

INTRODUCTION

MANAGEMENT APPROACH:

Biodiversity is managed at the landscape level through implementation of Old Growth Management Areas (OGMA's), Parks, and other types of protected areas; however, lack of reliable site series information makes it difficult to assess site series representation across these large protected areas. Therefore, to ensure At Risk Ecological Communities (AREC) are adequately protected, a stand level approach is required to manage sites when they are encountered in the course of forest development in order to meet the Sustainable Forestry Initiative Objective 4 & Indicator 4.2.2- until a broader government strategy is implemented.

SFI OBJECTIVE 4- CONSERVATION OF BIOLOGICAL DIVERSITY

Objective 4: *To manage the quality and distribution of wildlife habitats and contribute to the conservation of biological diversity by developing and implementing stand and landscape level measures that promote a diversity of types of habitat and successional stages and the conservation of forest plants and animals, including aquatic species as well as threatened and endangered species, Forests with Exceptional Conservation Value, old-growth forests and ecologically important sites*

SFI Indicator 4.2.2. *Locate and protect known sites of flora and fauna associated with viable occurrence of critically imperiled and imperiled species and communities also known as Forests with Exceptional Conservation Value. Plans for protection may be developed independently or collaboratively and may include Program Participant management, cooperation with other stakeholders, or use of easements, conservation land sales, exchanges, or other conservation strategies.*

APPLICATION OF THIS SOP:

THIS SOP APPLIES TO ALL OPERATING AREAS LOCATED WITHIN THE STRAIT OF GEORGIA (TSG) BUSINESS AREA, WITH THE EXCEPTION OF APPLICABLE AREAS UNDER THE GREAT BEAR RAINFOREST ORDER, THE CLAYOQUOT SOUND LAND USE PLAN ORDER AND ANY AREAS THAT MAY BE EXCLUDED FROM SFI CERTIFICATION.

BACKGROUND

CONSERVATION STATUS RANKING

Ecological communities in BC are ranked at an international or global level (G value) by international conservation authorities and also at a subnational or provincial level using a Conservation Status Ranking (S value) by the Conservation Data Centre (CDC) that makes an assessment on the level of risk of becoming extinct.

The CDC further assigns each ecological community based on their conservation status rank to a BC List of Red & Blue listed communities. Although, the Red Listed and Blue Listed communities are the classifications most familiar with forest practitioners, BCTS Strait of Georgia is committed through the current Sustainable Forestry Initiative (SFI) Sustainable Forest Management Plan (SFMP) to manage for threatened and endangered species and Forests with Exceptional Conservation Value which are defined as critically imperiled (G1/S1) and imperiled (G2/S2) species.

The management focus of this SOP is on G1/G2 and S1/S2 communities where:

G1 or S1= Critically imperiled. This defined as, “at a very high risk of extinction to extreme rarity (often 5 or fewer populations).

G2 or S2= Imperiled. This is defined as, “at high risk of extinction due to very restricted range, few populations (often 20 or fewer)”.

BCTS TSG retained a professional biologist to create a ‘Focus List’ of plant communities that meet the SFI criteria and could potentially be impacted by harvest or road development activities. Only plant communities on the TSG Plant Communities Focus List will be managed for under this SOP. The Focus List will target an annual update prior to the start of field layout season. Updates to the Focus List will be no longer than two years apart.

DEFINING ECOLOGICAL COMMUNITIES

It is important to clarify the linkage between plant/ecological associations and site series. Site series classifications based on the “Red Book” (Land Management Handbook #28), most commonly used in the forest industry, describe the potential of the site and is static (i.e. not changing) over time. Alternatively, plant associations describe the collection or assemblage of plants on a particular site at a specific point in time. Therefore, if a plant association exists in one site series within a subzone, it may also exist in a drier or wetter

site series when in a different (drier or wetter) subzone. For example, the site series CWHvh1 05, CWHvh2 05 and CWHwh1 03 all have the potential to create the ecological community described as Western Redcedar – Sitka Spruce/Sword Fern.

The CDC is currently working to provide Community Summaries for its associated plant communities. However, since Community Summaries are not yet available for all the TSG Plant Communities Focus List, ecological classification will be based primarily on the “Red Book” site series and the CDC Community Summaries where available as a back-up.

