

Appendix N

Environmental Offsets Metric

Step 1: Determining conservation significance

Key:

- Data to be entered
- Drop-down selection
- Automatically-generated scores
(Or, if appropriate, manual data entry permitted)

Area / feature (Impact site)

Conservation significance determination for the environmental value impacted									
Conservation significance	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 5px;">Description</td> <td style="padding: 5px; background-color: yellow;">Muchea limestone TEC</td> </tr> <tr> <td style="padding: 5px;">Type of environmental value</td> <td style="padding: 5px; background-color: #f4a460;">Ecological community</td> </tr> <tr> <td style="padding: 5px;">Conservation significance of environmental value</td> <td style="padding: 5px; background-color: #f4a460;">Threatened ecological community - endangered</td> </tr> <tr> <td style="padding: 5px;">Conservation significance score</td> <td style="padding: 5px; background-color: #cccccc;">1.2%</td> </tr> </table>	Description	Muchea limestone TEC	Type of environmental value	Ecological community	Conservation significance of environmental value	Threatened ecological community - endangered	Conservation significance score	1.2%
Description	Muchea limestone TEC								
Type of environmental value	Ecological community								
Conservation significance of environmental value	Threatened ecological community - endangered								
Conservation significance score	1.2%								

Please select <i>area</i> or <i>feature</i> for the calculations	Area
--	------

Step 2: Calculating significant residual impact

Key:
 Data to be entered
 Drop-down selection
 Automatically-generated scores

Environmental value (step 1)	Muechea limestone TEC
------------------------------	-----------------------

Area (impact site)

Part A: Significant impact calculation Area		
Description	Quantum of impact	
Clearing	Significant impact (hectares)	1.00
	Quality (scale)	5.00
	Total quantum of impact	0.50

Part B: Rehabilitation credit calculation Area (onsite)				
Description	Proposed rehabilitation (area in hectares)		Time until ecological benefit (years)	
Rehabilitation Credit	Current quality of rehabilitation site (scale)		Confidence in rehabilitation result (%)	
	Future quality WITHOUT rehabilitation (scale)		Rehabilitation credit	0.00
	Future quality WITH rehabilitation (scale)			

Part C: Significant residual impact calculation Area		
Significant residual impact	Total quantum of impact	0.50
	Rehabilitation credit	0.00
	Significant residual impact	0.50

WA Environmental Offsets Calculator

Step 3: Calculating offsets

Key:

	Data to be entered
	Drop-down selection
	Automatically-generated scores

Environmental value (step 1)	Muchea limestone TEC	Significant impact (step 2, part A)	1.00
		Rehabilitation credit (step 2, part B)	0.00
		Significant residual impact (step 2, part C)	0.50

Area (offset site)

Offset calculation Area							
Offsets calculation	Description	Proposed offset (area in hectares)	1.15	Duration of offset implementation (maximum 20 years)	20.00	Offset value	0.50
	Revegetation and rehabilitation	Current quality of offset site (scale)	0.00	Time until offset site secured (years)	5.00		100.0%
		Future quality WITHOUT offset (scale)	0.00	Risk of future loss WITHOUT offset (%)	0.0%		
		Future quality WITH offset (scale)	7.00	Risk of future loss WITH offset (%)	0.0%		
		Time until ecological benefit (years)	10.00				
		Confidence in offset result (%)	70.0%				

Step 1: Determining conservation significance

Key:

	Data to be entered
	Drop-down selection
	Automatically-generated scores (Or, if appropriate, manual data entry permitted)

Area / feature (Impact site)

Conservation significance determination for the environmental value impacted									
Conservation significance	<table border="1"> <tr> <td style="background-color: white;">Description</td> <td style="background-color: yellow;">Grevillea thelemanniana</td> </tr> <tr> <td style="background-color: white;">Type of environmental value</td> <td style="background-color: orange;">Species (flora/fauna)</td> </tr> <tr> <td style="background-color: white;">Conservation significance of environmental value</td> <td style="background-color: orange;">Rare/threatened species - critically endangered</td> </tr> <tr> <td style="background-color: #d3d3d3;">Conservation significance score</td> <td style="background-color: grey;">6.8%</td> </tr> </table>	Description	Grevillea thelemanniana	Type of environmental value	Species (flora/fauna)	Conservation significance of environmental value	Rare/threatened species - critically endangered	Conservation significance score	6.8%
Description	Grevillea thelemanniana								
Type of environmental value	Species (flora/fauna)								
Conservation significance of environmental value	Rare/threatened species - critically endangered								
Conservation significance score	6.8%								

