Reflections on the Use of Environmental Offsets

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Outline

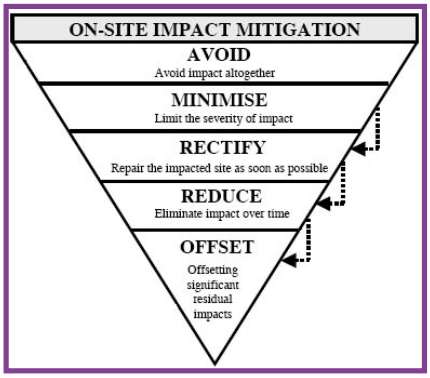
1. Mitigation Hierarchy and Offsets Principles
2. Ethics and Values
3. Practitioner Perspectives on the Effectiveness of Offsets Application in WA

1. Mitigation Hierarchy and Offsets Principles

- environmental offsets are intended to be used as a last resort mitigation measure

Simple definition of offsets
(Dept of the Environment & Water Resources, Australia)
actions taken outside of a development site that compensate for the impacts of that development

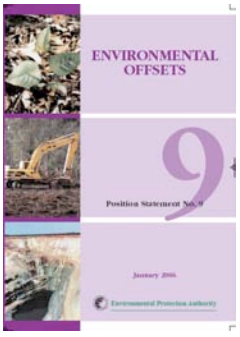
Hierarchy of environmental protection strategies – mitigation sequence (in order of priority)



(EPA 2006, *Environmental Offsets*, Position Statement No.9, EPA, Perth, WA, p20)

EPA (WA) position on offsets

- Offsets Position Paper defines clear 'goal posts'
  - environmental aspects considered to be 'critical assets' which should not be traded off or offset
  - what forms of offsets the EPA considers acceptable
- offsets should only be considered when opportunities to avoid, mitigate, rectify and reduce have been exhausted



(EPA 2006, p8)

EPA concept of offsets

> Environmental offsets aim to ensure that significant and unavoidable adverse environmental impacts are counterbalanced by a positive environmental gain, with an aspirational goal of achieving a 'net environmental benefit'.

> In view of the State's recent alignment with the sustainability philosophy, it has potential to be a useful management tool – enabling development to occur, but not at the total expense of the environment. It is important to recognize that environmental offsets represent a 'last line of defense' for the environment, only being used when all other options to avoid and mitigate environmental impacts have been considered and exhausted.

(EPA 2006, pi)

EPA Position Statement 9 Environmental Offsets

EPA 2004

- Draft released July 2004
- Preliminary Version 2, July 2005
- Final version January 2006

EPA 2005

EPA 2006

- Clarifies EPA's position on environmental offsets
- Distinguishes between direct and contributing offsets

Direct offsets

- Counterbalance the adverse environmental impact directly, with the aim of achieving no environmental difference (ie no net loss) and aspirationally a net benefit.
- For example:
  - ecosystem restoration, rehabilitation or reestablishment of existing degraded ecosystems
  - sequestration to permanently remove or 'lock up' a pollutant from the environment

(EPA 2006, p8)

Contributing offset

Complement and assist a direct offset. For example:

- Acquiring land for conservation or covenanting
- Going beyond best practicable measures
- 'Banking' or 'credit trading'
- Education or research
- Contributing funds to conservation improvement activities

(EPA 2006, p9)

Critical assets (i)

- The State's most important environmental assets that must be fully protected to meet statutory requirements and remain sustainable
- EPA is unlikely to approve project approvals with significant adverse impacts on critical assets
  - i.e. significant adverse impacts on critical assets cannot be offset except under 'special circumstances'

(EPA 2006, p14)

Principles for applying offsets (i)

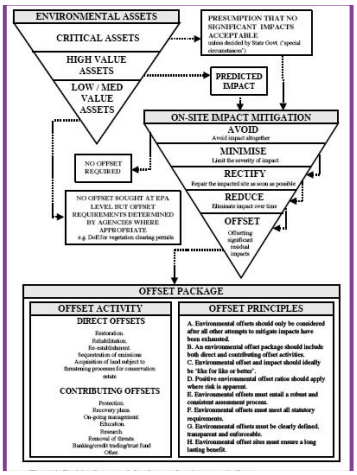
A. Environmental offsets should only be considered after all other attempts to mitigate impacts have been exhausted.
B. An environmental offset package should include both direct and contributing offset activities.
C. Environmental offset and impact should ideally be 'like for like or better'.
D. Positive environmental offset ratios should apply where risk is apparent.

