Session title: Exploring the need to revisit biodiversity offset theory and application

Title of paper: Biodiversity offsets in practice

Alan Key, Managing Director, Earthtrade, (alan.key@earthtrade.com.au)[1], Helen Wood, Senex Energy[2]

Introduction

There is a disjunct between the theory of offsets, and their application -- in identifying, securing, managing and acquitting offsets on the ground. Offset policy focuses heavily on academic theory, ecology and metrics and rarely recognises that a successful offset has many parties involved.

Simply put, environmental/biodiversity offsets may be a regulatory requirement that involves rehabilitating and protecting areas of land with the same or similar values to the area of disturbance, where a significant impact cannot be avoided for the development. Usually, the offset is a larger area, the size of which is determined by a ratio and calculation based on the threatened status of the value and the estimated start condition of the offset site.

The Australian and Queensland Governments have proponent-sourced environmental offset frameworks; the onus being on a proponent/developer to calculate the impact matters, find an offset site to match the offset requirements, prepare management plans, negotiate with the landholder, and then apply for an approval from the regulators.

Where offset policy is overly focused on meeting prescriptive requirements, or the reverse – being open to variability in regulator interpretation or uncertainty - the 'bigger picture' of restoring biodiversity values on an offset site can be surpassed by less pragmatic decisions and delays to offset implementation - one of the recognised key requirements of a successful offset.

We outline some of the ongoing challenges faced by a company or project proponent embarking on an offset. With a desire to meet regulatory requirements, approval conditions, and have an improved environmental outcome, proponents embark on what can be a very challenging and time-consuming exercise in which the ecological outcome is lost by managing many parties and contracts.

Implementing an offset for a project, combined with impact site restoration/rehabilitation, provides the opportunity to deliver a positive biodiversity legacy.

There are several major considerations in selecting and establishing a successful offset site. Success requires ensuring that:

- land management will be undertaken to achieve the goals within a specified timeframe, reviewed by monitoring in a reasonable time scale to capture changes in vegetation and habitat structure
- processes and legal agreements are in place to protect the offset site
- suitable parties such as land managers have an interest in the process and its success.

These requirements are totally independent of the progress or otherwise of the associated development project.

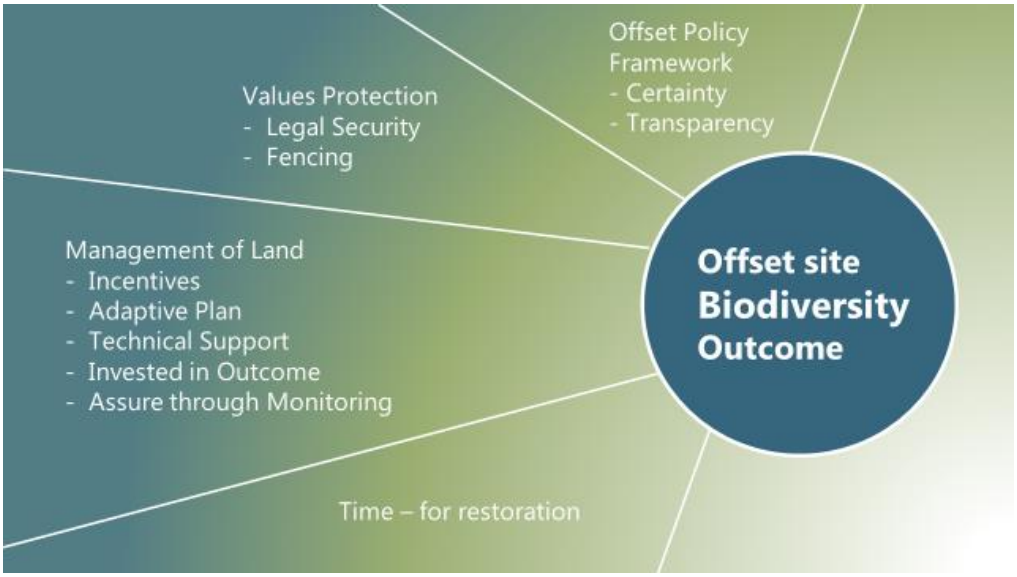
[1] Alan Key is one of Australia's leading biodiversity offset practitioners, having delivered 80+ offset projects. Earthtrade is an Australian-based company that specialises in the facilitation and delivery of offset solutions for development project proponents. Alan is a member of EIANZ, QELA and the BBOP advisory committee.

