INTRODUCTION

It is pleasing to see that the Environmental Protection Authority is aiming to achieve more rigour in assessing the need for and the appropriateness of particular offset initiatives. Offsets have been an important aspect of environmental management and decision making in Western Australia for many years. The Commission is particularly interested in the maintenance or enhancement of ecological function and biodiversity as an outcome of offsets and the following comments are made in that light.

The Commission has had the difficult task of considering proposed developments within the conservation estate on a number of occasions. These have ranged from localised issues such as the establishment of telecommunication facilities on restricted areas, linear disturbances such as power lines, and a range of petroleum and mineral exploration programs and production operations. Where possible these have been associated with offsets in an endeavour to achieve at least ‘no net loss’ to the environmental values. The offsets were assessed in the light of the actual or potential residual impact from the project within the reserve after on site environmental management was taken into account. These offsets were activities in addition to those associated directly with the management of the projects (eg minimising disturbance, weed control, progressive rehabilitation and meeting costs of CALM administration) and included the following:

- Additions of appropriate land to the conservation reserve or additions of lands to the conservation estate with significant biodiversity value elsewhere in the region (eg purchase of land with the declared rare flora *Eucalyptus rhodantha* to compensate for an excision from Watheroo NP and purchase of lands with well developed Tuart woodland to add to the Ludlow National Park to compensate for mining within the Ludlow State Forest)
- Conducting studies to further scientific knowledge regarding biodiversity conservation (eg funding of research into tissue culture propagation of rare species)
- Funding management initiatives to improve biodiversity conservation on conservation lands directly or on adjacent lands (eg appropriate pastoral lease management adjacent to Karijini NP and supporting the Western Shield feral animal control program)
- Rehabilitating disturbed lands within a conservation reserve (eg rehabilitating historical mining associated lands)
- Conducting remedial works on adjacent agricultural lands to reduce the potential for salinisation within a reserve (eg associated with gypsum mining at Lake Chinocup).

Despite this range of offset activities, what has been lacking has been a defined system for assessing the appropriate level and type of offset for each situation.

The Position Statement refers to the following definition of when offsets would be appropriate:

*Environmental offsets should only be considered where on-site impact mitigation has been reasonably considered or demonstrated, and where residual adverse impacts are considered significant – but not significant enough to make the project unacceptable.*

This approach is supported. However experience has shown that the EPA would need to consider an offset package even where there were not intended to be significant residual
impacts but there was a risk of such impacts occurring if the project’s management programs were not successful.

**Recommendation. Offset packages will need to be considered where residual adverse impacts or the risk of such impacts are considered significant**

**CONSERVATION COMMISSION MODEL – THE SECURITY OF OUTCOME MODEL**

When considering offset approaches the Conservation Commission believes there is a need to recognise that they are being introduced into a system that is generally experiencing a progressive decline in environmental quality due to poor management or third party effects. The probability of success in arresting this decline needs to be taken into account when deciding on the offset approach.

When addressing projects that will affect biodiversity and landscape values, there is a need to provide a model that achieves security of tenure, purpose and management to improve the success of any offset initiatives.

Additions of appropriate lands to the conservation estate, the funding of management initiatives on the conservation estate, and applying conservation covenants to private land are all seen to provide a high probability of success, when linked to the appropriate supporting regional management programs.

This model is based on the assumption that despite legislation to protect wildlife and to control clearing, there is frequently a regional environmental quality decline that can only be addressed through active ongoing management.

**Recommendation: The choice of offsets should be based on the probability of success in arresting a decline in environmental quality.**
DISCUSSION ON POSITION STATEMENT OFFSET PROPOSALS

No Net Loss

The Position Statement refers to offsets achieving ‘net environmental benefit’ but the first goal would surely be to achieve ‘no net loss’ to address any significant residual environmental impacts after on-site environmental management approaches have been adopted. Management would then be required to continue to maintain this standard of environmental health.

Where there are significant effects on the biodiversity of an area due to a project, it would be difficult enough to achieve ‘no net loss’ through off-site activities. An assessment of the activities to achieve ‘no net loss’ in biodiversity, landscapes or other values would need to consider the types of habitat, biota and other values affected and the intensity, time frame and the area of the disturbance. The assessment would also need to consider the actual disturbance and also potential disturbance if management actions are not effective.

The Position Statement emphasises that for ecosystems, the primary offset options to counterbalance adverse environmental impacts should relate to restoration or rehabilitation of existing degraded ecosystems or re-establishing desirable ecosystems (eg re-establishing biodiversity corridors or specific ecosystems in areas of low representation). Although these are desirable goals, they are long term and they may have a lower probability of success than that achieved through inclusion of lands in the conservation estate and improving management of such lands. Additions of appropriate lands to the conservation estate should be regarded as a high priority. Other activities such as re-establishment of corridors would be seen as supportive activities as long as the appropriate long-term management was instituted. Similarly, the funding of research initiatives, or contributions to a wetland/bushland bank, trust fund or credit-trading scheme also have a place but there is some uncertainty of success with such approaches.