STAND LEVEL MANAGEMENT PROCEDURE

PRELIMINARY CHECK

In order to adequately manage AREC at the stand level, staff and contractors are expected to have an adequate understanding of:

1. Biogeoclimatic classification LMH#28 A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region aka The Red Book
<https://www.for.gov.bc.ca/hfd/pubs/docs/Lmh/Lmh28.htm>
2. BCTS TSG Annual Species at Risk Training including the TSG Plant Communities Focus List

PRIOR TO COMMENCING FIELD WORK, THE MOST CURRENT TSG PLANT COMMUNITIES FOCUS LIST (INCLUDED IN THE HANDOVER CHECKLIST, EMS PLANT COMMUNITIES FIELD CARD, AND THE ANNUAL SPECIES AT RISK TRAINING PACKAGE) MUST BE CHECKED AGAINST THE TIMBER DEVELOPMENT AREA OF INTEREST.

In addition, the following information sources should be checked:

- **Known occurrences** of G1/G2 or S1/S2 ecological communities that have been identified on the Focus List via the Conservation Data Centre (recommended for individual plant community locations)
<https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/explore-cdc-data/species-and-ecosystems-explorer>
- **Known occurrences** of G1/G2 or S1/S2 ecological communities that have been identified on the Focus List via iMap layers (recommended for areas of interest)



BCTS
BC Timber Sales

At Risk Ecological Communities Standard Operating Procedure Strait of Georgia Business Area

<https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/explore-cdc-data/known-locations-of-species-and-ecosystems-at-risk/cdc-imap-theme>

- **Potential for occurrences** using available BEC layers in iMap or Arcmap
- Any existing rare plant community (sometimes known as sensitive ecosystem) inventory information

IF AN AT RISK ECOLOGICAL COMMUNITY (AREC) IS LOCATED IN THE FIELD

If an AREC from the Focus List is identified in the field, collect the following data and contact the applicable BCTS Practices Forester as soon as possible:

1. An accurate size and location of the AREC, preferably GPS points.
2. The BEC site series classification
3. List of plants and percentage coverage
4. Photographs
5. Soils information (texture, coarse fragment content)
6. Complete a SAR field observation form: G:\BCTS\TSG Records Management System\10000 FS General-TSG Procedures\02-Procedures\1-Planning\Final\SAR Field Observation.pdf

SUFFICIENTLY ESTABLISHED CRITERIA

Once the site series is confirmed, the next step is to determine whether or not the polygon is **Sufficiently Established** using the following criteria (Refer to **Appendix 1- Decision Matrix**).

Minimum Size Criteria

An additional factor to consider is whether or not the potential AREC polygon is large enough to manage. For the purposes of this SOP, the required minimum size of an AREC that is a single site series is 0.25ha. Where the community exists as the dominant component of a complex (two or more site series that cannot be separated due to the spatial complexity), the minimum size of the complex is 1 ha.



BCTS
BC Timber Sales

At Risk Ecological Communities Standard Operating Procedure Strait of Georgia Business Area

Age criteria

- If the occurrence is less than 80 years old there is no further action.
- If the occurrence is greater than 140 years old (age class 8-9) and meets the minimum size criteria it is considered sufficiently established.
- If the occurrence is less than 140 years old greater than 80 years old (age class 5-7) and meets the minimum size criteria, apply the TSG Recruitment Strategy.

The TSG Recruitment Strategy

Assess whether or not the site is a good recruitment site depending on the presence and quality of the following factors:

- The presence of a Veteran Overstory Tree layer
- Crown closure 10-30%.
- A consistent/ well developed understory plant community layer where the total area is >50% represented by shrubs and herbs and the plant species listed in the vegetation table for the site series (The Red Book)
- *Coarse Woody Debris* (CWD) is an obvious and visible feature
- A natural disturbance or selective harvesting history
- Proximity to other landscape level values (WHA, OGMAs, UWRs)

The Site Plan Forester shall consider all of the above factors as guidance and prepare a written rationale to determine the suitability for recruitment. It must be emphasized that these factors are for guidance only and the Site Plan Forester is encouraged to review the Guidelines to Support Implementation of the Great Bear Rainforest Order with Respect to Old Forest and Red –and Blue- Listed Plant Communities for more detail on how to consider the application of these factors.

The rationale titled: “AREC Recruitment Strategy Rationale” will be submitted to the applicable field team Practices Forester who shall incorporate the Rationale into a signed Supplemental Note to be included with the Site Plan final package.

If the site is determined to be a suitable recruitment site and meets the minimum size criteria then it is **SUFFICIENTLY ESTABLISHED**

WHEN FURTHER EXPERTISE IS REQUIRED

This protocol has been developed specifically for the Site Plan Forester to identify ARECs and recommend a management regime. However, there may be limited situations in which an ecologist is required to either conduct a field assessment to confirm the presence of an AREC or to determine whether or not it is Sufficiently Established. Further work by an ecologist/ biologist needs to be approved by the applicable Field Team Practices Forester.

