AHCARB604 Performance of Urban Forests Form

Prerequisite competency completion		
Not applicable. There are no prerequisite requirements.		
Required reports completion		
Has the candidate successfully completed the **required reports?**	**Yes/No (Y/N)**	**Signed (Initialled)**
Report on urban forest performance		
Mandatory Equipment (as a minimum)		
Has each of the mandatory equipment items been used to gather evidence for assessment?	**Yes/No (Y/N)**	**Signed (Initialled)**
computer		
word processing software		
statistical software		
internet connection		
measurement and data collection tools		
Knowledge Evidence		
Has the candidate successfully completed the **Knowledge Evidence** requirements by demonstrating knowledge of each of the line items below?	**Yes/No (Y/N)**	**Signed (Initialled)**
urban forest case studies		
urban forest management reports		
best management practices in urban forest planning and management		
applications and functional tools measuring benefits of urban forests		
social benefits of urban forests		
psychological benefits of urban forests		
environmental benefits of urban forests		
evidence-based research		
analysis of sampling of an urban forest		
requirements of sample sizes to assess total tree populations		
accuracy of sample size		
calculations of canopy cover		
calculations of total carbon storage		

calculations of annual carbon dioxide sequestration		
calculations of rainfall interception		
calculations of air pollution removal		
calculations of energy savings benefit		
calculations of environmental benefits		
calculations of amenity benefits		
base financial value for functional benefits of urban forests		
calculations of financial values of functional and environmental benefits of tree populations		
benefits of heat island modification of urban areas		
total asset valuation of an urban forest		
urban forest structure and functions		
urban tree population half-life, vacant planting ratio, species distribution and population diversity		
life expectancy of tree population		
urban forest analysis		
identification of urban forest issues within tree population sample areas		
recommendations for tree species and diversity		
tree planting and replacement programs		
volume and rate of planting programs		
modifications to planting practices		
targets for urban forest improvement		
Performance evidence		
Has the candidate successfully demonstrated the **Performance Evidence** requirements of the unit of competency AHCARB604 Measure and improve the performance of urban forests**, and as per listed line items below?**	**Yes/No (Y/N)**	**Signed (Initialled)**
researching urban forest case studies and management reports		
reviewing best management practices in urban forest planning and management		
researching applications and functional tools measuring benefits of urban forests		
analysing social benefits of urban forests		
analysing psychological benefits of urban forests		
analysing environmental benefits of urban forests		
documenting evidence-based research into a preliminary report on benefits of urban forests		

conducting sampling analysis of an urban forest		
determining required sample size to assess total tree population		
determining accuracy of sample size		
calculating canopy cover		
calculating total carbon storage		
calculating annual carbon dioxide sequestration		
calculating rainfall interception		
calculating air pollution removal		
calculating energy savings benefit		
calculating environmental benefits		
calculating amenity benefits		
identifying base financial value for each functional benefit		
calculating financial values of functional and environmental benefits of current tree population		
determining benefits of heat island modification of urban areas		
documenting a preliminary report on total asset valuation of an urban forest		
analysing urban forest structure and functions		
describing urban tree population half-life, vacant planting ratio, species distribution and population diversity		
estimating life expectancy of tree population		
compiling results of urban forest analysis		
identifying urban forest issues within tree population sample area		
determining recommendations for tree species and diversity		
determining extent of current tree planting and replacement programs		
determining volume and rate of planting programs required for improvements to urban forest performance		
determining required modifications to planting practices		
determining targets for urban forest improvement		
documenting a report on urban forest performance that provides recommendations for improvement of urban forests		
Assessment conditions		
Assessment may be conducted in a simulated or real work environment; however, determination of competency requires the application of work practices under work conditions.	**Yes/No (Y/N)**	**Signed (Initialled)**
Have assessments been demonstrated consistently over time?		

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Have assessments been demonstrated in a suitable range of contexts?		
Have assessments been demonstrated with a productivity-based outcome?		
Have assessments been demonstrated with multiple assessment events and reports?		

Assessor Declaration

Assessors must satisfy current standards for RTOs in the assessment of arboriculture units of competency. **Has assessment been conducted only by persons who have:**	**Yes/No (Y/N)**	**Signed (Initialled)**
• **arboriculture vocational competencies at least to the level being assessed?**		
• **current arboriculture industry skills directly relevant to the unit of competency being assessed?**		

Assessor name	**Assessor qualification**	**Year**	**Full Signature**

Competency Determination

This section determines the skills and knowledge required to measure and improve the performance of urban forests.	**Competent /Not yet competent**
The candidate is competent in measuring and improving the performance of urban forests.	

Competency Assessment Completion

Assessor name	**Date**	**Full Signature**

Industry Partners: