



# Species at Risk and 'At Risk' Ecological Communities Standard Operating Procedures

November 30, 2018

## PURPOSE

To define the various steps that are required to occur at different operational stages and identify the individuals who are responsible to undertake these steps to effectively manage and protect Species at Risk (SAR) and At Risk Ecological Communities (AREC).

## SCOPE

This Standard Operating Procedure (SOP) covers all aspects of forestry planning and block/road development, the signing and sealing of the applicable Site Plan, and implementation. It includes relevant business area staff, licensees, and contractors working for BCTS.

## Revisions incorporated

- Added procedures for identifying and managing for At Risk Ecological Communities (AREC).
- Deleted UBC Herbarium references as this layer has been incorporated into the LRM web map
- Updated 'PP Done' to 'RCDR Done'
- Replaced Cengea references with LRM
- Added SAR guidance for planned Roads outside of blocks
- Addition of Chinook BA Focus and Awareness Species Report
- Streamlined Quality Assurance checks

## Important Information Sources

**Focus and Awareness Species for BC Timber Sales, Chinook Business Area (revised annually).** BCTS Chinook has retained a professional biologist to conduct a review of SAR within the Chinook operating area, in order to create a 'Focus List' and an 'Awareness List' of species that meet the Sustainable Forestry Initiative (SFI) criteria and could potentially be impacted by harvest or road development activities. Only species on the BCTS Chinook Focus and Awareness List will be managed for under this SOP. This list will be updated annually to reflect any species status changes or new species for inclusion or deletion from the list.

- For AREC: The Chinook Focus and Awareness list does not include AREC at this time. The CDC and Ecosystem Explore are to be used as the primary information sources to identify AREC. Note that AREC management under this SOP is limited to occurrences of G1/G2 or S1/S2 ecological communities.

**Conservation Data Centre:** This site's Internet Mapping Service (IMap) will be utilized to identify known occurrences of Species at Risk and AREC, as well as legally designate land base set asides such as UWR, WHA and OGMA:

<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>

- For AREC, the CDC is currently working to provide Community Summaries for its associated plant communities: check for updates frequently. If none is available, ecological classification will be based primarily on the "Red Book" site series.

**BC Species and Ecosystems Explorer:** Species and Ecosystems Search: utilize this site to access reports and confirm conservation status ranking for Species at Risk and AREC. This site can also be used to see mapped locations of a specific species: <http://www.env.gov.bc.ca/atrisk/toolintro.html>

*Note: this SOP is more up to date than the SAR Process Design Map. There is no intent to update the Process Design Map*



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| <b>Stage 1: Block and Road Planning SAR / AREC Management</b>   |  |
| <ul style="list-style-type: none"> <li>• Ensure blocks have passed initial economic viability test; i.e. ensure it meets <i>RCDR Done</i> test.</li> </ul>  | <p><i>Planning Forester</i><br/><i>Practices Forester</i></p>  |
| <ul style="list-style-type: none"> <li>• Confirm location of potential cut block and associated road networks</li> </ul>  | <p><i>Planning Forester</i><br/><i>Practices Forester</i></p>  |
| <ul style="list-style-type: none"> <li>• Check CDC website utilizing <i>IMap</i> function to determine if any SAR / AREC have been located and mapped within area of proposed activity               <ul style="list-style-type: none"> <li>○ Record any findings of relevant SAR                   <ul style="list-style-type: none"> <li>▪ If necessary complete and submit CDC <i>Custom Data Request</i></li> </ul> </li> </ul> </li> </ul>   | <p><i>Planning Forester</i><br/><i>Practices Forester</i></p>  |
| <ul style="list-style-type: none"> <li>• Review Chinook Focus and Awareness Species report to determine potential SAR species in area of proposed activity.</li> </ul>  | <p><i>Planning Forester</i><br/><i>Practices Forester</i><br/><i>Multiphase Forester</i></p>                                   |
| <ul style="list-style-type: none"> <li>• Review BC Species and Ecosystems Explorer to determine potential AREC in area of proposed activity.</li> </ul>   | <p><i>Planning Forester</i><br/><i>Practices Forester</i><br/><i>Multiphase Forester</i></p>                                   |
| <ul style="list-style-type: none"> <li>• Determine management options for each SAR / AREC discovered:               <ul style="list-style-type: none"> <li>○ Discuss with Planning Officer/Forester, Area Forester/Woodlands Supervisor and/or Woodlands Manager to see if there are any previous commitments related to species management; e.g., Phantom orchid, tailed frog, etc., or recommendations provided by Qualified Professional</li> <li>○ If AREC are encountered manage for them utilizing BCTS Chinook, <i>Guidance Re Management of Listed Ecological Communities</i>, EcoLogic Research, 2009 and the provincial guidance on WTRA retention: <i>Provincial Wildlife Tree Retention Management Guidance Document</i>, 2006.</li> <li>○ If no management recommendations available, consider consultation with Qualified Professional                   <ul style="list-style-type: none"> <li>▪ Discuss Qualified Professional's recommendations with Area Forester/Woodlands Supervisor and Woodlands Manager</li> </ul> </li> </ul> </li> </ul> | <p><i>Practices Forester</i><br/><i>Multiphase Forester</i><br/><i>Planning Forester</i><br/><i>Qualified Professional</i></p> |
| <ul style="list-style-type: none"> <li>• Review Chinook plans and policies to determine if there are any pre-existing SFI/EMS/FSP commitments in relation to SAR / AREC management; e.g., percent Deer Winter Range available for harvest or avoiding certain ecotypes.</li> </ul>  | <p><i>Planning Forester</i><br/><i>Practices Forester</i><br/><i>Multiphase Forester</i></p>                                   |
| <ul style="list-style-type: none"> <li>• Determine if block planning should proceed based upon management recommendations</li> </ul>  | <p><i>Practices Forester</i><br/><i>Multiphase Forester</i><br/><i>Planning Officer</i></p>                                    |