(EPA 2006, pp8-11)

Principles for applying offsets (ii)

E. Environmental offsets must entail a robust and consistent assessment process.
F. Environmental offsets must meet all statutory requirements.
G. Environmental offsets must be clearly defined, transparent and enforceable.
H. Environmental offset sites must ensure a long lasting benefit.

(EPA 2006, pp11-12)



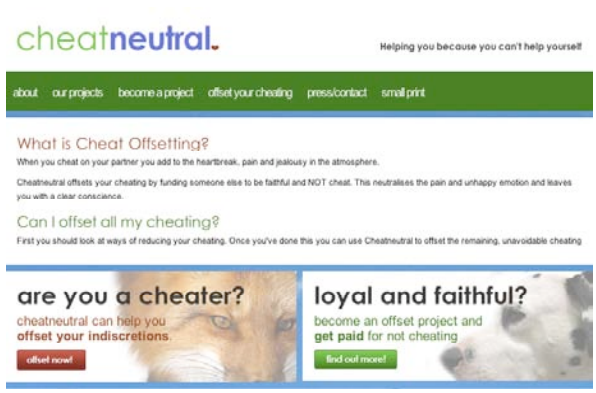
EPA's Decision Framework for the use of environmental offsets

(EPA 2006, p20)

2. Ethics and Values

The use of offsets raises some interesting issues for EIA practice

- some might question the ethical basis of offsets…



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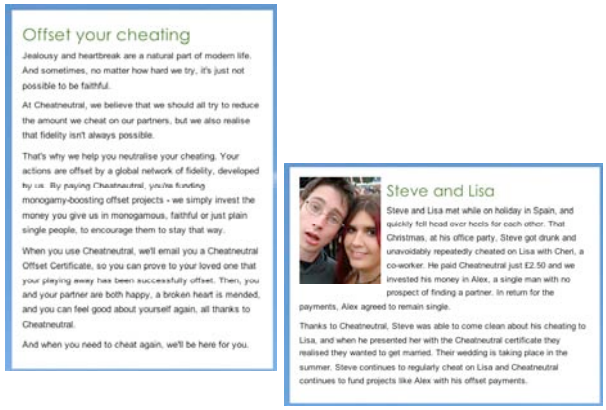


http://www.cheatneutral.com/

EPA (WA) concerns about use of offsets

The EPA is also concerned about perceptions that negotiated offset and compensation packages are being used to make otherwise 'unacceptable' adverse environmental impacts 'acceptable' within government. It is aware that some environmental offsets, proposed in the guise of sustainability tools, are sometimes over-riding the protection and conservation of our State's most valuable environmental assets. Over time, the cumulative effects of this type of decision-making would contribute to a gradual decline in both the quality and quantity of the State's priority environmental assets. The EPA is of the view that this approach is neither sustainable nor focused on protecting the environment. It is also aware there may be equity issues that need to be addressed by government. The challenge now is to find the means of doing so effectively.

(EPA 2006, p1)

More ethics/values aspects…

If baseline is a degraded environment, what does it mean to have an improvement in environmental quality?

- environmental quality for whom?; who decides?
  - waste dump/contaminated site that provides good habitat for snakes could be a biodiversity refuge (pers. comm. Ruud Cuperus, The Netherlands, 2006)

What about authenticity/things being in their 'natural' place?

- 'Swiss cheese effect' for national parks/natural areas(?)

Can you offset loss of a species?

Is 'like for better' possible? (trading up)

- e.g. offset loss of common (low significance) habitat with rare or threatened habitat?

