

## ***Addendum to NWDSN Data Integration Model v1***

(This replaces the existing section 2.5 of the document circulated in January 2004)

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### **2.5. Forest Overview Features**

#### **2.5.1. Overview of Forest Overview Features in the NWDSN**

It is proposed that NWDSN forest overview features be stored in two separate data layers:

- Forest Overview Areas (Polygonal)
  - Beetle Infestation / Forest Health Observation Extents
  - Forest Overview Description Areas
- Forest Overview Locations (Point)
  - Beetle Infestation / Forest Health Observation Points
  - Forest Overview Description Points

#### **NOTES:**

- The exact contents and spatial representations of the forest health and overview layers are unknown at this time
- This proposal makes use of an existing **Forest Health** model in use at the Ministry of Forests Forest Practices Branch (FPB) and extends it to be able to accommodate Forest Overview information

#### **2.5.2. Forest Overview Feature Submission Format and Standard**

Licensees are requested to submit their forest overview data to the NWDSN in Shapefile (.SHP) format. Submissions will be standardized using the TRIM Exchange (TRIMX) schema – a standard that is actively employed by MSRM to incorporate licensee data describing other feature types into the TRIM system.

Table 25 presents the TRIMX schema used to describe forest overview data submitted to the NWDSN. The structure of the files will not be modified in the NWDSN – attribute names and types will be identical to those in the TRIMX files provided.

### 2.5.3. TRIMX Forest Overview Submission - Attribute Schema

COLUMN	TYPE	DESCRIPTION
TRIM_CCSCM	CHAR(10)	The TRIM CCSM code that best describes the feature. Ex: GA9100032 <b>Feature Codes for relevant point and polygon features are supplied following in Tables 26 and 27 (respectively).</b>
SUPPLIER	CHAR(40)	The data supplier code. Assigned to the exchange partner at the time of the agreement. Ex: DKS
CAPT_METHD	CHAR(40)	The data capture method. Must be one of: orthoPhotography, differentialGPS, unknown, nondifferentialGPS, satelliteImagery, rubberSheeting, scanning, photogrammetric, coordinateGeometryWithControl, monoRestitution, tableDigitizing (case sensitive)
ACC_PCTL	NUMBER(2,0)	The data accuracy percentile. Quantifies the percentage of features which are statistically expected to fall within the horizontal and vertical accuracy bounds. Ex: 95
ACC_HOR	NUMBER(3,0)	The horizontal accuracy bound. Ex: 15
ACC_VER	NUMBER(3,0)	The vertical accuracy bound. Ex: 10
UPDATE_YR	NUMBER(4,0)	The year this feature was collected. A four-digit year. Ex: 2001
UPDATE_MN	NUMBER(2,0)	The month this feature was collected. A month from 1 to 12, where 1 is January and 12 is December. Ex: 3
UPDATE_DY	NUMBER(2,0)	The day this feature was collected. A day from 1 to 31. Ex: 15
PROJECTION	CHAR(10)	The data capture projection code. Regardless of the projection the data is delivered in, what projection was it captured in? Ex: UTM10 (case sensitive - use uppercase)
DATUM_HOR	CHAR(10)	The horizontal datum. Must be one of: nad83, nad27
DATUM_VER	CHAR(10)	The vertical datum. In British Columbia most vertical data uses the Canadian Vertical Datum. Ex: cvd28
UNITS	CHAR(15)	The original data capture unit. Ex: metres (use Canadian spelling)
ZVALUE	CHAR(10)	Is there original z-value information on this data? (yes, no, derived)
X_ID	CHAR(10)	Unique Feature Identifier (e.g. FHID123456)
X_FOOTYPE	CHAR(6)	Forest Health Type Code (health, damage, other)
X_FOOCODE	CHAR(10)	Code identifying the type of forest overview observation (FOO)
X_GIMGURL *	CHAR(55)	URL to a Generic image of FOO type looked-up using ForestHealthCode
X_SIMGURL *	CHAR(55)	URL to a Specific image of the FOO looked-up using ForestHealthCode
X_SEVCODE ~	CHAR(10)	Infestation/Overview severity code (only applies to health/damage agents)
X_NUMTREE *	NUMBER(8,0)	Number of trees within the scope of the observation

X_AREA *	DECIMAL(8,2)	Area of the observation (may be calculated for the area surrounding points)
X_ATTRK *	CHAR(255)	<p>Exchange Attribute Keys – Can be used to assign any other forest health, overview and other information to NWDSN features. Keys are submitted in association with Values – For each key entry there is a corresponding value entry.</p> <p style="text-align: center;">“SPECIESTYPE1/// SPECIESTYPE2”</p> <p>In the text string example above, “///” represents a Carriage Return character. Any number of attribute keys can be appended to this basic value using Carriage Return characters as the delimiter. For example:</p> <p style="text-align: center;">“SPECIESTYPE1/// SPECIESTYPE2/// SPECIESTYPE3”</p> <p>Adds the key “SPECIESTYPE3” to the set of keys submitted to the NWDSN.</p>
X_ATTRV *	CHAR(255)	<p>Exchange Attribute Values – Used to assign forest health, overview and other information to NWDSN features. Values are submitted in association with Keys – For each key entry there is a corresponding value entry. For the forest overview key sample above, the attribute value will assume the form:</p> <p style="text-align: center;">“[Species1]///[Species2]///[Species3]”</p> <p>Where ..</p> <ul style="list-style-type: none"> <li>• Species 1–3 represent the species in the area under investigation.</li> </ul> <p>For example:</p> <p style="text-align: center;">“Douglas Fir///Lodgepole Pine///Western Hemlock”</p> <p>Other attribute values can be appended to this basic value using Carriage Return characters as the delimiter. Additional attributes without a corresponding key entry will be dropped.</p>

- (\*) Indicates an optional field
- (~) Indicates a field that is mandatory for a certain data-type (see field descriptions)
- All other fields are mandatory

**NOTE:** Relating the sample of the X\_ATTRK and X\_ATTRV key:value set in the preceding table, the paired strings are tied together as follows:

Element	(0)	(1)	(2)	(...)
<b>Key</b>	SPECIESTYPE1	SPECIESTYPE2	SPECIESTYPE3	Comment
	↓	↓	↓	↓
<b>Value</b>	Douglas Fir	Lodgepole Pine	Western Hemlock	Potential damage due to windfall/snowload (~10 years ago)

**Table 26.** TRIM Feature Codes for Forest Overview Point Features

NWDSN / Exchange Feature Type	TRIM Feature Code
Forest Health Observation Point	[ Not yet assigned ]
Forest Overview Observation Point	[ Not yet assigned ]

**Table 27.** TRIM Feature Codes for Forest Overview Polygon Features

NWDSN / Exchange Feature Type	TRIM Feature Code
Forest Health Observation Polygon	[ Not yet assigned ]
Forest Overview Observation Polygon	[ Not yet assigned ]