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| <ul style="list-style-type: none"> <li>• Update and/or review SAR tracking form and attach to SAR Block Activity in LRM with other relevant documents and comments. The following details for roads are applicable to all stages.               <ul style="list-style-type: none"> <li>• Road Activity&gt;Tasks/Assessments tab&gt;SAR Assessment                   <ul style="list-style-type: none"> <li>• For all in-block roads, and roads outside of blocks where nothing is found, add the following comment in the <b>Memo</b> field: "SAR/AREC check done as part of block "XXX" SAR check". <i>Ensure the SAR tracking form lists all of the roads associated with the block. A separate tracking form is not required.</i></li> <li>• <b>For roads outside of a block where SAR/ AREC were found, attach a separate SAR tracking form for the applicable road(s) in the roads module.</b> This is done because SAR found along a road must still be managed even if the road is not associated with a block.</li> </ul> </li> </ul> </li> </ul>      | <p><i>Planning Forester<br/>Practices Forester<br/>Multiphase Forester</i></p>                            |
| <ul style="list-style-type: none"> <li>• During field review collect ecological information necessary to assist with use of BC Species and Ecosystems Explorer database               <ul style="list-style-type: none"> <li>○ BEC, subzone, variant and site series</li> <li>○ Primary forest cover/landscape attributes</li> </ul> </li> <li>• If AREC are encountered manage for them utilizing BCTS Chinook, <i>Guidance Re Management of Listed Ecological Communities</i>, EcoLogic Research, 2009 and the provincial guidance on WTRA retention: <i>Provincial Wildlife Tree Retention Management Guidance Document</i>, 2006.</li> <li>• If uncertain about potential SAR/AREC prior to field visit, consider engaging a Qualified Professional during field visit</li> <li>• Detail any SAR / AREC located in field and discuss management options with Area Forester/Woodlands Supervisor, Woodlands Manager and/or a Qualified Professional</li> <li>• Determine if proposed activity should occur based upon SAR / AREC recommendations</li> </ul> | <p><i>Planning Forester<br/>Practices Forester<br/>Multiphase Forester<br/>Qualified Professional</i></p> |
| <b>Stage 2: Block/Engineering Layout Pre-work (Multiphase)</b>   |   |
| <ul style="list-style-type: none"> <li>• Summarize findings from block planning stage if applicable for handover to multiphase staff/contractor(s)</li> </ul>  | <p><i>Operations Technician</i></p>   |
| <ul style="list-style-type: none"> <li>• Prior to pre-work meeting, check for:               <ul style="list-style-type: none"> <li>○ Updated version of Chinook Focus and Awareness Species Report</li> <li>○ CDC website utilizing <i>IMap</i> function to determine if any new SAR/AREC have been mapped within area of proposed activity</li> <li>○ Record any findings of relevant SAR/AREC and report these findings to BCTS immediately</li> </ul> </li> <li>• If necessary, complete and submit CDC <i>Custom Data Request</i></li> </ul>  | <p><i>Multiphase Forester<br/>Operations Technician</i></p>   |
| <ul style="list-style-type: none"> <li>• Update SAR tracking form and attach to SAR Block Activity in LRM with other relevant documents and comments.</li> </ul>   | <p><i>Operations Technician<br/>Multiphase Forester</i></p>   |
| <ul style="list-style-type: none"> <li>• Provide SAR/ AREC summary to contractor with any management recommendations including those from Qualified Professionals, where available</li> </ul>  | <p><i>Operations Technician</i></p>   |



