



Ministry of  
Forests, Lands, Natural  
Resource Operations  
and Rural Development

# **Woodlot Licence Management Plan Handbook**

**February 2019**

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This document contains material to assist with the administration of *agreements* entered into under the *Forest Act*. This document contains both a summary of the legal requirements and advice/suggestions from the non-legal realm. The latter are not legal requirements that you must follow, nor are they government policy.

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# Document Change Control

Version	Date	Key Change
1	January 2009	
1.1	February 2019	Updated template and updated broken web links.

Questions or comments should be directed to:

Forest Tenures Branch, Ministry of Forests, Lands, Natural Resource Operations and Rural Development

[ForestTenuresBranch@gov.bc.ca](mailto:ForestTenuresBranch@gov.bc.ca)

# 1 Introduction

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Section 45(f) of the *Forest Act* allows the woodlot licence agreement to specify the information required in a woodlot licence management plan. The woodlot licence agreement indicates a woodlot licence management plan must be prepared in accordance with any applicable handbook. This is the applicable handbook which must be followed when preparing a management plan for a woodlot licence. A primary purpose of the management plan is to take inventory information and resource management considerations to propose an allowable annual cut (AAC) for the woodlot licence. Under normal circumstances the management plan should propose an AAC that is sustainable in the long term.

In most cases, the management plan will not have an expiry date and will remain in effect until the licensee submits an amendment to the management plan or the district manager requires the submission of a new management plan to revise the AAC. The licensee may request an amendment to the management plan to propose a revised AAC to allow accelerated harvesting of timber that is windthrown, dead, damaged, insect infested or diseased. Some existing management plans may still have an expiry date, for example, where the licensee committed to completing an inventory by a specified time which will result in the submission of a new management plan and the determination of new AAC for the woodlot licence.

The district manager should consider the cut control situation of a woodlot licence before asking the licensee to submit a new management plan with a reduced AAC. If the licensee needs to maintain an elevated AAC for the remainder of a cut control period to balance accelerated salvage harvesting that has occurred, a new management plan proposing a lower AAC should not be requested until near the end of the cut control period.

This handbook should be reviewed before preparing a woodlot licence management plan. After reading this handbook and the woodlot licence agreement, licensees who are required to submit a management plan should meet with district woodlot licence staff to discuss what the plan must contain. The woodlot licence agreement indicates that a management plan must be prepared in accordance with any directions of the district manager that are consistent with the woodlot licence agreement and the forestry legislation. As you read this handbook, you may wish to take notes and prepare questions in preparation for that meeting. Forest district staff may also supply you with additional information that will assist you in developing the management plan.

## 2 Management Plan Content

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Woodlot licence management plans focus on four main sections:

- Licensee Statement of Goals
- Licensee Commitments
- Resource Inventories
- Proposed Allowable Annual Cut

To follow is a brief description of what the plan should address for each of these sections:

### 2.1 Statement of Licensee Goals

The management plan should include brief statements regarding the licensee's management goals for the woodlot licence. For existing licensees, your previous management plan should contain these statements, which can be revised as appropriate to suit the current situation.

### 2.2 Licensee Commitments

If specified as a condition in the tender package for a new woodlot licence, advertised after January 2008, the successful applicant will need to include a commitment to establish regeneration on any areas of the private land contribution that are not satisfactorily restocked with trees. This commitment must contain a measurable and enforceable description of the regeneration stocking standards and a date (YYYY/MM/DD), by when regeneration must be established.

For existing licensees, commitments from past management plans will usually continue, unless they have been satisfied or changes in technology or circumstances render them inappropriate. For example, if the previous management plan stated the licensee would juvenile space ten hectares of Crown land within the licence area, then this commitment would need to be stated in a new management plan unless the juvenile spacing had been completed or circumstances have changed and the opportunity to complete the commitment no longer exists; e.g. the young pine stand to be spaced has been killed by mountain pine beetle. In this example the licensee should propose an alternative commitment of comparable value to the Crown if the original commitment was made in the application for the woodlot licence and was a determining factor in the award of the woodlot licence. If a licensee feels an old commitment is no longer relevant the licensee should discuss the situation with the district manager.

