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**RE: FL A30171 CP 404 Laird Creek - Landscape Unit K10/ICHdw,  
Updated Biodiversity Analysis- Mature and Old**

This Biodiversity Analysis has been completed for Cooper Creek Cedar Ltd. to ensure that the minimum Mature + Old forest cover requirement is being met for proposed FL A30171 CP 404, including associated roads. CP 404 originally consisted of two planned blocks, Blocks 3 and 4, but was recently revised to include two additional blocks, Blocks 6 and 15. This updated biodiversity analysis for CP 404 replaces the original analysis dated August 17, 2020. The legal requirement for Mature + Old forest cover for biodiversity within a Connectivity Corridor, which applies to FL A30171 CP 404 Laird Creek, was established on October 26, 2002, under Objectives 2 and 5 of the Kootenay Boundary Higher Level Plan Order (KBHLPO). These requirements were applied in this analysis.

As per Cooper Creek Cedar's approved Forest Stewardship Plan, the requirement for Old Forest is considered to be met through spatially, non-legal Old Growth Management Areas (OGMAs). In May 2019, the District identified landscape unit and BEC combinations where there are concerns about old growth (they currently do not have enough OGMA area identified to meet the old targets and are also showing an aspatial deficit of old). K10/ICHdw was among the LU/BEC units of concern. CP 404 does not include any planned harvest within OGMAs, nor does it involve the harvest of any Age Class 8 or 9 stands, within the ICHdw, or otherwise. Therefore, an analysis of Old is not included in this analysis summary.

Roughly half of the proposed CP 404 development is located within the ICHmw2 subzone of Landscape Unit K10 (West Arm). The LU/BEC pairing has an "Intermediate" biodiversity emphasis option (BEO). The LU K10/ICHmw2 does not have a Mature+Old biodiversity requirement, and therefore is not included in this analysis summary.

The remaining half of the proposed development is located within the ICHdw subzone of Landscape Unit K10 (West Arm). The LU/BEC pairing has an "Intermediate" biodiversity emphasis option. K10/ICHdw has a Mature + Old biodiversity requirement, which is included in this analysis.

Approximately 60% of the area within K10/ICHdw is located within a connectivity corridor. Most of the planned development for FL A30171 CP 404 that is within the ICHdw is located within this connectivity corridor.

The forest cover data used in this analysis is based on the most current VRI downloaded from the BC Data Warehouse on August 12, 2020. The VRI Reference Year is 2005, with ages projected to 2020. For existing approved Cutting Permits in the LU/BEC, we used the FTA data layer as of March 2020, corrected for duplicate or retired FTA polygons.

Objective 2 of the KBHLPO considers the ICHdw to be Natural Disturbance Type 3 (NDT3). When combined with its Intermediate biodiversity emphasis rating, LU K10/ICHdw has the following Mature + Old Forest Cover Requirement:

**Minimum 23% of forest area within K10/ICHdw >100 years**

Because the planned development falls within a connectivity corridor, it must also meet the forest cover requirements for KBHLPO Objective 5 (Connectivity Corridors). Therefore, an analysis of the forest cover contributing to connectivity within the LU/BEC was also completed. Essentially, the forest cover requirement for connectivity corridors is the same as the target forest cover identified in Objective 2 above, except that the target area must be met within the connectivity corridor. Protected areas inside and outside the connectivity corridor must be used first to contribute to meeting the connectivity target.

Within connectivity corridors, forests situated on slopes greater than 80 percent do not contribute to the mature and old forest cover requirements. As such, forests within the connectivity corridor with slopes > 80% were identified in this analysis as non-contributing (i.e. they were netted out of the area deemed to meet the forest cover requirements).

Table 1. provides a summary of the netdowns used to derive the Crown forest land base area of Landscape Unit K10/ICHdw, and identifies the target number of hectares required to meet the Mature + Old requirement.

