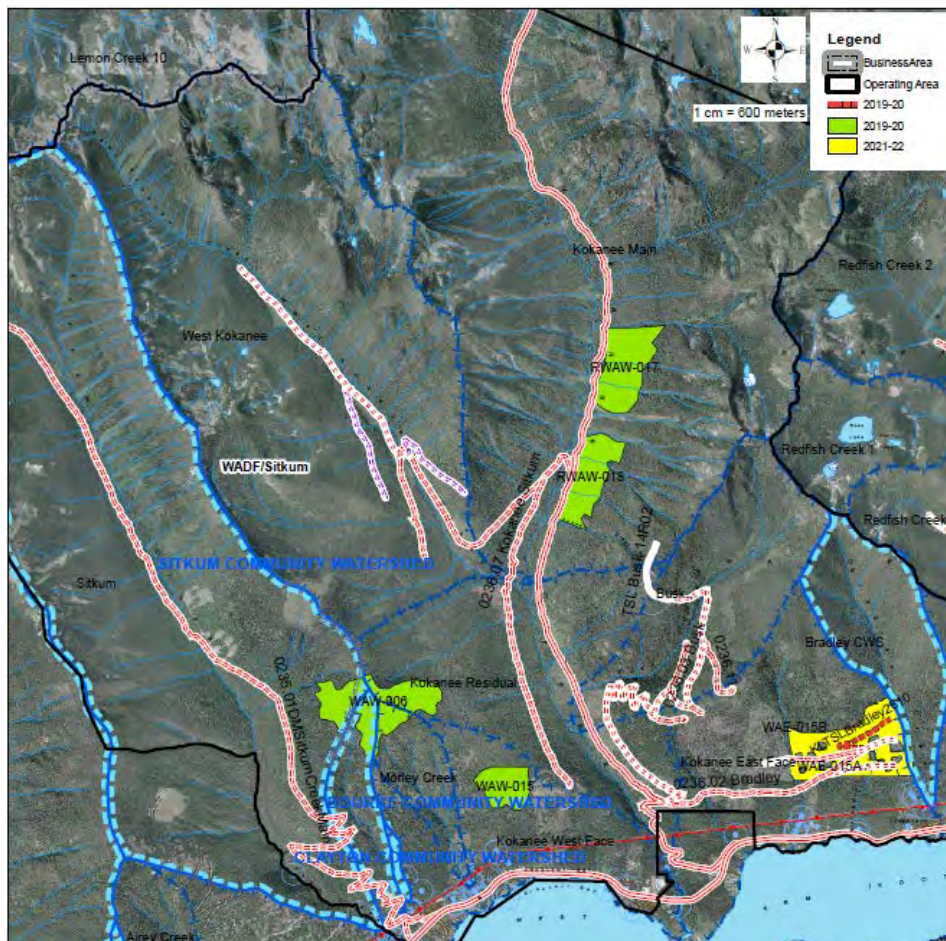


# KOOTENAY LAKE FIELD TEAM

## WADF Operating Plan

### 2017-2022

(Forest Stewardship Plan #601: 2017 to 2022)



SEAN SLIMMON, RPF #3812

DATE SIGNED- June 5<sup>th</sup>, 2017

I certify that the work described herein fulfills the standards Expected of a member of the Association of BC Forest Professionals and that I did personally supervise the work.

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# TABLE OF CONTENTS

|                                                                                                               |           |
|---------------------------------------------------------------------------------------------------------------|-----------|
| <b>1. DESCRIPTION / INTENTION OF DOCUMENT .....</b>                                                           | <b>3</b>  |
| <b>2. REFERENCES.....</b>                                                                                     | <b>4</b>  |
| <b>3. TABLE OF BLOCKS AND ROADS 2017-2022 .....</b>                                                           | <b>4</b>  |
| <b>4. STAKEHOLDER &amp; FIRST NATIONS CONSULTATION .....</b>                                                  | <b>6</b>  |
| 4.1. FIRST NATIONS (REFERRAL AND STRENGTH OF CLAIM) .....                                                     | 6         |
| 4.2. PUBLIC STAKEHOLDERS.....                                                                                 | 6         |
| 4.3. SUMMARY OF FIRST NATIONS & PUBLIC STAKEHOLDER COMMITMENTS .....                                          | 6         |
| <b>5. RESULTS AND STRATEGIES IN RELATION TO FOREST RESOURCE VALUES .....</b>                                  | <b>7</b>  |
| 5.1. SOILS .....                                                                                              | 7         |
| 5.2. TIMBER .....                                                                                             | 7         |
| 5.2.1 TIMBER .....                                                                                            | 7         |
| 5.2.2 ENHANCED RESOURCE DEVELOPMENT ZONES - TIMBER.....                                                       | 7         |
| 5.3. BIODIVERSITY, WILDLIFE AND FISH.....                                                                     | 7         |
| 5.3.1 BIODIVERSITY .....                                                                                      | 7         |
| 5.3.1.1 BIODIVERSITY EMPHASIS.....                                                                            | 7         |
| 5.3.1.2 OLD AND MATURE FOREST .....                                                                           | 8         |
| 5.3.1.3 GREEN-UP.....                                                                                         | 11        |
| 5.3.1.4 FIRE MAINTAINED ECOSYSTEMS.....                                                                       | 12        |
| 5.3.1.5 WATER, FISH, WILDLIFE AND BIODIVERSITY WITHIN RIPARIAN AREAS .....                                    | 13        |
| 5.3.1.6 WILDLIFE AND BIODIVERSITY — LANDSCAPE LEVEL .....                                                     | 13        |
| 5.3.1.7 WILDLIFE AND BIODIVERSITY — STAND LEVEL.....                                                          | 13        |
| 5.3.2 WILDLIFE.....                                                                                           | 14        |
| 5.3.2.1 GRIZZLY BEAR HABITAT AND CONNECTIVITY CORRIDORS .....                                                 | 14        |
| 5.3.2.2 CARIBOU.....                                                                                          | 14        |
| 5.3.2.3 OBJECTIVES SET BY GOVERNMENT FOR WILDLIFE.....                                                        | 14        |
| 5.3.2.4 SPECIES AT RISK, REGIONALLY IMPORTANT WILDLIFE, UNGULATE WINTER RANGE AND WILDLIFE HABITAT AREAS..... | 14        |
| 5.3.3 FISH HABITAT IN FISHERIES SENSITIVE WATERSHEDS .....                                                    | 18        |
| 5.4. WATER FOR CONSUMPTIVE USE.....                                                                           | 18        |
| 5.4.1 WATER IN COMMUNITY WATERSHEDS.....                                                                      | 18        |
| 5.4.2 CONSUMPTIVE USE STREAMS.....                                                                            | 18        |
| 5.5. VISUAL QUALITY - SCENIC AREAS AND VISUAL QUALITY OBJECTIVES.....                                         | 22        |
| 5.6. CULTURAL HERITAGE RESOURCES .....                                                                        | 22        |
| 5.7. RECREATION RESOURCES .....                                                                               | 24        |
| 5.8. FOREST ROADS .....                                                                                       | 25        |
| 5.8.1 ROAD MAINTENANCE .....                                                                                  | 25        |
| 5.8.2 REVEGETATION FOLLOWING ROAD CONSTRUCTION AND DEACTIVATION .....                                         | 25        |
| <b>6. MEASURES IN RELATION TO INVASIVE PLANTS AND NATURAL RANGE BARRIERS .....</b>                            | <b>25</b> |
| 6.1. MEASURES TO PREVENT THE INTRODUCTION OR SPREAD OF INVASIVE PLANTS .....                                  | 25        |
| 6.2. MEASURES TO MITIGATE THE LOSS OF NATURAL RANGE BARRIERS .....                                            | 26        |

# 1. DESCRIPTION / INTENTION OF DOCUMENT

The operating plan is designed to provide a linkage from the FSP (a landscape-level plan that identifies how the holder of the plan will be consistent with government objectives for managing and protecting forest and range values through the results, strategies and measures proposed in the plan.) to the operational level (block and road development). It is a means to consolidate and interpret strategic planning information/analyses, provide supplemental information for site plans, and to better understand the dynamics of our operating areas in terms of resource values and public and First Nations considerations.