It is not necessary to include statements that the licensee will comply with legislative requirements under the *Forest Act*, the *Forest and Range Practices Act* or other legislation. It is important that the licensee and the ministry understand and agree on what commitments need to be included in the management plan. It is also important that the management plan clearly documents what will be done, where it will be done, how it will be done, when it will be done and who will pay for it.

**Note:** some commitments may involve discussions with other ministries. One example is the [Ministry of Environment](#).

## 2.3 Resource Inventories

The Crown portion of the woodlot licence will have some inventory information available from the Forest Service which may be suitable for use in proposing an AAC. However, private land included in the application may or may not have inventory information. In older woodlot licence applications some applicants may have made a commitment to upgrade the inventory information on the Crown land and/or private land portions of the woodlot licence. With new woodlot licences, the district manager may require that inventories be completed or upgraded within the first five years of the woodlot licence.

Licensees may also elect to complete inventories on their own accord in preparation for re-calculating a proposed allowable annual cut for the licence area. New or updated inventory information, and a revised management plan proposing a different AAC, can be submitted to the district manager at any time.

Wherever inventories will be conducted on the licence area, the following should be discussed with the district manager:

- The type of inventory to be completed.
- The standards to be used for the inventory.
- The area that will be covered in the inventory.
- When the inventory will be completed.
- How the inventory information will be compiled and presented.

The document entitled “Timber Inventory for Woodlot Licences, Community Forests and other Small Areas” provides guidelines for conducting inventories on woodlot licences and is available at the following website: [https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/timber-tenures/woodlots/wl\\_inventory\\_handbook\\_version\\_1\\_final\\_1.pdf](https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/timber-tenures/woodlots/wl_inventory_handbook_version_1_final_1.pdf)

Check for any updates.

Forest Investment Account funding may be available to licensees who conduct a strategic level VRI Phase I Photo Interpretation inventory on the Crown land portion of a woodlot licence.

## 2.4 Utilization Standards for the Woodlot Licence

Under ‘Take or Pay Policy’, utilization standards are no longer specified in the woodlot licence agreement, the management plan or woodlot licence cutting permits. The utilization standards and the allowable annual cut for the woodlot licence are based on the merchantability specifications in the Provincial Logging Residue and Waste Measurement Procedures Manual. The woodlot licence management plan should include statements to this effect.

## 2.5 Proposed Allowable Annual Cut

All management plans must propose an allowable annual cut to be harvested from the Crown land (Schedule “B”) portion of the woodlot licence area. The woodlot licence holder may also propose an allowable annual cut for the private (Schedule “A”) land in the woodlot licence.

If the management plan contains commitments to establish regeneration on private land portions of the woodlot licence that are not satisfactorily restocked with trees, these areas of private land

should not be modeled as being stocked with trees until the regeneration has been successfully established. It is recommended that even areas of non-commercially valuable species be included in the data input for modeling purposes as they may play a role in meeting various height/age constraints. The district/regional manager, will use this information in the determination of the AAC for the woodlot licence.

Where the AAC determined by the district manager or regional manager is not the same as the AAC proposed by the licensee, the district manager should discuss the determination with the licensee, explaining why a different AAC was determined. The *Forest Act* does not include provisions that allow a licensee to request an administrative review of a woodlot licence AAC determination or an appeal of an AAC determination to the Forest Appeals Commission.

All information from both the Crown and private land portions of the woodlot licence should be analyzed using the approved version of Woodlot for Windows, the Ministry of Forests and Range woodlot licence timber supply model, to estimate the sustainable AAC for the licence.