[2] Helen Wood (member of EIANZ), Senior Environmental Advisor, Senex Energy. Helen Wood is an Australian oil and gas exploration and production company operating in South Australia and Queensland. Helen has a background in ecology and working on identifying offset obligations since 2007 for resource and infrastructure projects, operating under various offset policies in Queensland. For the past ten years, her focus has been on identifying offset requirements and sourcing offset sites for oil and gas projects in Australia, predominantly in Queensland, and is able to provide insights on offset delivery from a project proponent's perspective.

We are seeking to rebalance the focus on delivering a successful offset -- one that can mitigate the impact on an environmental value, but also seeks to successfully leave a legacy in the form of a restored area of land with biodiversity values, contributing to landscape-scale biodiversity improvement.

Some offset policy areas to enable a step change in biodiversity restoration and offset delivery are outlined.

What would contribute to successful offset delivery?



Policy acceptance that offset delivery involves risk. Is there such a thing as a perfect offset with no risk?

There is always risk involved that is mitigated as much as possible by planned actions. However, there can always be force majeure events that are unable to be planned for in entirety (e.g. cyclones, climate change) that could extend the timeframe for the outcome to be achieved.

The financial model behind the property on which the offset is placed, and the exit strategy for the client/developer, are key considerations. If a force majeure event occurs, then it is the responsibility of the offset provider to manage the offset until the outcomes are achieved. The reason is that the project and entity that triggered the offset will potentially not exist in future, due to project completion, commercial restructures etc.

As they are not risk-free, implementing on-ground offsets presents problems for governments. This is demonstrated in the report titled *State of Biodiversity Mitigation 2017, Markets and Compensation for Global Infrastructure Development,* which says: "Compensation funds accepted a reported $1.2 billion with 35% of programs reporting transactions, led by programs in India and the United States. But funds also reported that at least $7.1 billion in total compensation funds collected to date remained unspent as of 2016."[3] This is a common problem across many countries.

To mitigate these risks, scalable offsets need to be located with financially stable, long-term landowners/entities who accept the liability of implementing the offset management plan.

Therefore, when sourcing land on which to locate offsets attention needs to be given to:

1. The landholder/entity that is going to implement the offset over a term of about 20 years. By year 20, as a rough rule of thumb, the offset should be at a stage that it is self-sustainable, and the increase in condition thereafter is incremental with time.
2. Selecting a site that can achieve the outcomes in a reasonable time frame. Calculating the cost of management actions, monitoring, and reporting over periods of more than 20 years is problematic, to say the least.

Any policy or framework must provide certainty.

[3] Bennett, G., Gallant, M., ten Kate, K. *State of Biodiversity Mitigation 2017: Markets and Compensation for Global Infrastructure Development*, (October 2017). Forest Trends, Ecosystem Marketplace. Available at https://www.forest-trends.org/wp-content/uploads/2018/01/doc_5707.pdf

Proponents need to understand their obligations and be able to source and implement the offset. Approval certainty for proponents is fundamental, and therefore policy must be a balance between prescription and pragmatism to enable the offset to be secured and implemented.

For successful project development and to 'break ground' on the project site, it may be a requirement to have the offset management plan approved. In the time sequence of the project, this means that an offset site needs to be sourced before project approval has been gained. With no policy certainty, a proponent cannot proceed down the path of finding a potential offset site, while investing resources, without the knowledge that the offset will be approved.

There are two key tasks required to achieve approval:

- Identifying potential offsets, which may entail a site visit
- Establishing a relationship with the offset provider and negotiating a process to undertake a preliminary ecological suitability assessment.

From those two tasks, there are multiple parties to satisfy: the proponent, the offset provider (landholder), and bank or finance approval, prior to satisfying two to three regulators, to finally secure the offset on the property's title through a separate government department.

For project funding, banks may require project auditing against the International Finance Corporation's guideline *Performance Standard 6* (IFC 6) *Requirements 16 -19 Critical Habitat*.[4] This means an offset plan must be approved by the necessary regulators. To submit an offset plan, an offset site needs to be identified (ecologically assessed) to be able to assess any policies that are based around like-for-like.

Should offset policy be based on metrics or ratios?

A policy needs to be supported by a process that provides certainty, is measurable, transparent and repeatable. As soon as ambiguous components are introduced, the process is less transparent. Whether metrics or ratios are used, either method requires consistent application.

