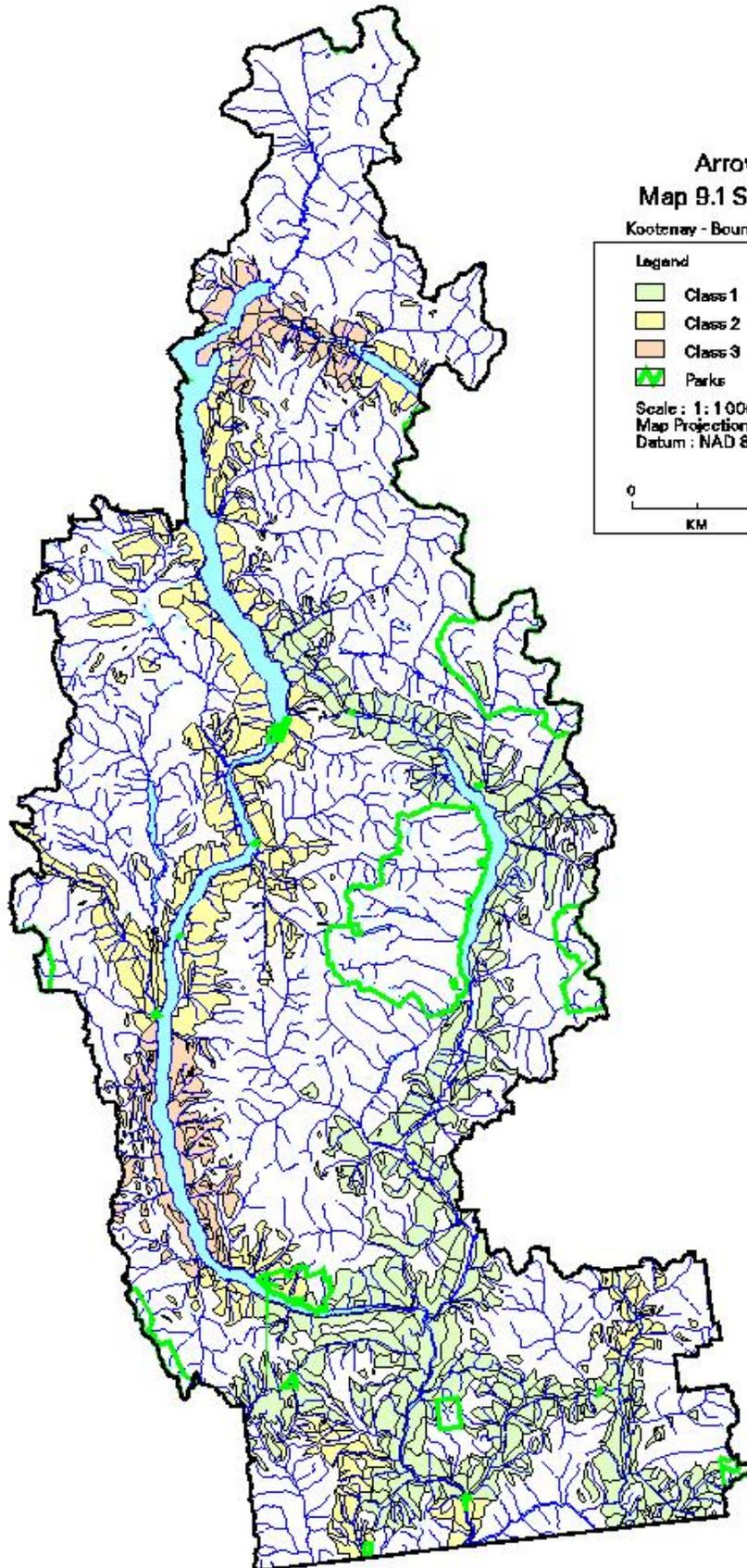
- ERDZ in the Invermere Harvesting Land Base (HLB) that meet with Low BLD Connectivity Corridors.
- FRDZ in the Invermere Harvesting Land Base (HLB) that do not meet Low BLD Connectivity Corridors.
- Risks

Scale : 1 : 1 000 000
 Map Projection : Albers
 Datum : NAD 83

**Coloured areas inside all lands are completely nested out.

0 20

KM



Arrow RMZ
Map 9.1 Scenic Areas
Kootenay - Boundary Land Use Plan

Legend

- Class 1
- Class 2
- Class 3
- Parks

Scale : 1 : 1 000 000
Map Projection : Albers
Datum : NAD 83

0 20
KM



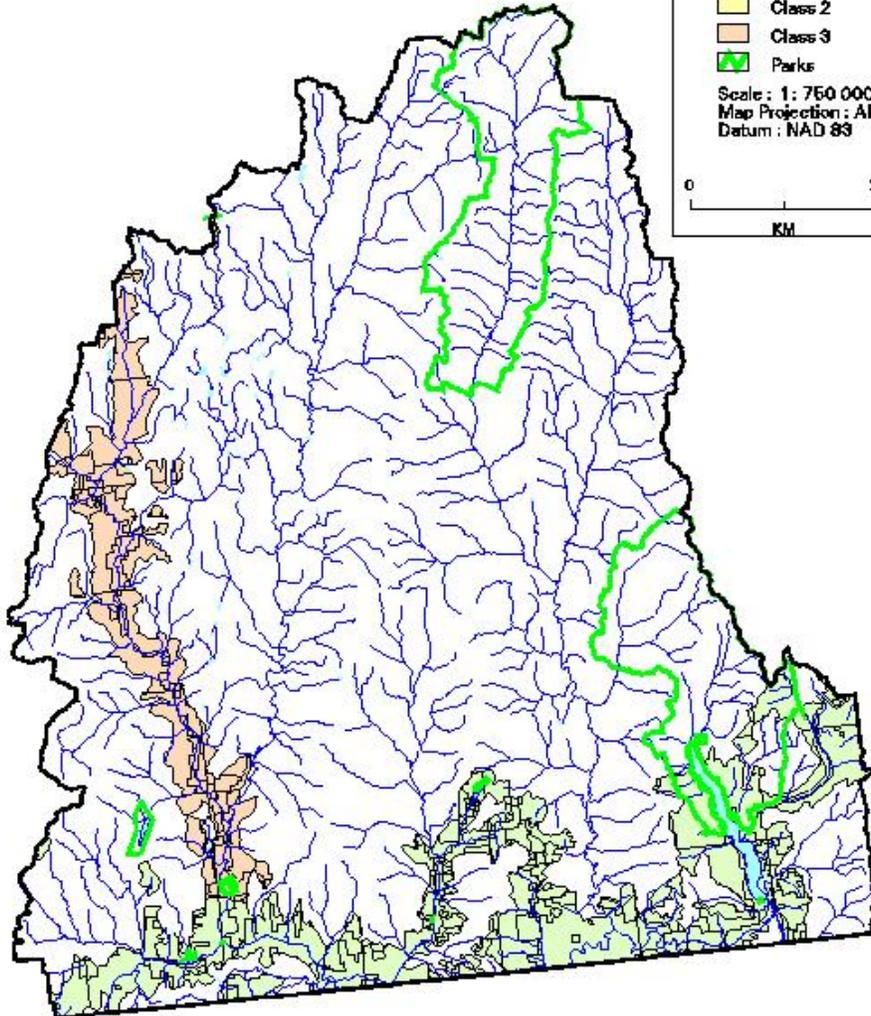
Boundary RMZ
Map 9.1 Scenic Areas
Kootenay - Boundary Land Use Plan

Legend

-  Class 1
-  Class 2
-  Class 3
-  Parks

Scale : 1 : 750 000
Map Projection : Albers
Datum : NAD 83

0 20
KM



Cranbrook RMZ
Map 9.1 Scenic Areas

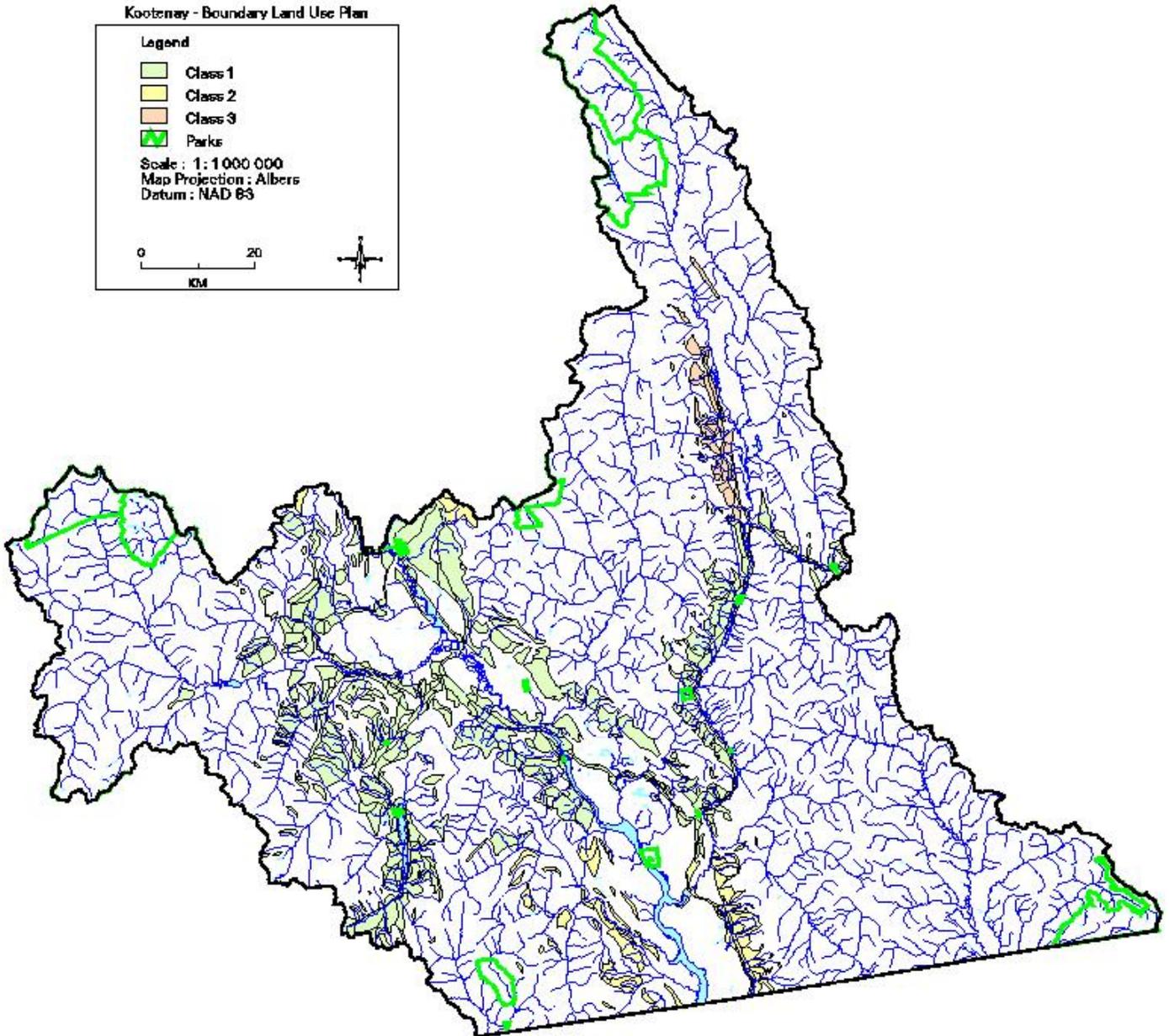
Kootenay - Boundary Land Use Plan

Legend

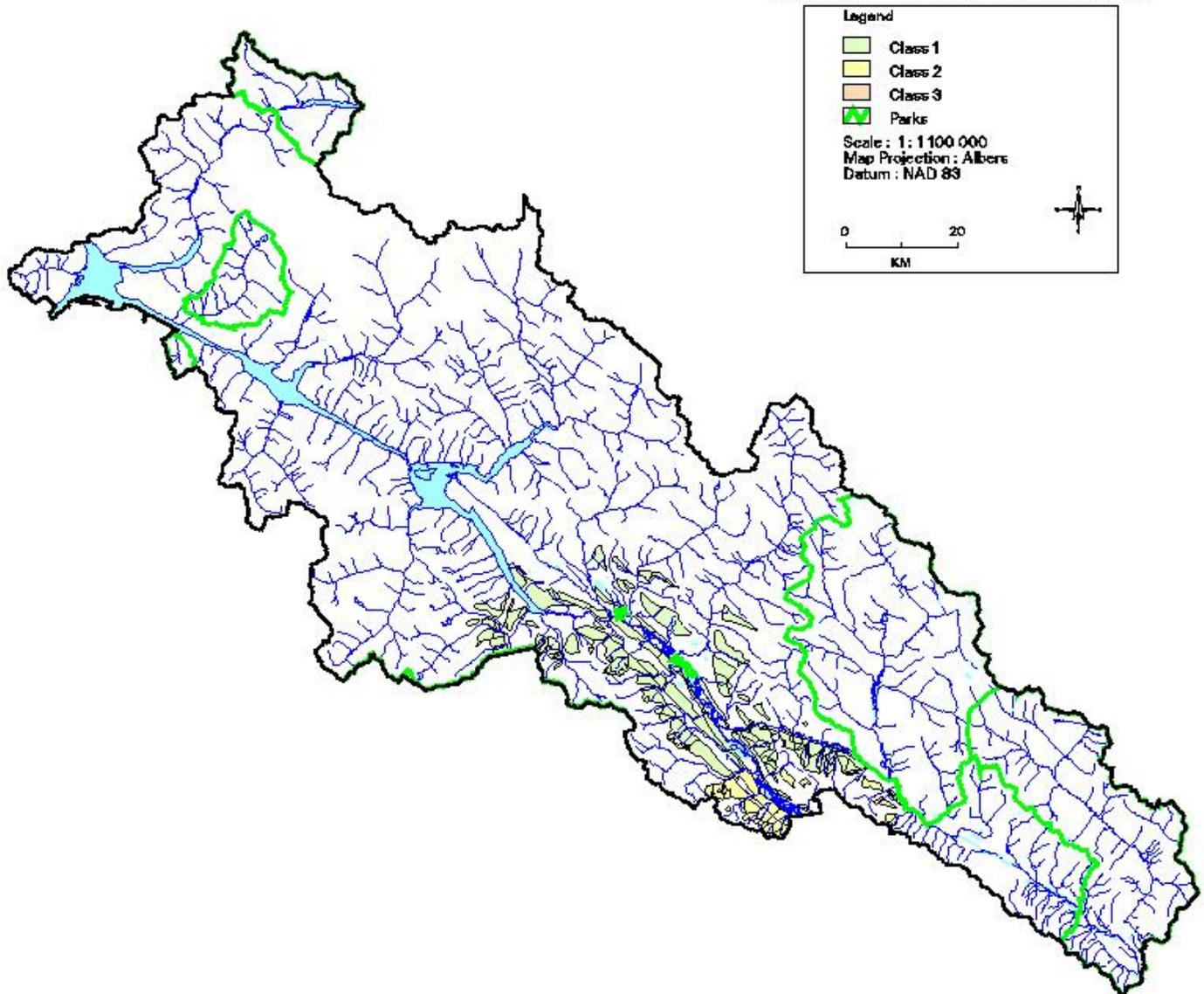
-  Class 1
-  Class 2
-  Class 3
-  Parks

