WA Environmental Offsets Calculator

Rationale for scores used in the offsets calculator

Environmental value to be offset			
Calculation	***Score (Area)***		***Rationale***
Conservation significance			
Description	Foraging Habitat for Black Cockatoos		The proposed clearing will impact on 3.65 ha of foraging habitat for Black Cockatoos
Type of environmental value	Species (flora/fauna)		Drop-down list
Conservation significance of environmental value	Rare/threatened species - endangered		Drop-down list
Landscape-level value impacted	yes/no		
Significant impact			
Description	clearing of foraging habitat		Clearing of 3.65 ha of foraging habitat for Black Cockatoos for the Development Area
Significant impact (hectares) / Type of feature	3.65		see above
Quality (scale) / Number	6.00		The value of 6 has been applied in the calculator based on the vegetation condition obtained from the flora, vegetation and fauna surveys of the area, provided in the PGV flora and veg report (2023) and the Terrestrial Ecosystems Basic and Targeted Fauna report (2023)
Rehabilitation credit			
Description	0		None proposed - the proposed Conservation Area within the Development Envelope is not planned to be rehabilitated as the vegetation is already in Very Good condition
Proposed rehabilitation (area in hectares)	0.00		
Current quality of rehabilitation site / Start number (of type of feature)	0.00		
Future quality WITHOUT rehabilitation (scale) / Future number WITHOUT rehabilitation	0.00		
Future quality WITH rehabilitation (scale) / Future number WITH rehabilitation	0.00		
Time until ecological benefit (years)	0.00		
Confidence in rehabilitation result (%)	0		
Offset			
Description	Like for like land acquisition with similar foraging value as the impact site.		The offset site will include at least 3.72 ha of foraging habitat with similar foraging value as that within the Development Area (being cleared).
Proposed offset (area in hectares)	3.72		Of the total extent of the offset site, 3.72 ha will provide Black Cockatoo foraging habitat suitable for Carnaby's Cockatoos and Forest Red-tailed Black Cockatoos.
Current quality of offset site / Start number (of type of feature)	6.00		The quality score has been applied to reflect the condition of the vegetation in the Development Area that is proposed to be cleared. As an offset site has not yet been acquired, it has been assumed that the the foraging habitat quality of the offset site will be comparable to that of the impact site.
Future quality WITHOUT offset (scale) / Future number WITHOUT offset	6.00		The future quality score without offset has been nominated based on the assumption that if the offset site has not yet been acquired, there would be no formal rehabilitation or protection measures in place to improve the quality of habitat in the area. It is possible that the future quality may decline if no formal protection is in place.
Future quality WITH offset (scale) / Future number WITH offset	7.00		The future quality score with offset has been nominated based on the following: The offset site will be protected with a Conservation Covenant Management actions will be undertaken such as weed control, removal of rubbish and infill planting.
Time until ecological benefit (years)	7.00		The ecological benefit will be experienced immediately if a like for like offset site is protected, however, it will take 5-7 years for the vegetation to provide adequate foraging value.
Confidence in offset result (%)	0.8		A value of 80% has been nominated based on the fact that land conservation mechanisms will be in place
Duration of offset implementation (maximum 20 years)	20.00		A value of 20 years has been nominated, as this is the timeframe associated with a conservation convenant.
Time until offset site secured (years)	2.00		The offset site will be secured within 18-24 months of agreement
Risk of future loss WITHOUT offset (%)	90.0%		The DAWE (2017) Guidance provide average annual background rates of loss for each local government area in Western Australia, which have been extrapolated over a period of 20 years. The average annual background rate of loss 2005-2014 (%) for the City of Cockburn is 0.35% as per the Guidance for deriving 'Risk of Loss' estimates when evaluating biodiversity offset proposals under the EPBC Act.
Risk of future loss WITH offset (%)	5.0%		A value of 5 has been nominated as the offset site is to be secured by a legal mechanism for conservation purposes.
Offset ratio (Conservation area only)	N/A		