**Table 1. Landscape Unit K10/ICHdw  
Total Crown Forest Land Base (CFLB) and Mature + Old Target**

Gross Area	12,128 ha
Private Land/Woodlots	4,796 ha
WTP	168 ha
Right-of-Way (RoW)	577 ha
Non-Productive (NP)	89 ha
Total CFLB	6,498 ha
Mature + Old Target (23% of CFLB > 100 years)	1,495 ha

To determine whether the targets for Objectives 2 and 5 were met, we subdivided the area into four categories: OGMA, Park, In Connectivity Corridor, and No Constraints (outside Connectivity Corridor). As noted, within the Connectivity Corridor, we excluded all slopes >80%.

Table 2. provides a summary of the existing condition of LU K10/ICHdw by age class. The shaded rows (area within Age Class 6+ (>100 yrs old)) represents the area that meets the Mature + Old Forest Requirements for LU K10/ICHdw. Column 5 represents the Total Mature and Old forest cover within the LU/BEC, or the area that meets KBHLPO Objective 2 (Biodiversity). Column 6 represents the area that meets KBHLPO Objective 5 (Connectivity).

In its existing condition, LU K10/ICHdw has a 3,036 hectare surplus of Mature + Old (Age Class 6+) forest cover within the LU/BEC as a whole, and a 1861 hectare surplus within the connectivity corridor area.

Table 3 summarizes the Mature + Old (Age Class 6+) forest cover within LU K10/ICHdw post-harvest of Cutting Permit 404. It shows that LU K10/ICHdw will have a surplus of 3,003 ha of Mature + Old within the LU/BEC as a whole, and a 1,834 hectare surplus within the connectivity corridor. Therefore, the proposed FL A30171 CP 404 development meets Objective 2 (Biodiversity) and Objective 5 (Connectivity) of the KBHLPO.

**Table 2. Biodiversity Analysis LU K10, ICHdw Mature and Old Analysis Existing Condition (1)**

Age Class/ (Years)	(1) OGMA	(2) Park	(3) In Connectivity (Excludes Slopes >80%)	(4) No Constraints	(5) 1+2+3+4 Total Mature and Old (AC 6+)	(6) 1+2+3 Connectivity Total Mature and Old (AC 6+)
AC 1 (0-20)	19	0	731	133		
AC 2 (21-40)	4	5	224	6		
AC 3 (41-60)	0.2	8	36	46		
AC 4 (61-80)	0	0	24	4		
AC 5 (81-100)	36	0	274	414		
AC 6 (101-120)	263	8	1014	877	2162	1285
AC 7 (121-140)	212	65	765	245	1287	1042
AC 8 (141-160)	276	55	668	50	1049	999
AC 9 (161+)	29	0	1	3	33	30
<b>Total AC 6+</b>	<b>780</b>	<b>128</b>	<b>2448</b>	<b>1175</b>	<b>4531</b>	<b>3,356</b>
<b>Surplus</b>					<b>3036</b>	<b>1861</b>

(1) Includes all active FTA permits within the LU/BEC

**Table 3. Biodiversity Analysis LU K10, ICHdw Mature and Old Analysis Post CP 404 Harvest**

Age Class/ (Years)	(1) OGMA	(2) Park	(3) In Connectivity (Excludes Slopes >80%)	(4) No Constraints	(5) 1+2+3+4 Total Mature and Old (AC 6+)	(6) 1+2+3 Connectivity Total Mature and Old (AC 6+)
AC 1 (0-20)	19	0	758	140		
AC 2 (21-40)	4	5	224	6		
AC 3 (41-60)	0.2	8	36	46		
AC 4 (61-80)	0	0	24	4		
AC 5 (81-100)	36	0	274	414		
AC 6 (101-120)	263	8	987	871	2129	1258
AC 7 (121-140)	212	65	765	245	1287	1042
AC 8 (141-160)	276	55	668	50	1049	999
AC 9 (160+)	29	0	1	3	33	30
<b>Total AC 6+</b>	<b>780</b>	<b>128</b>	<b>2421</b>	<b>1169</b>	<b>4498</b>	<b>3329</b>
<b>Surplus</b>					<b>3003</b>	<b>1834</b>

Attached is a map of the Biodiversity Analysis for Landscape Unit K10/ICHdw (dated December 8, 2020).



Irene Strucel, RPF