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| <ul style="list-style-type: none"> <li>• Discuss how contractors SAR/ AREC field investigations should be documented               <ul style="list-style-type: none"> <li>○ In site plan under relevant R/S</li> <li>○ As supporting document to Site Plan</li> <li>○ In the SP declaration letter</li> <li>○ Private filing with documentation available upon request</li> </ul> </li> </ul>  | <i>Practices Forester</i>                           |
| <b>Stage 3: Site Plan/Road Site Plan Quality Assurance</b>   |   |
| <ul style="list-style-type: none"> <li>• Site Plan prepared by multiphase or in-house</li> <li>• Site Plans peer reviewed:               <ul style="list-style-type: none"> <li>○ BA staff to review Site Plan to ensure SAR/ AREC have been considered and management options are suitable for species habitat needs.</li> <li>○ Review SAR/ AREC management options detailed in Site Plan to ensure consistency with previous BA commitments</li> <li>○ Review any submissions by qualified professional(s) to ensure that they have been properly incorporated into the Site Plan and block/road engineering</li> </ul> </li> <li>• Review latest version of Chinook Focus and Awareness Species Report</li> <li>• Review CDC website to check for any new SAR/AREC occurrences</li> <li>• If new SAR / AREC found determine management requirements with QP input as deemed necessary</li> <li>• Refine Site Plan and conduct additional field work if necessary to incorporate new finding(s)</li> <li>• if new findings result in changes affecting block valuation, reevaluate block economic viability</li> <li>• Seek corrections if inconsistencies or errors/omissions discovered</li> <li>• Confirm documentation is present, if required, in relation to SAR/AREC and associated reports and recommendations</li> </ul> | <i>Practices Forester<br/>Multiphase Forester</i>   |
| <ul style="list-style-type: none"> <li>• Update SAR tracking form and attach to SAR Block Activity in LRM with other relevant documents and comments</li> </ul>  | <i>Practices Forester<br/>Multiphase Forester</i>   |
| <ul style="list-style-type: none"> <li>• Conduct annual BA risk-based review of Site Plan population               <ul style="list-style-type: none"> <li>• Focus on any high risk EMS/SAR/AREC areas that may have been previously identified by BA Planning section</li> <li>• Confirm documentation is present, if required, in relation to SAR/AREC and associated reports and recommendations.</li> </ul> </li> </ul>   | <i>Practices Forester<br/>Operations Technician</i> |