The basis of metrics should be derived from site values, calculated for known species and potential offset sites. Used effectively, they can provide certainty for a proponent in the early stages of project development, prior to funding approval.

Over the last few years, a change in metric interpretation by regulators has increased the amount of area required with no transparency, repeatability or supporting evidence. Policy ambiguity, when estimating the offset area required, does not lead to the most optimal outcome. When sourcing an offset site, the most cost-effective solution is to find a site(s) with adequate area for all the values. Overestimating/variability in decision-making:

- Discounts potential sites that would have been adequate without an overestimated calculated area yet may have delivered a more beneficial offset.
- Increases project risks based on offset site suitability during initial project set-up, when the project is being evaluated as to whether it will proceed.
- Causes material project delay where an offset management plan must be approved within the project timeframes, and the offset site must be evaluated against the impact site values.
- Can lead to sub-optimal offset implementation. It is in both the project proponent's and offset provider's interests to choose an offset that will achieve an outcome quickly, to manage their business risk, and seek all the approvals that they require.

Offset approval evaluation should be based on a clear, transparent process that considers the condition of the impact and offset sites, and the context of the sites in the landscape, at a point in time. It should be based on data from onsite ecological studies undertaken by suitably qualified ecologists.

The offset should be managed to achieve the outcomes required – not in perpetuity.

Once an offset has achieved a level of maturity, whereby improvements in condition will be incremental over an extended period, it should be recognised as having met the obligations. The management plan should be reduced to only maintaining the condition for the balance of the set time.

Outcomes are achieved over time. The required management and monitoring actions should recognise this, be adaptive, and focus on the result. Monitoring events should be reflective of appropriate expected

[4] International Finance Corporation (January 2012). *IFC Performance Standards on Environmental and Social Sustainability*, Available at https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_handbook_pps

change, rather than of an event in itself. A monitoring program requires resourcing and should be appropriate to the anticipated risks and expected outcomes.

Project approvals with "outcomes-based conditions" tied to timeframes are fine in theory. However, they rarely consider the seasonal reality of the improvements of the offset. Offsets will not improve in a linear manner but will improve depending on time and seasonal conditions. A period of dry seasons will result in little to no change or even a reduction in condition at a point in time. Outcomes need to be considered as the end of the management plan and risks that evolve seasonally should be managed accordingly. It is in the project developer's/proponent's and offset provider's interests to achieve the outcomes as soon as possible to mitigate their risks.

More recognition should be given to the fact that nature will take over after a period of time and the outcomes are then time-driven rather than requiring intensive ongoing management.

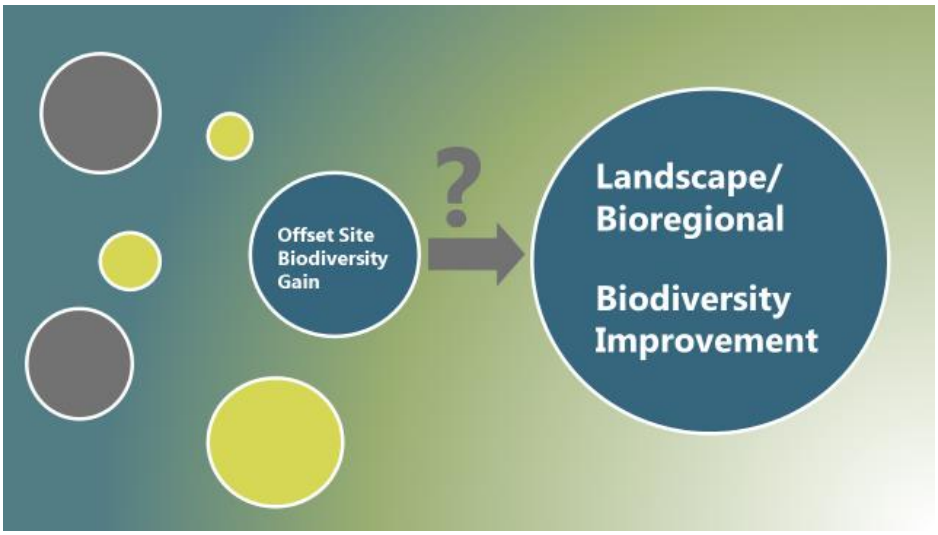
Price does matter – over-inflated costs and the attitude of "the developer will pay whatever it costs" lead to perverse outcomes.