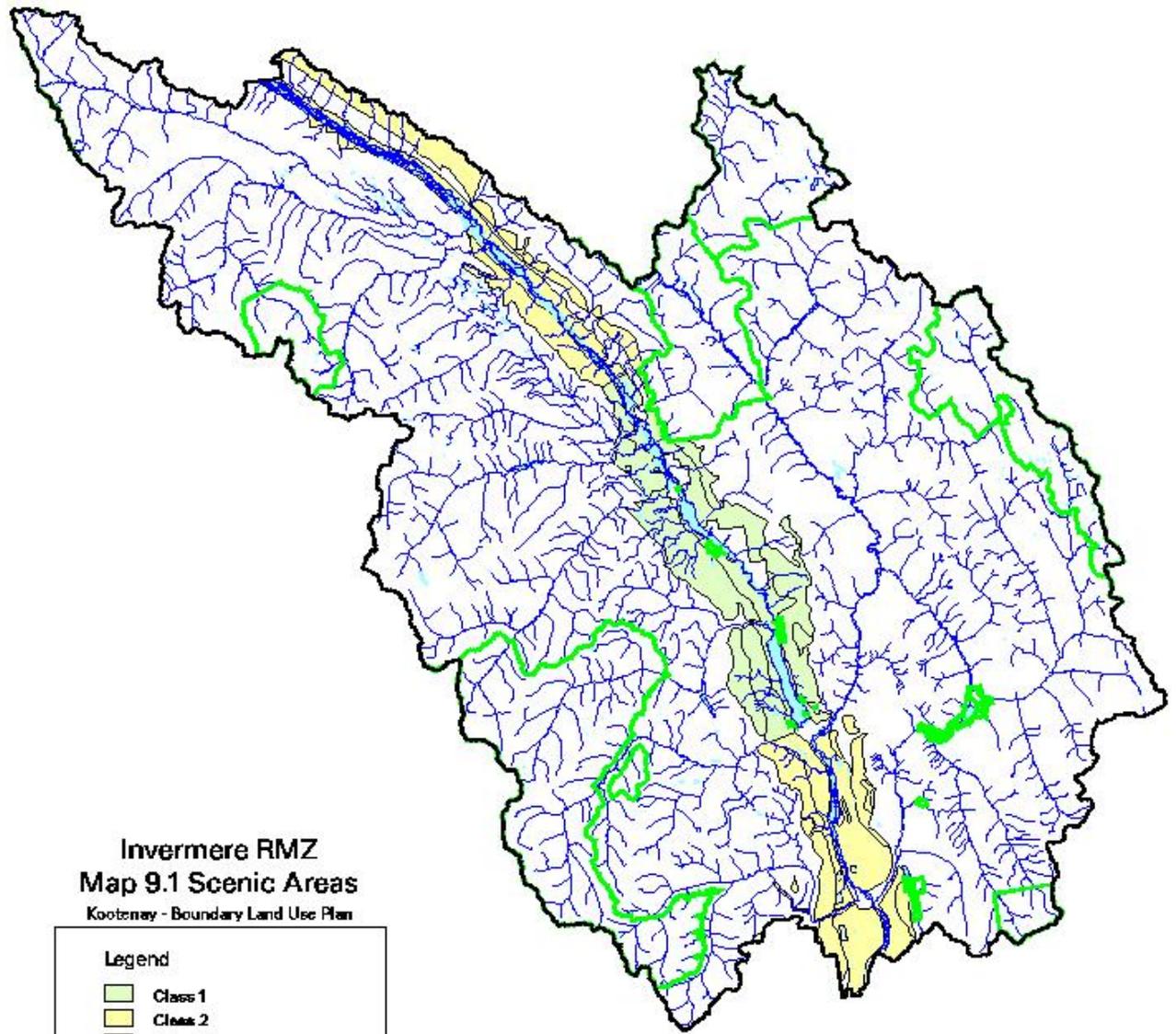
Scale : 1 : 1 000 000
Map Projection : Albers
Datum : NAD 83

0 20
KM



Golden RMZ
Map 9.1 Biodiversity Emphasis Option
Kootenay - Boundary Land Use Plan





Invermere RMZ
Map 9.1 Scenic Areas
 Kootenay - Boundary Land Use Plan

Legend

- Class 1
- Class 2
- Class 3
- Parke

Scale : 1 : 1 000 000
 Map Projection : Alberta
 Datum : NAD 83

0 ————— 20

KM

KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER

ORDER -KBHLP -01

ORDER VARYING OBJECTIVE 2 and 3 OF THE KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER (OCTOBER 2002) WITHIN THE ARROW RESOURCE MANAGEMENT ZONE PURSUANT TO SECTIONS 3 (2) AND 3 (7) OF THE *FOREST PRACTICES CODE OF BRITISH COLUMBIA ACT* (THE ACT).

Preamble

This preamble is meant to provide the context in which this variance was reviewed and approved and does not form part of the variance.

This variance was proposed by Slocan Forest Products in order to help them meet their short term wood supply needs. Slocan had been shut down due to poor market conditions but has recently reopened. In an effort to secure cost competitive timber to maintain operations Slocan has made a proposal that will benefit caribou and biodiversity. The proposal on which this variance is based involves increasing caribou forest cover requirements within the Kuskanax Landscape Unit while reducing biodiversity requirements by an equal amount in the Wilson Landscape Unit. This exchange will result in the protection of forest stands with higher values for Caribou and biodiversity while providing Slocan and BC Timber Sales with access to cost competitive timber within forest stands not subject to caribou requirements and less valuable in terms of biodiversity. This proposal has been reviewed by a Registered Professional Biologist and he has indicated that this variance provides a clear benefit to caribou habitat and general biodiversity in the Kuskanax Landscape Unit while posing little corresponding risk in the Wilson Landscape Unit.

Section e) of the Delegation of Ministers' Powers memorandum, dated February 28, 2003 provides the Regional Director with the authority to vary Objective 2 (Old and Mature Forest) where information is provided that indicates harvesting would maintain or enhance the old growth conservation values or that there are other benefits for conservation values. In this case, there is information that shows that there are both benefits to old growth and Caribou conservation. This is achieved through the adjustment to Objective 3 (Caribou) to increase forest cover requirements. Section f) of the memorandum provides the Regional Director with the authority to adjust Objective 3 where new information indicates that adjustments have a neutral to positive impact on the social, economic and environmental balance of the region. Information presented indicates a positive impact.

This variance order should be viewed in concert with the Kootenay Boundary Higher Level Plan Order dated October 26, 2002.

Part 1- Resource Management Zone Objective Variance

Objective 2 of the Kootenay-Boundary Higher Level Plan Order for the Arrow Resource Management Zone is varied as follows:

To increase available timber, the requirement for maintaining >46 % mature + old for the ICHmw2 within landscape unit N525 (Wilson) is reduced by 608 hectares by:

- **Allowing up to a maximum of 608 hectares of the mature component of existing mature + old seral forests in areas outside of mapped Caribou Habitat areas (Map 3.1) to be harvested.**
- **Any deficit in mature + old existing prior to this order coming into effect must be addressed through recruitment from forest stands less than a mature age considering Objective 2 (5) of the October 26, 2002 Kootenay-Boundary Higher Level Plan Order.**

Objective 3 of the Kootenay-Boundary Higher Level Plan Order for the Arrow Resource Management Zone is varied as follows:

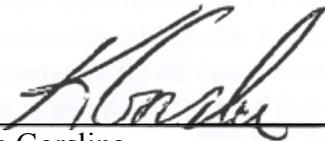
To enhance Caribou Habitat, the requirement for maintaining a minimum of 40% of the forested area in age class 8 or older within the ICH biogeoclimatic unit within landscape unit N528 (Kuskanax) below the Caribou line is increased by 608 hectares.

Part 2- Filing the Order

This order, KBHLP-01, will be filed with Regional Director, Kootenay Region Ministry of Sustainable Resource Management on May 8, 2003.

Part 3- Effective Date

This order comes into effect immediately. Despite subsection 16 (2) of the Forest and Range Practices Act, all forest stewardship plans submitted after the effective date must be consistent with this order. Despite Section 10 (d) of the Forest Practices Code of British Columbia Act, all forest development plans submitted after the effective date must be consistent with this order.



Ken Gorsline
Acting Regional Director
Kootenay Region
Ministry of Sustainable Resource Management



Date

KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER

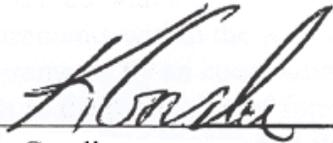
ORDER -KBHLP -02

ORDER VARYING OBJECTIVE 2 OF THE KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER (OCTOBER 2002) WITHIN THE BOUNDARY RESOURCE MANAGEMENT ZONE PURSUANT TO SECTIONS 3 (2) AND 3 (7) OF THE *FOREST PRACTICES CODE OF BRITISH COLUMBIA ACT* (THE ACT)

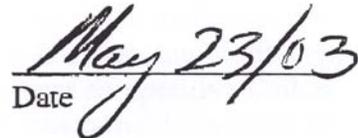
Objective 2 of the Kootenay-Boundary Higher Level Plan Order for the Boundary Resource Management Zone is varied as follows:

Within Landscape Unit B-11 of the Boundary Resource Management Zone (RMZ), 50 hectares of the mature and old seral requirements from the ESSFdc1 (NDT 3) biogeoclimatic unit within the connectivity corridor are reapportioned to the ESSFwc4 (NDT 2) biogeoclimatic unit within the connectivity corridor.

This order will be filed with the regional director, Kootenay Region, Ministry of Sustainable Resource Management and will take effect on May 30, 2003.



Ken Gorsline
Acting Regional Director
Kootenay Region
Ministry of Sustainable Resource Management


Date

KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER

ORDER- KBHLP-03

ORDER VARYING OBJECTIVES 2, 3, 5, AND 9 OF THE KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER (OCTOBER 2002) PURSUANT TO SECTIONS 3 (2) AND 3 (7) OF THE *FOREST PRACTICES CODE OF BRITISH COLUMBIA ACT* (THE ACT).

Preamble

This preamble is meant to provide the context in which this variance was reviewed and approved and does not form part of the variance.

This variance was initiated to provide forest licensees with direction for salvaging timber affected by fires in 2003 that is subject to the Kootenay-Boundary Higher Level Plan Order. The variance is intended to provide a means to salvage affected timber while considering the value of remaining Old and Mature forest (Objective 2), Caribou habitat (Objective 3) and Scenic (Objective 9) areas within the fire areas. This variance will be in effect only until December 31, 2004.

Section o) of the Delegation of Ministers' Powers memorandum, dated February 28, 2003 provides the Regional Director with the authority to vary these objectives where necessary to deal with forest health issues to the extent necessary to reasonably deal with the unforeseen event.

This variance order should be viewed in concert with the Kootenay Boundary Higher Level Plan Order dated October 26, 2002 and variances to this order made after this date.

Part 1- Resource Management Zone Objective Variance

Objective 2 (Old and Mature Forests) of the Kootenay-Boundary Higher Level Plan Order is varied by adding the following sub-sections below sub-section 5 of Objective 2:

- 6) Timber harvesting may be permitted in mature and old and old seral areas where a registered professional forester or registered professional biologist provides a written opinion indicating that the forest stand has been sufficiently damaged by fire to effectively eliminate its biodiversity value as mature and old seral and/or old seral forest. This applies only to areas that have been damaged by fires in 2003.
- 7) Timber harvesting of unburned timber may also be permitted where the preservation of mature and old seral and/or old seral within or adjacent to a 2003 fire area, would preclude conventional harvesting (ground or cable) of adjacent burnt timber provided:
 - a) the unburned area proposed for harvest is less than 5 ha and the burned area precluded from harvest is larger than the unburned area or,
 - b) the Regional Director MSRM believes that it is necessary to reasonably deal with forest health issues.
- 8) Sections 6) and 7) above only apply to areas which are in deficit of seral requirements.

Objective 3 (Caribou) of the Kootenay-Boundary Higher Level Plan Order is varied by adding the following sub-sections below sub-section 2 of Objective 3:

- 3) Timber harvesting may be permitted in Caribou habitat areas (Age class 8 and 9 or younger areas where recruitment is required) where a registered professional biologist or registered professional forester provides a written opinion indicating that the forest stand has been sufficiently damaged by fire to effectively eliminate its value as Caribou habitat and salvage operations will not adversely impact adjacent habitat. This applies only to areas that have been damaged by fires in 2003.
- 4) Timber harvesting of unburned timber may also be permitted where the preservation of caribou habitat within or adjacent to a 2003 fire area, would preclude conventional harvesting (ground or cable) of adjacent burnt timber provided the Regional Director MSRM believes that it is necessary to reasonably deal with forest health issues.
- 5) Sections 3) and 4) above only apply to areas which are in deficit of habitat requirements.

Objective 5 (Grizzly Bear Habitat and Connectivity Corridors) of the Kootenay-Boundary Higher Level Plan Order need not be considered in those areas that are approved for timber harvest under Objective 2 section 6), 7) and 8) and/or Objective 3 sections 3), 4) and 5).

Objective 9 (Visuals) of the Kootenay-Boundary Higher Level Plan Order is varied by adding the following to the objective:

Where timber within a scenic area has been damaged by fire, it may be salvaged. Salvage operations must be designed to reduce visual impacts where possible.

Part 2- Filing the Order

This order will be filed with Regional Director, Kootenay Region Ministry of Sustainable Resource Management on November 12, 2003.

Part 3- Effective Date

This order comes into effect immediately and will expire December 31, 2004. Despite subsection 16 (2) of the *Forest and Range Practices Act*, all forest stewardship plans submitted after the effective date must be consistent with this order. Despite Section 10 (d) of the *Forest Practices Code of British Columbia Act*, all forest development plans submitted after the effective date must be consistent with this order.

Original signed by Ken Gorsline

Ken Gorsline
Acting Regional Director
Kootenay Region
Ministry of Sustainable Resource Management

Date: November 12, 2003

VARIANCE KBHLP-04 PREAMBLE

This preamble is meant to provide the context in which this variance was reviewed and approved and does not form part of the variance.

This variance was initiated to improve the management of Caribou within the plan area and also to improve the clarity of the existing Caribou Objective. The variance includes revised mapping for the Central Selkirk, Central Rockies, South Selkirk and South Purcell Caribou herds. There are new management objectives for the South Selkirk and South Purcell herds and some new direction for the Central Selkirk herd. These changes have been proposed based on work completed by the Regional Caribou Committee lead by the Ministry of Water, Land and Air Protection. Members of this committee also included the Ministry of Forests and the forest industry. The variance proposed has been jointly developed between the Ministries of Sustainable Resource Management and Water, Land and Air Protection.

This variance proposal was submitted to the Minister of Sustainable Resource Management for decision as the variance was considered by the Regional Director to have potentially significant social, economic and environmental impacts on the region. This order was drafted considering the public input received through the review and comment period. This order is only one facet of government's plan to improve Caribou management and more information regarding government's plans for caribou management can be obtained from the Kootenay Region of the Ministry of Water, Land and Air Protection.

Variance KBHLP-04 replaces Objective 3 (Caribou) of the Kootenay Boundary Higher Level Plan Order dated October 26, 2002 and those parts of variance orders KBHLP-03 and 06 which pertain to Objective 3. This variance order should be viewed in concert with the Kootenay Boundary Higher Level Plan Order dated October 26, 2002 and other variances not incorporated into this order. This order does not supersede Orders KBHLP 1 and 5 and these Orders need to be considered in conjunction with this Order.

Implementation of this Order should be guided by the contents of implementation policies and data preparation reports developed to support this Order. Existing and future policy and information documents can be found on the following website-
<http://srmwww.gov.bc.ca/kor/rmd/>.

KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER

ORDER- KBHLP-04

**ORDER VARIES RESOURCE MANAGEMENT ZONE OBJECTIVE 3 (CARIBOU) OF THE
KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER DATED OCTOBER 26, 2002**

PURSUANT TO

SECTIONS 3(2), AND 9.1 OF THE

FOREST PRACTICES CODE OF BRITISH COLUMBIA ACT (THE ACT)

PART 1

Variance of Resource Management Zone Objective 3

Objective 3 of the Kootenay-Boundary Higher Level Plan Order (October 26, 2002) is varied by replacing Objective 3 with the new Objective 3 outlined below. Pursuant to Section 3(2) of the Act, Objective 3 is varied effective the date of this order being filed, as a Resource Management Zone objective for all Resource Management Zones established in the October 26, 2002 Order.

3. Caribou:

- (1) Retain seasonal habitats for mountain caribou in order to contribute to maintaining the viability of the existing subpopulations according to the forest cover requirements shown in Table 3.1 within the caribou management zones shown on Map 3.1 (Central Selkirks), Map 3.2 (Central Rockies), Map 3.3 (South Purcell) and Map 3.4 (South Selkirks).
- (2) In the Central Selkirks (Map 3.1), forest cover requirements must be applied by individual Caribou Management Zones by landscape unit and retained in mapped priority areas according to the following priorities:
 1. Priority Area 1
 2. Priority Area 1A
 3. Priority Area 2
- (3) Where subsections 1 and 2 above can not be achieved due to deficits in minimum forest retention area percentages, deficits must be recruited from the next youngest forest cover age class stands to achieve targets in the shortest time frame or through an alternate recruitment strategy. Alternate recruitment strategies must be submitted to the Regional Director Ministry of Sustainable Resource Management (MSRM) for approval. The Regional Director may approve specific recruitment strategies provided:
 - (a) the strategy has been developed by a registered professional biologist;
 - (b) the strategy contains a professional opinion from the registered biologist indicating that the strategy will benefit caribou habitat in the future;
 - (c) the strategy is spatially explicit;
 - (d) the strategy is not in conflict with any existing caribou recovery plan for the specific herd;
 - (e) and the Regional Director is satisfied that the strategy will benefit caribou habitat.
- (4) Promote the development of future Caribou habitat through reforestation and silviculture treatments on all areas harvested within a Caribou Management Zone.

