



SUNSHINE COAST COMMUNITY FOREST

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Block Development Summary Report

BLOCK EW24
East Wilson

PREPARED BY



Project #21-610
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Description

Block EW24 is an area planned for timber harvesting located within the Sunshine Coast Community Forest (SCCF) tenure in the East Wilson operating area. This area is accessed from Field Rd and the Sechelt Airport Forest Service Road (FSR) 7575-06. The block is located directly adjacent to the FSR and BC Hydro (BCH) transmission lines which are located south of the block. Block EW24 is adjacent to previously harvested blocks EW008A (located southeast of EW24) and EW008B (located northwest of EW24) which were both harvested in 2009 and which are well established young forest. West of the block are the shíshálh Nation Accommodation Lands located outside the Community Forest tenure area, which is currently mature forest. A band of mature forest is also located directly north and east of the harvest area between the plantations forest of Block EW008B, Block EW008B, and Block A19220 C1. This forested area is continuous up the riparian leave area along Husdon Creek.

Ecology

The forests within and around Block EW24 are composed of mature Douglas-fir stands with a minor component of Western redcedar. The stands primarily composed of dominant trees between 81-100 years old (age class 5) with a minor component of older Veteran Overstory Trees (VOTs) and a sparse understory. Using the Biogeoclimatic Ecosystem Classification (BEC) system the site can be described as located in the *Coastal Western Hemlock* (CWH) zone and the *Very Dry Maritime* (xm) subzone. This site is typical (zonal) of the CWH zone and xm subzone and is classified to the site series level as the *01 Western Hemlock - Douglas Fir - Oregon Beaked Moss* vegetation community. The soils in the area are a slightly drier than average soil moisture regime and a have medium or typical soil nutrient regime. The soils are well drained with a thin mor humus layer, a prominent Ae horizon, and a high coarse fragment content. The productive soils are between 40cm to more than 90cm deep overlying a restricting layer of dense parent materials. The site is level to gently sloping with few short, broken slope features and rock outcrops.

Planning and Development

All forest activities of the SCCF are conducted in accordance with the Management Plan and Forest Stewardship Plan. These planning documents have been reviewed and approved by the shíshálh Nation and the Ministry of Forests, Lands, Natural Resource Operations and Rural Development.

Block EW24 was first identified and shared publicly by the SCCF on April 15, 2021. The block was originally proposed to have a harvest area of approximately 12.6ha. Through the early development of this block, consideration given to ecological values has reduced the harvest planning area to 10.7ha. Further field work to define the harvest area and road locations began in May 2021. The block was refined with consideration for all identified forest values, including Old Growth Recruitment Areas.

Harvest Plan

The proposed harvest methods are ground based mechanized logging using a feller buncher or hoe forwarder. Rubber tired skidder forwarders may be used during dry conditions and on slopes less than

40% (see Soil Assessments Comments). During machine felling, where tree diameters exceed the manufacturer specification, hand felling must be used. Hoe-chucking and skidding are recommended to forward timber to the roadsides and identified landings. Machine use will be minimized on dry, rocky knolls.

Silviculture System

Block EW24 will be harvested using a Retention (RET) system. A retention system is defined by a distribution of single tree retention or group retention across the harvest area with at least 50% of the opening being covered by forest influence from the boundary edge as described in the Silvicultural System Handbook for British Columbia published in 2003. A justification can be made to include group retention as part of the forest influence area, as these groups are primarily composed of 5-7 co-dominant/dominant trees which are sufficient in providing forest influence. The edge effect from the boundary provides a forest influence of 39%. The group retention provides a forest influence of 21%. The combination of these forest influence types results in a final forest influence of 56% for block EW24.