3. Practitioner Perspectives on the Effectiveness of Offsets Application in WA

Hayes, N and A Morrison-Saunders (in press) The Effectiveness of Environmental Offsets in EIA – Practitioner Perspectives from Western Australia, *Impact Assessment and Project Appraisal*

Study aims and method

Determine:

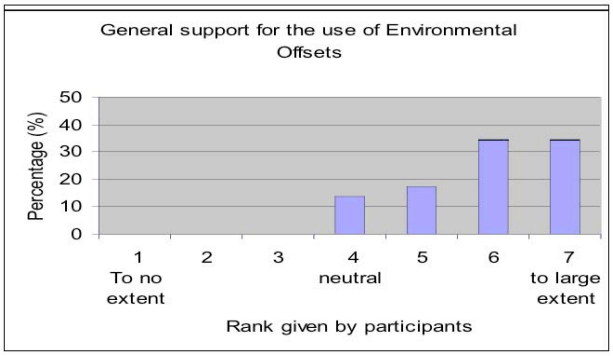
- degree of support for use of environmental offsets in EIA
- extent to which EPA (2006) principles are being achieved in practice

Interviews with 29 EIA practitioners (WA)

- government agencies (6)
- EIA regulators (6)
- consultants (9)
- industry proponents (8)

Interview Questions

1.	To what extent do you support the use of environmental offsets in environmental management?
2.	To what extent do you believe that the EPA's mitigation sequence: avoidance, minimize, rectify, reduce then offset as a last resort is being followed in practice?
3.	To what extent do you believe a net environmental gain is being achieved through the use of environmental offsets for: (a) Ecosystems (b) Emissions
4.	To what extent is the EPA's concept of 'like for like' workable in practice?
5.	To what extent does the 'like for like' principle provide the best environmental outcome?
6.	How important is the time dimension when applying environmental offsets?



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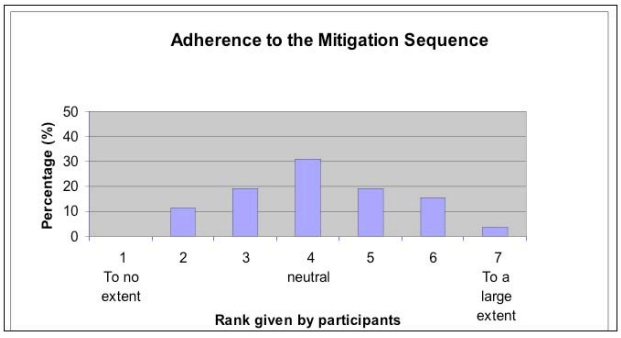

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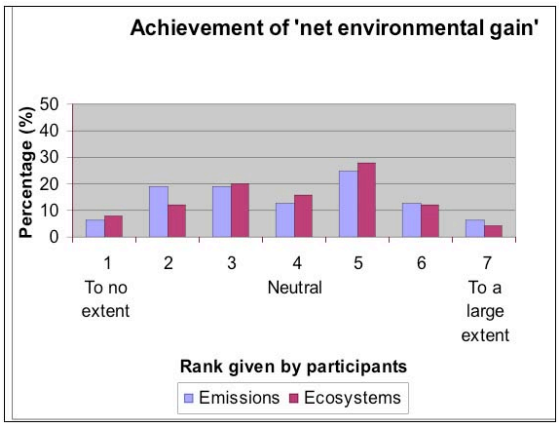
Practitioner comments concerning the mitigation sequence

Comments	Number of responses
Mitigation sequence *not* being followed in general, little effort is being made to avoid impacts	10 (38.4%)
Mitigation sequence *is* being implemented well	10 (38.4%)
The EPA do not follow the mitigation sequence as they ask for offsets up front, before determining if a significant residual impact is likely to occur	5 (19.2%)
Mitigation sequence is not being followed by proponents, however in most cases they are reprimanded by the EPA	3 (11.5%)



