

This Standard Operating Procedure covers the Significant Environmental Aspects relating to: maintenance of visual quality, fibre recovery, potential for degradation of water quality, and potential for soil disturbance.

## HARVESTING ADJACENT TO SENSITIVE AREAS

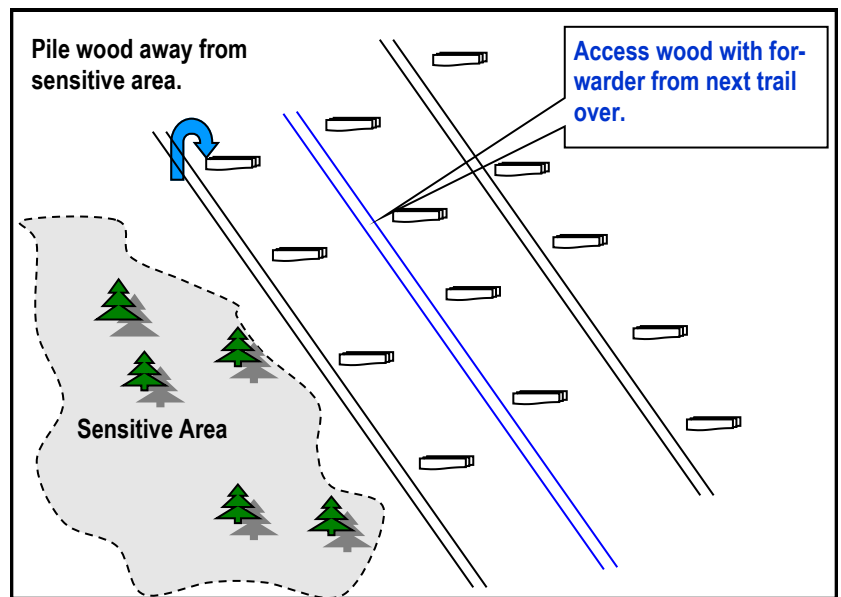
**Rationale:** To protect the **soil** integrity and water quality of sensitive areas during harvesting operations.

**Background:** On most harvesting operations there are sensitive areas that require special considerations because of their characteristics. These sensitive areas are most often at the bottom of a slope, and might be grassland, a bog, an intermittent stream, or soils of low weight-bearing capacity. Operators must follow specific procedures in order to prevent or minimize environmental damage to these areas.

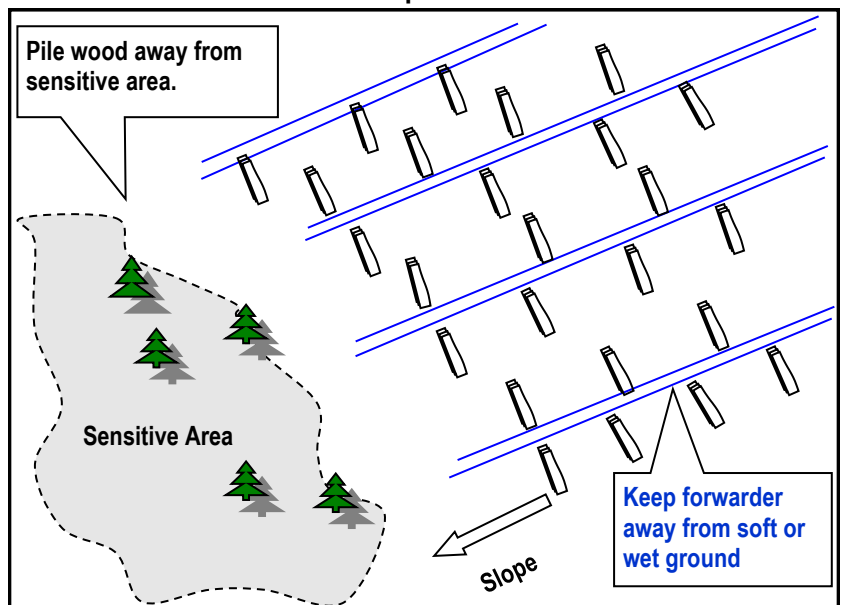
### Procedures:

There are specific procedures for harvester and buncher operators when working next to a sensitive area. These procedures are to prevent soil erosion, **mitigate impacts of soil compaction, and to protect water quality. Proper harvesting will support** forwarding operations (Refer to SOP H-04 for Forwarder). Harvesters and bunchers must stay out of sensitive sites and reach into these areas to harvest wood. After felling a tree, the harvester or buncher should swing it away from the sensitive area for processing. The harvester or processor will pile the processed wood in a location for the forwarder to pick up from firmer ground. This ensures that the wood is well away from any soft, low **weight-bearing** or sensitive sites. This **mitigates impacts on soil compaction and water run off areas.** The forwarder to back up the slope, if possible, to return to the landing.

### Flat Terrain



### Sloped Terrain





### Centreline Streams

Centreline streams are one type of sensitive areas that require considerations in addition to those outlined above. Centreline streams are less than 2m in width, do not appear on a 1:50 000 NTS map. These streams are identified by centre-lining the stream with plain pink flagging tape. Harvesting may occur right up to the edge of centerline streams, but equipment must not cross the stream at will. If a crossing is necessary, a proper temporary crossing should be installed as in the SOP H-01 *Cutting Extraction Trails Through Buffers and Installing Temporary Forwarder Crossings*.

While harvesting and forwarding wood, efforts must be taken to protect the stream banks and water quality of these small streams. The following procedures have been developed for harvester and buncher operators working adjacent to centreline streams.

Consider maintaining a minimum 5 meter machine-track free zone along the stream. Within this zone, to the fullest extent practical, leave non-merchantable trees, shrubs, and large diameter wildlife trees or “snags”, preferably in patches.

When harvesting next to a centreline stream, pile the wood on the opposite side of the trail, as far away from the stream as possible. You should fall the trees towards the stream, and then haul them back for processing. **Ensure tops and limbs are used for a brush mat under the harvester or buncher so that sediment will not be introduced into the stream, soil compaction will be limited, and natural regeneration seedlings are protected.**