Leave Tree Characteristics Including Form, Health and Vigour

Single tree retention and group retention are distributed across the entire harvest area. Single tree retention consists of old growth Douglas-fir, wildlife Western redcedar, and healthy Western White Pine. The group retention trees are primarily co-dominant and dominant trees. The groups range in size from 5-7 trees. Tree species of the groups are primarily Douglas-fir, Western redcedar, and a minor component of Western White Pine. Additionally, some group retention patches have been structured around old growth Douglas-fir trees. The single tree and dispersed retention will contribute to stand level structural diversity. If a tree marked for retention within the block must be felled for safety reasons, then a replacement tree of similar size and species must be left in the same area.

Additional unmarked advanced regeneration, specifically small 10-30cm diameter at breast height (DBH) Western red cedar, will be retained (preferably in groups) where operationally feasible.

Wildlife Tree Retention Area (WTRA) and Retention Areas

In total, 1.6ha of retention areas has been established immediately adjacent to the proposed harvest opening. This includes retention patch A and patch B which combine to 0.3ha of retention. Additionally, a Wildlife Tree Retention Area (WTRA) of 1.3ha has been established for block EW24. The WTRA assigned to Block EW24 is 10.4 % of the Total Area Under Prescription (TAUP) and this exceeds the 7% wildlife tree retention required for the Chapman Landscape Unit (CWHxm BEC variant). The retention areas were selected for long term retention of representative forest conditions in terms of species composition and ecological classification and will ensure the biodiversity ecological diversity of the forest is maintained long term.

Special Management Zone (SMZ)

A 20-meter-wide special management (SMZ) zone has been prescribed adjacent to the Sechelt Airport FSR. Understory vegetation including conifers up to 12cm DBH, will be retained. The SMZ will provide a visual screen for animals. Overstory and merchantable trees are required to be removed within the SMZ due to the proximity of the BC Hydro lines.

Reforestation Plan

Block EW24 will be reforested with Douglas-fir seedlings no later than 3 years post-harvest. The SCCF will continue to monitor the health of the regenerating stand and intervene as required with brushing or other silviculture treatments to ensure the block contains an adequate stock of vigorous trees in order to meet the Free Growing standard within 20 years of harvest.

A de-stumping treatment is prescribed for Root Rot Management Areas within the harvest area. After the harvest of the block and before planting, all Douglas-fir stumps will be removed from the ground in these management areas using an excavator. The stumps will be dispersed on top of the soil with their roots exposed to mitigate future concentrations of root rot. During planting, seedlings will be planted >1.0m away from the stumps.

Assessments

Terrain Assessment

A terrain stability hazard assessment was not conducted for block EW24. This is due to the very low likelihood of terrain instability or sedimentation risk based on the gentle topography of block EW24.

Species at Risk Assessment

There are no known occurrences of Species at Risk (SAR) within or adjacent to proposed EW24. Prior to developing the block, the recorded occurrences of SAR within the Conservation Data Center were identified and considered. Throughout the development process the forest professional conducting field work remained vigilant in order to attempt to identify any previously undocumented occurrences. No SAR were observed during field work. If SAR are identified during forest harvesting operations the SCCF will cease operations will immediately and will work to ensure the conservation through established best practices as defined in the Identified Wildlife Management Strategy for each species.

Invasives Species Assessment

The presence of invasive species within or near the block were identified and recorded by qualified forest professionals during block development. Identifying and monitoring the presence and spread of invasive plant species is in accordance with the commitments made under the SCCF FSP. All observed occurrences of invasive plant species are recorded and reported through the Invasive Alien Plan Program (IAPP) Application. Occurrences of English Holly (HO) were discovered inside the harvest area of block EW24 and were reported in the IAPP Application. As well, the occurrence of Scotch broom (SB), Himalayan blackberry (HI), Canada thistle (CT), Giant knotweed (GK), Giant hogweed (GH), Bohemian knotweed (BO), and Japanese knotweed (JK) have been recorded in the Invasive Alien Plant Program – Map Display on the access route to block EW24 along the Sechelt Airport FSR and Hwy 101. During primary forest activities, the Best Management practices outlined in the FSP will be followed, including:

- Heavy machinery will be washed prior to arriving on site.
- Material from infested areas is not to be used for road construction or maintenance.
- Revegetate all disturbed areas through grass seeding

Stream Assessment

There are no streams within or adjacent to block EW24.