Offsets represent a significant financial contribution to the approval process and contribute greatly to whether a project obtains a financial decision to proceed. On a recent project, the offset sourcing has cost 50% of the approval costs (including baseline and impact ecological assessments). And those costs aren't the cost of the offset itself.

Offset set-up and implementation are project costs and activities that require project management. On-ground offsets can take several years to establish and the hidden costs of managing the process are often underestimated. These costs include contract management, legal fees, site visits, ecological studies, plan approval process, landholder liaison and meetings.

Where an option exists to undertake a financial payment in lieu of a direct offset, a proponent would likely avoid increasing project delivery costs by financially offsetting as this is the time in a project's life when income has not yet been generated, and the total cost in resourcing delivery will be less.

How do we move to a model where offsets contribute to landscape-scale biodiversity outcomes?



Create a strategic "master plan" for a bioregional area where development is concentrated

There is an opportunity for projects to leave a biodiversity improvement and the scale of the legacy could be enhanced.

Selecting locations for offsets in a strategic way, with a focus on improving biodiversity values at the landscape scale, as well as improving habitat for targeted species strategically, is a real opportunity that all offset programs should aspire to.

Potentially, bioregional assessments, identified landscape corridors, identified protected areas and regional biodiversity mapping could identify offset sites that have bioregional value. Their value should be considered over ratio/calculated methods exclusively.

There is a role for government to identify strategic offset sites and facilitate the process through offsets delivered in advance of projects.

Pooling resources to improve cost-effectiveness of delivery

While not removing the mechanism for a proponent to deliver offsets of their own choosing (as they may have other corporate drivers to satisfy), there should be another pathway where offset requirements can be pooled with other project's requirements, to enable the selection of an offset site with more regional biodiversity value, and this could be achieved using financial payments. At the time of the approval process, the proponent's main driver is to meet regulatory requirements for their project and project delivery timeframes. As these will always differ for each project, the pooled offset approach could be coordinated by an experienced entity, leaving government to their primary task of regulation. When coupled with economies of scale, this would improve the extent of on-ground offsets. It would require an approach that recognises outsourcing the necessary professional expertise; as well as enabling advanced offsets.

Pooled offsets could be supported by government but facilitated by a team of professionals: land brokers, lawyers, and ecological monitoring specialists. The pathway would dissipate the high establishment costs experienced for individual offset sites and could deliver offset sites with additional landscape-scale benefits.

Another approach to use economies of scale with offset delivery is for an offset provider to deliver offset obligations for multiple clients, or offsets to be established for one client with multiple projects. Commonwealth and Queensland government policy positions for advanced offsets and the required prescriptive delivery for each project's impacts, do not currently support this approach.

Support offset providers to manage the offset site

As well as being an approval and contractual document, the offset management plan's purpose is to set out the practical requirements for the offset provider to implement over the life of the offset site. The plan should enable adaptability as the land manager works through the plan and learns and improves along the way.

Offsets should be able to be integrated with agriculture rather than the approach that a property should be 100% conservation. There is no economic model that supports the latter approach, apart from a model where the proponent purchases the offset site, or where there is a greatly increased cost of the offset to the project proponent.

In northern Australia, the main factors facilitating ecological restoration are time and removing agricultural practices. Monitoring schedules should match the expected growth and be a suitable timeframe to identify the risks to successful restoration. Annual monitoring schedules, for example, add unnecessary costs to the project.

Benchmarks linked to condition of the offset, rather than prescriptive timeframes, would encourage land management to achieve the outcome, and they would be driven by incentives.

Offset policy frameworks to support delivering the "big picture" - require some flexibility

Offset frameworks should provide certainty, but additionally enable innovation to improve the overall outcome of an offset, where possible.

Offset implementation requires multi-jurisdictional regulatory approval. Streamlining offset implementation between all regulatory departments involved will enable projects to seek approval in a timely manner and for government to recognise all the regulatory inputs.

At an individual project level, offset site selection should be incentivised to aim for sites that will be enhanced by other landscape-scale connectivity or bioregional network aspects, rather than focusing on matching values.

And finally, offset policy should focus on the offset outcome, when being evaluated. Offset management delivery plans should focus on their values, contributions to biodiversity, and the value being improved.