Modification history

|  |  |
| --- | --- |
| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0. |

| AHCFIR502 | Plan prescribed burning for fuel, ecological and cultural resource management |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to plan and review prescribed burning in areas associated with fuel management. It requires the planner to identify the advantages and risks of burning and assess the implications on ecological and cultural assets  The unit applies to individuals whose job roles include managing wildfire where ecological and cultural assets are at risk in target areas. Work is undertaken without supervision. They have accountability for the work of others and analyse, design and communicate solutions to a range of complex problems.  No licensing, legislative or certification requirements are known to apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Fire (FIR) |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Assess a designated site/area for prescribed burning | 1.1 Locate, assess and record accumulated fuel, cultural heritage and environmental assets  1.2 Locate, assess and record reference areas, experimental plots, populations of flora and fauna that may be affected by fire  1.3 Assess and record potential impacts on natural and cultural heritage assets from prescribed burn preparation and burning activities  1.4 Assess potential risks and hazards  1.5 Identify the history of previous burns on the site  1.6 Identify legislation, regulations and codes of practice relevant to prescribed burn preparation and activities  1.7 Assess the suitability of target site for fuel reduction burns  1.8 Identify alternative strategies where fuel reduction burns are not favourable  1.9 Determine resources and equipment required to implement the plan |
| 2. Plan for prescribed burning | 2.1 Conduct site assessments to confirm selection of target sites for prescribed burning  2.2 Establish objectives for fuel reduction, ecological and cultural heritage protection  2.3 Select strategies and tactics suitable for the area and consistent with the burn objectives  2.4 Assess wildfire hazards and risks of selected strategies and tactics  2.5 Conduct consultation and ongoing liaison with stakeholders  2.6 Ensure plan addresses work health and safety, protection of life, property, assets and the environment and is in accordance with legislative requirements  2.7 Develop objectives and procedures for monitoring ecological response to burn  2.8 Ensure required resources and the optimum timing to reduce risk are included in the plan |
| 3. Conduct post burn monitoring and evaluation | 3.1 Develop and record post burn monitoring and evaluation activities  3.2 Assess outcomes of the prescribed burn against established objectives for fuel management and protection of ecological and cultural heritage assets  3.3 Develop recommendations based on information from monitoring and evaluation activities according to legislation, regulations, codes of practice and organisational obligations  3.4 Document and report monitoring and evaluation findings |

| Foundation Skills  This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria. | |
| --- | --- |
| Skill | Description |
| Reading | * Use a broad range of strategies to build and maintain an understanding of complex texts including, legislation, regulation and workplace policies and procedures for consideration during plan development |
| Writing | * Prepare plans expressing ideas, exploring complex issues and constructing them in a logical, succinct and accurate way for fuel reduction burns |
| Oral communication | * Establish and maintain complex and effective communication when liaising with a broad range of stakeholders and during consultations |

|  |  |  |  |
| --- | --- | --- | --- |
| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCFIR502 Plan prescribed burning for fuel, ecological and cultural resource management  Release 2 | AHCFIR502 Plan prescribed burning for fuel, ecological and cultural resource management  Release 1 | Edited Application for clarity.  Edited Performance Criteria for clarity. Split Performance Criteria 1.7.  Added Foundation Skills  Edited  Edited Performance Evidence and Knowledge evidence.  Added detail to Assessment Conditions | Equivalent unit |

|  |  |
| --- | --- |
| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72 |

| TITLE | Assessment requirements for AHCFIR502 Plan prescribed burning for fuel, ecological and cultural resource management |
| --- | --- |
| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.  There must be evidence that the individual has on at least one occasion planned, monitored, evaluated and reported prescribed burning activities according to organisational procedures and legislative requirements.  There must also be evidence the individual has:   * identified the history of previous burns on the site, including: * frequency * season * intensity * extent * assessed the fuel loading for a site and determined the fire risk * identified wildfire hazards and risks and impact on ecology and wildlife * identified ecological and cultural assets that could be affected by preparation and burning activities * developed and met objectives for prescribed burn strategies, tactics and outcomes, including: * minimised environmental impact * minimised impact on cultural and heritage assets * consulted and liaised with key stakeholders in development of prescribed burning plan * researched, considered and applied outcomes of historical fires in target area * apply work health and safety legislative requirements to prescribed burn plans. | |

| Knowledge Evidence |
| --- |
| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:   * wildfire hazards and risk management strategies * basic wildfire behaviour * fuel types and fuel levels * sources of ignition * effects of climate change and impact of weather * fire movement and reaction to aspect and terrain * prescribed burning strategies * fuel reduction * ecological * cultural * legislation relevant to wildfire hazard reduction, cultural heritage and protection of flora and fauna * effects of fire on the ecology, including: * vegetation and vegetation types * fire frequency and vegetation response * fauna and habitat * fuel accumulation * impact on soils and erosion * impact on streams and waterways * impact on natural vegetation and pest plants * effects of fire on areas and places of cultural significance * indigenous culture * heritage sites * resource requirements used to conduct burning activities * risks in burning for fuel management |

| Assessment Conditions |
| --- |
| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated on a site requiring prescribed burning as part of a fire management plan * resources, equipment and materials: * computer and web based resources * instruments for measuring fire intensity and soil temperature * specifications: * use of wildfire hazard rating systems * use of workplace policies and procedures for wildfire management * access to legislation, regulations and codes of practice for wildfire management   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

|  |  |
| --- | --- |
| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72 |