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Dear Ms Andrews

FEEDBACK ON DRAFT OPERATIONAL MANUAL FOR ENVIRONMENTAL OFFSETS METRIC INPUTS

Thank you for providing the Environmental Protection Authority (EPA) the opportunity to provide feedback on the *Draft Operational Manual for Environmental Offsets Metric Inputs* (Manual). Overall, the EPA considers the draft Manual to be an excellent piece of work with very good explanations and examples throughout. The material in the appendices is particularly useful.

The EPA provides feedback on the following areas:

Purpose of calculator

The EPA considers that an overarching statement about the purpose and intended use of the calculator should be included. This is important to ensure proponents are aware of the reasonable limits of the intended use of the calculator and its outputs. The EPA notes that an overarching statement will mitigate against over-reliance on the calculated result being considered as a conclusive assessment or approval outcome. Such an approach would also enable the EPA to consider application of innovative approaches to offsets so that the best environmental outcomes are achieved. The overarching statement should be consistent with the WA Environmental Offsets Guidelines, and in particular the section on Quantitative Tools.

Specifically, the purpose statement could state that:

- The calculator is a decision-making tool, not a decision itself and that considerable judgement and expertise is still required on a case-by-case basis when considering offsets;
- Decision-makers may take other matters into account in addition to the calculator result when determining the significance of residual impacts and the adequacy of proposed offsets; and

- The calculator must be used with care and not be applied without regard to the reasonableness of the outcome it aims to deliver.

Treatment of risk of future loss without offset

The EPA supports the inclusion of the risk of future loss (i.e. the estimated likelihood that the environmental value of a site will be completely lost in the foreseeable future) in the calculator. However, when calculating risk of future loss, there appears to be significant offset credit applied for protecting environmental values that are not actually under threat.

Further, to minimise misinterpretation, the EPA considers that the Manual would benefit from additional guidance as to what “the capacity to protect the environmental value through planning approvals and environmental assessment processes” means for risk of future loss.

In addition, a distinction should be made between different types of pressures that may cause the loss. For example, if a future development proposal on the land would require offsets itself, then the risk of future loss without offset is zero. This should mean that land acquisition is not an appropriate offset in this case and yet the calculator suggests that it is.

Confidence in offset result

The EPA notes that the confidence in the rehabilitation or offset result is defined as the level of certainty that the proposed outcome will be achieved. The EPA considers that there should be a minimum acceptable level of confidence in rehabilitation. The EPA notes this is an important consideration because if the confidence of success is very low, then the desired ecological outcome is not likely achievable, regardless of the number of hectares applied to the offset.

Time until ecological benefit and duration of offset implementation

The calculator allows time until ecological benefit to be greater than duration of offset implementation (where the latter includes the duration of on ground activities plus the duration of monitoring). The EPA considers the Manual should note that offsets should usually be expected to be in place until the expected environmental outcome is achieved, rather than limited to a certain number of years or quantum of funds. Monitoring and adaptive management should also be required to continue through to the time at which ecological benefit is achieved to ensure there is evidence of the outcome.

Rehabilitation credit

The EPA recommends a minor change to section 3.2 Part B: Rehabilitation credit. This change is indicated in italics in the following sentence: “The rehabilitation credit would usually be used where the clearing is temporary and rehabilitation is of sufficient quality to return, *maintain or improve* biodiversity values to the site”.

We look forward to the continued engagement with the Department of Water and Environmental Regulation on improvements to the Western Australian Environmental Offsets Framework to ensure clarity is provided for proponents and the community and that strong environmental outcomes are achieved.

Further detailed feedback is provided in Attachment 1.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'M. Tonts', with a long horizontal flourish extending to the right.

Prof. Matthew Tonts
CHAIR, ENVIRONMENTAL PROTECTION AUTHORITY

22 February 2022

Attachment 1: Calculator trial examples

A number of trials were run based on area only (not function), changing only values in Step 3, with further details at the end of this document. Values that did not vary were set at:

- Current quality of offset site: 5
- Future quality without offset: 5
- Future quality with offset: 8
- Risk of loss with offset: 0
- Time until offset site secured: 1

Checking sensitivity of values:

Area required to achieve 100% offset under different scenarios

Run	Time to benefit (yrs)	Confidence (%)	Duration of offset (yrs)	Risk loss w/out offset	Area (ha)	Area ratio (/20)
1	20	20	20	0	385.59	19.3
2	20	20	20	5	215.87	10.8
3	20	20	20	10	149.89	7.5
4	20	50	20	10	98.3	4.9
5	20	80	20	10	73.13	3.7
6	10	80	20	10	67.31	3.4
7	10	80	10	10	78.82	3.9

Risk of future loss without offset - Significant offset credit appears to be given for protecting environmental values that are not actually under threat, which means that the offset may not ensure 'no net loss.' In an example of loss of 20ha of Banksia woodland with a proposed offset area of 100ha, with time to outcomes and duration both 20, risk of future loss without offset can be set as 0% (i.e. no risk of loss of Banksia woodland on the proposed offset site) and the offset calculator still gives a score of 77.8%. At 5%, score is 95.6% and at 10% is 113.4%.

Confidence in offset result - The calculator does not appear particularly sensitive to this variable. Increasing confidence from 20% to 80% only resulted in a halving of the required offset area (see run 3 – 5 above).

Time until ecological benefit - The calculator does not appear particularly sensitive to this. In run 5 and 6 above, decreasing the time from 20 years to 10 years only changed the offset area required from 73ha to 67ha.

Screen shots of calculator values used:

D12 Threatened ecological community - endangered

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: Banksia woodland
	Type of environmental value: Ecological community
	Conservation significance of environmental value: Threatened ecological community - endangered
	Conservation significance score: 1.2%

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Area (impact site)		
Part A: Significant impact calculation Area		
Description	Quantum of impact	
Significant impact	Significant impact (hectares): 20.00	
	Quality (scale): 10.00	
	Total quantum of impact: 20.00	
Part B: Rehabilitation credit calculation Area (onsite)		
Description	Proposed rehabilitation (area in hectares): 5.00	Time until ecological benefit (years): 10.00
Rehabilitation Credit	Current quality of rehabilitation site (scale): 0.00	Confidence in rehabilitation result (%): 50.0%
	Future quality WITHOUT rehabilitation (scale): 0.00	Rehabilitation credit: 1.78
	Future quality WITH rehabilitation (scale): 8.00	
Part C: Significant residual impact calculation Area		
Total quantum of impact: 20.00		
Rehabilitation credit: 1.78		
Significant residual impact: 18.22		

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