AREC MANAGEMENT OBJECTIVES

The BCTS TSG protocol for managing ARECs at a stand level is consistent with the Provincial Wildlife Tree Retention Management Guidance Document (2006) where the general approach for selection of Wildlife Tree Retention Areas (WTRA) is to anchor WTRAs on the most important ecological features and in stands with high conservation value.

- **Where an AREC is located in non-operable areas within a WTRA - protect 100% of each sufficiently established occurrence.**

Where an AREC is located in operable polygons, Section 9.1 of the Forest Planning & Practices Regulation (FPPR) must be considered:

“the objective set by government for wildlife and biodiversity at the stand level is , without unduly reducing the supply of timber from British Columbia’s forests, to retain wildlife trees”

- **Where an AREC is located in operable polygons, establish a WTRA up to 2 times the area requirement as per the applicable Forest Stewardship Plan** (West Coast, Pacific Maritime or Campbell River) including those area requirements specified in the approved Sproat, Sayward or Renfrew Aggregate Landscape Use Plans, subject to operational and safety constraints.

In situations where the area established for ARECs exceed the WTRA area required in the applicable FSPs, FPPR 66 (2) may be applied where WTRAs may be reduced to a minimum of 3.5% provided the total area covered by wildlife tree retention at the end of a 12 month period is a minimum of 7% of the total area of the cutblocks. There are exceptions for FDUs covered by approved Land Use Plans (Sproat, Sayward and the



At Risk Ecological Communities Standard Operating Procedure Strait of Georgia Business Area

Renfrew Aggregate) where the applicable FSP supersedes Section FPPR 66(2) and the total area covered by WTRA that relates to the cutblocks must meet or exceed the percent of the total area of the subzone detailed in the applicable FSP. Consider if applying FPPR s. 66(3) is appropriate and can be applied, utilizing one WTRA for multiple cutblocks while still meeting the intent of the guidance.

Example: If the WTRA in proposed cutblock A was exceeded beyond the target specified in the FSP for the objective of protecting an AREC, proposed cutblocks B, C &/or D may be reduced to a minimum of 3.5 % as long the total area occupied by WTRAs by Timber Sale Licence is at a minimum of 7% or whatever the requirement is from the applicable FSP.

REPORTING CRITERIA

SITE PLAN REQUIREMENTS

All ARECs must be mapped and documented in the WTRA section of the Site Plan including the rationale for the placement of the WTRA. Shape files must be included in the final submission.

LRM AND RESULTS SUBMISSIONS

When reporting to Land Resource Manager (LRM) and RESULTS, if the WTRA is associated with a cutblock, create a "RESERVE" polygon with an Objective Code of "BIO" with a comment of "AREC". If the polygon is not directly associated with a cutblock, create a shell opening in LRM/RESULTS with an Objective Code of "BIO" and a comment of "AREC".



At Risk Ecological Communities Standard Operating Procedure Strait of Georgia Business Area

ABOUT THIS SOP

This AREC management protocol formally replaces the direction provided by Don Hudson, Timber Sales Manager in July 2015:

"We will protect red listed plant communities where practicable and blue listed plant communities where it fits logically in the lay of the land and in a manner that does not unduly affect the supply of timber."

Effective October 26, 2018. This SOP applies to all cutblocks where site plan field work that has not been initiated.

Effective October 21, 2019: BCTS recognizes that updates to the CDC are undertaken periodically that result in changes to the conservation status ranking. We recognize that delays may occur between these CDC status changes and the TSG Plant Communities Focus List updates that occur on an annual or bi-annual basis. Further to this dynamic process there may also be delays between development of cutblocks, auction of Timber Sale Licenses, and harvest of TSL's. The updated focus list then applies to all cutblocks where Site Plan field work has not yet been initiated as per the October 22nd, 2018 direction. Though the applicable plant communities focus list is benchmarked to the version in place at time of Site Plan field work initiation, there may be circumstances where BCTS chooses to incorporate AREC management objectives for updated focus list plant communities after Site Plan field work has been completed. In these cases BCTS will conduct an evaluation to determine if the AREC management objectives can be met outside of the developed cutblock.

A handwritten signature in blue ink, consisting of several loops and a horizontal line at the end.

March 26, 2020

Don Hudson, Timber Sales Manager, Strait of Georgia Business Area

APPENDIX 1
AT RISK ECOLOGICAL COMMUNITY (AREC)
DECISION MATRIX