Table 3.1 Caribou Habitat Requirements

Caribou Management Zone ⁽¹⁾	Zone Located On Map(s)	Forest leading species ³	Minimum forest retention area ⁴	Forest age class ⁵	Exceptions
1	All	All	100%	All age classes	Previously harvested stands require future decisions.
2	Maps 3.3 and 3.4	Spruce (S), Balsam (B), Whitebark Pine (Pa), Alpine Larch (La), Cedar (C) or Hemlock (H)	100%	All age classes	
		Lodgepole Pine (Pl), Douglas-fir (Fd) or Western Larch (Lw)	N/A	All age classes	
3	Maps 3.3 and 3.4	S, B, Pa, C or H ⁽²⁾	70% 40%	≥4 ≥8	
		Pl, Lw or Fd	N/A		
4	Maps 3.3 and 3.4	All	33%	≥5	Stands may be partial cut to maintain 250-800 stems/ha and connect cross valley.
5	Maps 3.1 and 3.2	All	≥70%	≥8	
6	Maps 3.1 and 3.2	All	≥70%	≥8	
7	Maps 3.1 and 3.2	All	≥40%	≥8	
			≥10% (1/4 of the 40% above)	9	
8	Maps 3.1 and 3.2	All	≥30%	≥8	
			≥10% (1/3 of the 30% above)	9	
			Plus 20% Partial cut (with ≥ 70% basal area maintained)	≥7	

1 All Caribou Management Zones have been mapped.

2 The intent is to allow a maximum of 30% of these stands to be harvested every 80 years.

3 Forest leading species is the first species listed in the forest inventory type label unless the leading species is Pl and it makes up less than 50% of the stand, in which case the second leading species shall be considered the forest leading species for the purposes of this table.

4 Forest retention requirements for table 3.1 are determined by applying percentages to the Crown forested land base within the mapped caribou habitat of each individual landscape unit. Crown forested land base excludes Provincial Parks, Protected Areas, Ecological Reserves and Federal Parks. The resultant forest retention requirements are applied to slopes less than 80 percent.

5 Forest stand ages will be based on the best available information.

(5) Timber harvesting to deal with 2003 fires and mountain pine beetles is permitted despite the requirements of subsections 1 to 3 above, in the following circumstances:

1. A qualified professional^p (registered professional biologist or registered professional forester) provides a written opinion indicating that the forest stand has been sufficiently damaged by fire to effectively eliminate its value as Caribou habitat and salvage operations will not adversely impact adjacent habitat. This applies only to areas that have been damaged by fire in 2003.
2. The Regional Director MSRM determines that harvesting in unburned forest stands within or adjacent to a 2003 fire area, would preclude conventional harvest (ground or cable) of adjacent burnt timber, and that timber harvesting is necessary to deal with forest health issues.
3. A strategy for managing mountain pine beetle is in place, which indicates that harvesting of lodgepole pine leading stands is necessary to reduce the risk of epidemic losses to mountain pine beetles and subject to the following requirements:
 - a. An assessment of Caribou habitat using a recognized methodology^o has been completed to determine caribou habitat values and management options.
 - b. Where caribou habitat values have been assessed as having moderate or higher caribou habitat value, harvesting is not allowed unless:
 - i. a qualified professional^p provides an opinion that indicates that the impact of the pine beetle on the affected stand will reduce the current habitat value below a moderate value or;
 - ii. strategies for maintaining the caribou habitat value to at least a moderate value level have been developed by a qualified professional and incorporated into harvesting plans.
 - c. New roads into unroaded areas must be assessed to determine if they will provide new motorized vehicle access points to important caribou habitat areas such as alpine and subalpine basin areas. Where a new road is identified as a likely access point, the proponent of harvesting must develop strategies and implement measures to restrict motorized access to these areas.

- o Recognized methodology includes processes sanctioned by government for the specific herd area or in the absence of sanctioned methodology, processes developed by a qualified Registered Professional Biologist.
- p A qualified professional is considered a registered professional biologist or registered professional forester who has appropriate training and experience in the field of work being completed.

PART 2

Filing the Order

This order will be filed with the Regional Director, Southern Interior Region and will take effect on March 25, 2005.

PART 3

Effective Date

This order comes into effect immediately. Despite subsection 16 (2) of the *Forest and Range Practices Act*, all forest stewardship plans submitted after the effective date must be consistent with this order.

The Honourable George Abbott
Minister of Sustainable Resource Management

Date

KBHLPO Variance 4 (Objective 3 Caribou) Implementation Policy

January 15, 2004

This policy provides guidance for the implementation of the Caribou objective outlined in Variance KBHLP- 4.

1. This Implementation Policy applies to all caribou habitat mapped in the Purcell mountains south of Findlay Creek to the US border and the Selkirk mountains south of the West Arm of Kootenay Lake.

Description	Strategies	Best Management Practices
<p>Core Habitat This is key habitat in or adjacent to areas of known caribou activity. It includes high elevation habitat above the caribou line (1994 operability line), as well as parts of the ESSF and upper ICH below the operability line. A small portion is heavily used valley crossings near the heads of valleys. Recent cutblocks surrounded by high caribou activity and suitable habitat are also included if they provide capable habitat.</p>	<p>A. Maintain contiguous habitat over the majority of stand types used by caribou to fulfill their life requirements (foraging, reproducing, avoiding predation).</p> <p>B. Enhance caribou habitat in previously harvested areas.</p> <p>C. Minimize fragmentation caused by timber harvest.</p> <p>D. Avoid increasing the risk of a mountain pine beetle outbreak impacting large amounts of caribou habitat at one time by limiting the amount of mature pine dominated stands.</p>	<p>1. Above the Caribou (1994 Operability)Line</p> <ul style="list-style-type: none"> • Avoid road construction to the greatest extent possible. When previously harvested stands reach maturity, reserve or harvest these stands with silviculture systems aimed at minimizing non-caribou ungulate use and enhancing the habitat value to caribou, as per the guidelines outlined below for Se/BI or PI dominated stands. <p>2. Below the Caribou Line –</p> <ul style="list-style-type: none"> • Prior to harvest consideration, Pine leading stands should be assessed for early winter habitat value using the Kinley Habitat Field card. Stands rated as higher value early winter habitat should be reserved from harvest unless there is epidemic MPB infestation in them, in which case the probability of the infestation spreading to other stands will be minimized with the least impact treatment, from single tree salvage to stand salvage. • Protect healthy understory trees as much as logistically practical, especially those with lichen present. • Reserve tree species other than pine if Windthrow Hazard Assessment indicates that the windthrow potential is acceptable for the site conditions, particularly those with high lichen. • Reforest to a future Se/BI dominated stand if ecologically suited to site. On drier sites, PI may have to be planted in conjunction with the Se to ensure survival. It may take more than one rotation to achieve a Se/BI dominated stand • Encourage the development of old stand features (large trees, gaps) within the stand. • Minimize the value of the stand as good habitat for deer, elk, and moose by minimizing the amount of edge and good forage conditions created. • Aggregate harvesting in time and space over short time periods (5 years) to reduce fragmentation.

		<ul style="list-style-type: none"> • Minimize road access and utilize legislation to control recreational access into core habitat areas. • In previously harvested areas, encourage the development of old stand features (large trees, small gaps) and SeBl trees within the stand. • When previously harvested areas reach maturity, reserve or harvest them in accordance with the recommendations as for SeBl stands above.
<p>Supporting Habitat This is typically located downslope of the core habitat zone and closer to headwaters than the Connectivity zone. It is located in areas with fewer caribou locations than core habitat, but represents habitat that is likely used to an extent for foraging and movement, and may be important for predation avoidance.</p>	<ol style="list-style-type: none"> 1. Ensure that forest management activities adjacent to high value core habitat do not significantly increase predation risk to caribou in the core habitat. 2. Maintain or enhance caribou habitat adjacent to high use areas. 3. Maintain the ability of caribou to move among core habitat polygons with low predation risk. 	<p><i>Above the Caribou (1994 Operability)Line</i></p> <ul style="list-style-type: none"> • Avoid road construction to the greatest extent possible. When previously harvested stands reach maturity, reserve or harvest these stands with silviculture systems aimed at minimizing non-caribou ungulate use and enhancing the habitat value to caribou, as per the guidelines outlined below for SeBl or PI dominated stands. <p><i>Below the caribou line -</i></p> <p>A. SeBl dominated stands. For harvest, follow general harvest guidelines of Steventon et al. 2001, but account for effects of safety and slope on harvesting logistics, and minimize the amount of roads and landings created.</p> <ul style="list-style-type: none"> • Slope 0-30 %, use group cuts of 0.20 – 1.5 ha, average 1 ha • Slope > 30 % group cuts up to 5 ha, average < 3 ha • In both cases, protect healthy conifer understory as much as logistically practical, and reforest to a future Se/Bl dominated stand if ecologically suitable to enhance caribou habitat. Encourage the development of old stand features (large trees, gaps) within the stand. • Minimize road access and, in collaboration with MSRM and MWLAP, utilize legislation, to control recreational access into core habitat areas. • In previously harvested stands, encourage the development of old stand features (large trees, small gaps) within the stand. • When previously harvested SeBl stands reach maturity, reserve or harvest them in accordance with the recommendations listed above. <p>PI dominated stands. Stands should be harvested and managed to enhance caribou habitat following the guidelines given for PI stands in the Core Habitat. Prior to harvest consideration stands should be assessed with the Kinley Habitat Field card. High value Pine stands should be reserved from cutting, unless there is epidemic MPB infestation in them, in which case the probability of the infestation spreading to other stands will be minimized with the least impact treatment, from single tree salvage to stand salvage.</p>

<p>Meta-population Connectivity These are areas most likely for infrequent, long-distance movement of caribou, which connect otherwise isolated sub-populations, e.g. across the St. Mary River. Movement has not been observed with radio-collared caribou, but was likely in the past and may be very important for genetic transfer among populations and long-term viability of the herds.</p>	<ol style="list-style-type: none"> 1. Provide habitat that does not impede movement or significantly increase the risk of predation to caribou during infrequent, large-distance movements. 2. Avoid creating large tracts of young, thick stands which impede caribou sightlines, or stands with large amounts of CWD which make movement difficult. 	<p>Develop harvesting and silviculture plans that will achieve the stated goals. Avoid creating dense young stands; spacing and thinning is encouraged to provide long sight lines. Minimize excessive CWD, dense tall shrub development, and road access.</p>
<p>Intra-population Connectivity These are areas used for short-distance cross-valley movement that connect core areas (e.g., across Hellroaring or Buhl Cr.). Caribou use is evident from radio-telemetry data.</p>	<ol style="list-style-type: none"> 1. Provide habitat that does not impede movement or significantly increase the risk of predation to caribou while moving cross-valley. Avoid creating large tracts of young, thick stands which impede caribou sightlines, or stands with large amounts of CWD which make movement difficult. 	<p>At any given time, at least 33 % of each corridor should be in stands age class 5 or greater with < 800 stems /ha, connecting cross-valley. This area can be reserved or group/partial cut, with emphasis on maintaining open mature/old forest characteristics. In the rest of the corridor, avoid creating dense young stands with limited sightlines; spacing and thinning is encouraged. Minimize excessive CWD, dense tall shrub development, and road access.</p>
<p>Population Recovery Zone This zone includes areas with characteristics similar to those in the core habitat and having high suitability, but in which there is historic but little or no known recent activity (and no radio-collar locations). Most of it is above the caribou line, but it includes portions of the ESSF and ICH below the line.</p>	<ol style="list-style-type: none"> 1. Maintain habitat that would likely be used by a caribou population greater than 100 individuals, and which could be very important in sustaining a viable, recovered caribou population. 	<p><i>Above the Caribou (1994 Operability)Line –</i></p> <ul style="list-style-type: none"> • Avoid road construction to the greatest extent possible. • When previously harvested stands reach maturity, reserve or harvest these stands with silviculture systems aimed at minimizing non-caribou ungulate use and enhancing the habitat value to caribou, as per the guidelines outlined below for SeBl or Pl dominated stands. <p><i>Below the caribou line -</i></p> <p>A. SeBl dominated stands. For harvest, follow general harvest guidelines of Steventon et al. 2001, but account for effects of safety and slope on harvesting logistics, and minimize the amount of roads and landings created.</p> <ul style="list-style-type: none"> • Slope 0-30 %, use group cuts of 0.20 – 1.5 ha, average 1 ha • Slope > 30 % group cuts up to 5 ha, average < 3 ha • In both cases, protect healthy conifer understory as much as logistically practical, and reforest to a future Se/Bl dominated stand if ecologically suitable to enhance caribou habitat. Encourage the development of old stand features (large trees, gaps) within the stand.

		<ul style="list-style-type: none"> • Minimize road access and, in collaboration with MSRM and MWLAP, utilize legislation, to control recreational access into core habitat areas. • In previously harvested stands, encourage the development of old stand features (large trees, small gaps) within the stand. • When previously harvested SeBl stands reach maturity, reserve or harvest them in accordance with the recommendations listed above. <p>PI dominated stands. Stands should be harvested and managed to enhance caribou habitat following the guidelines given for PI stands in the Core Habitat. Prior to harvest consideration stands should be assessed with the Kinley Habitat Field card. High value Pine stands should be reserved from cutting, unless there is epidemic MPB infestation in them, in which case the probability of the infestation spreading to other stands will be minimized with the least impact treatment, from single tree salvage to stand salvage.</p>
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2. The most current forest cover inventory as defined by MSRM must be used for determining forest cover age classes. These age classes are intended to identify stands with characteristics suitable for Caribou. Where a stand is found to mistyped for age, it should be reviewed by a Registered Professional Biologist to determine whether it has suitable characteristics for Caribou. If it does it should still be considered to contribute to the forest cover requirements. If it does not then it should considered to be a younger age class and where recruitment is required be considered for recruitment based on its revised age class.

KBHLPO Variance 4 (Objective 3 Caribou) Implementation Policy 2

The attached document titled “Caribou Management in TFL #23 Agreement for District-Level Implementation Issues” should be considered guidance for the implementation of the Caribou objective outlined in Variance KBHLP-4. This policy only applies to TFL 23 in the Arrow Resource Management Zone.

Caribou Management in TFL #23 Agreement for District-Level Implementation Issues

As representatives of our respective organizations, we, the undersigned, support the intent of the district-level agreement for caribou management in TFL #23 and commit to the implementation of the outlined procedures. This agreement is in effective between May 1, 2002 and April 30, 2007.

Pat Field
Operations Manager, Ministry of Forests
Arrow Forest District

Al Skakun
Small Business Officer
Arrow District Small Business Forest
Enterprise Program

Doug Lang
Forestry Manger
Pope and Talbot

Cam Leitch
Knowledgeable Forester
Pope and Talbot

Norbert Kondola
Planner
Ministry of Sustainable Resource Management

Mike Knapik
Ecosystem Officer
Ministry of Water, Land and Air
Protection

Date: May 1, 2002

Caribou Management in TFL #23

Agreement for District-Level Implementation Issues

This document represents a District level agreement between Pope and Talbot (P&T), Arrow District Small Business Forest Enterprise Program (SBFEP) and District level staff of the Ministries of Forests (MoF), Sustainable Resource Management (MSRM) and Water, Land and Air Protection (WLAP).

This agreement provides guidance for forest management within the Trout Lake, Halfway and Fish landscape units within TFL #23. The agreement takes effect May 1, 2002 and is intended to remain in effect until April 1, 2007.

Goals

This agreement provides direction for forestry planning and certainty for timber availability within the context of maintaining a viable sub-population of mountain caribou in the Central Selkirks, by:

- spatializing components of the Higher Level Plan objectives; specifically, integration of the most recent caribou inventory with regional caribou and mature/old guidelines at the stand and landscape scales; and,
- providing clarity on district-level implementation issues resulting from the recommendations of the 2000/02 TFL #23 pilot landscape unit planning working group to the Regional Caribou Committee.