During entry of the inventory information, it is critical to identify which polygons represent Crown Land, and which represent private land. This will allow the model to identify separate AAC's attributable to the Schedule A and B portions of the woodlot licence area. It is not recommended to model the Crown and private portions individually, as the sum of the individual AAC's will not equal the sum of combined land base. This is a result of merchantable timber of a certain age class being available on one portion when a shortage of this age class may exist on the other. By combining private and Crown portions of the woodlot licence, these "age class gaps" can be minimized and an increased sustainable harvest volume realized.

If AAC's are determined for both the Schedule "A" and Schedule "B" portions of a woodlot licence, this does not mean that the AAC from Schedule "A" land must be harvested from private land and the Schedule "B" AAC must be exercised on Crown portions of the licence. For cut control purposes, there is only one AAC for the entire woodlot licence which is the total of the AAC for the Crown land plus any AAC for the private land that has been included in the woodlot licence. When proposing a new AAC for determination by the district manager, include a summary of all information you analyzed, along with any assumptions that the district manager should consider.

To speed the issuance of a new woodlot licence, the successful applicant may propose to adopt the allowable annual cut for the Crown portion of the woodlot licence that appeared in the licence advertisement without proposing an AAC for the private land contribution. This would allow the licence to be issued and an AAC proposed for the private land at a later date. Established licensees that have a previously determined AAC based on good timber inventory and other information that is still accurate, can propose to maintain the current AAC without providing additional detail.

At any time, a licensee may submit a management plan amendment to propose a new AAC based on new or additional inventory or other information which was not considered in the initial AAC determination for the licence. For example, if there is a mountain pine beetle infestation, serious blowdown event or wildfire on the woodlot licence the licensee can propose an increased AAC to salvage the dead, damaged or dying timber.

Refer to Appendix 1 for notes on the information needed to run WOODLOT for Windows. The model and reference manual are available on the Internet at <http://www.for.gov.bc.ca/hth/woodlots/aac-program.htm>

Questions should be directed to Resource Tenures and Engineering Branch. Contact: Dave Haley, Woodlot Licence Forester at (250) 387-8317. Depending on funding from the Federation of BC Woodlot Associations (FBCWA), support may be available from Mike Bandstra of Forsite Consultants (250) 847-4822 or the developer, ENFOR Consultants Ltd.

## 3 Submission of Management Plans

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As mentioned in the introduction, to ensure that management plans are approved in a reasonable time frame and extensive revisions are not required, it is critical that the licensee and the district woodlot licence staff understand clearly what needs to be included in the management plan. It is strongly suggested that licensees meet with district woodlot licence staff before beginning the preparation of a woodlot licence management plan.

For new woodlot licences, management plans must be submitted by the deadline imposed by the district manager, which is usually six months following the award of the licence. It should be noted that a district manager has the right to rescind an award of a woodlot licence if a management plan is not submitted by the deadline and there is, in the opinion of the district manager, no valid reason for the delay in submission.

To comply with the *Foresters Act*, woodlot licence management plans should be signed and sealed by a registered forest professional.

Unlike forest stewardship plans or woodlot licence plans, there is no legislated requirement for management plans to be advertised, reviewed by the public or referred to other resource agencies. In special circumstances, the district manager may require the licensee to refer a woodlot licence management plan to resource agencies or other interested parties. The Forest Service will conduct an assessment of First Nations interests and First Nations consultation before the approval of woodlot licence management plans.



# 4 APPENDIX 1

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## 4.1 Using WOODLOT for Windows to Calculate an AAC

WOODLOT for Windows is a timber supply model used as a tool for calculating sustainable harvest rates (AACs) on woodlot licences. It is important to note, however, that the *WOODLOT* model is only a tool. District managers have the final say in determining an AAC, and in so doing, they must consider many factors in addition to the model inputs. Consequently, a district manager may not agree with the harvest rate proposed and will give their rationale for their decision in their determination.