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| <b>Stage 4: TSL/Contract Package Preparation</b>   |  |
| <ul style="list-style-type: none"> <li>• During preparation of TSL package, review CDC website and review most recent Chinook Focus and Awareness Report to determine if any new SAR/ AREC occurrences have been mapped in proposed area of activity               <ul style="list-style-type: none"> <li>• If new SAR / AREC found, determine management requirements with QP input as deemed necessary</li> <li>• If AREC are encountered manage for them utilizing BCTS Chinook, <i>Guidance Re Management of Listed Ecological Communities</i>, EcoLogic Research, 2009 and the provincial guidance on WTRA retention: <i>Provincial Wildlife Tree Retention Management Guidance Document</i>, 2006</li> <li>• Refine Site Plan to incorporate new SAR/AREC finding(s) if block still economically viable</li> </ul> </li> </ul> | <p><i>Operations Technician</i><br/><i>Multiphase Forester</i></p> |
| <ul style="list-style-type: none"> <li>• Update SAR tracking form and attach to SAR Block Activity in LRM with other relevant documents and comments</li> </ul>  | <p><i>Operations Technician</i><br/><i>Multiphase Forester</i></p> |
| <ul style="list-style-type: none"> <li>• Review any SAR/AREC specific details that must be addressed in TSL or contract documents to ensure they are adequately incorporated into plan</li> </ul>  | <p><i>Operations Technician</i><br/><i>Multiphase Forester</i></p> |
| <b>Stage 5: TSL/Contract Pre-work</b>  |  |
| <ul style="list-style-type: none"> <li>• Review any SAR/AREC specific details in Site Plan with Licensee, and describe how management options were integrated into the block/road engineering and related Site Plans</li> </ul>  | <p><i>Forest Technician</i><br/><i>Operations Technician</i></p>   |
| <ul style="list-style-type: none"> <li>• Provide summary of species characteristics to TSL Licensee to enable additional identification of new occurrences in the field               <ul style="list-style-type: none"> <li>○ SAR/AREC name; Latin, common</li> <li>○ Pictures</li> <li>○ Reports</li> </ul> </li> </ul>  | <p><i>Forest Technician</i></p>                                    |
| <b>Stage 7: Conformance Quality Assurance (Inspection)</b>   |  |
| <ul style="list-style-type: none"> <li>• Review relevant plans and SAR/AREC descriptions/information to familiarize self with potential species</li> </ul>   | <p><i>Forest Technician</i></p>                                    |
| <ul style="list-style-type: none"> <li>• Review relevant plans to ensure thorough understanding of how SAR/AREC habitat needs were to be addressed in the field.</li> </ul>  | <p><i>Forest Technician</i></p>                                    |
| <ul style="list-style-type: none"> <li>• Check operations to ensure consistency with legal plans.</li> </ul>   | <p><i>Forest Technician</i></p>                                    |
| <ul style="list-style-type: none"> <li>• Where deviations from the plan have occurred that impact SAR/AREC follow standard conformance process.               <ul style="list-style-type: none"> <li>○ Ensure appropriate agencies have been notified.</li> </ul> </li> </ul>  | <p><i>Forest Technician</i></p>                                    |
| <ul style="list-style-type: none"> <li>• Ensure non-conformances and/or potential non-compliances have been entered into the EMS Issue Tracking System and Action Plan has been developed.</li> </ul>  | <p><i>Forest Technician</i></p>                                    |
| <ul style="list-style-type: none"> <li>• Return to field for follow-up inspection(s) to ensure any Action Plans/mitigation strategies have been implemented</li> </ul>   | <p><i>Forest Technician</i></p>                                    |



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**Addendum concerning AREC**

- 1) This guidance is not targeted towards an ecological community; rather, it is targeted at ecological communities that have specific attributes that make these ecological community 'at risk'.
- 2) AREC must have specific attributes (such as stand age, structure and species composition) as defined in reports that can be located on the CDC and BC Species and Ecosystem Explorer websites.

Example: CWHdm05 is considered a red listed plant community on the CDC web site. By utilizing the associated reports for this community one discerns that it is not all of the CWHdm05 that is at risk, rather it is CWHdm05 stands with certain attributes and these attributes are typically found in mature to old stands displaying well developed vertical structure.

**Vegetation** --Jump to Section--

**Vegetation Summary:** Overstories in this closed-canopy plant community are dominated by high cover of *Thuja plicata*, *Tsuga heterophylla*, and *Pseudotsuga menziesii*. Low to moderate cover of *Acer macrophyllum* and *Alnus rubra* is sometimes present in the overstory. The moderately well-developed shrub layer is dominated by a moderate cover of *Acer circinatum* and low cover of *Vaccinium parvifolium* and regenerating *Thuja plicata* and *Tsuga heterophylla*, and sometimes a low cover of *Gaultheria shallon*. *Polystichum munitum* dominates the moderately well-developed herb layer and is accompanied by low cover of *Dryopteris expansa*, *Tiarella trifoliata*, *Rubus ursinus*, and *Pteridium aquilinum*. Often there is low cover of *Trillium ovatum* and *Trientalis borealis*. The sparse to moderately well-developed moss layer is dominated by low to moderate cover of *Hylocomium splendens* and *Eurhynchium oregonum* with low cover of *Rhytidiadelphus loreus*, *Plagiomnium insigne*, and sometimes *Plagiothecium undulatum*.

- 3) 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.
- 4) The CDC is currently working to provide Community Summaries for its associated plant communities. However, since Community Summaries are not yet available for all Plant Communities, ecological classification will be based primarily on the "Red Book" site series.
- 5) If AREC are encountered manage for them utilizing BCTS Chinook, Guidance Re Management of Listed Ecological Communities, EcoLogic Research, 2009 and the provincial guidance on WTRA retention: Provincial Wildlife Tree Retention Management Guidance Document, 2006.