



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



MEMO

DATE: May 1, 2022

TO: Wildlife Dangerous Tree Assessors
FROM: Wildlife Dangerous Tree Committee of BC

TOPIC: Introducing the new Forest Activities Module

In British Columbia, the Forest Harvesting and Silviculture (FHS) module of the Wildlife Dangerous Tree Assessors Course (WDTAC) has been regarded by WorkSafe BC to be the standard of care applied to assessing and managing dangerous trees in seismic operations. Recently, the Canadian Association of Geophysical Contractors (CAGC) facilitated a process for adapting the FHS module's Level of Disturbance (LOD) table (table 1) for its members during the updating of Energy Safety Canada's safety guidelines for managing dangerous trees.

The FHS module of the WDTAC was revised as of April 2022 to clarify the process for managing dangerous trees in the context of geophysical developments in the oil and gas sector. In April 2022, WorkSafe BC's Certification Services approved the request by the Wildlife Dangerous Tree Committee of BC (WDTC) to expand guidance for Wildlife Dangerous Tree (WLDT) Assessors when being asked to assess trees within geophysical workplaces. Consequently, the FHS module was renamed the Forest Activities (FA) module to reflect the broader application of the dangerous tree assessment process in BC.

In 2022, there will be a gradual transition to the launch of the FA module of the WDTA course and its materials. The launching process is summarized below:

- The new manual is posted on the WDTC website for previously certified FHS assessors to download and reference when/if being asked to perform DT assessments in the geophysical sector (May 2022).
- FS502 field reference cards will become available from the provincial distribution centre and introduced to the WDTAC delivery process when available.
- UNBC Continuing Studies will be transitioning their marketing and course postings to this new FA module of WDTAC delivery (June 2022), and course delivery materials will be updated.
- WDTAC certification references and wallet cards from UNBC Continuing Studies will commence with the FA module certification documentation (June 2022); students enrolling in FA module courses will be provided with FA module wallet cards. Existing FHS course certification will be grandfathered into the FA module data base; employers and WorkSafe BC will continue to honour the FHS module until individuals recertify prior to their expiration of FHS certification.

Highlights of changes in the FA module training

Course Prerequisites have been broadened for persons wishing to take the FA module training for certification as shown below. Prior to taking the course, registrants must have these prerequisites.

Those participants wishing to become qualified assessors require:

- *Three or more years of practical field experience in the area of forestry, resource management, parks management, wildland fire protection, arboriculture, geophysical exploration or a related field; and*
- *Grade 10 equivalency in reading, writing and arithmetic skills (including the ability to calculate percentages); and*
- *Ability to identify tree species native to BC; and*
- *Proven forestry measurement skills (including ability to determine tree diameter, height, lean, stem cross-section, and skill in distance measuring).*

Wildlife Tree habitat value

The table used to determine the relative wildlife tree value has been updated to better reflect a meaningful valuation process and to incorporate the need to protect trees of significance (Culturally Modified Trees, Special Trees, etc), as shown in the following table:

Wildlife Tree Value	Characteristics
<p>HIGH</p> <p>NOTE: If a tree has an active nest, then automatically default to high value, regardless of tree size.</p> <p>Culturally Modified Trees (CMT's) and Special Trees (defined by regulation) are also to be regarded as High Value.</p>	<ul style="list-style-type: none"> • A tree with rare or uncommon habitat characteristics for the site. (e.g., large brooms, cavities, loose bark, dead tops, broken tops, perch site) • A tree protected by policy or special management practices (e.g., CMT, Special Tree, monumental trees, veteran trees, etc) • Tree with active or recent wildlife use (feeding, nesting, denning, perching, roosting, etc) • Tree structure suitable for wildlife use (suitable for large stick nest, hunting perch sites, bear den, fisher den, etc.) • Largest tree for site (height and/or diameter) or rare tree species • Habitat characteristics suited for locally important wildlife tree user species
MEDIUM	<ul style="list-style-type: none"> • Large, stable trees that will likely develop into a wildlife tree (e.g., recent split, broken top, death from insects) • A wildlife tree that has deteriorated and has diminishing viability for continued use
LOW	<ul style="list-style-type: none"> • Trees not covered by high or medium categories • Trees which are highly unstable and unlikely to remain standing beyond an operational period (e.g., advanced root disease, leaners, soft wood decay class)

Note: Under section 34 of the Wildlife Act, no tree with an active nest, or the nest of an eagle, peregrine falcon, gyrfalcon, osprey, heron can be disturbed.

Level of Disturbance (LOD) Table

The LOD Table has been modified to cover both the original timber harvesting and silviculture activities and add the seismic/geophysical activities, as shown in table 1.