An Operating Plan can be broken down into 3 distinct components:

1. A referral package which includes letters/emails out to Stakeholders and First Nations and a copy of an advertisement in newspaper(s) relevant to the set of blocks in the plan. Generally covering years 2 and 3 of the 5 year plan.
  - First Nations, not broken down by operating area
  - Public stakeholders by operating area, note stakeholders will be in multiple operating areas.
2. Spatial component. Blocks and roads in 5 year plan saved in an Arc Shape file(.shp) and/or Google Earth (.kml) formats
3. A Resource Check/Landscape Level Assessment that documents the current review of the values, as they relate to meeting the FSP, for each of the blocks within the plan. This will also include a summary of the relevant information and commitments arising from referrals.
  - This document is a “Dashboard” document summarizing our most up to date knowledge of these operating areas with respect to higher level constraints/values, referrals, stakeholder interactions, First Nations
  - It is by geographical/operating area so becomes a series of operating area specific operating plans
  - Referral is separate file. Key items stemming from the referral are summarized in the LLA, again by continually updating we see a history of interactions per stakeholder relative to that area
  - A running inventory of shapes from a planning status of info/proposed to TSL sold. Rolling list, frequent updates
  - Not meant to be a comprehensive suite of detailed maps for field use. Mapping is simple, 8.5 x 11 maps showing general overviews of values and constraints. Detailed, larger scale maps can be produced as required for field or office use, focused on a particular constraint, issue, block, or road etc.
  - A simple block by block summary can be completed to supplement outgoing development assignments to the multi-phase contractors.

## 2. REFERENCES

The following acts, regulations and higher level plan documents are relevant to FSPs and are specifically referenced in this FSP:

Forest Act

[http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/96157\\_00](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/96157_00)

Forest and Range Practices Act (FRPA)

[http://www.bclaws.ca/Recon/document/ID/freeside/00\\_02069\\_01](http://www.bclaws.ca/Recon/document/ID/freeside/00_02069_01)

Forest Planning and Practices Regulation (FPPR)

[http://www.bclaws.ca/Recon/document/ID/freeside/14\\_2004](http://www.bclaws.ca/Recon/document/ID/freeside/14_2004)

Forest Recreation Regulation (FRR)

[http://www.bclaws.ca/Recon/document/ID/freeside/16\\_2004](http://www.bclaws.ca/Recon/document/ID/freeside/16_2004)

Government Actions Regulation (GAR)

[http://www.bclaws.ca/Recon/document/ID/freeside/582\\_2004](http://www.bclaws.ca/Recon/document/ID/freeside/582_2004)

Kootenay Boundary Higher Level Plan Order (KBHLPO)

<https://www.for.gov.bc.ca/tasb/slrp/plan50.html>

BCTS Practice reference Documents

[https://spc-bcts.gov.bc.ca/bcts\\_tko\\_genus/Practices%20Working%20Group/Forms/AllItems.aspx](https://spc-bcts.gov.bc.ca/bcts_tko_genus/Practices%20Working%20Group/Forms/AllItems.aspx)

## 3. TABLE OF BLOCKS AND ROADS 2017-2022

| <i>TSL-BLK</i> | <i>PLANNING #</i>       | <i>LOCATION</i>      | <i>OP PLAN</i>       | <i>REFERRAL PERIOD</i> | <i>PLANNED SALES DATE</i> |
|----------------|-------------------------|----------------------|----------------------|------------------------|---------------------------|
| !DKLPlanning   | WAW-006                 | Sitkum-Kokanee ridge | Pending winter 17/18 |                        | 2019-20                   |
| !DKLPlanning   | WAW-015                 | West Kokanee         | Pending winter 17/18 |                        | 2019-20                   |
| !DKLPlanning   | WAW-017                 | Kokanee- Sunset      | Pending winter 17/18 |                        | 2019-20                   |
| !DKLPlanning   | WAW-018                 | Kokanee- Sunset      | Pending winter 17/18 |                        | 2019-20                   |
|                | KL0236.07Kokanee Sitkum | West Kokanee         | Pending winter 17/18 |                        | 2019-20                   |
| !DKLPlanning   | WAE-15A                 | Bradley              | Pending winter 17/18 |                        | 2021-22                   |
| !DKLPlanning   | WAE-15B                 | Bradley              | Pending winter 17/18 |                        | 2021-22                   |
|                | KL0236Bradley2610       | Bradley              | Pending winter 17/18 |                        | 2019-20                   |
|                | KL0236BradleyFSR        | Bradley              | Pending winter 17/18 |                        | 2019-20                   |

# WADF 5 Year Plan: 2017-2022



1 cm = 500 meters

### Legend



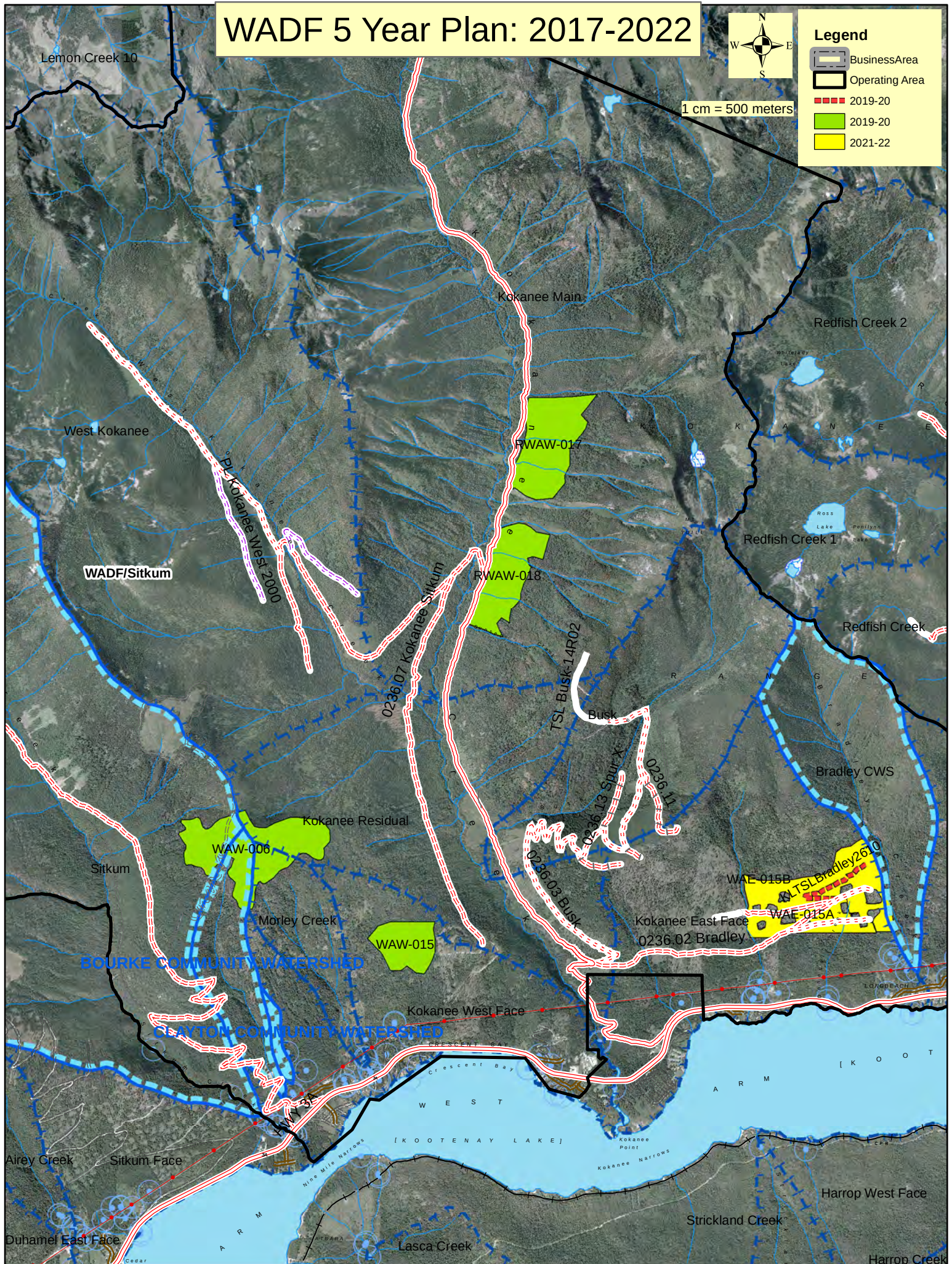
BusinessArea



## Operating Area



2019-20



## 4. STAKEHOLDER & FIRST NATIONS CONSULTATION

Public referrals and First Nations Consultation are tentatively scheduled to occur in late fall 2017 or early winter 2018. This section will be updated once this process is complete.