The model requires three main types of information: inventory and silviculture data, future management and silviculture assumptions, and resource constraints as follows:

## 4.2 Current Inventory and Silviculture Data

Current inventory and silviculture data are required to estimate the growth potential from your existing forest. The model requires timber inventory and some silviculture information for all forest polygons in your licence area. Most of this information is available from older, discontinued forest cover maps or the newer Vegetation Resource Inventory (VRI) maps. In some areas of the province, Terrestrial Ecosystem maps (TEM) may also be available. Information may also be available from the Reporting Silviculture Updates and Land Status Tracking Program (RESULTS) or from the holder's own records. Contact your local forest district office to determine the process to obtain the best information available.

You will need the following information for each Polygon:

- Polygon number (= map sheet and polygon number for tracking in the model).
- Net area (= operable area that will grow commercially valuable trees).
- Current stand age.
- Ownership by polygon (e.g. Crown, private, etc.).
- Current type of forest, whether it is a natural stand or a managed stand.
- Yield information for naturally occurring or managed stands.
- **For naturally occurring stands, this includes:**
  - Site index.
  - Crown closure at harvest (approximate).
  - Volume adjustment factor if any is used (leave as 1.0 if you do not know).
  - Stocking class at harvest.
  - Forest inventory zone (for zonal decay factors).
  - Public sustained yield unit (local non-recoverable inventory level waste and breakage factors).
  - Species by percent.
- **For managed stands this includes:**
  - Initial stocking density at establishment.

- Method of establishment (natural vs. planted).
- Site index.
- Forest inventory zone (for zonal decay factors).
- Percent by species.
- Thinning if any (regime which has occurred and density thinned to).
- Operational adjustment factors (use defaults if you do not know).

### 4.3 Future Management and Silviculture Assumptions

Future management assumptions are required to determine how your forest will be managed, grow and be harvested over time. These include:

- Regeneration delay (clearcut stands only).
- Utilization level (inventory utilization for trees at dbh).
- Silviculture system (clearcut vs. partial cut).

Note: Depending on whether clearcutting or partial cutting is indicated, the following information must be used or must be provided:

<b>Clearcutting</b> <b>(Based on natural or managed yield information.)</b>	<b>Partial Cutting</b> <b>(Based only on natural yield information.)</b>
Model will assume 100 percent removal on each entry.	Percentage of volume to be removed in first entry.
Model will assume re-entry at the harvest age selected.	Minimum re-entry period in years (to determine the extent of ingrowth).
Use yield information for natural stands or for managed stands.	Use yield information for natural stands <b><i>only</i></b> .

- Target Harvest age.
- Minimum harvesting parameters.
- **Yield information for stands that will be managed like naturally occurring and managed stands:**
  - Use natural stand information (VDYP) for managing deciduous stands or any coniferous stands that you propose to manage like a naturally occurring forest (i.e. naturally regenerated stands that will not receive tending or partial cut areas).
  - Use managed stand information (TIPSY) for clearcut areas that will be regenerated to conifers and naturally regenerated conifer stands that have received or will receive tending.

## 4.4 Notes on Silviculture and Operational Adjustment Factors:

### 1. Silviculture

The silviculture assumptions used in WOODLOT will have an effect on the calculated AAC. Silviculture assumptions that are used to calculate the harvest rate must be based on the current level of silviculture practice that is being achieved on the woodlot licence. If, for example, the reported stocking at regeneration date is different than the initial establishment stocking that is used in WOODLOT, then the district manager may adjust the AAC accordingly. Adjustments to the AAC as a result of species conversion should be based on proven practice on the woodlot licence area.