Thus in order to ensure that not only will there be offsets to achieve ‘no net loss’ for the immediate residual effects of a project, but also that the ongoing regional decline in environmental values will be addressed, there is a need for the inclusion of appropriate lands in the managed conservation estate and higher levels of management of appropriate lands. Rehabilitation and trust fund approaches are of a longer-term nature, are less certain of success, and also require appropriate management.

Recommendation: An important consideration for offsets is the opportunity to include appropriate lands in the managed conservation estate and higher levels of management of appropriate lands.

A range of issues would need to be considered in offsets including: the ownership of any land acquired (eg ownership transferred to Government, vested in Conservation Commission, or land remaining in private hands with covenants); and whether funds for offset actions continue to be available if a project changes hands.

The following diagram compares the Commission’s ‘Security of Outcome Model’ with that favoured in the Position Statement. The probability of achieving ‘no net loss’ is greater with land purchases and management than through undertaking rehabilitation programs. Not only is there the need for overcoming the initial effect of the project but also the general decline in environmental quality needs to be factored in.

The Commission’s approach provides for more security as good quality lands are being incorporated into the conservation estate or there are additional levels of management in areas that are well regarded from a biodiversity point of view. With direct or indirect rehabilitation initiatives there is always the risk of failure of the program and often there would be a considerable period of time before success was assured.
If the uncertainty of success of rehabilitation were ignored, one would expect that there would be little difference between the Commission and Position Statement approaches. However despite legislation to regulate environmental harm and control vegetation clearing, inappropriate land management is leading to a regional decline in environmental quality that is not addressed in the Position Statement approach. This can only be arrested through ongoing management. Such long term management does not seem to be the priority in the Position Statement approach, leading to a decline in environmental quality recommencing at the “completion” of the rehabilitation exercise. This is illustrated in the following diagram.

Trend in environmental quality over time when comparing the Commission and Position Paper offset approaches, superimposed over regional environmental quality loss.

Principles
Section 6 of the Position Statement indicates that in relation to offsets, the policies, decisions and advice of the EPA will be guided by a series of principles. These are discussed as follows:

A. The principle that offsets should only be considered after all other attempts to mitigate impacts have been exhausted does not seem to be supported by the stated aim that there be an improvement of the environment while allowing for economic and social growth. Such an aim would need to see offsets as the norm.

Also the principle might not always be for the best. For example the cost of routing a power line around a reserve may have been better spent in the offset of expanding and securing the reserve, given the relative impacts.

Recommendation: Offsets should be seen as a normal part of evaluating the long term environmental impacts of projects.

Recommendation: The relative benefits of mitigating impacts on site or conducting offsite offsets should be evaluated as part of environmental impact assessment
B. The principle of an *offset package requiring both primary and secondary offset activities* off-site is questioned. The actions defined to satisfy ‘primary’ and ‘secondary’ offsets to achieve ‘no net loss’ and ‘net environmental benefit’ respectively are not supported. As discussed earlier, the aim should be for certainty of outcomes with a range of direct conservation initiatives. A range of longer term activities with less certain outcomes would also be useful to consider as part of the approach of gaining ‘no net loss’.

It could well be the case that the concept of defined types of Primary and Secondary Offsets is not appropriate and really the offsets should be considered on a case by case basis with the mix of offsets to at least achieve ‘no net loss’ being based on the type, extent and significance of disturbance or potential disturbance.

*Recommendation: Offsets should be based on case by case situations but with the relative certainty of success being used as the basis for the decision.*

C. Environmental offset and impact should ideally be ‘like for like or better’ – like for like is a desirable first principle, however these should not exclude consideration of other options which may achieve greater environmental outcomes. Thus the opportunity to purchase land which includes species or communities poorly represented in the conservation estate could well be of greater value than arranging an exchange with land with similar attributes to the project area. Consideration should normally be given for offsets to be achieved in the same bioregion or a region of suitable scale to suit the risks associated with the project.

*Recommendation: Offsets should be achieved in a region of suitable scale to suit the risks associated with the project.*

D. *Positive environmental ratios should apply where risk of failure is apparent* – the concept of developing a ratio of the value of an offset to the value of an impact is very poorly understood at present due to the difficulty in valuing environmental ‘goods’ and it may be better to use the considered view of the EPA to assess whether the offset is adequate.

*Recommendation: The adequacy of an offset should be based on the considered view of the EPA rather than relying on a valuation of the value of an impact.*

E. Environmental offsets must entail a robust and consistent assessment process – agreed. The objective of a ‘no net loss’ outcome or otherwise needs to be explicit when assessing proposals.

F. *Environmental offsets must meet all statutory requirements* – agreed.

G. Environmental offsets must be clearly defined, transparent and enforceable – agreed. For enforcement amongst the range of initiatives, environmental performance bonds should be considered.

*Recommendation: Environmental performance bonds should be considered as a way of ensuring the appropriate establishment and management of offsets.*
H. *Environmental offsets must ensure a long lasting benefit* - this principle is agreed. However as discussed earlier the probability of success in the long term is important. This would involve demonstrated security of purpose and tenure and security of management. In the case of trust funds and credit trading schemes there is some uncertainty of outcome and the organisation responsible. The Position Statement refers to the potential use of credit trading to purchase environmental credits produced by others in situations where the proponent is unable to undertake restoration, rehabilitation, or sequestering activities. Also it refers to an alternative of using a contribution to a statutory trust fund for strategic environmental improvement actions. These are seen to be useful options to include in the mix of offset options. The Commission considers however that they are less certain in outcome than those direct conservation initiatives discussed above. It would be desirable to establish a statutory basis for the management of such trust funds.

**Recommendation:** Consideration should be given to establishing a statutory trust fund that is managed by an appropriate Government agency to finance strategic environmental improvement actions involving Government lands or projects.

**Implementation**

It is unclear from the discussion in the Position Statement whether the EPA is expecting to consider all proposals involving ‘critical assets’ with a view of deciding on the need for formal assessment, ie those involving: conservation reserves, native vegetation, rare organisms and communities, wetlands, wild rivers, important landscapes, air and water quality, biodiversity threats, heritage value or other important environmental assets. Should all such proposals of whatever scale be referred to the EPA, or will criteria be developed to guide such referral. This needs to be resolved so that other Government agencies can develop their approaches on offsets and environmental impact assessment. It would be expected that the majority of proposals affecting areas containing ‘critical assets’ would normally be assessed by other agencies, with the EPA only assessing those that potentially have significant affects. The actual significance of the disturbance would need to take into account the degree of on-site management as well as off-site initiatives.

**Net Environmental Benefit**

The Position Statement indicates that it is aiming for ‘net environmental benefit’ as the environment has been significantly affected by past activities and there is a need to halt and reverse the decline through additional activities above those to achieve ‘no net loss’. However as discussed earlier where there are significant effects on or risks to the biodiversity of an area due to a project, it would be difficult enough to ensure ‘no net loss’ through off-site activities.

Further offsets to achieve ‘net environmental benefit’ are supported to the extent that they are socially and economically viable but it is there that the risk of buying an approval is greatest. Despite the comment on p7 that offsets should be used as an environmental impact management tool and not a project negotiation tool, the reality is that offsets to achieve ‘net environmental benefit’ would be the subject of negotiation. It is through negotiations over offsets to achieve net environmental benefit that historical adverse environmental impacts could be addressed.

As a result there is a need for more elaborate criteria to decide when ‘net environmental benefit’ offsets should be sought from a developer through activities further afield but still linked to the specific development.
Recommendation: More elaborate criteria are required to decide on when ‘net environmental benefit’ offsets should be sought.

As with offsets to achieve ‘no net loss’ the offsets would need to be chosen on the basis of probability of achieving long term environmental gains.

The outcomes from various offset actions are not necessarily clear-cut. For example when considering offset options, there would be a need to review the range of programs already being carried out by other agencies. It could well be that ‘no net loss’ actions by a developer could lead to ‘net environmental benefits’. This could arise through contributions to local management that allow for the freeing up of resources to cover regional issues.

Recommendation: Offsets should not be considered in isolation from the other environmental management initiatives occurring in the relevant region.

CONCLUSIONS

The Commission has suggested an alternative model for assessing offsets, based on probability of long term success. Under this model it is believed that additions to, and support for the management of, the conservation estate should always be considered as an important opportunity for environmental offsets to achieve ‘no net loss’. Rehabilitation without long term management is seen to be a useful but less certain means of achieving such aims.

‘No net loss’ should always be the aim. The approach of ‘net environmental benefit’ may be appropriate for particular projects but would be the subject of negotiation.

The examples of the types of initiatives to ensure ‘primary offsets’ for ‘no net loss’ and ‘secondary offsets’ for ‘net environmental benefit’ are not supported as the type and extent of any particular offset or mix of offsets would need to be related to the nature and implications of the disturbance being offset. It is not that certain offsets lead to a ‘no net loss’ outcome while others contribute to ‘net environmental benefit’. A mix of approaches, depending on whether the issues are related to biodiversity, air quality, water quality or other aspects of the environment could be implemented to provide an appropriate level and certainty of outcome. However for particular types of projects there is probably a ranking of the types of offsets that would be most effective.

Any funds set aside for appropriate works by Government to improve biodiversity should be deposited in an appropriate trust so that the proponent and community are confident that relevant outcomes will be achieved.

The Commission recognises that the paper encourages Government agencies, local authorities, and relevant business and industry groups to develop their own environmental offset approaches that are consistent with the Position Statement. The Conservation Commission and the Department of Conservation and Land Management routinely consider proposals that include conservation offsets yet many will fall far below any thresholds requiring the Environmental Protection Authority’s involvement. It is understood that guidelines will be developed to assist proponents to develop offset approaches associated with EPA assessments. There will also be a need for the three agencies to discuss the development of guidelines for agency offset approaches.