Table 1. Levels of disturbance for unprotected workers in various work activities

Level of Disturbance*	Example Types of Work Activities in Harvesting & Silviculture Activities	Example Types of Work Activities in Geophysical Projects
Very Low Risk** (No Pre-work DT Assessment)	<ul style="list-style-type: none"> Forest surveys, stand recce, tree marking, road & cutblock layout, foot travel General light vehicle travel (pickups, ATV/UTV) 	<ul style="list-style-type: none"> Walking, surveying, safety egress (heads up work) General light vehicle travel (pickups, ATV/UTV, snow sleds)
1 (Table 3) WIND: <40km/hour	<ul style="list-style-type: none"> Tree planting Brushing & Weeding, Firewood bucking Tree pruning (stems <20 cm dbh) Use of light-duty machinery (e.g., weed whips, brush saws) Road travel with heavy vehicles (>5500 kg GVWR) on a constructed and maintained resource road Fire control with hand tools and/or water hoses 	<ul style="list-style-type: none"> Placing/retrieving recording lines (e.g., geophones) Power tool brushing/slashing Bucking logs (any size), or downed trees <15cm dbh Seismic blasting <4kg charges (properly placed) Seismic line rehabilitation (manual works, light duty machinery) Road travel with heavy vehicles (>5500 kg GVWR) on constructed & maintained resource roads
2 (Table 4) WIND: <40km/hour	<ul style="list-style-type: none"> Road travel with heavy vehicles (>5500 kg GVWR) on a trail or overgrown road Maintenance or construction activities without heavy equipment (e.g., small machines such as "bobcats") Tree pruning (stems >20 cm dbh) Juvenile spacing or slashing (stems <15 cm dbh) Tree bucking (root plate attached) 	<ul style="list-style-type: none"> Road travel with heavy vehicles (>5500 kg GVWR; e.g., LIS Drills, Vibes) on seismic line or overgrown road Light duty equipment (e.g., LIS drills, small cats) Bucking downed trees >15cm dbh (e.g., wind thrown trees with full root wad attachment) Seismic line construction (stems <15cm dbh) with chainsaws*** Seismic blasting >4kg charges (properly placed) Road maintenance activities without excavations (e.g., brushing, ditch clearing)
3*** (Table 4A) WIND: 40-65km/hour	<ul style="list-style-type: none"> Tree falling (any tree >15 cm dbh) **** Cable yarding Ground skidding Mechanical harvesting and forwarding Helicopter logging with NO workers exposed to rotor wash Use of light and intermediate helicopters where workers are exposed to rotor wash (e.g., helipads) Mechanical site preparation, maintenance, and construction activities with heavy machinery 	<ul style="list-style-type: none"> Tree falling (any tree >15cm dbh)**** Mechanical harvesting and ground skidding Use of light and intermediate helicopters where workers are exposed to rotor wash (e.g., slinging geophone bags) Land clearing & site preparation/deactivation with heavy machinery Road maintenance or construction activities with heavy equipment
4 (Table 5) WIND: >65km/hour	<ul style="list-style-type: none"> Trees adjacent to corridors in partial-cut cable logging operations Harvesting operations in structurally damaged stands (e.g., wildfire burns) Surface rock blasting Helicopter logging with workers exposed to rotor wash Use of medium and heavy helicopters where workers are exposed to rotor wash 	<ul style="list-style-type: none"> Use of medium and heavy lift helicopters where workers are exposed to rotor wash (e.g., slinging Heli seismic drill into position) Surface blasting (e.g., road construction)

*A dangerous tree assessment is only valid for the lowest level of disturbance at which the assessment has been done.

**VLR activities are based upon the expectation that workers have been trained and mentored how to be situationally aware of the hazards expected in their workplace under a variety of forest and weather conditions.

*** If trees CANNOT be safely felled and yarded away from adjacent standing timber (i.e., there is a chance that felled or yarded timber will strike adjacent standing "leave timber"), then default to Level 4 disturbance.

**** Does not include dangerous tree falling and/or line slashing for fallen tree hazard mitigation. Falling of dangerous trees does not require reassessment to LOD3; the falling process must be in accordance with the BC Faller Training Standard and adherence to safe falling practices. Slashing and bucking to remove fallen hazards after mulcher line clearing does not require reassessment to LOD2.

Qualified Person (QP) recognition

In the FHS module it is acceptable for QP's to perform DT Assessments for LOD1 activities. However, the new module clarifies the expectation that when a QP is performing LOD1 assessments they are doing so under supervision and mentoring of a certified WDT Assessor.

Work site perimeter assessments

The FHS module identified the process for assessing the work site perimeters of LOD2-4 activities. In the FAM manual, this process is further clarified by stating that the experienced and certified WDT assessor must apply their knowledge, skills and experience when determining how to assess work site perimeters. This perimeter process is implemented by the certified WDT Assessor.

Trees within the Perimeter Zone need to be viewed from the perspectives of:

- 1) Is the tree (or its part) within reach of the work site, and
- 2) Is it likely the tree could collapse without any disturbance?

If the answer to BOTH of these two conditions is YES, then the tree is a dangerous tree, and it needs to be managed accordingly.

If the WDT assessor identifies a suspect tree that is within the Perimeter Zone, the assessor must review the tree amidst its surroundings and determine whether the tree poses an imminent hazard and whether the tree can reach the work site. The diligent WDT assessor must consider whether a tree having significant hazards has a sufficient buffer of trees to prevent the tree from reaching the work site. If there is sufficient screening to prevent the fall of a tree or its part from reaching the work site, then the tree is not a risk to workers.

To view the entire FA module's course manual, please visit the WDTC's website to download the manual.

<https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/wildlife/wildlife-habitats/wildlife-tree-committee>

For further information on this or other safety matters pertaining to managing wildlife/dangerous trees, contact the Wildlife Dangerous Tree Committee members or your local WorkSafe BC safety officer.

Prepared by: Dean McGeough, RPF (deanmcg@shaw.ca)
Coordinator, WDTC of BC