### 2. Operational Adjustment Factors for Managed Stands

The Operational Adjustment Factor (OAF) No. 1 is designed to reduce managed stand yield projections to reflect small holes in operationally regenerated areas that were not present in the completely stocked research plots that provide the yield estimates. If silviculture performance is not producing fully stocked stands at regeneration and free growing dates that are lower than the initial establishment stocking used in the *WOODLOT* model, then OAF No. 1 should be increased. Operational Adjustment Factor No. 2 should be adjusted if necessary to reflect any special forest health concerns that will impact managed stands. The default value represents a stand with no serious forest health concerns. The province has recommended defaults to use for both OAF 1 and 2. It is recommended that these be used unless other information exists in a format acceptable to the District Manager which gives better guidance for the local area.

## 4.5 Resource Management Constraints

Resource management constraints may apply to your woodlot licence, and can be accounted for either by netting areas out first, or by applying factors to allow for some timber removal over time, including:

- height and/or age constraints to be applied against a portion of the woodlot, such as for visual quality or wildlife management;
- equivalent area net downs where height and age constraints cannot be determined.

## 4.6 Net (Operable) Area

You need to identify the net area that will be available for harvest, referred to as the “net operable area”. To derive the net operable area, you will need to look at the entire woodlot licence and then remove areas that will not be managed for timber production over time. This normally is done as follows.

- Determine the total area of the woodlot licence (gross area).
- Reduce the total area by identifying areas not managed for timber production:
  - Non-productive areas.
  - Roads, landings and gravel pits.
  - Unstable terrain where harvesting will not occur.
  - Riparian reserves.
  - Land withdrawals and harvesting restrictions due to objectives set by government.
  - Archaeological and Cultural Heritage Resources.
  - Recreation reserve areas.
  - Range management and cultivated areas.
  - Reserves for biodiversity and wildlife (i.e. wildlife tree retention areas, wildlife habitat areas, wildlife habitat features).
  - Water resource needs.
  - Other land withdrawals or self-imposed harvesting restrictions.
  - Other management objectives on areas that will not permit production of commercial timber for future harvest (i.e. utility transmission rights of way).

Where any of the above items can or will be managed by partial cutting over the rotation, consider using a resource constraint, or using the partial cut features of the *WOODLOT* model to account for the contribution to timber supplies. While excluded from the Net Area, it is important to model this information as stand attributes may help in meeting other constraint thresholds (i.e. green-up or wildlife habitat characteristics).

The following section describes areas that may exclude part of the licence area, or portions of stands, from harvest:

## 4.7 Non-Productive Areas

Mappable (greater than 0.25 hectare) non-productive areas such as wetlands, lakes or rock outcrops should be removed from the total woodlot area to determine the net operable area.

## 4.8 Roads, Landings and Gravel Pits

An allowance must be deducted from the total area of the woodlot licence for permanent roads (existing or planned) and any area occupied by permanent landings or gravel pits. The total area of roads (in hectares) can be calculated by determining the total length of road (in meters) in the polygon (or total licence area) multiplied by the average width of the road that will be removed from timber production (in meters) divided by 10,000. If inputting the road information on a polygon by polygon basis, a feature has been added in Woodlot for Windows that recognizes that volume will be harvested from these roads prior to construction. Another methodology acceptable to some District Managers is a % net down of the operable land base for future and existing roads. This may be useful in situations where the woodlot is not very developed and/or the road system is not fully planned. Consult with your District Woodlot Staff to determine if this is an accepted methodology for your area.

## 4.9 Unstable Terrain

Remove areas where harvesting is unlikely to occur due to a high likelihood of landslides.

“Sensitive soils” are defined in Section 1 of the Woodlot Licence Planning and Practices Regulation as an area with one or both of the following:

- a slope of greater than 60%;
- indicators of potential slope instability.

Sensitive soils could include areas that were considered to be “sensitive slopes” under the previous Woodlot Licence Forest Management Regulation. In addition to “sensitive soils”, there may be gullies within coastal woodlot licences where harvesting should be avoided or modified to ensure that primary forest activities do not have a material adverse affect on forest resources. If sensitive soils or coastal gullies are present, the WL holder should indicate if the area is not available for harvesting or will be modeled in WOODLOT through partial cutting. If the woodlot licence area contains no sensitive soils or coastal gullies, then a simple statement that this is not a consideration, is all that is required. If sensitive soils or coastal gullies are present, then assumptions on how these will be managed should be stated in the rationale for the proposed AAC.

