



Intact Forest Landscape Assessment Exercise

Thank you for assisting FSC Canada to investigate the practicality and implications of working with Intact Forest Landscapes.

You may identify IFLs using any of three approaches:

1. Use the process outlined in the following sections of this file. The process is based on the recently-completed (draft) rule-set of GIS directions on identification of IFLs¹.
2. Use the IFL data on the Global Forest Watch Canada web-site (<http://www.globalforestwatch.ca/>). These data are scheduled for release in June of 2016. If the data are not yet available, please use an alternate approach
3. Use another approach convenient for you, or other information that you have available on IFLs in your Management Unit.

Using the Rule Set

If you elect to use the rule set as outlined below, please record anything that causes problems. This rule set for calculating IFL size is based on initial work by a collaborating company to investigate the practicality of technical direction regarding IFL definition.

If you have a problem that needs direction, contact Tom Clark (705 645 2580, tom@tomclark.ca) or Chris Wedeles (905 877-6887, chris@avesltd.ca).

Use the Table that follows as the rule set for calculating the base amount of IFLs.

Table 1. Rule set for measurement of IFL.

Descriptor	Quantitative measure	Application
Base Size	> 500 km ² (50,000 ha) patch size	All patches >500 km ² contiguous and intact. This includes patches contiguous with IFL outside the FMU. The Area of ecological influence (AEI) of the contiguous IFL will be considered in a later analysis.
Disturbance	<5% affected by recent human disturbance	Intent is that one or two roads into an IFL do not invalidate the whole IFL. The 5% disturbance measure should be applied strictly and include the appropriate buffering around roads and other disturbances.
Roads and utility corridors	Road disturbance and corridors should be defined using local road classification methods. Buffers around these disturbances should follow regional	The buffers suggested at left are from the first case study, which are consistent with Caribou guidelines in some parts of Canada.

¹ A separate exercise is being conducted to develop and refine the rule set, however if suggestions to improve their clarity are welcome.



Descriptor	Quantitative measure	Application														
	<p>guidance. Alternatively here are buffers used by one company:</p> <table> <tr> <td>Harvest blocks</td> <td>0 m</td> </tr> <tr> <td>Highways</td> <td>500m</td> </tr> <tr> <td>Municipal/Town Roads</td> <td>250m</td> </tr> <tr> <td>Primary Roads</td> <td>100m</td> </tr> <tr> <td>Branch Roads</td> <td>50m</td> </tr> <tr> <td>Railways</td> <td>250m</td> </tr> <tr> <td>Utility/Pipe Lines</td> <td>50m</td> </tr> </table>	Harvest blocks	0 m	Highways	500m	Municipal/Town Roads	250m	Primary Roads	100m	Branch Roads	50m	Railways	250m	Utility/Pipe Lines	50m	<p>Note that the road and buffer are used to include in the <5% disturbance for an IFL.</p> <p>It is not appropriate to allow for additional future road building up to the 5% disturbance level. IFLs with a very low level of disturbance may have unforeseen road building occurring in the future, for example from other tenure holders. The 5% is not intended to be used for new forestry.</p>
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Minimum width	The minimum width of an IFL is ten km as measured by a 10 km diameter circle that is entirely within the boundaries of the territory).	A circle of this diameter has an area of 7850 ha. The intent of this criterion is to safeguard against long narrow IFLs which would be difficult to calculate and not really the intent of the IFL concept.														
Non Forest - Rock	Bare rock of any extent can be included. There are no constraints on the total area.	There were no reasons for a maximum size limit, as there is for open water. It is functional terrestrial habitat, and even in areas dominated by rock, it appears consistent with the intent of an IFL.														
Non Forest - Open water	Open water can be included for up to 1 km off shore, an area that could be considered biologically functional for larger terrestrial animals. This can be included for a maximum length of maximum 10 km, after which the shoreline should be followed as the end of the IFL. Larger areas are unlikely to occur, but if they do, please not these. The maximum area for a single contiguous block of open Lake water is 10,000 ha.	<p>Note that areas defined as wetland (bog, fen, marsh) are not be considered open water.</p> <p>The 10,000 ha maximum is provided because this approximates a 1 km stretch of water running along 10 km of shoreline. A one km distance across water is biologically functional for larger terrestrial animals.</p>														
Non forest - Wetlands Grasslands	IFLs may contain non-forest areas as part of a broader ecosystem including: <ul style="list-style-type: none"> • Wetland - bogs, fens, marshes • Grasslands • Non production forest 	Non production forest is included, which could have a number of different labels: sensitive forest lands, hazard lands, inoperable, etc, as long as it is undisturbed.														
Natural Disturbance	Natural disturbance (fire, blow down, insects) can be fully included as long as the area remains unaccessed, and salvage is not occurring.	Note that salvage areas are not allowed because roads are required. As this guidance was prepared, there were no exceptions, such as salvage in winter.														
Non Forestry land uses	Protected areas and FSC Candidate Protected areas can be included in IFL.	Obviously, non forestry resource extraction is not included.														



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Contiguous Patches	Small patches contiguous to IFLs external FMA/SFL/defined forest area (For area calculation, the measure area inside of the license area).	Intact patches smaller than 500 km sq that are contiguous with other intact areas outside of the management zone should be included as IFLs.
Time since disturbance	No disturbance is currently allowed at any previous time.	There is currently no allowance for a time since disturbance, regardless of how natural an area may now appear.
Bottlenecks	Bottlenecks are constrictions of the IFL to a distance of less than 2 km measured across the narrowest portion of the neck.	A 2 km bottleneck would divide the IFL into two portions. If either side or both sides of the constriction is greater than 50,000 ha, then one or both would be considered IFL.