Objectives

The objectives of this agreement are to:

1. build trust among, and a framework for, Pope and Talbot, SBFEP and District level agency staff (of the MOF, MSRM and MWALP) to support an adaptive management approach to integrating caribou management with timber harvesting activities;
2. enable regional changes and strategic direction (i.e. creation of the caribou connectivity and caribou special management zones, see map in Appendix 1) to be translated into tactical/operational zonation and spatial planning;
3. support alternative silvicultural systems and innovative forestry practices in the caribou special management zone;
4. integrate planning between tenure holders with the intent to expand successful integration mechanisms to all agencies and tenure holders that affect the caribou population; and,
5. enable a mechanism for adaptive management and any subsequent decision changes into the Higher Level Plan.

Overall Principles and Assumptions

1. In the caribou connectivity zone (see map in Appendix 1), timber harvesting is restricted to:
 - the existing approved P&T block in Alpha, given substantial investment has already occurred;
 - stand improvements that meet the requirements for caribou habitat;
 - one-off issues (e.g. forest health, access to lands that lie beyond) that will be considered based on the provided rationale.

Existing road access within the caribou connectivity zone will remain. but longer term access objectives will be addressed during planning stages.

2. Opportunities for innovative timber harvesting within the caribou special management zone will be identified through a standard assessment procedure (see Appendix 2). A forester and biologist¹ with Central Selkirk caribou experience will jointly conduct the assessment. The Ministries of Forests, Sustainable Resource Management and Water, Land and Air Protection will review the outcomes of the assessment process at two points in the process, including:
 - following completion of the office procedures, which result in the delineation of proposed planning units and early identification of issues, and;
 - via the Forest Development Plan review that outlines proposed development.

Stand-level management and harvesting practices, to be based on the reconnaissance and field levels surveys, are summarized in Appendix 3.

3. In the interim management zone, timber harvesting activities will be deferred for a period of five years. After this time they will become part of the caribou special management zone unless a formal peer review process identifies substantive reasons that would lead to a different decision. Currently approved blocks will continue to be shown in the Forest Development Plans.
4. Management within the integrated resource management zone will be for general biodiversity and other resource values as directed through appropriate policy and legislation.
5. MoF Arrow Forest District is responsible for information extension in order to support integrated planning across resource uses, including coordinated access management planning and effectiveness monitoring.

Monitoring and Adaptive Management

The standard assessment procedures will form the basis for monitoring and evaluating implementation of the agreement. The specific effectiveness monitoring criteria to be recorded and assessed include:

Scale	Desired Outcome	Indicator	Monitoring/Reporting
Coarse	Mature and old growth forest retention for caribou	Amount of mature/old growth	Tabular and graphic summaries of seral stage distribution reported in LU Tabular and mapping summaries of seral stage distribution in relation to seasonal caribou habitats (ie: capability/suitability mapping, HSI models)
Medium	Important caribou habitat elements and attributes present	Caribou habitat trend	Table and graphic summaries of amount of caribou habitat by capability and suitability class within each LU as % total available
		Caribou habitat elements and attributes	Table summaries of caribou habitat attributes/elements (ie: lichens, structural stand diversity, presence of CWD, blowdown) retained and managed through innovative forest practices

¹ The forester and/or biologist may work in conjunction with a qualified technician.

Scale	Desired Outcome	Indicator	Monitoring/Reporting
Fine	Sustainable caribou population in Central Selkirks	Population trend	Population census and report completed every year during next 5 years
	Sustainable timber harvest	20 year volume forecast 5 year harvest levels Delivered wood cost	Management and working plan spatial deployment of harvesting Forest development plan volumes and spatial deployment of harvesting Quarterly delivered wood costs

Monitoring of plan implementation and effectiveness will be ongoing, with significant issues brought forward by Pope and Talbot for discussion with government agencies as required. A formal evaluation of plan implementation and effectiveness will occur within five years of plan adoption. The formal evaluation will involve a peer review, using suitable experts, to consider the effectiveness of the timber harvesting and silvicultural practices in maintaining or enhancing caribou habitat. The specific terms of reference for the formal review, including defining suitable experts, will be developed jointly by all involved parties. It is assumed the monitoring results will be adapted into the decision-making and operational planning processes as appropriate.

Appendix 1: Zonation Criteria and Resultant Caribou Zonation Map

Management Zones	Description
Caribou Connectivity Zone (Zone 1 of Variance KBHLP-04)	<ul style="list-style-type: none"> ▪ areas with high caribou habitat suitability (HSI results, winter and summer field sampling) ▪ known caribou high use areas (telemetry data, flight observations, population census, field assessments) ▪ high degree of connectivity to seasonal habitats (telemetry, flight observations, field assessments) ▪ low fragmentation ▪ full retention of all forest within this zone is recommended (salvage logging for disease and insects permissible with DEO approval)
Interim Management Zone (Zone 1A of Variance KBHLP-04)	<ul style="list-style-type: none"> ▪ areas with medium to high habitat suitability for caribou and/or other key wildlife species such as deer, elk, moose, goat and grizzly bear (HSI results, winter and summer field sampling) ▪ known caribou medium to high use areas (telemetry data, flight observations, population census, field assessments) ▪ high degree of connectivity to seasonal habitats (telemetry, flight observations, field assessments) ▪ deferred from harvest until experimental harvesting trials are reviewed
Caribou Special Management Zone (Zone 2 of Variance KBHLP-04)	<ul style="list-style-type: none"> ▪ medium to high habitat suitability ▪ connectivity at drainage level (i.e., valley crossings) ▪ known caribou use areas with highest value caribou habitat to retained in concert with Core Caribou Habitat Zone to meet mature plus old biodiversity and caribou forest retention guideline requirements ▪ partial harvest with retention of mature/old forest stand characteristics important to caribou is recommended (i.e., maintain appropriate forest stocking levels, old forest attributes and lichen productivity) ▪ site assessments involving caribou experts is recommended to identify appropriate silviculture practices to maintain site-specific habitat attributes and caribou movement areas
Integrated Management Zone	<ul style="list-style-type: none"> ▪ generally areas with low to nil caribou habitat suitability (fragmented and/or isolated habitat, poor caribou habitat attributes, low to nil lichen productivity) ▪ application of general biodiversity and strategic direction for other resource values is recommended

Appendix 2: Standard Assessment and Reporting Procedures for Assessing Caribou Habitat at the Stand Level

Stand-level Caribou Habitat Assessment and Reporting

Office Procedures (<i>Landscape-level</i>)

STEP ONE: Pre-Planning

- 1.1 Define Planning Unit (PU)². Locate PU boundary on orthophoto or satellite image (include contour lines). Document rationale for PU selection. Factors to consider when identifying planning units are: logical planning units, topographic features, caribou movement, professional/technical advice.
- 1.2 Proposed PU boundary review and agreement with licensee, MoF, MSRM and MWLAP.
- 1.3 Map Caribou Landscape Unit Planning directions (LUP report and map (2002))
 - caribou connectivity zone (defer from harvest)
 - interim deferral zone (deferred from harvest for five years) – proceed to STEP 2
 - integrated management zone – proceed with direction provided by Higher Level Plan Order (HLPO), Forest Practices Code (FPC), applicable FPC Guidebooks and as directed by MoF, MSRM, and MWLAP

STEP TWO: Inventory Compilation

- 2.1 overlay and map management zones within planning unit (LUP report (2002)). Tally and map caribou telemetry point location data (denoted by season of use) within planning area (Hamilton *et al* 2000)

Season	Code	Start date	End date
Early Winter	EW	25 October	15 January
Late Winter	LW	16 January	12 May
Spring	SP	13 May	30 June
Summer/Fall	SU/FA	1 July	24 October

- 2.2 map known caribou migration³ for planning unit (Figure 21, Hamilton *et al* 2000)
- 2.3 record and/or map by BEC (ha) the Duncan/Nakusp caribou sub-populations multi-scale All Seasons Habitat Suitability Index (HSI)⁴ results for planning unit (Figure 16, Hamilton *et al* 2000)

² **Planning Unit (PU):** 1000-5000 ha area that considers proposed development area (i.e., cutblocks and roads), bio-physical features, drainage size and caribou habitat inclusive of valley bottom to ridge line. PU size will vary depending on physical drainage characteristics, caribou ecology and extent of proposed development.

³ Migration routes identified during telemetry monitoring flights, population censuses, winter trailing of caribou and field studies

⁴ **Habitat Suitability Index (HSI):** models caribou habitat related to suitability (telemetry and field sampling).

HSI Code	All-seasons Habitat Suitability Rating	ICH (ha)	ESSF (ha)	Atp (ha)	Other (ha)
p=0-0.25	poor				
p=0.25-0.5	low				
p=0.5-0.75	moderate				
p=0.75-1	high				

- 2.4 record and/or map PEM-based caribou capability/suitability seasonal habitat ratings⁵ results by BEC (ha) within planning unit (Hamilton *et al* 2002)

Habitat Rating Class	Habitat Capability/Suitability Rating	ICH (ha)	ESSF (ha)	ATp (ha)	Other (ha)
1	High				
2	moderately high				
3	moderate				
4	low				
5	very low				
6	nil				

STEP THREE: Forest and Caribou Inventory Recording/Mapping

- 3.1 initiate standardized reporting and/or mapping:
- √ planning unit boundary (1000-5000 ha)
 - √ caribou telemetry points/season of use (Hamilton et al 2000)
 - √ LUP management zones (LUP Working Group report and map 2002)
 - √ caribou migration routes (Hamilton et al 2000)
 - √ existing roads/proposed roads (Pope & Talbot)
 - √ existing cutblocks/proposed cutblocks (Pope & Talbot)
 - √ operability line, creeks, lots, etc.
- caribou HSI by BEC/ha (Hamilton et al 2000)
 - caribou capability by BEC/ha (Hamilton et al 2002)
 - caribou suitability by BEC/ha (Hamilton et al 2002)
- 3.2 map above information (√), using satellite image/orthophoto with contour lines, as required for field procedures (see below). Habitat mapping (□) can be mapped separately or viewed as needed using ArcView.

⁵ **Capability:** ability of the habitat under optimal natural condition to provide life requisites of a species (RIC 1999)

Suitability: defined ability of the habitat in its current condition to provide the life requisites of a species (RIC 1999)

Rating: a value assigned to habitat for its potential to support a particular species for a specified season and life requisite (RIC 1999)

Life Requisites: basic food/cover (thermal and/or security) and other (reproducing, migrating, etc.) life requisite requirements of an animal for sustaining and perpetuating the species (RIC 1999)

Field Procedures (*Stand-level*)

All field assessments will be conducted jointly by a forester and biologist⁶ with Central Selkirk caribou related experience. Upon completion of the Office Procedures, field surveys will be conducted, as required, at two levels:

1. Reconnaissance (1000-5000 ha planning units)
2. Development (cut blocks/roads or stand/timber type)

STEP FOUR: Reconnaissance-level Assessment – COARSE FILTER

- 4.1** review Office Procedures results (Steps 1-3 above) and supplement with a PU overview assessment to identify additional drainage level potential travel routes, seasonal habitats, seasonal use patterns or other important features not readily apparent through existing inventory (potential identified through interpretation of existing mapping, HSI/cap/suit ratings, telemetry data, orthophoto/satellite images, LUP zones, professional experience/knowledge)
- 4.2** Conduct field reconnaissance surveys. Observations to include physical identification of corridors, evidence of caribou use (tracks, trails, and pellets), general habitat characteristics (slope, forest and stand type, lichen abundance) and photo documentation.
- 4.3** Reporting. All reconnaissance field survey results to be transferred to summary report submitted to the licensee, to become part of a standardized database.

STEP FIVE: Stand-level Field Assessment –FINE FILTER

Following or in conjunction with Step 4 (reconnaissance-level survey) stand-level habitat assessment will be conducted for any proposed harvesting within the PU.

- 5.1** Office and Reconnaissance caribou information collated for each stand type/timber type or ecosystem site series grouping.
- 5.2** One caribou field sampling plot will be established within each forest stand type or proposed cutblock within the planning unit. Field sampling to include:
 - Site series classification (Ground Inspection Form FS 212-2 (1) GRE98/5 or Ecosystem Field Form FS882 (1) HRE 98/5)
 - PEM-based wildlife habitat assessment (WHA field form FS882 (5) HRE98/5). The plots will be assessed by a qualified individual having completed Wildlife Habitat Ratings Standards in British Columbia training (RIC 1999).
 - Stand characterization consistent with stand-level harvesting and management practices identified in the LUP report (LUP Pilot Working Group 2002). This information will be entered into the “Comments/Notes” section of the WHA field form. Management recommendations will be provided in the “Management” section of the WHA field assessment form.
- 5.3** Winter surveys *may* be conducted to field verify potential early winter caribou habitat and drainage level migration where such information has been identified through field reconnaissance and/or habitat mapping BUT limited or no telemetry or observed use data exists. Additional winter field surveys (long trailing of caribou) may be conducted to monitor strategy implementation and effectiveness (see Monitoring section).
- 5.4** Reporting. All field-level survey results will be entered into a standardized summary report submitted to the licensee. Information to be part of the caribou database.

⁶ The forester and/or biologist may work in conjunction with a qualified technician.

Appendix 3: Harvesting and Silviculture Management Strategies

LUP Working Group report (2002) identified stand-level management and harvesting practices to be based on reconnaissance and field levels surveys referred in this strategy. This information is summarized below.

Proposed Management Strategies for Halfway, Trout and Fish Landscape Unit Planning Pilot Project

Management Zone	Habitat Management Objective	Landscape-level Management Practices	Stand-level Management Practices (to be applied to AC 8 & 9 stands < 80% & < 94 OCL)
Caribou Connectivity	- maintain core caribou habitat	- identification of caribou no harvest zones - locate OGMA's in no harvest zones - forest road and recreational access management	- forest harvesting and other resource extraction prohibited with the exception of addressing forest health, stand improvement (caribou habitat improvement) activities or operational requirements (i.e. access). Existing access through priority 1 areas and approved development (approved CP or blocks laid out and cruised) will remain and will be addressed during the planning stages.
Interim Management	5 year deferral		
Caribou Special Management	- maintain pre-harvest species composition where silviculturally acceptable and in accordance with the SP. - abundant arboreal lichen production in lower and upper forest canopy - snow interception cover in ICH and ICH/ESSF ecotone as part of 30-40% forest retention guideline - maintain low evergreen shrubs in ICH and ICH/ESSF ecotone - minimize visual	- timber management planning and development for species harvest should be directed by caribou habitat considerations - concentrate forest development in areas already largely fragmented (large cutblocks) and therefore having relatively low caribou habitat suitability - apply additional caribou guideline forest retention requirements (e.g., amount required to supplement no harvest zones to meet targets) to unfragmented medium to high habitat capability areas - minimize access this is guided by the silvicultural system and growth rates of the residual stand. This is difficult to	- silviculture and harvesting strategies will be determined by pre-harvest species composition, stand level management objectives for caribou, ecological requirements of the trees and silvicultural obligations and associated liability. SILVICULTURE - species mix and composition of regenerating stand should mimic as much as possible pre-harvest stand. HOWEVER, stand retention and regeneration should focus, when possible, on mixture of shade tolerant conifer species (balsam, hemlock, and whitebark pine. Shade intolerant tree species (pine, hardwoods) should be discouraged - maintain significant component of lichen bearing trees (\geq lichen class 3, low branches) retaining larger diameter lichen supporting trees and clumps of trees - avoid physical obstructions to movement and visual sight distances HARVESTING MULTI STORIED STANDS Conventional Harvesting ➤ Maintain late seral forest conditions with trees that support abundant arboreal lichen available as forage. Partial cutting regimes that remove relatively low volumes and

	<p>obstructions - discourage moose forage production forest harvesting and silviculture practices to promote caribou habitat structural elements - forest harvesting in fragmented habitats to consider creation of large contiguous blocks in fragmented habitats with retention of large contiguous forested blocks in unfragmented caribou habitats</p>	<p>track and has no real value.</p> <p><i>General strategies to be applied to age class 8 & 9 stands available for harvest:</i></p>	<p>allow for long time periods between cuts are preferred.</p> <ul style="list-style-type: none"> ➤ Harvesting strategies with an objective to retain an RBA of 18 – 24 square metres per hectare in an approximate uniform distribution throughout the block, , the entire area will be recognized as caribou habitat, ➤ Harvesting in small groups (approximately 0.5 ha average opening size) with a 66% area retention. The goal is to maintain the stands continuously as suitable caribou habitat. <p>*Uphill Cable and Aerial Harvesting</p> <ul style="list-style-type: none"> ➤ Partial cutting using either group selection or narrow strips with a retention of 66% of the existing basal area, or retain an RBA of 18 – 24 square metres per hectare in an approximate uniform distribution throughout block. The entire area will be recognized as caribou habitat. ➤ Clear cut with internal retention of groups of trees to facilitate lichen retention and future inoculation. Spacing of tree groups should be 75 – 150 m maximum and retained in groups of 10-20+. <p>SINGLE OR TWO STORIED STANDS</p> <p>Conventional Harvesting</p> <ul style="list-style-type: none"> ➤ Retain an RBA of 18 – 24 square metres per hectare in an approximate uniform distribution throughout block. . The entire area will be recognized as caribou habitat. ➤ harvesting in small groups (approximately 0.5 ha average opening size) with a 66% area retention. ➤ Clear cut with internal retention of groups of trees to facilitate lichen inoculation. Spacing of groups should be 75 – 150 m and retained in groups of 10-20+. <p>*Uphill Cable and Aerial Harvesting</p> <ul style="list-style-type: none"> ➤ Partial cutting using either group selection or narrow strips with a retention of 66% of the existing basal area. ➤ Retain an RBA of 18 – 24 square metres per hectare in an approximate uniform distribution throughout block. . The entire area will be recognized as caribou habitat. ➤ ➤ Clear cut with internal retention of groups of trees to facilitate lichen inoculation. Spacing of groups should be 75 – 150 m and retained in groups of 10 - 20+. <p>*Note – attempts will be made to meet these objectives when downhill yarding. However, downhill yarding of partial cuts is much mor difficult and costly, consequently downhill yarding will be evaluated on a stand by stand basis.</p>
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			<i>General strategies to be applied to age class 8 & 9 stands available for harvest:</i>
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Kootenay Boundary HLPO
Caribou Habitat Areas
MAP 3.1 Central Selkirks

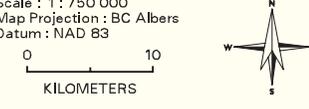
Legend

- Caribou Management Zone 1
- Caribou Management Zone 2
- Caribou Management Zone 3
- Caribou Management Zone 4
- Caribou Management Zone 5
- Caribou Management Zone 6
- Caribou Management Zone 7
- Caribou Management Zone 8

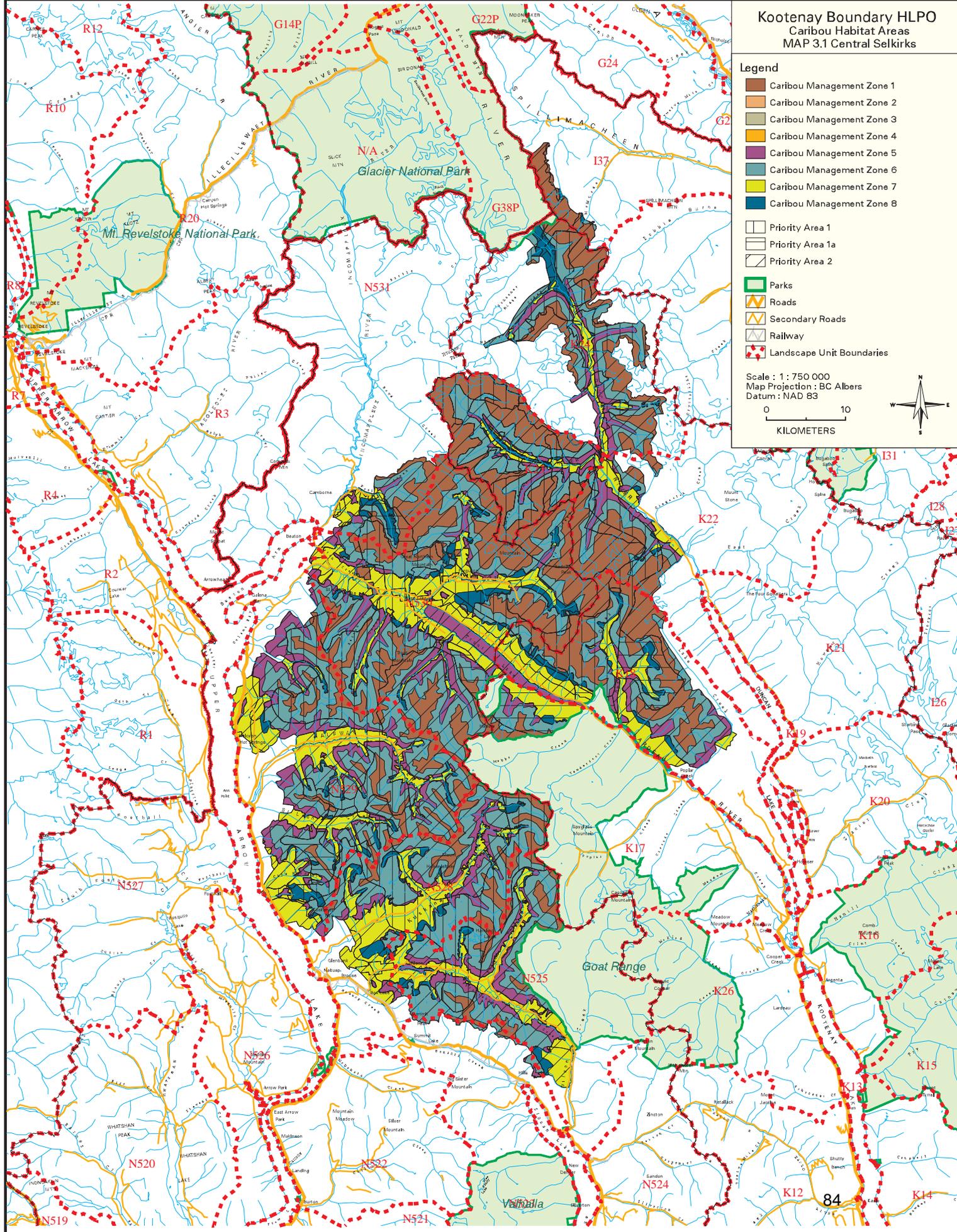
- Priority Area 1
- Priority Area 1a
- Priority Area 2

- Parks
- Roads
- Secondary Roads
- Railway
- Landscape Unit Boundaries

Scale : 1 : 750 000
Map Projection : BC Albers
Datum : NAD 83



0 10
KILOMETERS



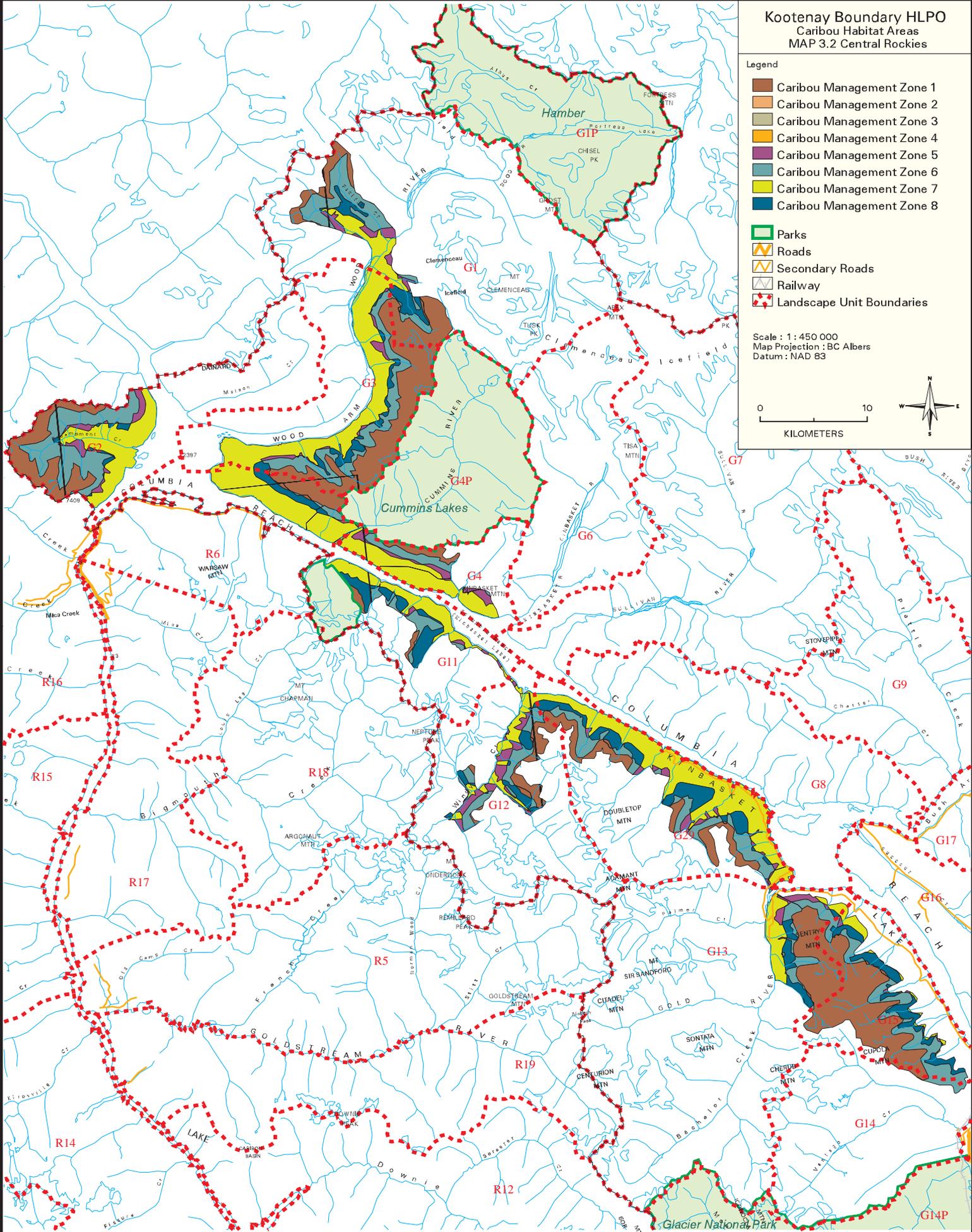
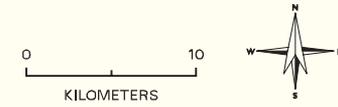
Kootenay Boundary HLPO
Caribou Habitat Areas
MAP 3.2 Central Rockies

Legend

- Caribou Management Zone 1
- Caribou Management Zone 2
- Caribou Management Zone 3
- Caribou Management Zone 4
- Caribou Management Zone 5
- Caribou Management Zone 6
- Caribou Management Zone 7
- Caribou Management Zone 8

- Parks
- Roads
- Secondary Roads
- Railway
- Landscape Unit Boundaries

Scale : 1 : 450 000
Map Projection : BC Albers
Datum : NAD 83

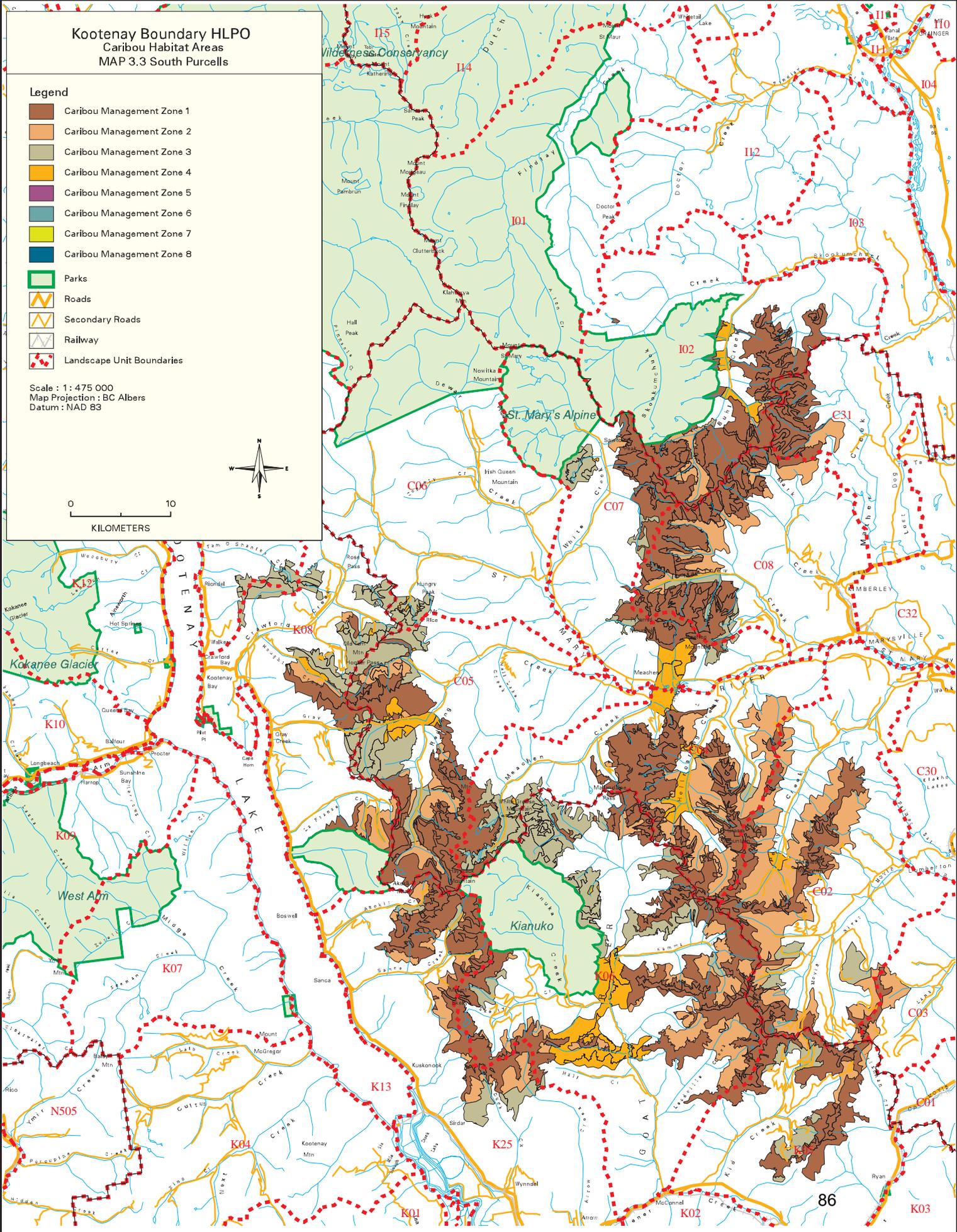
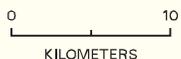


**Kootenay Boundary HLPO
Caribou Habitat Areas
MAP 3.3 South Purcells**

Legend

- Caribou Management Zone 1
- Caribou Management Zone 2
- Caribou Management Zone 3
- Caribou Management Zone 4
- Caribou Management Zone 5
- Caribou Management Zone 6
- Caribou Management Zone 7
- Caribou Management Zone 8
- Parks
- Roads
- Secondary Roads
- Railway
- Landscape Unit Boundaries

