Title	Salvage windthrown trees		
Level	4	Credits	12

Purpose	This unit standard is intended for people employed in a tree felling role in a forestry operation.	
	People credited with this unit standard are able to: demonstrate knowledge of considerations in salvaging windthrown trees; demonstrate knowledge of hazards and associated risks created by windthrown trees; and carry out windthrown salvage.	

Classification	Forestry > Tree Felling	
----------------	-------------------------	--

Available grade	Achieved
Prerequisites	Unit 28561, Plan and fell trees using advanced techniques in a commercial forest harvesting operation.

Guidance Information

- Legislation relevant to this unit standard includes the Health and Safety at Work (HSW) Act 2015; the Resource Management (National Environmental Standards for Plantation Forestry) Amendment Regulations 2018; and any subsequent amendments.
- 2 References

Approved Code of Practice (ACOP) for Safety and Health in Forestry Operations, December 2012, available from <u>https://worksafe.govt.nz/</u>. New Zealand Forest Owners Association, *Forest Practice Guides* (2019), and any subsequent amendments, available from <u>https://www.nzfoa.org.nz</u>.

- 3 This unit standard is intended to cover the salvage of trees in areas of windthrow, as distinct from isolated windthrown trees.
- 4 Definitions

Accepted industry practice refers to approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice. *Worksite procedures* refer to documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

- Assessment information
 This unit standard must be assessed on-job.
 All activities and evidence must meet worksite procedures and accepted industry practice.
- 6 Recommended skills and knowledge for entry: Unit 24569, *Fell trees using machine pushing assistance*; and Unit 24570, *Fell trees using back-pulling machine assistance*.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of considerations in salvaging windthrown trees.

Performance criteria

- 1.1 Differences in emphasis between windthrown salvage and conventional forest harvest are explained.
 - Range changes in emphasis on safety, production, costs, use of resources.
- 1.2 The plan for the block being harvested is explained.
 - Range access to block, felling plan, machine availability, training requirements, supervision.
- 1.3 Rules for salvaging windthrown trees are described.

Outcome 2

Demonstrate knowledge of hazards and associated risks created by windthrown trees.

Performance criteria

- 2.1 The hazards and associated risks specific to salvaging windthrown trees are identified and controls are explained.
 - Range hazards may include but are not limited to partial or complete stem breakage, shatter, tension, compression, weakened and/or leaning and fallen trees, spar trees.
- 2.2 The hazards and risks specific to trees which are standing but wind wrenched are identified, and controls are explained.
 - Range risk of unstable tree moving and altering lean during or after cutting, movement of root plate, wind.

- 2.3 The hazards and risks able to be minimised by use of machines are identified and described.
- 2.4 Control methods of other risks are described.
 - Range may include but are not limited to techniques to deal with felling, butting and heading trees, limbing, trimming, yarding, upturned root plates, compression, tension, strop attachment, breaking out, machinery.

Outcome 3

Carry out windthrown salvage.

Performance criteria

- 3.1 Safety requirements are established and met.
 - Range training, protective clothing, felling aids, chainsaw suitability, workface setup, escape routes, stance, communication.
- 3.2 The hazards and associated risks specific to each intended action are assessed before commencing.
 - Range compression, tension, weight transfer, predicting likely or possible log or tree movement, body position on safe side, ground conditions.
- 3.3 Compression and tension in a tree stem or log are identified, and sequence of chainsaw cuts made.
- 3.4 Machines are directed in order to control risks and to meet operational requirements.
 - Range overhead and ground hazards before, during and after felling and extraction work.
- 3.5 Factors affecting salvage options are dealt with individually and systematically.

Range a planned systematic approach to all situations, safety as priority, top stems first.

- 3.6 Situations beyond the scope of available resources and equipment are recognised, and assistance and/or additional resources and/or equipment sought.
- 3.7 Trimming and heading-off are carried out in an established safe area.
- 3.8 Stem extraction is directed to suit operational requirements.

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 2012
Review	2	8 November 1996	31 December 2012
Revision	3	19 June 1998	31 December 2012
Review	4	5 December 2000	31 December 2012
Review	5	24 March 2003	31 December 2012
Review	6	22 May 2008	31 December 2016
Review	7	19 March 2015	31 December 2023
Revision	8	28 September 2017	31 December 2023
Review	9	25 June 2020	31 December 2023
Revision	10	26 May 2022	N/A
Rollover	11	26 April 2024	N/A

Consent and Moderation Requirements (CMR) reference	0173		
This CMR can be accessed at http://www.nzga.govt.nz/framework/search/index.do.			

Comments on this unit standard

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