Community Watersheds Assessment

Block EW24 is not located within a community watershed.

Visual Assessment

A Visual Impact Assessment titled 'Visual Impact Assessment Blocks EW24 – East Wilson Operating Area' has been completed by Chartwell Resource Group Ltd. The block meets the designated Visual Quality Objective (VQO) of Partial Retention. The visual condition of *Partial Retention* is defined as an altered forest landscape in which the alteration when viewed from significant public viewpoint, is easy to see, small to medium in scale and natural and not rectilinear or geometric in shape in its appearance.

shíshálh Nation Rights and Title and Cultural Heritage Resources

Block EW24 was referred to the shíshálh Nation Rights and Title Department for comment and review, and SCCF maintained communication with the Shíshálh Nation throughout the block development. A preliminary archaeological assessment for block EW24 was conducted by In Situ Consulting Inc. and the findings were summarized in a report titled 'Preliminary Archaeological Field Reconnaissance of Sunshine Coast Community Forest Cutblock EW-24 (FO06004.33)', dated Nov.1, 2021. This assessment determined that no further archaeological work is recommended prior to the development of EW24.

Windthrow Management

The boundary of block EW24 has been engineered with consideration given to the hazard of windthrow affecting resource values both timbered and non-timbered. A windthrow hazard assessment was completed by qualified forest professionals for block EW24 based on the primary damaging wind direction from the southeast. The windthrow hazard assessment takes the following factors into account: local windthrow patterns, topography, soil characteristics, and stand features. It was determined that the likelihood of windthrow is low to moderate for all boundary segments and the trees in the dispersed retention. Tree crown modification (TCM) for all dominant and co-dominant trees along the boundary segment between FC12-13 is recommended to mitigate the risk of windthrow damage to the adjacent shíshálh Nation Accommodation Lands. The TCM will be a spiral pruning treatment for all dominant and co-dominant Douglas-fir and Western redcedar. The spiral pruning should remove 50-70% of the live crown for each tree. The TCM treatment must be completed within 30 days of falling the timber within one tree length of the designated treatment area.

Ecosystem Assessment

An ecosystem assessment was conducted by Madrone Environmental Services Ltd. for block EW24. The primary objective of the assessment was to determine the presence of old forests, evaluate current ecological communities, and identify any red- and blue- listed plant communities. After conducting a desktop review and field data collection, Madrone Environmental Services Ltd. provided a report titled 'ENVIRONMENTAL BLOCK ASSESSMENT: EW24' dated December 7, 2021.

The report recommended removing four areas within the initial harvest area in order to preserve mature/old forest characteristics, add structural diversity to the next stand after harvest, and preserve habitat that is conducive to ungulate species. These recommendations were followed, and the areas were preserved to reduce the harvest area of block EW24 from 12.6ha to 10.7ha.

Recreation

Block EW24 is not situated within any active or pending recreational polygon. Due to the block's proximity to Sechelt and residential areas, the road network in the vicinity of the block gets used for walking, biking, equestrian use, and motorized recreational use. Roads have been engineered to minimize impacts to the public during time of harvest. Signs will be posted to notify the public during active operations.

Biodiversity

The SCCF has created an Old Growth Recruitment Area adjacent to block EW24 in an effort to help reach an old growth age class (>250 years) target for the Wilson Creek tenure area. The addition of the Old Growth Recruitment Area moves us towards the targeted 10% protection for forest that is designated for future old growth age classes in the Wilson Creek tenure area. The Old Growth Recruitment Area for block EW24 provides connectivity to the riparian area of Husdon Creek. The connectivity between these ecosystem acts as unique habitat and travel corridors for wildlife in the area.