



Australian Government

SISOPLN005 Interpret weather and environmental conditions for outdoor recreation activities

Release: 1

SISOPLN005 Interpret weather and environmental conditions for outdoor recreation activities

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to collect and interpret information on weather conditions for a specific locality or region. It also requires the ability to collect and evaluate information about environmental events such as floods, bushfires and droughts. These skills are used to plan outdoor recreation programs and activity sessions, and to assess weather and other conditions immediately before and during activities.

This unit applies to any type of organisation that delivers outdoor recreation activities including commercial, not-for-profit and government organisations.

It applies to individuals who plan or deliver programs or activities including program and logistics managers and coordinators, and leaders (guides or instructors).

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Outdoor Recreation Planning

Unit Sector

Outdoor Recreation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes

1. Interpret information from a weather map.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1. Select map type according to required use.
- 1.2. Interpret weather map symbols and colours and associated weather conditions.
- 1.3. Compare and identify differences between current

- weather conditions and a current weather forecast.
2. Obtain and interpret information about, weather conditions for a locality or region.
 - 2.1. Identify seasonal variations in weather patterns for a specific area.
 - 2.2. Obtain long and short range weather forecasts for the general region and activity location.
 - 2.3. Determine differences between large scale and localised weather conditions for a specific area.
 - 2.4. Identify major cloud types, altitude level and influence on local weather.
 - 2.5. Identify typical wind types, speeds and directions for locality and seasonal variations.
 - 2.6. Determine effects of topography and landforms on weather conditions for activity location.
 3. Obtain and interpret information about environmental events.
 - 3.1. Access and interpret information about seasonal environmental events that occur in a specific area and locality.
 - 3.2. Access and evaluate information on current environmental events and likelihood of impact on operational zone of outdoor recreation activities.
 4. Plan activities according to weather and environmental conditions.
 - 4.1. Determine and document a weather prediction for duration of activity for a specific locality or region using weather maps and forecast data.
 - 4.2. Identify hazards associated with the onset of changing weather and other environmental conditions for locality or region and impacts on activities.
 - 4.3. Assess weather conditions and forecast immediately before activities to determine suitability and limitations of activities.
 - 4.4. Identify and implement strategies to ensure the safety and wellbeing of participants in current and predicted weather conditions.
 5. Interpret weather in the field.
 - 5.1. Access immediate weather forecast in the field, as able, and identify conditions and onset timelines.
 - 5.2. Use a range of atmospheric features including wind and direction, temperature, sky colour, cloud type and coverage to assess weather.
 - 5.3. Estimate probable changing weather conditions and onset timelines.
 - 5.4. Identify and implement strategies to ensure the safety and wellbeing of participants in prevailing weather conditions.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Reading skills to:	• interpret unfamiliar and potentially complex technical information about weather and environmental events.
Writing skills to:	• record weather predictions incorporating correct terminology and jargon.
Numeracy skills to:	• interpret and record detailed numerical data involving degrees, percentages, speeds, volume and mass.
Technology skills to:	• use a range of technologies to access information about weather and environmental conditions.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume Implementation Guides -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1ca50016-24d2-4161-a044-d3faa200268b>

Assessment Requirements for SISOPLN005 Interpret weather and environmental conditions for outdoor recreation activities

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- for a particular region or locality and for a particular type of outdoor recreational activity:
 - interpret weather and environmental conditions for the seasons of operation and outline the following in a brief written or verbal report to include:
 - nature of different weather conditions in different seasons
 - nature of environmental events that occur and likelihood of their onset
 - activity specific hazards associated with those conditions
 - optimum time for operation of activities
 - interpret weather and environmental conditions for the operation of three forthcoming activity sessions and outline the following in a brief written or verbal report:
 - the predicted weather conditions for the duration of each activity session
 - activity specific hazards associated with the onset of particular weather conditions and environmental events
 - how activities can be delivered to provide for the safety and wellbeing of participants
 - utilise options provided in Assessment Conditions to interpret weather conditions in the field during the operation of two activity sessions and determine required activity modifications to suit prevailing conditions.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- different types of weather maps, forecasts, current weather and environmental event information that are available
- trusted sources and technologies used to access weather and environmental event information
- methods used to predict and record weather conditions
- characteristics of different map types and their different uses:
 - mean sea level pressure analysis
 - synoptic charts
 - forecast charts

- marine wind forecasts
- symbols and colours used on weather maps, what they represent, and associated weather conditions:
 - cyclones
 - anti-cyclones
 - isobars
 - depressions
 - troughs
 - ridges
 - fronts – cold, warm, stationary, occluded
 - precipitation type and intensity - drizzle, rain, hail, sleet, snow
 - wind speed and direction
 - sky, cloud cover
 - temperature
- difference between current weather conditions and current forecast
- different cloud types, altitude range and effects on ground weather:
 - cirrus
 - stratus
 - cumulus
 - nimbus
 - cumulonimbus
- for a particular region or locality:
 - the general seasonal patterns of weather and environmental events to include:
 - temperature
 - humidity
 - precipitation
 - winds of different types, strengths and directions, common wind chill factors and how these are ascertained
 - storms
 - lightning
 - cyclones
 - floods
 - bush fires
 - droughts
 - tides and currents, as relevant
 - difference between large scale and localised weather conditions and forecasts
 - different topography and landforms present, and effects on local weather
 - hazards associated with local weather conditions and environmental events, including those which are life threatening, (e.g. storms, lightning, cyclones, floods, tides, currents, bush fires, droughts)

- specific to the particular type of outdoor recreation activity:
 - particular weather conditions and weather hazards which affect operations
 - particular hazardous environmental events which affect operations
 - adjustments that can be made to provide for the safety and wellbeing of participants
 - when conditions are so extreme that activities must be abandoned
- how the following can be used to estimate probable changing weather conditions and onset timelines:
 - wind and direction
 - temperature
 - sky colour, cloud type and coverage.

Assessment Conditions

Skills for in the field interpretation of weather must be demonstrated in an environment specific to the particular type of outdoor recreation activity.

Assessment must ensure use of:

- information about the region and locality to allow the individual to evaluate specific characteristics related to topography, landforms, weather conditions and environmental events
- real workplace situations, or simulated activities, or case study scenarios that test aspects of this unit that involve in the field activity modifications
- different types of weather maps
- weather forecasts for the region and locality
- forecasts for and information about environmental events
- specific to the particular type of outdoor recreation activity:
 - programs plans
 - activity plans for sessions.

Assessors must satisfy the Standards for Registered Training Organisations requirements for assessors, and:

- have a collective period of at least three years' experience with an organisation providing recreational programs where they have applied the skills and knowledge covered in this unit of competency; the three years' experience can incorporate full and or part time experience.

Links

Companion Volume Implementation Guides -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1ca50016-24d2-4161-a044-d3faa200268b>