### 4.1. First Nations (Referral and Strength of Claim)

| FIRST NATIONS                   |                             |                                                  |                                      |                               |
|---------------------------------|-----------------------------|--------------------------------------------------|--------------------------------------|-------------------------------|
| <i>Ktunaxa Nation Council</i>   | <i>Lower Kootenay Band</i>  | <i>Shuswap Nation Tribal Council - Secwepemc</i> | <i>Adams Lake Indian Band</i>        | <i>Neskonlith Indian Band</i> |
| Yes                             | Yes                         | Yes                                              | Yes                                  | Yes                           |
| <i>Okanagan Nation Alliance</i> | <i>Okanagan Indian Band</i> | <i>Penticton Indian Band</i>                     | <i>Lower Similkameen Indian Band</i> | <i>Shuswap Indian Band</i>    |
| Yes                             | Yes                         | Yes                                              | Yes                                  | Yes                           |

### 4.2. Public Stakeholders

| Public Stake Holders |              |                          |              |                  |                   |                                                                            |              |
|----------------------|--------------|--------------------------|--------------|------------------|-------------------|----------------------------------------------------------------------------|--------------|
| <i>Woodlots</i>      | <i>Range</i> | <i>Trapper</i>           | <i>Guide</i> | <i>Water</i>     | <i>Recreation</i> | <i>Other</i>                                                               | <i>Other</i> |
| NA                   | NA           | TR0418T002<br>TR0418T003 | NA           | Multiple<br>PODs | FLNRO<br>NCC      | -Kaslo<br>Chamber of<br>Commerce<br>-Nelson<br>Kootenay<br>lake<br>Tourism | RDCK         |

### 4.3. Summary of First Nations & Public Stakeholder Commitments

## 5. RESULTS AND STRATEGIES IN RELATION TO FOREST RESOURCE VALUES

### 5.1. Soils

**Legal References:** FPPR Sec. 5, Sec. 12.1 (5), Sec. 35 and Sec. 36

Proposed activities must be consistent with the results and strategies for soils defined in the Forest Stewardship Plan.

### 5.2. Timber

#### 5.2.1 Timber

**Legal References:** FPPR Sec. 6.0 and Sec. 12(8)

Government has not established an objective for timber; therefore, there is no result and strategy for this section.

#### 5.2.2 Enhanced Resource Development Zones - Timber

**Legal References:** KBHLPO Objective 7, FPPR Sections 12(4) to 12(6)

**Relates to:** KBHLPO Objective 4, FSP Sec. [5.3.1.3](#) and Sec. [5.3.1.6](#)

BCTS has proposed an alternate result and strategy as it relates to ERDZs and green up. ERDZs do not need to be addressed.

### 5.3. Biodiversity, Wildlife and Fish

#### 5.3.1 Biodiversity

##### 5.3.1.1 Biodiversity Emphasis

**Legal References:** KBHLPO Objective 1

**Relates to:** KBHLPO Objective 2

This section is for reference only and relates to the old and mature objective. Note an older BEC is used for determining compliance with the Kootenay Boundary Higher Level Plan and should not be confused with the BEC used for development, site plans and silviculture.

| <b>PLANNING #</b>       | <b>LOCATION</b>      | <b>LU</b>    | <b>BEO</b> | <b>KBHLPO BEC</b> | <b>NDT Type</b> |
|-------------------------|----------------------|--------------|------------|-------------------|-----------------|
| WAW-006                 | Sitkum-Kokanee ridge | K10-West Arm | I          | ESSFwc4           | 1               |
| WAW-015                 | West Kokanee         | K10-West Arm | I          | ICHdw             | 3               |
| WAW-017                 | Kokanee- Sunset      | K10-West Arm | I          | ICHdw<br>ICHmw2   | 3<br>2          |
| WAW-018                 | Kokanee- Sunset      | K10-West Arm | I          | ICHdw             | 3               |
| KL0236.07Kokanee_Sitkum | West Kokanee         | K10-West Arm | I          | ICHdw             | 3               |
| WAE-15A                 | Bradley              | K10-West Arm | I          | ICHdw             | 3               |
| WAE-15B                 | Bradley              | K10-West Arm | I          | ICHdw<br>ICHmw2   | 3<br>2          |
| KL0236Bradley2610       | Bradley              | K10-West Arm | I          | ICHdw             | 3               |
| KL0236BradleyFSR        | Bradley              | K10-West Arm | I          | ICHdw             | 3               |

### 5.3.1.2 Old and Mature Forest

**Legal References:** KBHLPO Objective 2

In this landscape unit mature targets are applicable in the ICHdw only. Note two of the Bradley Planning shapes (WAE-15A and 15B) overlap an existing OGMA. If final block boundaries still overlap an OGMA replacement will have to be done (see link to BCTS Practice Reference Documents under section 2)

| <b>PLANNING #</b>       | <b>LOCATION</b>      | <b>KBHLPO BEC</b> | <b>Connectivity<br/>(applies if mature is on)</b> | <b>OGMA</b> | <b>Mature</b> |
|-------------------------|----------------------|-------------------|---------------------------------------------------|-------------|---------------|
| WAW-006                 | Sitkum-Kokanee ridge | ESSFwc4           | In                                                | NA          | NA            |
| WAW-015                 | West Kokanee         | ICHdw             | In                                                | NA          | Surplus       |
| WAW-017                 | Kokanee- Sunset      | ICHdw<br>ICHmw2   | In                                                | NA          | Surplus<br>NA |
| WAW-018                 | Kokanee- Sunset      | ICHdw             | In                                                | NA          | Surplus       |
| KL0236.07Kokanee_Sitkum | West Kokanee         | ICHdw             | In                                                | NA          | Surplus       |
| WAE-15A                 | Bradley              | ICHdw             | In                                                | replace     | Surplus       |

|                       |         |                 |    |         |               |
|-----------------------|---------|-----------------|----|---------|---------------|
| WAE-15B               | Bradley | ICHdw<br>ICHmw2 | In | replace | Surplus<br>NA |
| KL0236Bradley261<br>0 | Bradley | ICHdw           | In | NA      | Surplus       |
| KL0236BradleyFSR      | Bradley | ICHdw           | In | NA      | Surplus       |

The following table outlines the current old and mature status by BEC and the net downs of the mature target to demonstrate that mature is met in connectivity first (per objective 5 of the KBHLPO). Proposed blocks and roads are consistent with the old and mature objective. IC and OC stand for in connectivity and out of connectivity.

| <b>OLD and MATURE STATUS</b><br><b>Tab-20160421_Old_and_Mature</b><br><b>LU: K10-West Arm</b> |                    |                    |                    |
|-----------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|
| BEC                                                                                           | ESSFwc4            | ICHdw              | ICHmw2             |
| Age of Old<br>Age of Mature                                                                   | 251-AC9<br>121-AC7 | 141-AC7<br>101-AC6 | 251-AC9<br>101-AC6 |
| Old Target                                                                                    | 3358.9             | 914.2              | 1470               |
| Mat target                                                                                    | NA                 | 587.7              | NA                 |
| Old + Mature Target                                                                           | NA                 | 1501.9             | NA                 |
| Total OGMA (all age classes)                                                                  | 4083.4             | 910.3              | 1917.3             |
| O&M OGMA +<br>Protected Area                                                                  | NA                 | 928                | NA                 |
| CFLB O&M IC                                                                                   | NA                 | 2424.1             | NA                 |
| Surplus (+) / Deficit (-) O&M IC First                                                        | NA                 | 1850.2             | NA                 |
| CFLB O&M OC                                                                                   | NA                 | 1115.7             | NA                 |
| Surplus (+) / Deficit (-) O&M All                                                             | 724.5              | 2965.9             | 447.3              |