## 4.10 Riparian Reserves and Riparian Management Zones

Riparian reserve zones are normally excluded from harvesting unless under section 39 of the Woodlot Licence Planning and Practices Regulation, limited harvesting is carried out in a manner that doesn't have a material adverse effect on the riparian reserve zone. Harvesting is possible in riparian management zones provided that it is consistent with the retention of timber specified in

the woodlot licence plan approved under the *Forest and Range Practices Act* or a site plan approved under the Code. Depending on the District Manager's requirements, this can be applied as a polygon by polygon net area reduction or by placing a representative % of the land base (non-spatially defined) into Wildlife Tree Retention.

Part 3 Division 3 of the Woodlot Licence Planning and Practices Regulation identifies that streams, wetlands and lakes with the indicated riparian class requires the following basic riparian reserves zone and management zone widths:

### Streams

Riparian Class	Riparian Reserve Zone Width	Riparian Management Zone
S1A	0 meters	100 meters
S1B	50 meters	20 meters
S2	30 meters	20 meters
S3	20 meters	20 meters
S4	0	30 meters
S5	0	30 meters
S6	0	20 meters

### Wetlands

Riparian Class	Riparian Reserve Zone Width	Riparian Management Zone
W1	10 meters	40 meters
W2	10 meters	20 meters
W3	0	30 meters
W4	0	30 meters
W5	10 meters	40 meters

### Lakes

Riparian Class	Riparian Reserve Zone Width	Riparian Management Zone
L1-A	0 *	determined by DM
L1-B	10 meters	0
L2	10 meters	20 meters
L3	0	30 meters
L4	0	30 meters

\*Or a width determined by the district manager.

The riparian class of each stream should be based on the best information available. The determination of the riparian class of streams should be based on the definition of “fish stream” in the Forest Planning and Practices Regulation (except in community watersheds where there presence of fish is not a consideration in determining the riparian class). Where there are no fish inventories to verify the absence of fish, the definition of “fish stream” would conclude that a stream reach with a gradient less than 20 percent, without barriers to fish migration, contains fish. A stream reach above a barrier to fish migration would not be a fish stream if all reaches upstream of the barrier are simultaneously dry at any time during the year, or no perennial fish habitat exists upstream of the barrier. If the riparian class of all streams on forest cover or TRIM maps for the woodlot licence is not known at the time the management plan is being prepared, make the most logical assumptions about the presence of fish using the definition of “fish stream” without completing fish inventories.

The riparian reserve zones for wetlands should be based on the size of the wetland from field measurements or the forest cover or TRIM maps and the biogeoclimatic subzone.

The licensee may use a riparian reserve zone as a wildlife tree retention area or may create a wildlife tree retention area that includes a portion of a riparian management zone. Riparian reserve zones should be removed from the net operable area when proposing an AAC. In addition to the riparian reserve zones, assumptions need to be stated to account for timber that may be excluded from harvesting in riparian management zones. For example, a percentage of the volume within riparian management zones may be excluded from harvesting.

Riparian management zones that will not be clearcut can be modeled for partial cutting in WOODLOT.

## **4.11 Objectives Set by Government and Land and Resource Management Plans**

Section 1 of the *Forest and Range Practices Act* defines “objectives set by government” which may be established under section 93.4 of the *Land Act*. The *Land Act* also provides for the continuation of objectives for resource management zones, landscape units and sensitive areas that were established under the *Forest Practices Code of British Columbia Act*. Land and Resource Management Plans are plans that have not been formally approved as “objectives set by government” but provide guidance that licensees should consider when preparing a management plan and conducting their operations.