Scale : 1 : 475 000
Map Projection : BC Albers
Datum : NAD 83

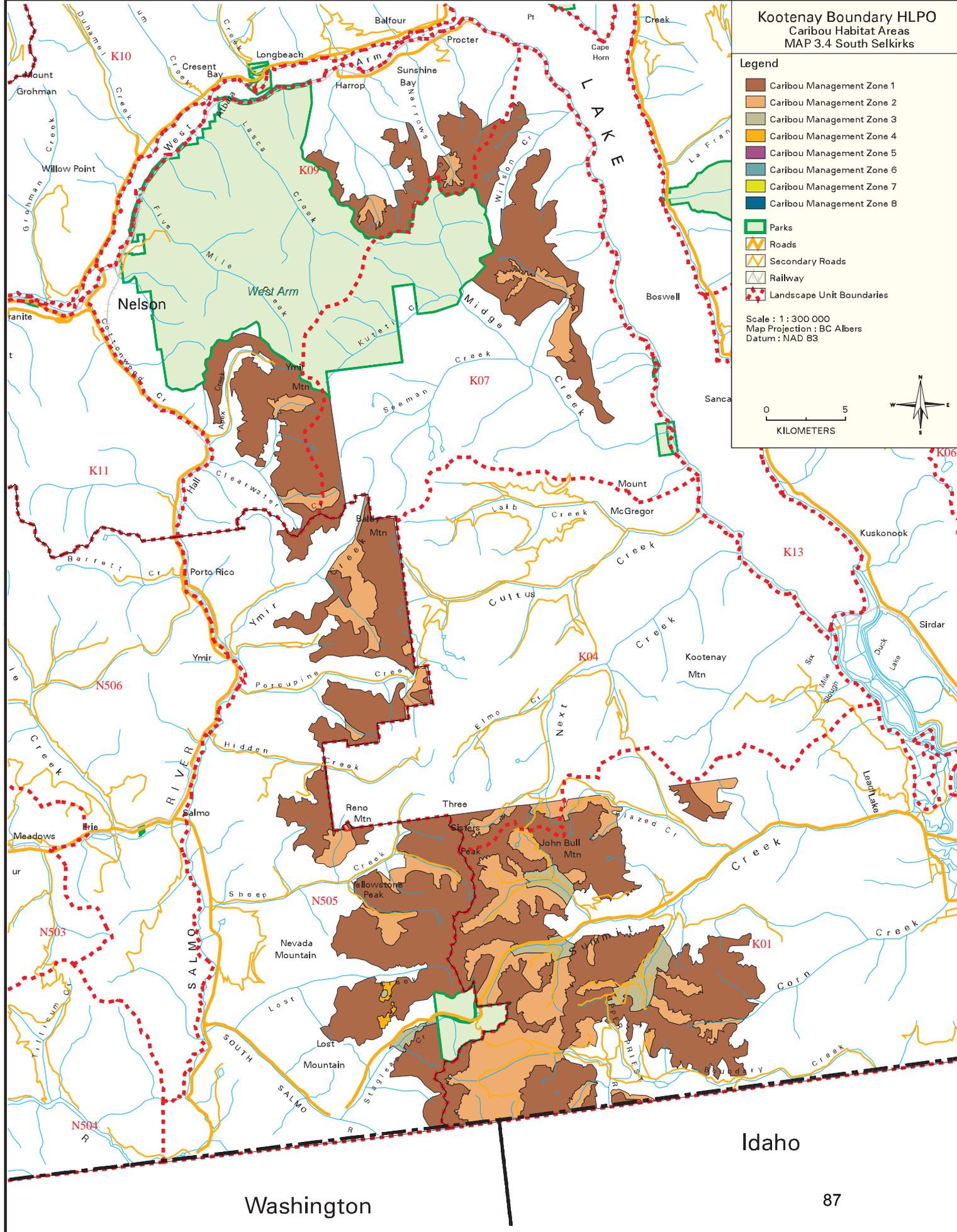
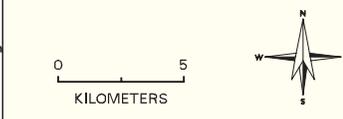


Kootenay Boundary HLPO
Caribou Habitat Areas
MAP 3.4 South Selkirk

Legend

- Caribou Management Zone 1
- Caribou Management Zone 2
- Caribou Management Zone 3
- Caribou Management Zone 4
- Caribou Management Zone 5
- Caribou Management Zone 6
- Caribou Management Zone 7
- Caribou Management Zone 8
- Parks
- Roads
- Secondary Roads
- Railway
- Landscape Unit Boundaries

Scale : 1 : 300 000
Map Projection : BC Albers
Datum : NAD 83



Washington

Idaho

KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER (KBHLPO)

ORDER- KBHLP-05

ORDER VARYING OBJECTIVES 2, 3, 5, AND 9 OF THE KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER (OCTOBER 2002) PURSUANT TO SECTIONS 3 (2) AND 3 (7) OF THE *FOREST PRACTICES CODE OF BRITISH COLUMBIA ACT* (THE ACT).

Preamble

This preamble is meant to provide the context in which this variance was reviewed and approved and does not form part of the variance.

This variance was initiated in response to a request from Tembec (forest licensee) to harvest 4 blocks in a Caribou habitat area. The purpose of the variance is to allow for harvest of areas infested with Mountain Pine Beetle. In reviewing this variance consideration was given to its significance to the public. Given the relatively small area involved and the fact that the affected blocks are Lodgepole Pine leading stands which are not considered to be good Caribou habitat, it was felt that approval of this variance would not significantly affect the public. For this reason it was decided that this variance would not be publicly advertised.

The following information was considered in approving this variance. The licensee presented information showing that the stands proposed for harvest are dominated by Lodgepole Pine stands that have been rated as having a high risk to Mountain Pine Beetle in a forest health strategy for the area. The harvesting of the proposed blocks would reduce the amount of beetle green attack by 12 %. Information was also presented that showed the block areas were currently being considered for removal from the existing KBHLPO Caribou habitat maps. Telemetry information provided by Tembec showed that no Caribou had used these proposed blocks. A review of the variance proposal by the Ministry of Forests indicated they had no concerns with proceeding with the proposed variance. The Ministry of Water, Land, and Air Protection also reviewed the proposal and indicated that a variance was appropriate for addressing the Mountain Pine Beetle attack but requested that salvage harvest should be limited to the Lodgepole component of the stand. This was considered but due to operational considerations was felt to be impractical to limit the harvest to pine.

Section o) of the Delegation of Ministers' Powers memorandum, dated February 28, 2003 provides the Regional Director with the authority to vary these objectives where necessary to deal with forest health issues to the extent necessary to reasonably deal with the unforeseen event.

This variance order should be viewed in concert with the Kootenay Boundary Higher Level Plan Order dated October 26, 2002 and variances to this order made after this date.

Part 1- Resource Management Zone Objective Variance

Objectives 3 is varied to the extent necessary to allow harvesting of mountain pine beetle infested forest stands contained in Forest Licence A19040, Cutting Permit 499, Blocks 560, 561, 564 and 568. These blocks contain an area of approximately 30.6 ha and are as shown on the attached map. This variance applies only within the Cranbrook Resource Management Zone.

Part 2- Filing the Order

This order will be filed with Regional Director, Southern Interior Region, Ministry of Sustainable Resource Management on February 2, 2004.

Part 3- Effective Date

This order comes into effect immediately. Despite subsection 16 (2) of the *Forest and Range Practices Act*, all forest stewardship plans submitted after the effective date must be consistent with this order. Despite Section 10 (d) of the *Forest Practices Code of British Columbia Act*, all forest development plans submitted after the effective date must be consistent with this order.

Originally signed by Steve Carr

Steve Carr MSc. RPF
Regional Director
Southern Interior Region
Ministry of Sustainable Resource Management

Date: January 29, 2004



CUTTING PERMIT OVERVIEW MAP

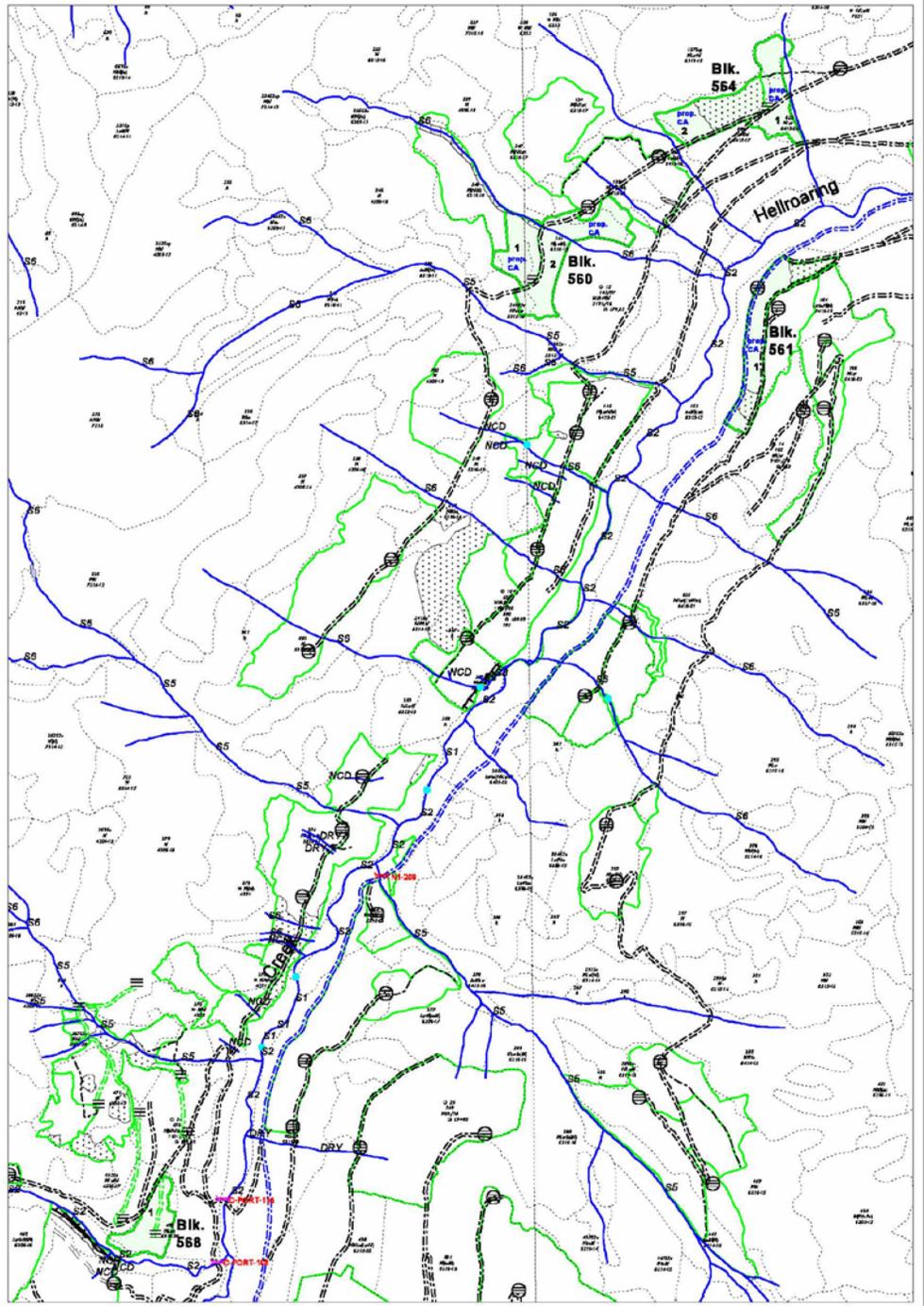
Licence: A19040
Permit: 499
Location: Emerg. Bark Beetle Salv.

Map Reference: 82F060 82F070 82F059 82G051 82G042
Forest District: Rocky Mountain
Forest Region: S Interior
Supply Block: A
Source: G.P.S
Date: 29-Jan-2004

References

- Wildlife Tree Patch Reserve
- Riparian Reserve Zone
- Reserve - Other
- Non-Productive Area
- Cut Block
- Crown Grant - Private Admin.
- Crown Grant - Park
- Transmission Line
- Railway
- Managed Forest Boundary
- Gas Line
- Reach Break
- Non-Commercial Area
- Non-Classified Drainage
- Landing (proposed)
- Landing (existing)
- Bridge (MOP)
- Bridge (portable)
- Bridge (permanent)
- Trail
- Reconstructed Road
- Proposed Temporary Road
- Proposed Permanent Road
- Proposed For/Yard Trail
- Private Road
- Operational Road
- Old Existing Road
- Mainline Road
- Highway
- Forwarding/Yarding Trail
- Forest Service Road
- Existing Temporary Road
- Existing Permanent Road
- Block Road
- Standards Unit
- Scopage Area
- Riparian Management Zone
- Riparian Management Area
- Machine Free Zone
- Logged
- Deletion
- Addition
- Stream Crossing (Culvert)

Scale: 1:20000



KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER (KBHLPO)

ORDER- KBHLP-06

ORDER VARYING OBJECTIVES 2, AND 3 OF THE KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER (OCTOBER 2002) PURSUANT TO SECTIONS 3 (2) AND 3 (7) OF THE *FOREST PRACTICES CODE OF BRITISH COLUMBIA ACT* (THE ACT).

Preamble

This preamble is meant to provide the context in which this variance was reviewed and approved and does not form part of the variance.

This variance was initiated in response to requests from BC Timber Sales and Tembec for variances to the Kootenay Boundary Higher Level Plan Order (KBHLPO) to deal with Mountain Pine Beetle infestations located within Caribou habitat areas and areas reserved from harvesting under Objective 2 (Old and Mature Forest). The purpose of the variance is to allow for harvest of areas infested with Mountain Pine Beetle to the extent necessary to manage the infestation while ensuring that the caribou habitat areas and old and mature forests are adequately protected. This variance while in response to Tembec and BC Timber Sales is not specific to them and may be utilized by others dealing with mountain pine beetle infestations. In reviewing this variance consideration was given to its significance to the public. Given the dynamic nature of pine beetle infestations and the need for quick action it was decided that the normal 60 day public review and comment period would be reduced to 15 days for this variance.

Both BC Timber Sales and Tembec have requested variances to allow for timely salvage of pine beetle infected wood and the control of the infestation to limit its spread to adjacent stands. Both have presented information showing that the stands proposed for harvest are dominated by Lodgepole Pine stands that have been rated as having a high risk to Mountain Pine Beetle in a forest health strategy for the area. The Ministry of Forests have indicated they are supportive of proceeding with the proposed variance given the information provided regarding the beetle. The variance has also been developed with consultation with the Ministry of Water Land and Air Protection. In implementing this variance, licensees may wish to consider the relevant sections of KBHLPO Variance 4 (Objective 3 Caribou) Implementation Policy 1 dealing with lodgepole pine.

Section o) of the Delegation of Ministers' Powers memorandum, dated February 28, 2003 provides the Regional Director with the authority to vary these objectives where necessary to deal with forest health issues to the extent necessary to reasonably deal with the unforeseen event.

This variance order should be viewed in concert with the Kootenay Boundary Higher Level Plan Order dated October 26, 2002 and variances to this order made after this date.

Part 1- Resource Management Zone Objective Variance

The October 2002 Kootenay- Boundary Higher Level Plan Order is hereby varied by adding the following sub-sections to Objectives 2 and 3 of the existing Order including other approved variances.

Objective 2 (The following sub-section is added)

9. Timber harvesting may be considered despite the requirements of objective 2 where a strategy for managing mountain pine beetle is in place, which indicates that harvesting is necessary to reduce the risk of epidemic losses to mountain pine beetles and subject to one of the following requirements:
 - a. The stand being considered for harvest has greater than 50% lodgepole pine by inventory type.
 - b. The stand being considered for harvest has been assessed by a qualified professional and a professional opinion is received that indicates that the existing stand:
 - i. Does not contain sufficient stand level attributes (stand age, number of larger diameter trees, snags, vets, trees with dead tops, stand successional stage) to make a viable mature or old seral forest considering the potential impacts of mountain pine beetle on the stand;
 - ii. Would have less value in meeting mature or old seral requirements than a recruitment stand or;
 - iii. Would maintain sufficient stand level attributes to meet the requirements of a mature or old seral forest following harvesting of lodgepole pine from the stand.

Where a deficit is created by harvesting, recruitment is required as per subsection 5 of Objective 2.

Objective 3 (The following sub-section is added)

6. Timber harvesting may be considered despite the requirements of objective 3 where a strategy for managing mountain pine beetle is in place, which indicates that harvesting of lodgepole pine leading stands is necessary to reduce the risk of epidemic losses to mountain pine beetles and subject to the following requirements:
 - a. An assessment of Caribou habitat using a recognized methodology ^o has been completed to determine caribou habitat values and management options.
 - b. Where caribou habitat values have been assessed as having moderate or higher caribou habitat value, harvesting is not allowed unless:
 - i. a qualified professional ^P (registered professional biologist or registered professional forester) provides an opinion that indicates that the impact of the pine beetle on the affected stand will reduce the current habitat value below a moderate value or;
 - ii. strategies for maintaining the caribou habitat value to at least a moderate value level have been developed by a qualified professional and incorporated into harvesting plans.
 - c. New roads into unroaded areas must be assessed to determine if they will provide new motorized vehicle access points to important caribou habitat areas (alpine and subalpine basin areas). Where a new road is identified as a likely access point, the proponent of harvesting must develop strategies and implement measures to restrict motorized access to these areas.

- o Recognized methodology includes processes sanctioned by government for the specific herd area or in the absence of sanctioned methodology, processes developed by a qualified Register Professional Biologist.
- p A qualified professional is considered a registered professional who has appropriate training and experience in the area of work being completed.

Part 2- Filing the Order

This order will be filed with Regional Director, Southern Interior Region, Ministry of Sustainable Resource Management on September 23, 2004.

Part 3- Effective Date

This order comes into effect immediately. Despite subsection 16 (2) of the *Forest and Range Practices Act*, all forest stewardship plans submitted after the effective date must be consistent with this order. Despite Section 10 (d) of the *Forest Practices Code of British Columbia Act*, all forest development plans submitted after the effective date must be consistent with this order.