## K10-Old & Mature



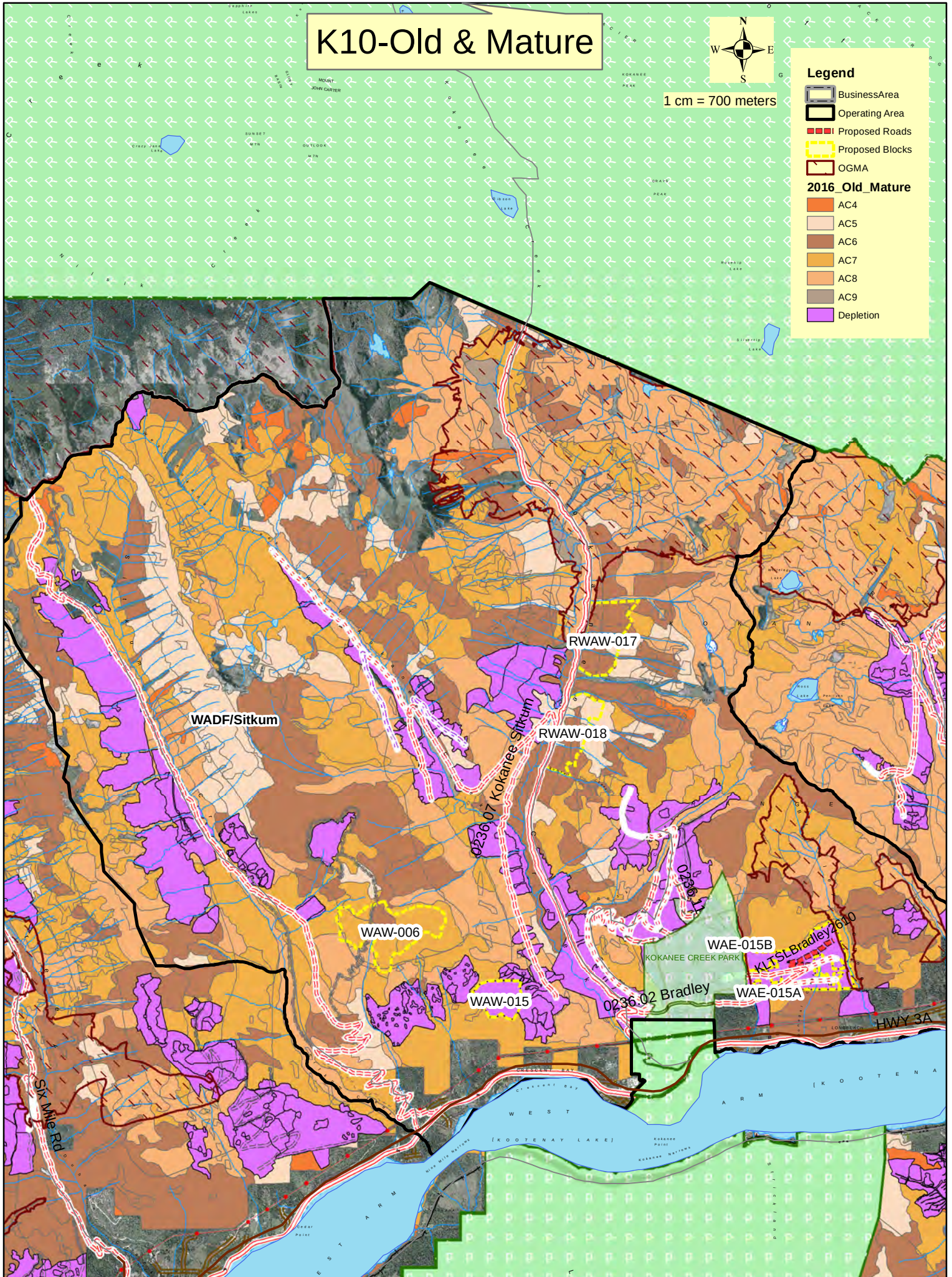
1 cm = 700 meters

### Legend

-  BusinessArea
-  Operating Area
-  Proposed Roads
-  Proposed Blocks
-  OGMA

## 2016\_Old\_Mature

-  AC4  
 AC5  
 AC6  
 AC7  
 AC8  
 AC9  
 Depletion



### 5.3.1.3 Green-up

**Legal References:** KBHLPO Objective 4, FPPR Sections 12(4) to 12(6)

**Relates to:** KBHLPO Objective 7, FSP Sec. [5.2.2](#) and Sec. [5.3.1.6](#)

FPPR Sec 64 outlines criteria for maximum cutblock size and those instances where maximum cutblock size does not apply. FPPR 65 is related to FPPR Sec 64 and outlines requirements for harvesting adjacent to other cutblocks, the criteria to be met to be considered greened up, and those cases where green up does not apply. The following table outlines the interaction of these two sections.

| Section                 | Description                                                                                                                  | Comments                                                                                                                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FPPR sec 64(1)(a)       | NAR <40 Ha                                                                                                                   | Does not apply if 64 (2) (3) or (4) apply to new block                                                                                                                                            |
| FPPR sec 64(2)(a)(i)(A) | salvage-dead damaged                                                                                                         | utilize dead or dying wood before it becomes worthless                                                                                                                                            |
| FPPR sec 64(2)(a)(i)(B) | sanitation (MPB)                                                                                                             | removal of infected or infested dead or damaged trees, or of susceptible trees, to prevent or reduce the spread of the infestation. Usually in conjunction with a District Forest Health Strategy |
| FPPR sec 64(2)(a)(ii)   | structural characteristics, temporal & spatial distribution-                                                                 | Green wood block uses Patch Size                                                                                                                                                                  |
| FPPR sec 64(2)(b)       | structural characteristics to resemble opening that would result from natural disturbance                                    | in addition to 64(2)(a)                                                                                                                                                                           |
| FPPR sec 64(3)          | 40% basal area                                                                                                               |                                                                                                                                                                                                   |
| FPPR sec 64(4)          | partial/single tree                                                                                                          |                                                                                                                                                                                                   |
| FPPR sec 65(1)          | Definitions                                                                                                                  |                                                                                                                                                                                                   |
| FPPR sec 65(2)          | adjacent ok if combined area is <40Ha or 65(3) must be met                                                                   | If combined area is >40 Ha 65 (3) must be met                                                                                                                                                     |
| FPPR sec 65(3)          | green up criteria: 3 components to this:<br>1. Stocked<br>2. 2.5m Ht<br>3. 700 sph of a commercially viable species 1.3m Ht. | describes the green up criteria. FSP specifies 2.5m ht in place of 3.0m.                                                                                                                          |
| FPPR sec 65(4)          | FPPR sec 65(2) Does not apply if 64 (2) (3) or (4) apply to new block                                                        |                                                                                                                                                                                                   |

Outlined below is a list of proposed blocks and the (office reviewed) status of green up for any adjacent blocks. Maximum block size is covered in section 5.3.1.6. A review of opening detail reports from RESULTS indicate these blocks are greened up.

| PLANNING #              | LOCATION             | ADJACENT TSL/OPENING ID |
|-------------------------|----------------------|-------------------------|
| WAW-006                 | Sitkum-Kokanee ridge | NA                      |
| WAW-015                 | West Kokanee         | 102372<br>1256572       |
| WAW-017                 | Kokanee- Sunset      | NA                      |
| WAW-018                 | Kokanee- Sunset      | NA                      |
| KL0236.07Kokanee_Sitkum | West Kokanee         | NA                      |
| WAE-15A                 | Bradley              | A63724-1                |
| WAE-15B                 | Bradley              | A63724-1                |
| KL0236Bradley2610       | Bradley              | NA                      |
| KL0236BradleyFSR        | Bradley              | NA                      |

|                             |         |               |     |             | FPPR<br>sec<br>65(3)(a)(i)               | FPPR<br>sec<br>65(3)(a)(i) | FPPR sec<br>65(3)(a)(iii)    |                                 |          |
|-----------------------------|---------|---------------|-----|-------------|------------------------------------------|----------------------------|------------------------------|---------------------------------|----------|
| Opening ID o or TSL-<br>BLK | Source  | SU/<br>Strata | NAR | Ref<br>Year | 75% NAR<br>meets<br>stocking<br>standard | Ave<br>Ht>2.5m             | 700 sph<br>CV ave ht<br>1.3m | Green<br>Up<br>65(3)(A)<br>Met? | Comments |
| 102372                      | RESULTS | All           | 25  | 2015        | Y                                        | Y                          | Y                            | Yes-<br>FPPR<br>sec<br>65(3)(a) |          |
| 1256572                     | RESULTS | All           | 3.7 | 2013        | Y                                        | Y                          | Y                            | Yes-<br>FPPR<br>sec<br>65(3)(a) |          |
| A63724-1                    | RESULTS | All           | 145 | 2009        | Y                                        | Y                          | Y                            | Yes-<br>FPPR<br>sec<br>65(3)(a) |          |

#### 5.3.1.4 Fire Maintained Ecosystems

**Legal References:** KBHLPO Objective 8

Fire maintained ecosystems have not been established therefore there is no result or strategy for this objective

### 5.3.1.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas

**Legal References:** FPPR Sec. 8, Sec. 12.1(6) and Sec. 12(3)

**Relates to:** FSP Sec. [5.3.1.7](#)

This result and strategy is dealt with at the site level during block development and site plan preparation.