Please select area or feature for the calculations	Feature
--	---------

Step 2: Calculating significant residual impact

Key:

	Data to be entered
	Drop-down selection
	Automatically-generated scores

Environmental value (step 1)	Grevillea thelemanniana
---------------------------------	-------------------------

(SCROLL DOWN FOR FEATURE CALCULATION)

Feature (impact site)

Part A: Significant impact calculation Feature			
Significant impact	Description	Quantum of impact	
	Clearing of significant flora within road reserves to enable road widening/upgrades	Type of feature	Number
		Grevillea thelemanniana	206.00
		Total quantum of impact	206.00

Part B: Rehabilitation credit calculation Feature (onsite)					
Rehabilitation credit	Description	Start number (of type of feature)	Time until ecological benefit (years)		
		Future number WITHOUT rehabilitation		Confidence in rehabilitation result (%)	
		Future number WITH rehabilitation		Rehabilitation credit	0.00

Part C: Significant residual impact calculation Feature		
Significant residual impact	Total quantum of impact	206.00
	Rehabilitation credit	0.00
	Significant residual impact	206.00

WA Environmental Offsets Calculator

Step 3: Calculating offsets

Key:

	Data to be entered
	Drop-down selection
	Automatically-generated scores

Environmental value (step 1)	Grevillea thelemanniana	Significant impact (step 2, part A)	206.00
		Rehabilitation credit (step 2, part B)	0.00
		Significant residual impact (step 2, part C)	206.00

(SCROLL DOWN FOR FEATURE CALCULATION)

Feature (offset site)

Offset calculation <i>Feature</i>							
Offsets calculation	Description	Start number (of type of feature)	0.00	Time until ecological benefit (years)	5.00	Offset value	206.00
	Revegetation planting	Future number WITHOUT offset	0.00	Confidence in offset result (%)	70.0%		100.0%
		Future number WITH offset	408.91				
							OFFSET ADEQUATE?

Step 1: Determining conservation significance

Key:

- Data to be entered
- Drop-down selection
- Automatically-generated scores
(Or, if appropriate, manual data entry permitted)

Area / feature (Impact site)

Conservation significance determination for the environmental value impacted	
Conservation significance	Description CCW
Conservation significance	Type of environmental value Wetland/watercourse
Conservation significance	Conservation significance of environmental value A category or type of wetland or watercourse for which an offset is required
Conservation significance	Conservation significance score 0.1%

Please select <i>area</i> or <i>feature</i> for the calculations	Area
---	------

Step 2: Calculating significant residual impact

Key:
 Data to be entered
 Drop-down selection
 Automatically-generated scores

Environmental value (step 1)	CCW
------------------------------	-----

Area (impact site)

Part A: Significant impact calculation Area		
	Description	Quantum of impact
Significant impact	Clearing of mapped wetland values within road reserves to enable road widening/upgrades	Significant impact (hectares) 0.70
		Quality (scale) 6.00
		Total quantum of impact 0.42

Part B: Rehabilitation credit calculation Area (onsite)				
	Description	Proposed rehabilitation (area in hectares)	Time until ecological benefit (years)	
Rehabilitation Credit				
		Current quality of rehabilitation site (scale)	Confidence in rehabilitation result (%)	
		Future quality WITHOUT rehabilitation (scale)	Rehabilitation credit	0.00
		Future quality WITH rehabilitation (scale)		

Part C: Significant residual impact calculation Area		
	Total quantum of impact	
Significant residual impact		0.42
	Rehabilitation credit	0.00
	Significant residual impact	0.42

WA Environmental Offsets Calculator

Step 3: Calculating offsets

Key:

	Data to be entered
	Drop-down selection
	Automatically-generated scores

Environmental value (step 1)	CCW	Significant impact (step 2, part A)	0.70
		Rehabilitation credit (step 2, part B)	0.00
		Significant residual impact (step 2, part C)	0.42

Area (offset site)

Offset calculation Area							
Offsets calculation	Description	Proposed offset (area in hectares)	1.21	Duration of offset implementation (maximum 20 years)	20.00	Offset value	0.42
	Revegetation and rehabilitation of cleared wetland area	Current quality of offset site (scale)	2.00	Time until offset site secured (years)	5.00		100.0%
		Future quality WITHOUT offset (scale)	2.00	Risk of future loss WITHOUT offset (%)	0.0%		
		Future quality WITH offset (scale)	7.00	Risk of future loss WITH offset (%)	0.0%		
		Time until ecological benefit (years)	10.00				
		Confidence in offset result (%)	70.0%				