Objectives set by government may restrict harvesting for the protection of such things as:

- visual quality objectives;
- wildlife habitat; and
- recreation sites or trails or interpretive forest sites.

Contact the district office to determine if “objectives set by government” or land resource management plans apply to your woodlot licence areas and how they may affect harvesting.

Note that “objectives set by government” usually allow areas to be harvested periodically over time, and can be modeled in WOODLOT by using partial cutting, or by applying management constraints.

## **4.12 Archaeological and Cultural Heritage Resources**

If an archaeological overview assessment has identified areas that require archaeological impact assessments or if archaeological impact assessments have been carried out, assumptions must be made on the effect, if any, that archaeological resources will have on the determination of the AAC. A woodlot licence plan is required to present results or strategies to protect cultural heritage resources that are important to First Nations. If reserve areas must be established or timber volumes must be excluded from harvesting to protect archaeological or cultural heritage resources, the effect on the AAC should be modeled. If the archaeological overview assessment did not identify any areas of significance then this should be stated. Be careful not to disclose the location of any archaeological or cultural heritage resources that need to remain confidential.

## **4.13 Recreation Management**

Identify if any recreation management initiatives will have an impact on the AAC. Also identify, and exclude from the net operable area, any areas within the woodlot licence that are being permanently excluded from harvesting due to the establishment of a recreation site or trail.

## **4.14 Range Management and Cultivated Areas**

If there are any range developments (structures, excavations or constructed livestock trails) which will prevent harvesting of a specific area, remove the area from the net operable licence area. Any areas within a polygon that are cultivated should be removed from the net operable area until such time as the area is sufficiently stocked with trees of a commercially valuable species.

## **4.15 Biodiversity and Wildlife Management**

Section 52 of the Woodlot Licence Planning and Practices Regulation normally requires 8 percent of the woodlot licence area to be set aside for wildlife tree retention unless a lower percentage for wildlife tree retention is approved in a woodlot licence plan or specified in a land use objective. Areas with harvesting constraints (i.e. riparian areas), can be used as wildlife tree retention areas providing they support trees that are suitable for wildlife habitat. There are two basic approaches that are being taken. The first approach is to map the desired percentage of the area for wildlife tree retention and remove these areas from the net operable land base when the AAC is proposed. The second method is to make a percentage reduction to the AAC to account for areas that will be set aside for wildlife tree retention. In other situations, rather than excluding area for wildlife tree retention from the net operable area, these areas are modeled on an extended rotation. The approach that is taken and the effect on the AAC should be described.

If wildlife habitat areas, general wildlife measures or ungulate winter range exist on the woodlot licence area, the effect on AAC should be modeled and discussed in the plan.

## 4.16 Water Resources

Section 48 of the Woodlot Licence Planning and Practices Regulation places restrictions on harvesting within 100 meters upslope from a water supply intake for human consumption in a community watershed. Harvesting operations must also be carried out in a manner that protects community and domestic water supply infrastructures. Identify any areas excluded from harvesting due to protection of water intakes and related water supply infrastructures. These restrictions should be modeled using WOODLOT and reflected in the proposed AAC.

## 4.17 Licensee Management Objectives

Discuss whether the woodlot licence holder's management objectives will impact on the net operable area. For example, if areas are currently growing mixed deciduous/coniferous stands, and the deciduous will not be harvested, the timber yield from the areas should be reduced through the exclusion of the deciduous species from the AAC calculation or through the use of an appropriate volume adjustment factor. Pure deciduous stands that will not be utilized should be excluded from the net operable area.

Identify where and how management decisions to employ partial cutting will have an impact on AAC.

## 4.18 Maps

The district manager may require information to be presented on a map with the management plan.

***Please note that much more detail about the Woodlot for Windows software is available by referring to the latest published user guide which is currently available at:***

***<https://www2.gov.bc.ca/gov/content/industry/forestry/forest-tenures/timber-harvesting-rights/woodlot-licence/allowable-annual-cut-calculator-tool>***