### 5.3.1.6 Wildlife and Biodiversity — Landscape Level

**Legal References:** FPPR Sec. 9, Sec. 12.1(7), and Sec. 64 and Sec. 65

**Relates to:** FSP Sec. [5.2.2](#), Sec. [5.3.1.2](#) and Sec. [5.3.1.3](#), KBHLPO Objectives 4 and 7

Note this section has to be considered in conjunction with section 5.3.1.3-Green up. Following table outlines gross area by block and those that exceed maximum block size under FPPR Sec 64. Depending on adjacency/green up status some blocks that are under 40 Ha may not meet FPPR Sec 65.

| <i>PLANNING #</i> | <i>LOCATION</i>      | <i>Max Block Size</i> |
|-------------------|----------------------|-----------------------|
| WAW-006           | Sitkum-Kokanee ridge | 87.2                  |
| WAW-015           | West Kokanee         | 30.9                  |
| WAW-017           | Kokanee- Sunset      | 63.2                  |
| WAW-018           | Kokanee- Sunset      | 50.7                  |
| WAE-15A           | Bradley              | 30                    |
| WAE-15B           | Bradley              | 64.8                  |

### 5.3.1.7 Wildlife and Biodiversity — Stand Level

**Legal References:** FPPR Sec. 9.1, Sec. 12.5 (3), Sec. 12.5 (4), Sec. 66 and Sec. 67

This result and strategy deals with the establishment of WTRAs is dealt with at the site level during block development and site plan preparation.

## 5.3.2 Wildlife

### 5.3.2.1 Grizzly Bear Habitat and Connectivity Corridors

**Legal References:** KBHLPO Objective 5

**Relates to:** FSP Sec. [5.3.2.4](#) and Sec. [5.3.1.2](#)

Grizzly Bear mapping has not been completed for this objective. However there is a further requirement that old and mature targets must be met in connectivity first if it is present within the LU/BEC variant. The FSP states that OGMAs meet old therefore it is only the mature target, where applicable, that must be met in connectivity first. Consistency with this requirement is demonstrated under section 5.3.1.2 Old and Mature Forest.

### 5.3.2.2 Caribou

**Legal References:** KBHLPO Objective 3, GAR Sec. 9 to Sec. 13

**Relates to:** FSP Sec. [5.3.2.4](#)

The objective for Caribou that is set out in Objective 3 of the KBHLPO is not in effect as this objective was cancelled by Ministerial (variance) Order 09, on January 8th, 2009. The requirements for habitat retention for Mountain Caribou are now specified within GAR orders establishing ungulate winter ranges and general wildlife measures. Results and strategies related to ungulate winter range, including those related to Mountain Caribou, are specified in FSP Section 5.3.2.4.

### 5.3.2.3 Objectives Set by Government for Wildlife

**Legal References:** FPPR Sec. 7 and GAR Sec. 9 to Sec. 13

**Relates to:** FSP Sec. [5.3.2.4](#)

Per FPPR Section 7(3), persons required to prepare a FSP are exempt from the obligation of specifying a result or strategy in relation to the objective set by government for wildlife in FPPR Section 7(1) if the objective is addressed by objectives established in relation to Wildlife Habitat Areas (WHAs), Ungulate Winter Ranges (UWRs), General Wildlife Measures (GWMs) or Wildlife Habitat Features, or if an order given under the GAR Sections 9 to 13 specifically includes an exemption. These circumstances apply to the FDUs of this FSP.

### 5.3.2.4 Species at Risk, Regionally Important Wildlife, Ungulate Winter Range and Wildlife Habitat Areas

**Legal References:** KBHLPO FPPR Sec. 7 and GAR Sec. 9 to Sec. 13

There are no established WHA's in this WADF operating area. There are, however, two UWR cells (180-MD and 187-MD) under GAR order 4-001.

There are two Conservation Data Center areas identified, one in Sitkum Creek, Blunt-sepaled Starwort, the second within Kokanee Creek provincial park over the campground, Spurless Touch-me-not. Proposed blocks and roads are not impacted by these CDC areas.

The following tables show which blocks are impacted by GAR/CDC polygons followed by the status of the relative UWR cells. In both UWR cells proposed blocks and roads are considered harvested in the following analysis and are consistent with the general wildlife measures outlined in GAR 4-001

| PLANNING #              | LOCATION             | GAR orders    | CDC |
|-------------------------|----------------------|---------------|-----|
| WAW-006                 | Sitkum-Kokanee ridge | NA            | NA  |
| WAW-015                 | West Kokanee         | 4-001: 187-MD | NA  |
| WAW-017                 | Kokanee- Sunset      | NA            | NA  |
| WAW-018                 | Kokanee- Sunset      | NA            | NA  |
| KL0236.07Kokanee_Sitkum | West Kokanee         | 4-001: 180-MD | NA  |
| WAE-15A                 | Bradley              | 4-001: 180-MD | NA  |
| WAE-15B                 | Bradley              | 4-001: 180-MD | NA  |
| KL0236Bradley2610       | Bradley              | 4-001: 180-MD | NA  |
| KL0236BradleyFSR        | Bradley              | 4-001: 180-MD | NA  |

| UWR Cell# 180-MD<br>Tab-West Kootenays UWR 4001_20160420_v7.2 |                  |                        |                             |
|---------------------------------------------------------------|------------------|------------------------|-----------------------------|
| GWM #1:SNOW INTERCEPTION COVER<br>Age >81 CC ≥ 40%            |                  |                        |                             |
| CFLB Area (Ha)                                                |                  | 871.2                  |                             |
| MIN TARGET                                                    | EXISTING         | SURPLUS +    DEFICIT - | BCTS Proportional Share (%) |
| 94.3                                                          | 170.5            | 76.2                   | NA                          |
| RECRUITMENT                                                   |                  |                        |                             |
| Polygon ID                                                    | VRI Age & CC%    | Area                   |                             |
|                                                               |                  |                        |                             |
| EARLY SERAL ≤ 21 yrs                                          |                  |                        |                             |
| MAX TARGET                                                    | EXISTING         | SURPLUS +    DEFICIT - | BCTS Proportional Share (%) |
| 313.3                                                         | 67.5             | 245.8                  | NA                          |
| RECRUITMENT                                                   |                  |                        |                             |
| Opening ID / Polygon ID                                       | Age-reference yr | Area                   |                             |
|                                                               |                  |                        |                             |

| GWM #3: FORAGE Age >81 areas identified in schedule A |          |                        |          |
|-------------------------------------------------------|----------|------------------------|----------|
| MIN TARGET                                            | EXISTING | SURPLUS +    DEFICIT - | Comments |
| 46.9                                                  | 333.5    | 286.6                  |          |

| UWR Cell# 187-MD<br>Tab-West Kootenays UWR 4001_20160420_v7.2 |                  |                        |                             |
|---------------------------------------------------------------|------------------|------------------------|-----------------------------|
| SNOW INTERCEPTION COVER<br>Age >81 CC ≥ 40%                   |                  |                        |                             |
| CFLB Area (Ha)                                                |                  | 871.2                  |                             |
| MIN TARGET                                                    | EXISTING         | SURPLUS +    DEFICIT - | BCTS Proportional Share (%) |
| 39.2                                                          | 95.2             | 56                     | NA                          |
| RECRUITMENT                                                   |                  |                        |                             |
| Polygon ID                                                    | VRI Age & CC%    | Area                   |                             |
|                                                               |                  |                        |                             |
| EARLY SERAL ≤ 21 yrs                                          |                  |                        |                             |
| MAX TARGET                                                    | EXISTING         | SURPLUS +    DEFICIT - | BCTS Proportional Share (%) |
| 188.4                                                         | 21.8             | 166.6                  | NA                          |
| RECRUITMENT                                                   |                  |                        |                             |
| Opening ID / Polygon ID                                       | Age-reference yr | Area                   |                             |
|                                                               |                  |                        |                             |
| GWM #3: FORAGE Age >81 areas identified in schedule A         |                  |                        |                             |
| MIN TARGET                                                    | EXISTING         | SURPLUS +    DEFICIT - | Comments                    |
| 34                                                            | 280.6            | 246.6                  |                             |