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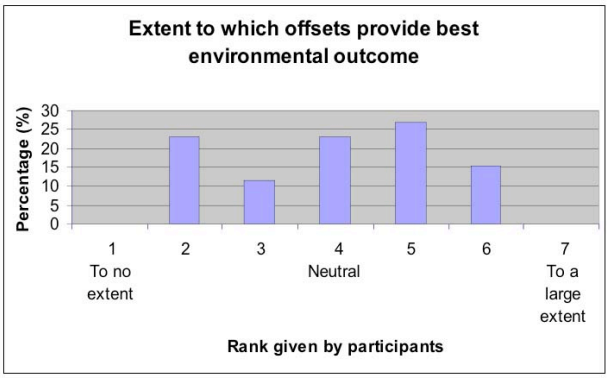
Practitioner comments concerning the 'like for like' concept

Practitioner comments	Number of responses
'Like for like' is difficult to implement	17 (60.7%)
'Like for like' is workable in practise	6 (21.4%)
Difficult to define 'like for like' and compare values	5 (17.8%)
Difficult due to lack of comparable land, especially in highly constrained areas.	4 (14.2%)



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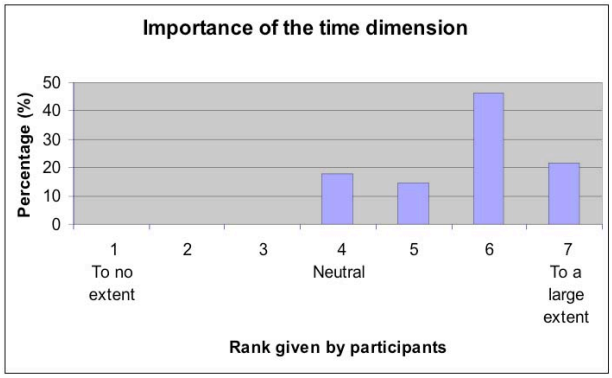
Practitioner comments concerning 'like for like' contribution to environmental outcomes

Practitioner comments	Number of responses
May not provide the best environmental outcome, need for more flexibility	7 (26.9%)
'Like for like' principle is important as it identifies where else the threatened ecological community exists. It is not an offset if it is not 'like for like'	6 (23.1%)
A strategic or prioritised set of natural assets needed to identify where offsets can provide the best outcome.	5 (19.2%)
How is the 'best environmental outcome judged?'	3 (11.5%)
'Like for like' principle does not provide the best environmental outcome	3 (11.5%)



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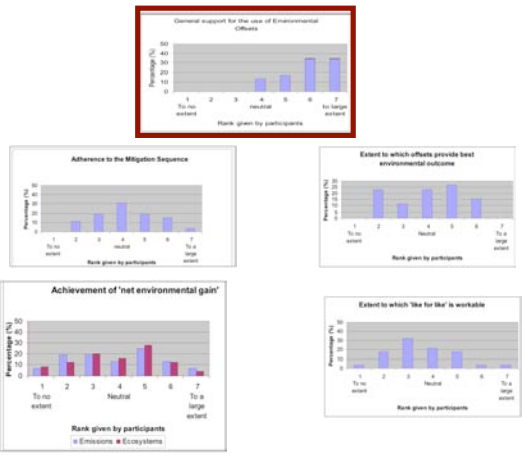
Practitioner comments concerning timing issues

Practitioner comments	Number of responses
The time lag between when the impact occurs and the offset begins compensating for the impact is an important consideration	21 (75%)
The timeline for the implementation of offsets must be clear and within realistic boundaries, considering the companies ability to create income and the clearly defining when liability ends.	7 (25%)
Offsets should be put in at the same rate at which the impact occurs or ideally be provided up front.	5 (17.8%)



Conclusions

Strong in principle endorsement for use of offsets but considerable concerns about practice…

- implementation does not live up to theoretical expectations
- mitigation sequence not always followed
- 'net environmental gain' not always achieved
- workability of 'like for like' is challenging and extent to which it produces best environmental outcome is questioned.
- dealing with time lag and timeline of implementation of high importance to resolve