Originally Signed by Ken Gorsline

Ken Gorsline
Acting Regional Director
Southern Interior Region
Ministry of Sustainable Resource Management

Date: September 23, 2004

Preamble

This preamble is meant to provide the context in which this variance was reviewed and approved and does not form part of the variance.

This variance was initiated in response to requests from East Kootenay forest licensees to align Biodiversity Emphasis Options (BEO) mapping to revised Biogeoclimatic Ecosystem Classification (BEC) mapping in the Cranbrook and Invermere Resource Management Zone areas. Revised BEC mapping from the Forest Research Branch of the Ministry of Forests and Range for the Rocky Mountain Forest District has been used to align the BEO. This change has been made to incorporate improved information regarding BEC mapping and to reduce the complexity involved in managing for BEO. These changes are expected to help improve timber and biodiversity management in the area. This variance was not publicly advertised as it was felt that approval of this variance would not significantly affect the public.

The following information was considered in approving this variance. The Ministry of Forests and Range, Ministry of Environment and major forest licensees within the Cranbrook and Invermere RMZ's have indicated support for moving to the new BEC and BEO. The revised BEC has already been considered in old growth management planning. It has also been accepted by the Defined Forest Area Management group for the Rocky Mountain Forest District.

Section a) of the Delegation of Ministers' Powers memorandum, dated February 28, 2003 provides the Regional Director with the authority to vary map 1.1 of the established order as a direct result of changes to established landscape unit boundaries, **BEC**, and other adjustments due to new technical inventory.

This variance order should be viewed in concert with the Kootenay Boundary Higher Level Plan Order dated October 26, 2002 and other variances to this order made after this date.

KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER (KBHLPO)

ORDER- KBHLP-07

ORDER VARYING OBJECTIVES 1 OF THE KOOTENAY-BOUNDARY HIGHER LEVEL PLAN ORDER (OCTOBER 2002) PURSUANT TO SECTIONS 3 (2) AND 3 (7) OF THE *FOREST PRACTICES CODE OF BRITISH COLUMBIA ACT* (THE ACT).

Part 1- Resource Management Zone Objective Variance

Objective 1 of the Kootenay-Boundary Higher Level Plan Order (October 26, 2002) is varied by replacing Maps 1.1 for the Cranbrook and Invermere Resource Management Zones with the attached maps.

Objective 2 (Old and Mature Forest) is varied by replacing Table 2.5 with the following table:

Table 2.5 Areas to be Managed for Mature Forest Targets

RM Z	Landscape Unit	BEC subzone/variant	BEO
Arrow			
	N501 Sheep Creek	ICH dw	Intermediate
	N504 Pend' Oreille	ICH dw	Intermediate
	N505 Stagleap	ICH dw	Intermediate
	N508 Blueberry	ICH dw	Intermediate
	N509 Dog	ICH dw	Intermediate
	N511 Cayuse	ICH dw	Intermediate
	N513 Pedro	ICH dw	Intermediate
	N514 Perry	ICH dw	Intermediate
	N518 Gladstone	ICH dw	Intermediate
	N515 Lemon	ESSF wc1	High
		ESSF wc4	High
		ICH dw	High
		ICH mw2	High
	N525 Wilson	ESSF wc1	High
		ESSF wc4	High
		ICH dw	High
		ICH mw2	High
		ICH wk1	High
	N528 Kuskanax	ESSF wc1	High
		ESSF wc4	High

RMZ	Landscape Unit	BEC subzone variant	BEO
Arrow ^{cont}			
	N529 Halfway	ESSF wc1	High
		ESSF wc4	High
	N530 Trout	ESSF wc1	High
		ESSF wc4	High
		ICH mw2	High
		ICH vk1	High
		ICH wk1	High
Boundary			
	B10 Burrell	ESSF wc4	High
	B11 Rendell	ESSF dc1	High
Cranbrook			
	C04 Hellroaring/Meachen	ESSF wm	High
		ESSF wmw	High
	C09 Yahk River	ESSF dk	Low
		ICH mk1	Low
	C14 Wigwam River	ESSF dk	High
		ESSF dkw	High
		MS dk	High
	C15 Lodgepole/Bighorn	ICH mk1	High
		MS dk	High
	C18 East Flathead	MS dk	Intermediate
	C22 Upper Elk	MS dk	Intermediate
		ESSF dk	Intermediate
		ESSF dkw	Intermediate
	C23 West Elk	ESSF dk	High
		ESSF dkw	High
Golden			
	G1	ESSF wc2	High
		ICH wk1	High
	G6	ESSF wc2	High
		ICHmw1	High
		ICH wk1	High
RMZ	Landscape Unit	BEC subzone variant	BEO

Golden ^{cont}			
	G12	ESSF vc	High
		ESSFwc2	High
		ICH wk1	High
	G13	ESSFvc	High
		ESSF wc2	High
		ESSF wm	High
		ICH mw1	High
		ICH wk1	High
	G24	ESSF wm	High
		ICH mw1	High
	G26	MS dk	High
	G27	ESSF dk	High
		MS dk	High
Invermere			
	I01 Findlay	ESSFdk1	High
		ESSF dku	High
	I02 Buhl/Bradford	ESSF dk1	High
		ESSF dku	High
		MS dk	High
	I11 Kootenay	ESSF dk1	High
		ESSF dku	High
		MS dk	High
	I16 Jumbo	ESSF dk1	High
		ESSF dk2	High
		ESSF dku	High
		ESSF wm	High
		ESSF wmu	High
		MS dk	High
	I17 Goldie	ESSF dk1	High
		ESSF dku	High
		MS dk	High
	I19 Fenwick	MS dk	Intermediate
	I20 Pallisar	MS dk	Intermediate
RMZ	Landscape Unit	BEC subzone variant	BEO
Invermere ^{cont}			

	I22 Albert	ESSFdk1	High
		ESSF dk2	High
		ESSF dku	High
		MS dk	High
	I24 Pedley	MS dk	High
Kootenay Lake			
	K05 Kid Creek	ICH dw	Intermediate
	K06 Goat River	ICH dw	Intermediate
	K08 Gray Creek	ICH dw	Intermediate
	K10 West Arm	ICH dw	Intermediate
	K12 Kaslo River	ICH dw	Intermediate
	K25 Duck Lake	ICH dw	Intermediate
	K17 Goat Range	ESSF wc4	High
		ICH mw2	High
		ICHwk1	High
	K18 Lardeau River	ESSF wc4	High
		ICH mw2	High
		ICH wk1	High
	K23 Westfall Creek	ICH wk1	High

Part 2- Filing the Order

This order will be filed with the Regional Director, Southern Interior Region, Integrated Land Management Bureau, Ministry of Agriculture and Lands on September 30, 2005.

Part 3- Effective Date

This order comes into effect immediately. Despite subsection 16 (2) of the *Forest and Range Practices Act*, all forest stewardship plans submitted after the effective date must be consistent with this order.

Originally Signed by Ken Gorsline

Ken Gorsline
Regional Director
Southern Interior Region
Integrated Land Management Bureau
Ministry of Agriculture and Lands

Date: October 1, 2005

Cranbrook RMZ

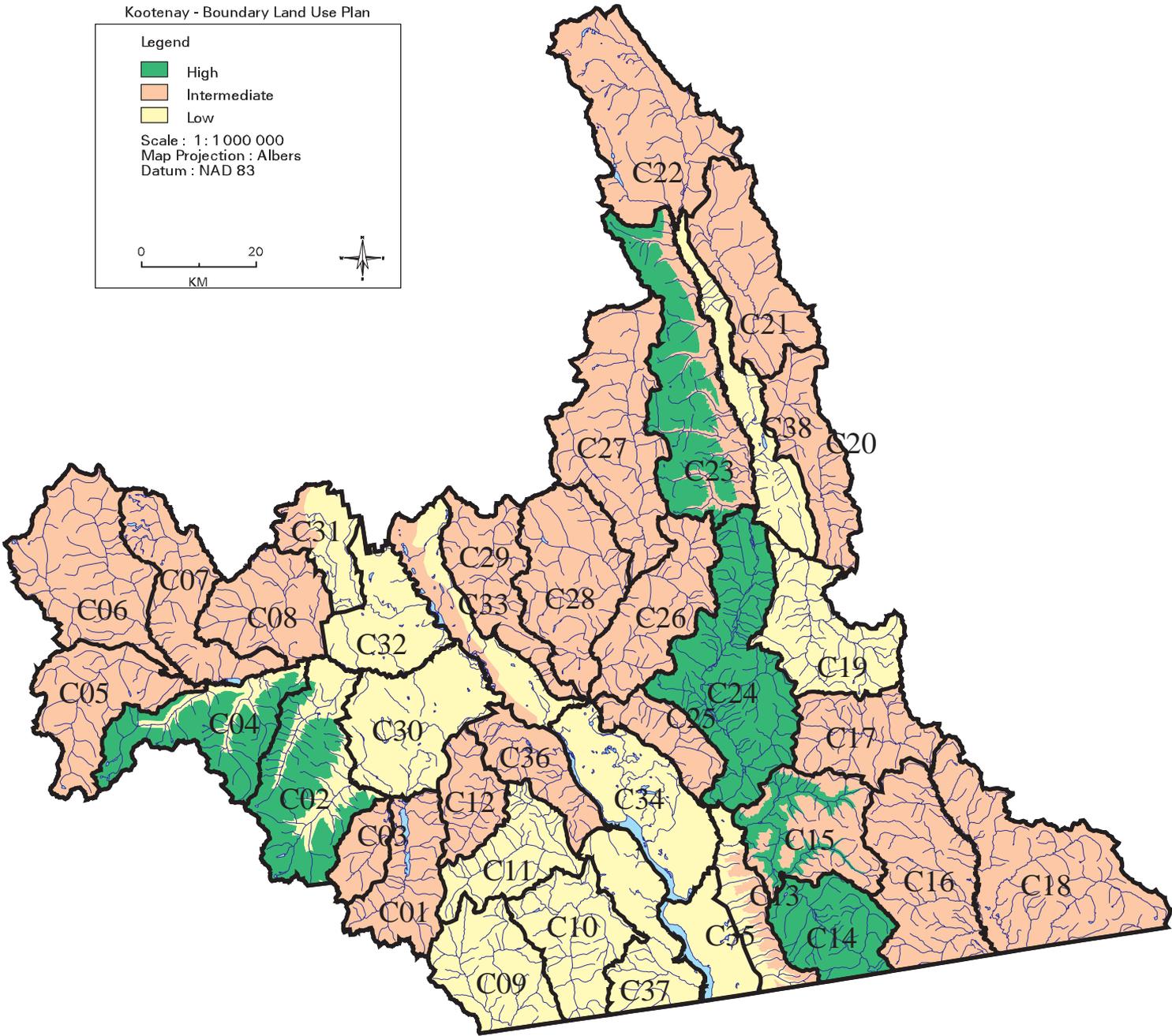
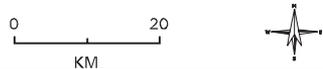
Map 1.1 Biodiversity Emphasis Options

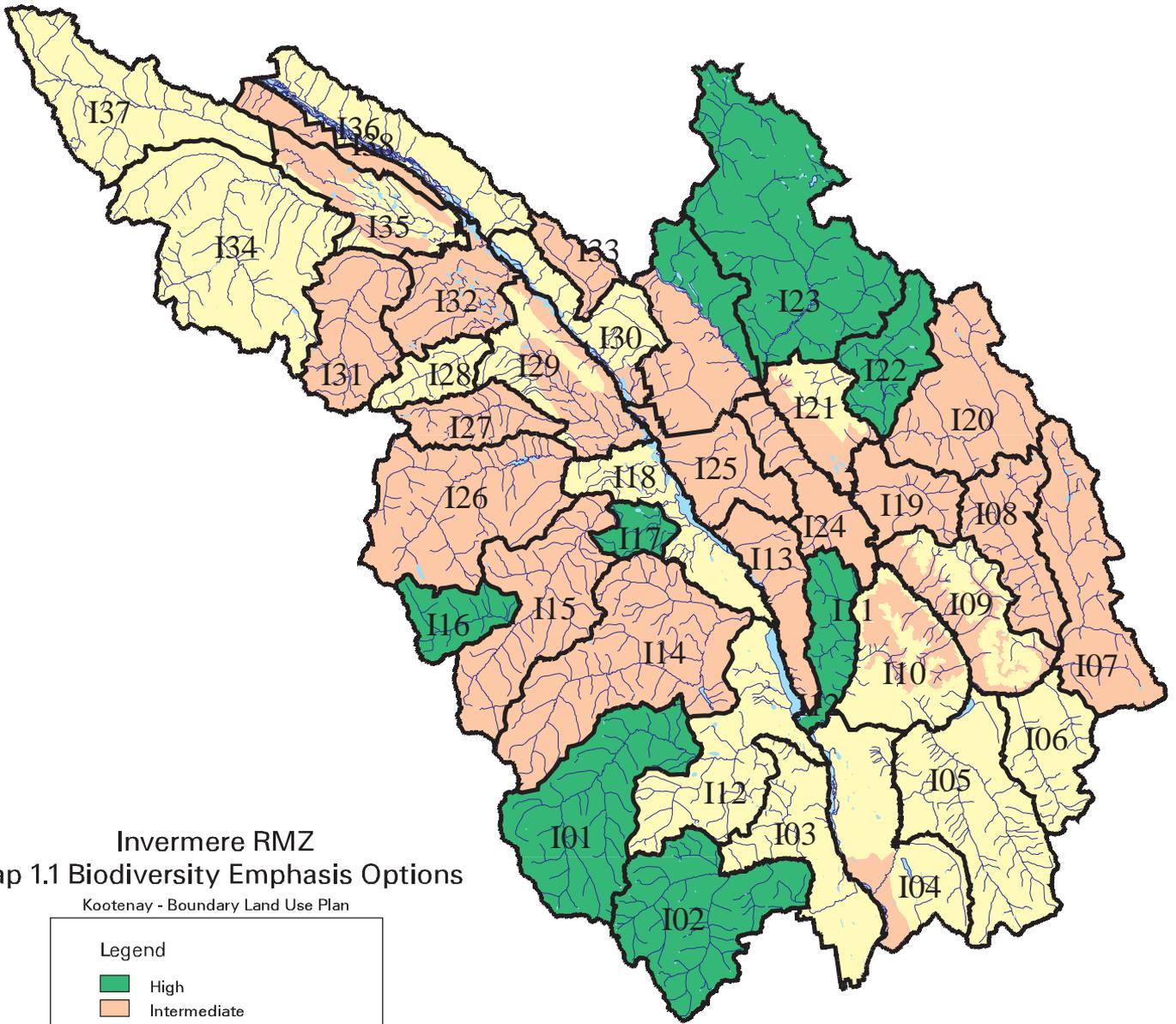
Kootenay - Boundary Land Use Plan

Legend

- High
- Intermediate
- Low

Scale : 1 : 1 000 000
Map Projection : Albers
Datum : NAD 83





Invermere RMZ
Map 1.1 Biodiversity Emphasis Options

Kootenay - Boundary Land Use Plan

Legend

- High
- Intermediate
- Low

Scale : 1 : 1 000 000
 Map Projection : Albers
 Datum : NAD 83

0 20

KM

PROVINCE OF BRITISH COLUMBIA

KOOTENAY-BOUNDARY HIGHER LEVEL PLAN VARIANCE 08

Order of the Regional Executive Director, Southern Interior Region, Integrated Land Management Bureau, Ministry Of Agriculture And Lands
(Section 93.4 *Land Act*)

Whereas I have determined that the land use objectives established by this order do not conflict with other objectives established under the *Forest and Range Practices Act*

And Whereas I am satisfied that

(a) the land use objectives in this variance order provide for the management and use of forest or range resources in a manner that has not otherwise been provided for under the Land Use Objectives Regulation or another enactment,

(b) the land use objectives in this variance order provide for an appropriate balance of social, economic and environmental benefits, and

(c) the importance of the land use objectives and amendments in this variance order outweighs any adverse impact on opportunities for timber harvesting or forage use within or adjacent to the area that will be affected,

Therefore, pursuant to section 93.4 of the *Land Act*, I, Steve Carr, the Regional Executive Director for the Southern Interior Region, Integrated Land Management Bureau, Ministry Of Agriculture And Lands, hereby order that:

1. The Kootenay-Boundary Higher Level Plan Order, made by the Ministers of Forests, Sustainable Resource Management, and Energy and Mines, on October 26, 2002, as varied from time to time, is further varied as set out in the attached Schedule, and
2. This order is effective on the date it is made, and despite subsection 16 (2) of the *Forest and Range Practices Act*, and section 10 1) (d) (ii) of the Forest Practices Code, all forest stewardship plans or amendments, and all forest development plan amendments, submitted on or after the effective date must be consistent with this order.



