



**Australian Government**

# **AHCIRG437 Schedule irrigations**

**Release: 1**

## AHCIRG437 Schedule irrigations

### Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 4.0.

### Application

This unit of competency describes the skills and knowledge required to monitor water use, apply a measured amount of water, assess efficacy of irrigation and repeat cycles, record irrigation and scheduling parameters, and plan for extremes of weather to determine irrigation scheduling requirements.

The unit applies to individuals who apply specialised skills and knowledge to irrigation scheduling. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.

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

### Pre-requisite Unit

Nil

### Unit Sector

Irrigation (IRG)

### Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Monitor crop and plant water use	1.1 Estimate or measure water use from one or more systems 1.2 Accumulate water as a soil water deficit in the root zone
2. Apply a measured amount of water	2.1 Predict a pre-determined deficit using a scheduling system 2.2 Apply irrigation to partly or fully replace the deficit 2.3 Increase water quantities where appropriate to ensure dilution and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	transport of toxic solutes below the root zone
3. Assess efficacy of irrigation and repeat cycles of irrigation	3.1 Measure effectiveness of irrigation application with in-field equipment 3.2 Adjust estimated soil moisture level in scheduling system to match in-field measurements 3.3 Recalibrate scheduling system where necessary 3.4 Repeat cycles of irrigation until schedule is correctly established
4. Record irrigation and scheduling parameters	4.1 Record each irrigation and significant rainfall event, plus other appropriate parameters used in scheduling system 4.2 Estimate and record drainage amount below root zone at each irrigation 4.3 Record system performance data
5. Plan for extremes of weather	5.1 Modify estimated deficits to cater for prolonged saturation following heavy rainfall 5.2 Alter shift areas, and where applicable, application rates, to suit appropriate irrigation schedules to minimise frost damage where applicable 5.3 Implement strategies involving prioritising of plants and crops and intermittent irrigation at times of extreme heat

## 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	<ul style="list-style-type: none"> <li>Identify and interpret information regarding irrigation schedule</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Record scheduling system information for each irrigation, significant rainfall events and other appropriate parameters</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Estimate or measure water use</li> <li>Record water usage, rainfall event and system performance data</li> </ul>
Navigate the world of	<ul style="list-style-type: none"> <li>Identify and describe own workplace requirements, including</li> </ul>

Skill	Description
work	safety requirements, associated with own role and area of responsibility

## Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCIRG437 Schedule irrigations	AHCIRG408 Schedule irrigations	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit

## Links

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