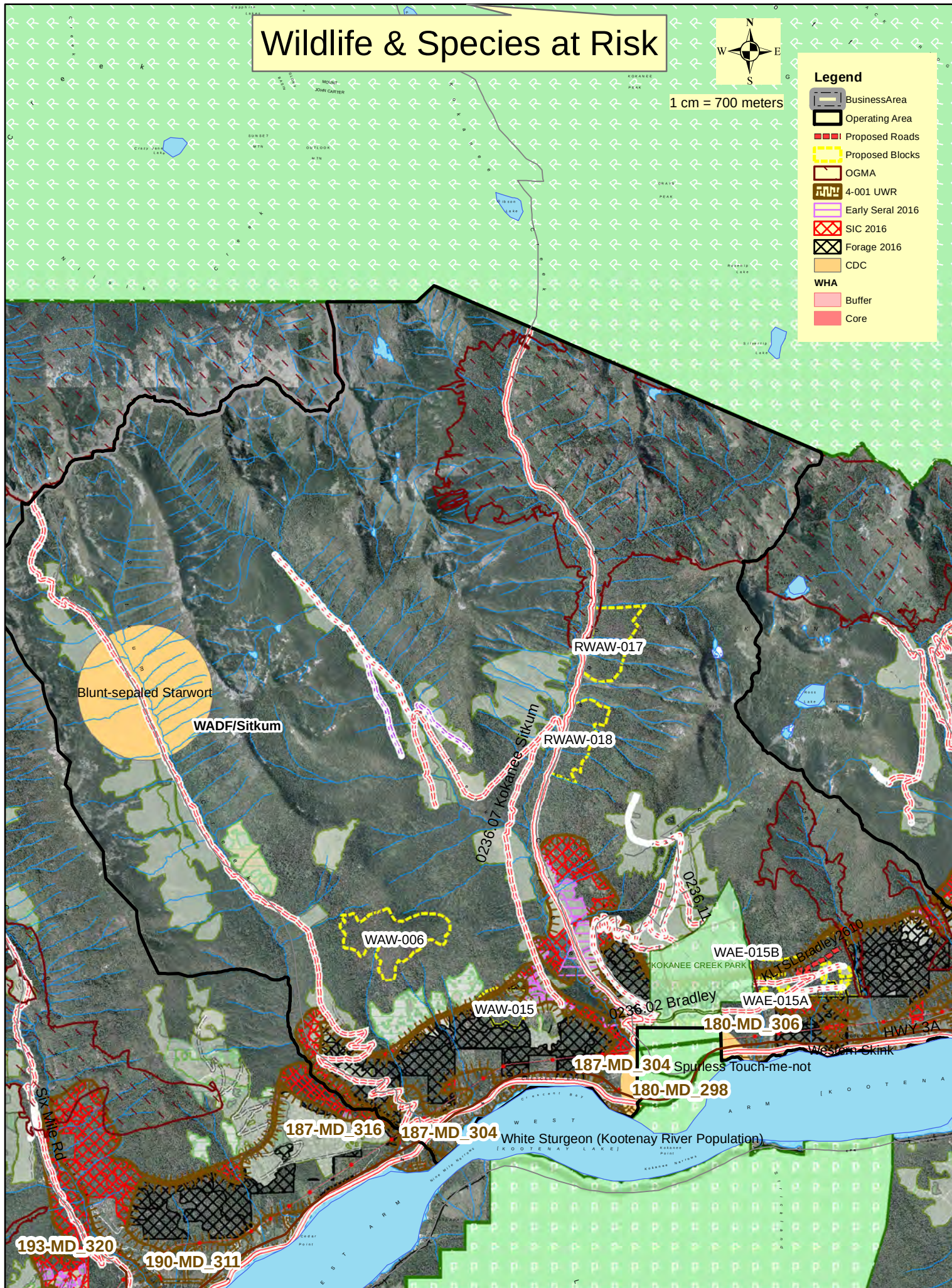
# Wildlife & Species at Risk



1 cm = 700 meters

## Legend

- BusinessArea
- Operating Area
- Proposed Roads
- Proposed Blocks
- OGMA
- 4-001 UWR
- Early Seral 2016
- SIC 2016
- Forage 2016
- CDC
- WHA**
  - Buffer
  - Core



### 5.3.3 Fish Habitat in Fisheries Sensitive Watersheds

**Legal References:** FPPR Sec. 8.1 and GAR Sec. 14(1) and Sec. 14(2)

**Applies to:** Rocky Mountain FDU

There are no fisheries sensitive watersheds established within the Kootenay lake TSA

## 5.4. Water for Consumptive Use

The WADF operating area is dominated by the Sitkum Creek Community Watershed and the Kokanee Creek Domestic Watershed. It is further characterized by a number of small, long narrow, community and domestic watersheds and face units along the southern part of the operating area.

### 5.4.1 Water in Community Watersheds

**Legal References:** FPPR Sec. 8.2, Sec. 59 to Sec. 63, Sec. 84

There are 4 community watersheds in the WADF operating area:

- Sitkum Creek
- Bourke Creek
- Bradley Creek
- Clayton Creek

Planning shape WAW-006 partially falls within the Bourke and Sitkum watersheds. ECAs have not been updated for Sitkum, nor completed for Bourke. Sitkum has seen a large fire since the last ECA update and hydrological assessment in 2008. Further updates/assessments will be determined pending the outcome of a ground reconnaissance. Note the Bradley Creek ECA has been embedded within the Kokanee-Longbeach ECA analysis.

### 5.4.2 Consumptive Use Streams

**Legal References:** KBHLPO Objective 6 and FPPR Sec. 59 & Sec. 60(1)

**Relates to:** FSP Sec. [5.3.1.5](#)

The following tables outline the interactions of proposed development with the various watersheds and sub-basins. ECAs have been updated, (tabular), for Kokanee and the Longbeach area.

A Hydrological Assessment is scheduled, tentatively, for June, 017 in the Longbeach/Bradley face area.

| <b>PLANNING #</b>       | <b>LOCATION</b>      | <b>Watershed Type</b> | <b>Watershed Name</b>                                              | <b>ECA Analysis</b>                 | <b>Hydrological Assessment</b>           |
|-------------------------|----------------------|-----------------------|--------------------------------------------------------------------|-------------------------------------|------------------------------------------|
| WAW-006                 | Sitkum-Kokanee ridge | CW<br>DW              | Sitkum CW<br>Bourke CW<br>Morley Creek DW<br>Kokanee: Kokanee Res. | 21%<br>None<br>None<br>5.2% / 19.2% | Streamworks 2008<br>None<br>None<br>None |
| WAW-015                 | West Kokanee         | DW: FU                | Kokanee West Face                                                  | None                                | None                                     |
| WAW-017                 | Kokanee- Sunset      | DW                    | Kokanee: Kokanee Main                                              | 5.2% / 1.2 %                        | None                                     |
| WAW-018                 | Kokanee- Sunset      | DW                    | Kokanee: Kokanee Main                                              | 5.2% / 1.2 %                        | None                                     |
| KL0236.07Kokanee_Sitkum | West Kokanee         | DW: FU                | Longbeach: Kitto Donegal                                           | 17.1%<br>14.8%<br>1.6%              | None                                     |
| WAE-15A                 | Bradley              | DW: FU                | Longbeach: Kitto Donegal                                           | 17.1%<br>14.8%<br>1.6%              | None                                     |
| WAE-15B                 | Bradley              | DW: FU                | Longbeach: Kitto Donegal                                           | 17.1%<br>14.8%<br>1.6%              | None                                     |
| KL0236Bradley2610       | Bradley              | DW: FU                | Longbeach: Kitto Donegal                                           | 17.1%<br>14.8%<br>1.6%              | None                                     |
| KL0236BradleyFSR        | Bradley              | DW: FU                | Longbeach: Kitto Donegal                                           | 17.1%<br>14.8%<br>1.6%              | None                                     |

| <b>Kokanee - Long Beach ECA - May 30, 2017</b> |          |                     |                         |                      |                       |                    |                    |                        |
|------------------------------------------------|----------|---------------------|-------------------------|----------------------|-----------------------|--------------------|--------------------|------------------------|
|                                                |          | <b>Bagley Creek</b> | <b>Bradley Creek CW</b> | <b>Donegal Creek</b> | <b>Hamilton Creek</b> | <b>Heals Creek</b> | <b>Kitto Creek</b> | <b>Watershed Total</b> |
| Sub-basin Area                                 | ha       | 91.7                | 269.3                   | 99.0                 | 132.3                 | 34.5               | 107.7              | 734.5                  |
| Existing Openings and Roads                    | ECA (ha) | 5.6                 | 0.2                     | 1.6                  | 92.7                  | 9.3                | 15.9               | 125.3                  |
|                                                | %        | 0.0                 | 0.1                     | 1.6                  | 70.1                  | 27.0               | 14.8               | 17.1                   |
| OPC Blocks and Roads                           | ECA (ha) | 0.0                 | 0.0                     | 0.0                  | 0.0                   | 0.0                | 0.0                | 0.0                    |
|                                                | %        | 0.0                 | 0.0                     | 0.0                  | 0.0                   | 0.0                | 0.0                | 0.0                    |
| Existing and OPC Cumulative                    | ECA (ha) | 5.6                 | 0.2                     | 1.6                  | 92.7                  | 9.3                | 15.9               | 125.3                  |
|                                                | %        | 0.0                 | 0.1                     | 1.6                  | 70.1                  | 27.0               | 14.8               | 17.1                   |
| Proposed Blocks and Roads                      | ECA (ha) | 0.0                 | 0.0                     | 2.1                  | 0.0                   | 0.0                | 1.1                | 3.2                    |

|                         |                 |            |            |            |             |             |             |              |
|-------------------------|-----------------|------------|------------|------------|-------------|-------------|-------------|--------------|
|                         | %               | 0.0        | 0.0        | 2.1        | 0.0         | 0.0         | 1.0         | 0.4          |
| <b>ECA Post-Harvest</b> | <b>ECA (ha)</b> | <b>5.6</b> | <b>0.2</b> | <b>3.7</b> | <b>92.7</b> | <b>9.3</b>  | <b>17.0</b> | <b>128.5</b> |
|                         | %               | <b>6.1</b> | <b>0.1</b> | <b>3.7</b> | <b>70.1</b> | <b>27.0</b> | <b>15.8</b> | <b>17.5</b>  |

| Kokanee Creek ECA -May 30, 2017 |                 |              |              |              |              |                 |
|---------------------------------|-----------------|--------------|--------------|--------------|--------------|-----------------|
|                                 |                 | Residual     | West Kokanee | Busk         | Kokanee Main | Watershed Total |
| Sub-basin Area                  | ha              | 787.4        | 2345.5       | 548.6        | 5814.1       | 9495.6          |
| Existing Openings and Roads     | ECA (ha)        | 131.3        | 50.7         | 121.5        | 181.1        | 484.6           |
|                                 | %               | 16.7         | 2.2          | 22.1         | 3.1          | 5.1             |
| Approved Blocks and Roads       | ECA (ha)        | 0.0          | 0.0          | 0.0          | 0.0          | 0.0             |
|                                 | %               | 0.0          | 0.0          | 0.0          | 0.0          | 0.0             |
| Proposed Blocks and Roads       | ECA (ha)        | 44.0         | 79.5         | 2.2          | 0.0          | 125.7           |
|                                 | %               | 5.6          | 3.4          | 0.4          | 0.0          | 1.3             |
| <b>ECA Post-Harvest</b>         | <b>ECA (ha)</b> | <b>175.3</b> | <b>130.1</b> | <b>123.7</b> | <b>181.1</b> | <b>610.3</b>    |
|                                 | %               | <b>22.3</b>  | <b>5.5</b>   | <b>22.5</b>  | <b>3.1</b>   | <b>6.4</b>      |

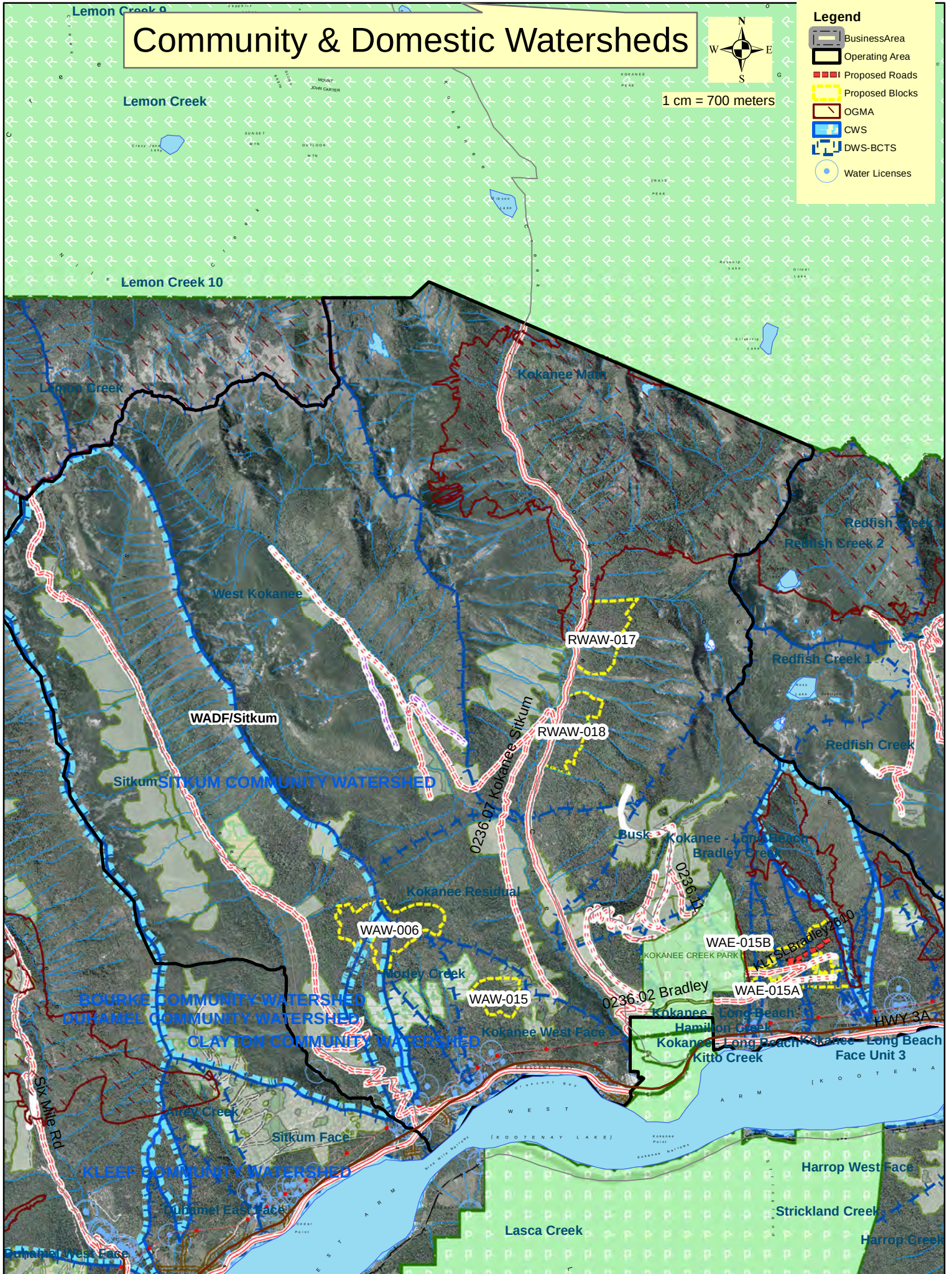
# Community & Domestic Watersheds



1 cm = 700 meters

## Legend

- Business Area
- Operating Area
- Proposed Roads
- Proposed Blocks
- OGMA
- CWS
- DWS-BCTS
- Water Licenses



## 5.5. Visual Quality - Scenic Areas and Visual Quality Objectives

**Legal References:** FPPR Sec. 9.2, KBHLPO Objective 9, GAR Sec. 7(1) and Sec. 7(2)

Visual quality objectives range from retention to partial retention in the WADF area.

| <i>PLANNING #</i>       | <i>LOCATION</i>      | <i>Visual Quality</i> |
|-------------------------|----------------------|-----------------------|
| WAW-006                 | Sitkum-Kokanee ridge | PR<br>R               |
| WAW-015                 | West Kokanee         | R                     |
| WAW-017                 | Kokanee- Sunset      | PR                    |
| WAW-018                 | Kokanee- Sunset      | PR                    |
| KL0236.07Kokanee_Sitkum | West Kokanee         | R                     |
| WAE-15A                 | Bradley              | R                     |
| WAE-15B                 | Bradley              | R                     |
| KL0236Bradley2610       | Bradley              | R                     |
| KL0236BradleyFSR        | Bradley              | R                     |

## 5.6. Cultural Heritage Resources

**Legal References:** FPPR Sec. 10

There are no CCVF's in the WADF but there are a number of AOA polygons. Proposed blocks adjacent or within AOA polygons are shown in the following table.

| <i>PLANNING #</i>       | <i>LOCATION</i>      | <i>AOA</i>       | <i>CCVF</i> |
|-------------------------|----------------------|------------------|-------------|
| WAW-006                 | Sitkum-Kokanee ridge | NA               | NA          |
| WAW-015                 | West Kokanee         | NA               | NA          |
| WAW-017                 | Kokanee- Sunset      | K10-62- adjacent | NA          |
| WAW-018                 | Kokanee- Sunset      | K10-62- adjacent | NA          |
| KL0236.07Kokanee_Sitkum | West Kokanee         | NA               | NA          |
| WAE-15A                 | Bradley              | NA               | NA          |
| WAE-15B                 | Bradley              | NA               | NA          |
| KL0236Bradley2610       | Bradley              | NA               | NA          |
| KL0236BradleyFSR        | Bradley              | NA               | NA          |

