

Chapter D4 – FOREST DESCRIPTION

Introduction By addressing each of the elements of a complete forest description the reader will be able to make judgements on the confidence they can place in the valuation.

Land The forest description should document the land on which the forest is located:

- legal ownership and tenure of the land, and of the trees, including any encumbrance on the title or other rights or documents affecting rights to the trees or land (include statements or evidence that such documents have been reviewed and that all titles and other instruments have been searched, noting any encumbrances or limitations that could have a material impact on the value of the tree crop);
- existence of other tenures within forest boundary (unformed legal roads, give-and-take boundaries);
- status of the land in any emissions trading scheme;
- location (map and cadastral reference);
- physical attribute and characteristics;
- limitations on use imposed by local and other regulatory authorities;
- limitations on access from the public road network;
- presence of archaeological features or historic sites;
- other salient features (e.g. customary use, public access, hunting rights).

Reference: Chapter B1, Description Of Land

Forest area The method used to estimate stocked areas must be described. A statement that gives the reader a reasonable estimate of the precision of the area statement is required. The forest description should declare:

- areas:
 - legal title areas;
 - total land area including non-title area;
 - stocked area;
 - area prepared for planting;
 - area not prepared but intended for planting;
 - other area.
- method(s) of area measurement;
- reconciliation of areas (to title or other known area) or declaration that this was not done;
- reliance on area declarations supplied by others;
- probable accuracy of stocked area statement;



- confirmation that stocked area conventions are consistent with those for which yields have been estimated;
- confirmation that mapping to meet obligations under any emission trading scheme does meet requirements of that scheme.

Reference: Chapter B2, Forest Area

Land value

The value of land contained within a forest description will be supported by:

- source of the land value and value of improvements; and any associated land rentals;
- what is included in the value of land (vegetation, roads);
- date of land valuation;
- confirmation that the land valuation is for the same land that is included in the forest description;
- statement on the relationship between land value, tree crop value and carbon crop value, as used in the valuation, with emphasis on the extent to which they are or are not additive;
- statement of the relationship of the land value used in the forest description to land value derived from external sources.

Reference: Chapter B6, Value Of Land

Stand history

The forest description needs to draw upon existing stand records or other sources to classify stands for existing condition, growth and yield prediction, future management or harvesting.

Describe:

- available records;
- completeness of records;
- reliability of inputs to forest records;
- steps taken to audit the reliability of records;
- how deficiencies in the available information have been addressed.

Reference: Chapter B3, Stand History

Aggregation

Any aggregation of stands into groups for purposes of analysis should be accompanied by:

- the purpose of aggregation;
- the rules defining group membership;
- the rules for combining attributes, including area, yields, costs and prices, of base land units;
- confirmation that all area is accounted for and not double-counted;
- confirmation that aggregation is fit for the purpose of the valuation and does not introduce material loss of information or bias.

Reference: Chapter B4, Aggregation of Tree Crop Areas



Yield estimation Yields are estimated from measurements (inventory) using models.
Yield estimates must be internally consistent with the areas, costs and prices with which they are used.

The forest description documentation must:

- describe the measurement data underpinning the yield estimates;
- describe the assumptions used for unmeasured areas;
- describe the models used to estimate yields from the measurement data;
- describe the steps taken to ensure consistency with area, stand history, costs and prices;
- provide the results of any comparative analyses, e.g. yield reconciliation studies, that explain the quality of yield estimates.

Reference: Chapter B5, Yield Estimation

Costs To ensure completeness, reliability and consistency of all costs specified in the forest description, the following elements need to be addressed.

Completeness:

- direct costs;
- forest level costs of being in business (rates, land occupation costs, access formation, management costs, protection costs, overheads);
- the costs from stump to price point, including overheads.

Reliability:

- source;
- models of cost;
- relevance of externally sourced costs;
- reconciliation to independent sources.

Consistency:

- costs expressed in current values using the valuation currency;
- no double counting (e.g. treatment of supervision costs);
- timing of all costs consistent with forest description (including pre-harvest roading);
- costs are internally consistent with the areas and yields to which they are applied; e.g. \$/tonne are applied to tonnes, not m³, and \$ per planted hectare are applied to planted hectares, not title hectares.

Cost movements:

- disclosure of assumptions about real cost changes.



Applicability:

- a statement describing the author's view as to the applicability of the costs for the purposes of the valuation.

Reference: Chapter B7, Costs

Prices

The valuation should disclose prices used, the sources of those prices and comment on the fitness of the prices used for the purpose of the valuation.

Disclosure of prices:

- prices for each log grade (use the same grades as in the yield table) at the point of sale;
- points of sale and price points;
- conversion of prices from points of sale to price points (units, currency, costs);
- log grade prices at price point using the valuation currency for the units used in the yield tables (e.g. m³, under-bark on roundwood basis);
- specific adjustments.

Sources of price information:

- log grades from which prices are derived;
- markets for log grades from which prices are sourced;
- period over which prices are sourced;
- derivation of prices at point of sale.

Disclosure of price movements:

- method of forecast for assumed real price movement (including zero change);
- confidence limits around any analysis used to forecast trend.

Applicability/fitness for purpose:

- comparison with practice of others;
- valuer's statement.

Reference: Chapter B8, Prices

