Title	Demonstrate knowledge of the principles of forest valuation		
Level	5	Credits	3

Purpose	People credited with this unit standard are able to: explain the uses of valuation in commercial forestry; describe methods of valuing forests; define key terms used in forest valuation; and value a forest crop using given data.

Classification	Forestry > Forest Inventory

Available grade	Achieved

Guidance Information

References
Colley, M. *Forestry handbook / New Zealand Institute of Forestry Inc.* (4th ed). (2005)*.* Christchurch: New Zealand Institute of Forestry Inc.
McLaren, J.P. *Radiata Pine Growers Manual.* (1993)*.* FRI Bulletin 184. Rotorua, New Zealand: New Zealand Forest Research Institute.
New Zealand Institute of Forestry. *Forest Valuation Standards*, (1999). PO Box 19840, Christchurch 8241, New Zealand.

Outcomes and performance criteria

Outcome 1

Explain the uses of valuation in commercial forestry.

Performance criteria

1.1   The reasons for obtaining a forest valuation are described in accordance with the reference texts.

        Range   sale of forest, insurance, asset valuation for company accounts, land use comparisons, project evaluation, strategic planning.

1.2   The differences between the valuation of the land, the valuation of the tree crop, and the valuation of the land and tree crop are distinguished in terms of the purpose of the valuation, in accordance with the reference texts.

Outcome 2

Describe methods of valuing forests.

Performance criteria

2.1   Methods of valuing forests and the application of each method are described in accordance with the reference texts.

        Range   willing buyer/willing seller, sale comparison, expectation value.

2.2   Key valuation parameters used when comparing forest sales are described in accordance with the reference texts.

        Range   area, species, age class distribution, site productivity, topography, location, currency of data.

Outcome 3

Define key terms used in forest valuation.

Performance criteria

3.1   The terms *price*, *value*, and *cost* are defined in accordance with the reference texts.

3.2   The concepts of the time value of money, compounding, and discounting are described in accordance with the reference texts.

3.3   The terms *discounted cash flow*, *net present value*, and *internal rate of return* are defined in accordance with the reference texts.

3.4   The sources of data to be used in a Discounted Cash Flow (DCF) for a forestry project are defined in accordance with the reference texts.

        Range   silvicultural regime, costs, forecasts of yield, log price forecasts.

Outcome 4

Value a forest crop using given data.

Performance criteria

4.1   Calculate the value of a forest using given data in accordance with the reference texts.

        Range   sales comparison, expectation value.

4.2   The impact on forest valuation of changes in inputs is determined using the expectation value method.

        Range   inputs include – operational costs, log prices.

Planned review date	31 December 2028

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	28 January 1995	31 December 2017
Review	2	27 May 1998	31 December 2017
Review	3	27 May 2002	31 December 2017
Review	4	16 October 2009	31 December 2017
Review	5	10 December 2015	N/A
Rollover and Revision	6	28 May 2020	N/A
Rollover	7	26 April 2024	N/A

Consent and Moderation Requirements (CMR) reference	0173

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

Comments on this unit standard

Please contact Muka Tangata - People, Food and Fibre Workforce Development Council qualifications@mukatangata.nz if you wish to suggest changes to the content of this unit standard.