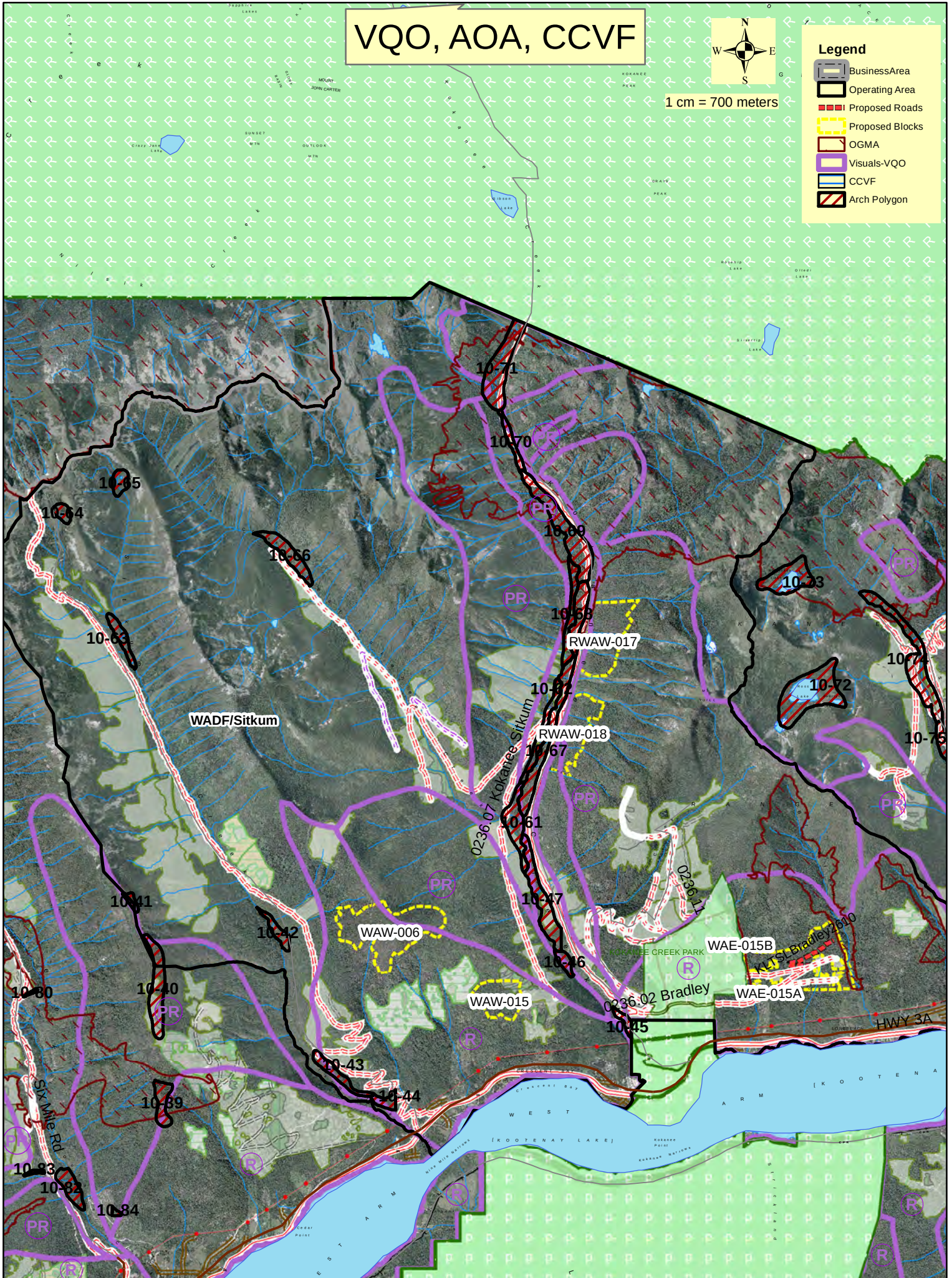
# VQO, AOA, CCVF



1 cm = 700 meters

## Legend

- BusinessArea
- Operating Area
- Proposed Roads
- Proposed Blocks
- OGMA
- Visuals-VQO
- CCVF
- Arch Polygon



## 5.7. Recreation Resources

**Legal References:** FRPA Sec. 56, Sec. 180 and Sec. 181, FPPR Sec. 70(1), FRR Sec. 16

The WADF operating area sees a high amount of recreation use. Mountain biking, hiking, berry picking and back country skiing are popular activities in this area. The Kokanee Creek FSR is the access route to Kokanee Glacier and sees a high amount of public use and traffic. Kokanee Ziplines is located about 2 km up the FSR.

The following tables outline those recreation sites or trails tracked by FLNRO and if they have any legal objectives. The second table shows proposed blocks that may impact recreation features.

| Recreation Sites, Trails, & Reserves |                    |                          |                                                                                                                                                                                                                                                                                                                    |        |          |
|--------------------------------------|--------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|
| Rec#                                 | Type               | Name                     | Legal or other Objectives                                                                                                                                                                                                                                                                                          | Source | Comments |
| REC 203576                           | Trail              | Sitkum Beyond Trail      | NO legal objectives per FTA                                                                                                                                                                                                                                                                                        | FTA    |          |
| REC 6949                             | Trail              | Kokanee Creek            | NO legal objectives per FTA                                                                                                                                                                                                                                                                                        | FTA    |          |
| REC 22231                            | Trail              | West Kokanee Trail       | NO legal objectives per FTA                                                                                                                                                                                                                                                                                        | FTA    |          |
| REC 203933                           | Recreation reserve | Kokanee Recreation Area  | NO legal objectives per FTA                                                                                                                                                                                                                                                                                        | FTA    |          |
| REC 5223                             | Rec Site           | Kokanee Creek Old Growth | 98/03/31 The objective is to manage the Old Growth recreation trail for a forested, semi-primitive non motorized recreation experience. The trail will be maintained and adjacent vegetation conserved. Opportunities for hiking and old growth forest interpretation are available, no mechanized uses permitted. | FTA    |          |

| PLANNING #              | LOCATION             | Recreation                             |
|-------------------------|----------------------|----------------------------------------|
| WAW-006                 | Sitkum-Kokanee ridge | REC 203576<br>REC 6949                 |
| WAW-015                 | West Kokanee         | NA                                     |
| WAW-017                 | Kokanee- Sunset      | NA                                     |
| WAW-018                 | Kokanee- Sunset      | NA                                     |
| KL0236.07Kokanee_Sitkum | West Kokanee         | Adjacent to Kokanee Park & Bike Trails |
| WAE-15A                 | Bradley              | Adjacent to Kokanee Park & Bike Trails |

|                   |         |                                        |
|-------------------|---------|----------------------------------------|
| WAE-15B           | Bradley | Adjacent to Kokanee Park & Bike Trails |
| KL0236Bradley2610 | Bradley | Adjacent to Kokanee Park & Bike Trails |
| KL0236BradleyFSR  | Bradley | Adjacent to Kokanee Park & Bike Trails |

WAW-006 will require a an authorization under section 16 of the Forest Recreation Regulation prior to issuing a TSL. This is done through the referral/consultation process tentatively scheduled to occur in late fall of 2017 or early winter 2018.

## 5.8. Forest Roads

### 5.8.1 Road Maintenance

**Legal References:** FPPR Sec. 79

The results and strategies specified in this section are not related to an objective established by government, but rather are 'stewardship' related, intended to specify the standard of road maintenance required of industrial road users holding a licence or permit entered into by the TSM and operating within the FDUs of this FSP.

### 5.8.2 Revegetation following Road Construction and Deactivation

**Legal References:** FPPR Sec. 40

**Relates to:** FSP Sec. [6.1](#)

As with FSP Section 5.8.1, the results and strategies specified in this section are not related to an objective established by government, but rather are 'stewardship' related, intended to specify the standard for revegetation measures required following road construction and/or deactivation by a holder of a licence or permit entered into by the TSM and operating within the FDUs of this FSP.

## 6. MEASURES IN RELATION TO INVASIVE PLANTS AND NATURAL RANGE BARRIERS

### 6.1. Measures to Prevent the Introduction or Spread of Invasive Plants

**Legal References:** FRPA Sec. 47, FPPR Sec. 17

**Relates to:** FSP Sec. [5.8.2](#)

A review of the FLNRO Invasive Alien Plant Program (IAPP) did not identify any known locations of invasive plant infestations.

## 6.2. Measures to Mitigate the Loss of Natural Range Barriers

**Legal References:** FRPA Sec. 48 and Sec. 51, FPPR Sec. 18

There are no range tenures within the WADF operating area