STEVE CARR

November 2, 2006

DATE

SCHEDULE

Part 2 of the Kootenay-Boundary Higher Level Plan is varied as set out below.

Objective variance

- 1 Objective 1, is varied by replacing map 1.1 for the Golden Resource Management Zone with the map attached as appendix 1.
- 2 Objective 2, is varied as follows:
 - (a) Table 2.5, is deleted and the Table in Appendix 2 is substituted, and
 - (b) in addition to the variance in paragraph (a), objective 2, as it applies to the Golden Resource Management Zone, is varied by adding the following objective: To enhance biodiversity values, the requirement for maintaining a minimum of 19% of the forested area in age class 9 or older is increased by 116 hectares (>19% plus 116 hectares) within the ICH biogeoclimatic unit within landscape unit G01 (Upper Wood River) and decreased by 116 hectares (>19 % minus 116 hectares) within the ESSF biogeoclimatic unit within landscape unit G02 (Molson).
- 3 Objective 3 for the Golden Resource Management Zone is varied by adding the following objective: To better manage for caribou, timber, biodiversity, and recreation values, within caribou management zone 7, the requirement for maintaining a minimum of 40 % age class 8 or older within landscape unit G01 (Upper Wood River) is increased by 256 ha ($\geq 40\%$ minimum retention forest area, plus 256 hectares), and decreased by 256 hectares ($\geq 40\%$ minimum retention forest area, minus 256 hectares) within landscape unit G03 (Lower Wood River).

APPENDIX 1

MAP 1.1

APPENDIX 2

Table 2.5 Areas to be Managed for Mature Forest Targets

RMZ	Landscape Unit	BEC subzone/variant	BEO
Arrow			
	N501 Sheep Creek	ICH dw	Intermediate
	N504 Pend' Oreille	ICH dw	Intermediate
	N505 Stag Leap	ICH dw	Intermediate
	N508 Blueberry	ICH dw	Intermediate
	N509 Dog	ICH dw	Intermediate
	N511 Cayuse	ICH dw	Intermediate
	N513 Pedro	ICH dw	Intermediate
	N514 Perry	ICH dw	Intermediate
	N518 Gladstone	ICH dw	Intermediate
	N515 Lemon	ESSF wc1	High
		ESSF wc4	High
		ICH dw	High
		ICH mw2	High
	N525 Wilson	ESSF wc1	High
		ESSF wc4	High
		ICH dw	High
		ICH mw2	High
		ICH wk1	High
	N528 Kuskanax	ESSF wc1	High
		ESSF wc4	High
	N529 Halfway	ESSF wc1	High
		ESSF wc4	High
	N530 Trout	ESSF wc1	High
		ESSF wc4	High
		ICH mw2	High
		ICH vk1	High
		ICH wk1	High

RMZ	Landscape Unit	BEC subzone/variant	BEO
Boundary			
	B10 Burrell	ESSF wc4	High
	B11 Rendell	ESSF dc1	High
Cranbrook			
	C04 Hellroaring/Meachen	ESSF wm	High
		ESSF wmw	High
	C09 Yahk River	ESSF dk	Low
		ICH mk1	Low
	C14 Wigwam River	ESSF dk	High
		ESSF dkw	High
		MS dk	High
	C15 Lodgepole/Bighorn	ICH mk1	High
		MS dk	High
	C18 East Flathead	MS dk	Intermediate
	C22 Upper Elk	MS dk	Intermediate
		ESSF dk	Intermediate
		ESSF dkw	Intermediate
	C23 West Elk	ESSF dk	High
		ESSF dkw	High
Golden			
	G01 Upper Wood	ESSF vv	High
		ESSF wc2	High
		ICH wk1	High
	G06 Kinbasket River	ESSFmm1	High
		ESSF vv	High
		ESSF wc2	High
		ICH mw1	High
		ICH wk1	High
	G12 Windy Creek	ESSF vc	High
		ESSF vv	High
		ESSF wc2	High
		ICH wk1	High
	G13 Bachelor Creek	ESSF vv	High
		ESSF vc	High
		ESSF wc2	High
		IVH mw1	High
		ICH wk1	High

RMZ	Landscape Unit	BEC subzone/variant	BEO
Golden ^{con't}			
	G24 Canyon Creek	ESSF wm	High
		ICH mw1	High
	G26 Kicking Horse	MSdk	High
	G27 Ice River	ESSFdk	High
		MSdk	High
		ICHmk1	High
Invermere			
	I01 Findlay	ESSFdk1	High
		ESSF dku	High
	I02 Buhl/Bradford	ESSF dk1	High
		ESSF dku	High
		MS dk	High
	I11 Kootenay	ESSF dk1	High
		ESSF dku	High
		MS dk	High
	I16 Jumbo	ESSF dk1	High
		ESSF dk2	High
		ESSF dku	High
		ESSF wm	High
		ESSF wmu	High
		MS dk	High
	I17 Goldie	ESSF dk1	High
		ESSF dku	High
		MS dk	High
	I19 Fenwick	MS dk	Intermediate
	I20 Pallisar	MS dk	Intermediate
	I22 Albert	ESSFdk1	High
		ESSF dk2	High
		ESSF dku	High
		MS dk	High
	I24 Pedley	MS dk	High

RMZ	Landscape Unit	BEC subzone/variant	BEO
Kootenay Lake			
	K05 Kid Creek	ICH dw	Intermediate
	K06 Goat River	ICH dw	Intermediate
	K08 Gray Creek	ICH dw	Intermediate
	K10 West Arm	ICH dw	Intermediate
	K12 Kaslo River	ICH dw	Intermediate
	K25 Duck Lake	ICH dw	Intermediate
	K17 Goat Range	ESSF wc4	High
		ICH mw2	High
		ICHwk1	High
	K18 Lardeau River	ESSF wc4	High
		ICH mw2	High
		ICH wk1	High
	K23 Westfall Creek	ICH wk1	High

APPENDIX 1

Golden RMZ
Map 1.1 Biodiversity Emphasis Options

Kootenay - Boundary Higher Level Plan

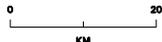
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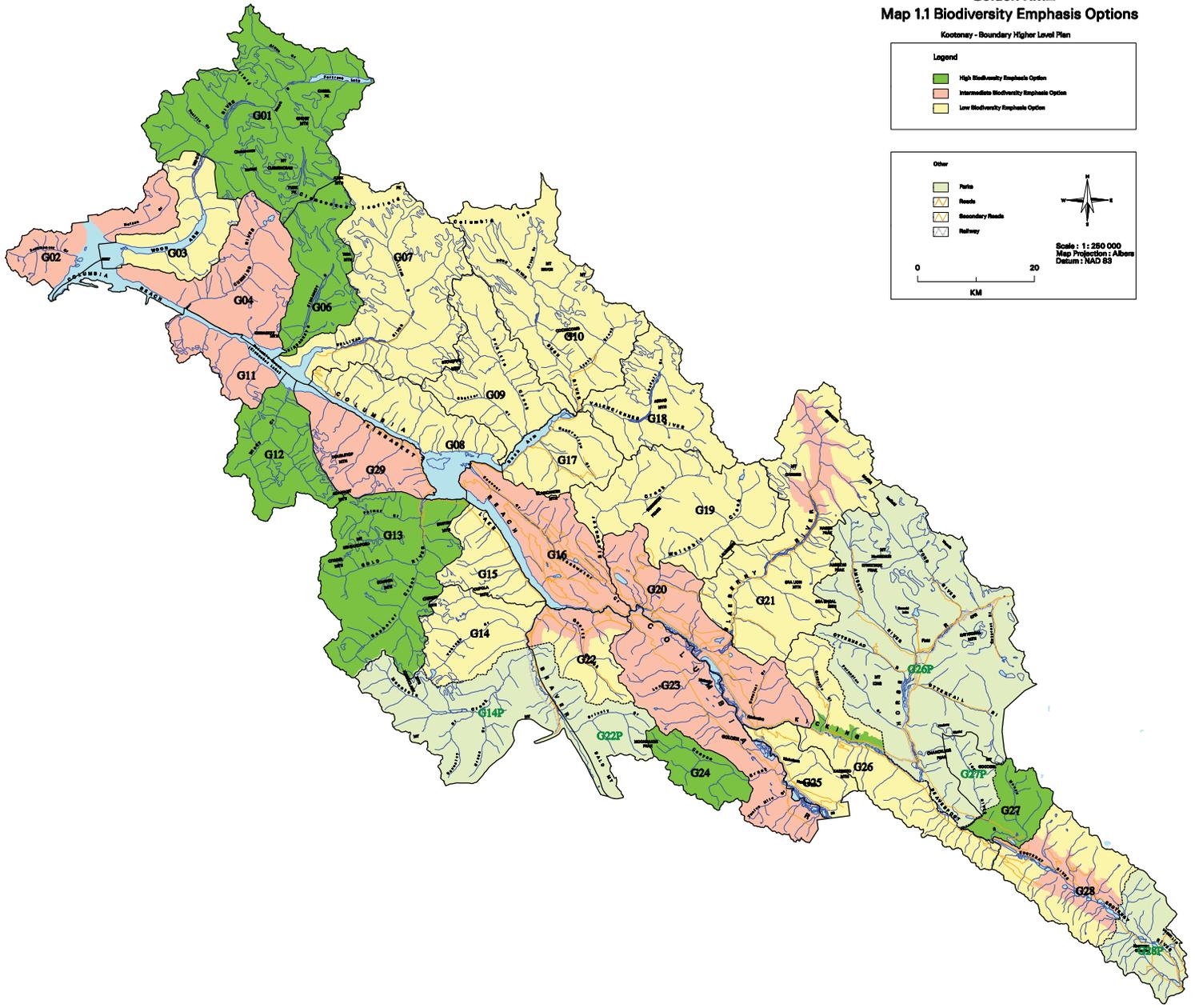
- High Biodiversity Emphasis Option
- Intermediate Biodiversity Emphasis Option
- Low Biodiversity Emphasis Option

Other

- Parks
- Roads
- Secondary Roads
- Railway


 Scale : 1: 250 000
 Map Projection : Albers
 Datum : NAD 83


 0 20
 KM



Kootenay-Boundary

Preamble

The preamble provides background and context but does not form part of the legal order.

This order is for the purposes of facilitating the Mountain Caribou Recovery Implementation Plan announced on October 16, 2007.

Habitat management direction for mountain caribou is being consolidated under a few legal tools. To facilitate that goal, this order cancels caribou habitat management objectives in the Kootenay-Boundary Higher Level Plan and eliminates duplication or conflicts in management direction.

Some Enhanced Resource Development Zones have also undergone minor amendment to align the boundaries with direction stemming from the Mountain Caribou Recovery Implementation Plan.

MINISTRY OF AGRICULTURE AND LANDS

MINISTERIAL ORDER

ORDER – KBHLP - 09

KOOTENAY – BOUNDARY HIGHER LEVEL PLAN ORDER (KBHLPO) CANCELLING THE CARIBOU OBJECTIVE IN THE KOOTENAY BOUNDARY HIGHER LEVEL PLAN ORDER

Relationship with *Forest and Range Practices Act* Objectives

1. Pursuant to section 93.4 of the *Land Act* this order amends the Kootenay Boundary Higher Level Plan Order (KBHLP order), made by the Minister Sustainable Resource Management on October 26, 2002.

The KBHLP order is amended as follows

2. Objective 3, Table 3.1 and Map 3.1 (Central Selkirks), Map 3.2 (Central Rockies), Map 3.3 (South Purcells) and Map 3.4 (South Selkirks) of the KBHLP order are cancelled.
3. Maps 7.1, the Enhanced Resource Development Zones in the Golden, Kootenay Lake, Cranbrook and Arrow Resource Management Zones are amended as per the attached maps.

Transition

4. This order takes effective when notice of this order is posted in the Gazette.

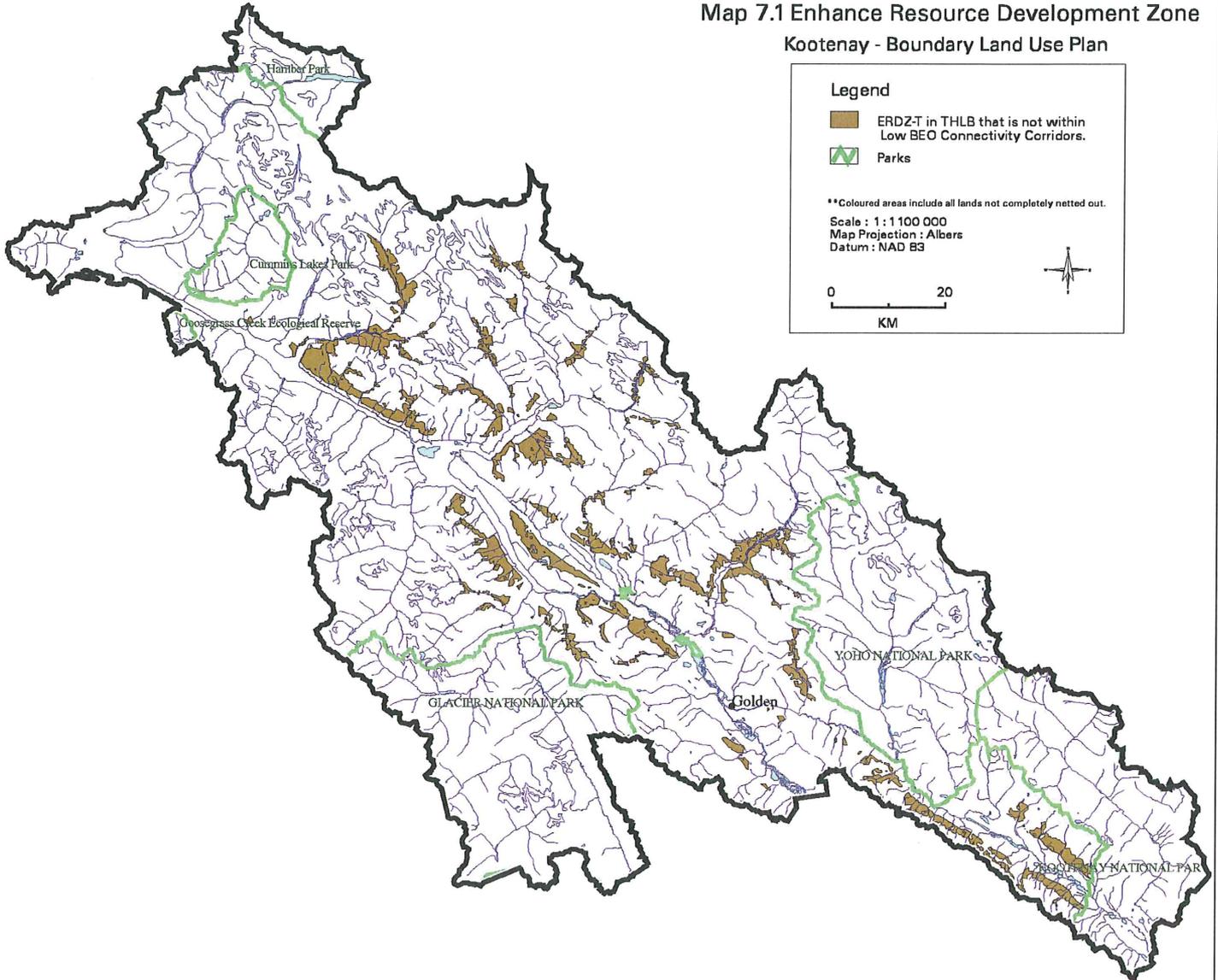


Steve Carr, Chief Executive Officer
Ministry of Agriculture and Lands

Jan 8/09

Date

Golden RMZ
 Map 7.1 Enhance Resource Development Zone
 Kootenay - Boundary Land Use Plan



Legend

- ERDZ-T in THLB that is not within Low BEO Connectivity Corridors.
- Parks

****Coloured areas include all lands not completely netted out.**

Scale : 1 : 1100 000
 Map Projection : Albers
 Datum : NAD 83

0 20
 KM

Arrow RMZ
 Map 7.1 Enhanced Resource Development Zone
 Kootenay - Boundary Land Use Plan

Legend

- ERDZ-T in THLB that is not within Low BEO Connectivity Corridors.
- Parks

** Coloured areas include all lands not completely netted out.
 Scale : 1 : 1 000 000
 Map Projection : Albers
 Datum : NAD 83

0 20

KM

