

EXECUTIVE SUMMARY

Background

The National Spatial Biodiversity Assessment (NSBA) established that 30% of grasslands in South Africa are irreversibly transformed and only 2.8% are formally conserved. A Grassland Biodiversity Profile and Spatial Biodiversity Priority Assessment was undertaken for the biome which built on the outcomes of the NSBA. The assessment identified and integrated priority areas for terrestrial and river biodiversity, as well as ecosystem services for future conservation action in the grassland biome – the result being the identification of 15 priority clusters for conservation which represent 50% of the biome.

The National Grasslands Biodiversity Programme (NGBP) is seeking to mainstream biodiversity in production landscapes involving the coal mining and agricultural sectors with the aim being for “major production sectors to contribute directly to the achievement of biodiversity conservation priorities in the grassland biome.” The NGBP is investigating both regulatory and market based approaches, and identified offsite mitigation and mitigation banking for wetlands as a concept with the potential to achieve the conservation of aquatic biodiversity within the priority areas of the grassland biome.

Terms of Reference

The terms of reference for this study required that the following main objectives be addressed:

1. An assessment of the appropriateness and feasibility of wetland mitigation banking to secure/sustain inland water biodiversity within the grasslands biome at a demonstration level.
2. Identification of a demonstration site with at least two potential project interventions in each site. The sites need to be located within one of the biodiversity priority clusters and be undertaken with the agriculture or mining sectors.
3. Framework for implementation of mitigation banking at the demonstration sites
4. Recommendations for the way forward.

Methodology

This study has been based primarily on the review and analysis of literature and consultation with relevant role-players and stakeholders. The available resources restricted the consultation to discussion at a high level during which an attempt was made to explain the basic aims and operation of a banking system and obtain feedback from stakeholders regarding the perceived benefits and challenges to implementing the concept in South Africa, as well as suggestions for taking the concept forward.

Limitations

Given that mitigation banking is a new concept in the South African context, the broad level discussions possible within the scope and nature of the investigation have limited the level of detail and understanding achievable. The authors have nevertheless proposed a model that is justified as far as possible based on the evidence and understanding available. It is therefore acknowledged that the recommendations require further investigation. Similarly, the level of investigation limited the thoroughness and detail included in the recommendations related to the proposed pilot project and associated framework for implementation.

Key Findings

The concept of wetland mitigation banking developed in the United States where it has been practised over the past 15 years to meet the country’s policy of ‘no-net loss’ of wetlands. A background to the development of the mechanism is provided in the main report along with a

definition and overview of the concept. This is followed by a more detailed view of the policy, legislation, tools, processes, and the responsibilities of different role-players involved in establishing and operating mitigation banks in the USA.

A review of the available literature revealed that the federal government has recently selected mitigation banking over other mechanisms as the preferred option for offsetting wetland impacts. It holds several advantages when compared to project specific offsite mitigation, which was the mechanism initially implemented in the United States. It would also appear that government support for mitigation banking, along with the potential for third party bankers to benefit financially, has led to an increase in the number and size of banks being developed in the USA.

Despite the increased application of the mechanism, there remains a large body of sceptics with wide ranging criticisms of the mechanism. There are many reviews which document cases where banks have not resulted in effective mitigation of the ecological impacts they are required to offset, and in several instances it is contended that the mechanism has allowed for a 'net-loss' of wetlands – in direct variance with the policy that the mechanism was developed to support. A debate around the effectiveness of mitigation banking in the USA therefore continues to rage despite the national government's recent show of support for the mechanism and ongoing allocation of resources to improve its effectiveness.

The apparent failures of the concept in the USA have prompted the Canadian government to take a decision against employing it in their country which also has a guiding policy of 'no-net loss' of wetlands. The overriding argument against adopting the mechanism in Canada is that "it encourages a commodity approach to conservation wherein wetlands are traded for cash". The Canadian authorities also feel that mitigation banking places emphasis on compensation rather than conservation. Certain states in Canada have developed state managed institutions and models for mitigating wetland impacts, thereby avoiding the influence that the market and potential for profits has on the mechanism in the way it is applied in the USA.

Other countries, such as Australia recognise the potential of mitigation banks but are also wary of the documented limitations. They are considering mitigation banking along with a suite of other mechanism designed to manage and offset the often inevitable impacts to biodiversity associated with ongoing development.

Offsets are increasingly being applied in response to pressure from the significant growth and development agenda in South Africa. The success of these has to date been questionable which has prompted the development of guidelines and standards for designing effective offsets (Western Cape). In the case of wetlands, several cases exist where off-site mitigation has been included as a condition of authorisation for projects that have resulted in 'unavoidable' impacts to wetlands. A review of these cases concluded that the approach to the mitigation has been ad hoc and that there are several issues affecting the sustainability and effectiveness of the wetland offsets implemented to date.

Having established an understanding of mitigation banking, a more detailed analysis of the benefits and limitations of the concept is provided. This provides the basis for assessing whether the mechanism is suitable for the South African context and, if so, whether we have the legislation, tools and any other requirements to implement mitigation banking. Consideration is also given to other mechanisms, specifically off-site mitigation, and whether these are a more suitable option than a banking system.

Conclusions and Recommendations

Given the degraded state of much of the country's wetland resources and the increased threat to wetland resources in certain regions and the growing application of questionable approaches to off-site mitigation measures for wetlands, there is an urgent need to develop policy and guidelines that will improve the effectiveness of offsets.

Mitigation banking is considered to hold several advantages to project-specific off-site mitigation and other mechanisms discussed. However, while the legal instruments available in South Africa are considered adequate and many of tools necessary to implement a bank also exist, the application of mitigation banking as practised in the USA is for various reasons not considered appropriate for South Africa. The model in the USA, which relies on third party bankers, contains too many risks and would place an additional administrative burden on already stretched government departments in this country.

Given the demand for an effective offsets mechanism and the potential benefits offered by a banking system, the study team developed a mitigation banking model considered appropriate to the South African situation. The model differs fundamentally from the USA situation in that it is based on the State, via the Working for Wetlands programme, fulfilling the role of banker and thereby taking responsibility for the planning, implementation and operation of the bank. This structure in itself limits many of the issues that seem to plague the operation of the mechanism in the USA where the state regulates the banks. Further aspects of the model structure are designed in a way that seeks to maximise the benefits of the bank for all role-players which includes a range of government departments, while limiting the risks associated with the technical and institutional issues identified in the review and analysis of the United States experience.

The proposed model is in effect the main structure of a banking system. Discussion is provided regarding the responsibilities of different role-players in activities required at different steps in the bank structure and the tools, data and projected resources necessary to undertake these activities.

While the model is considered feasible and appropriate for the local situation, the preliminary nature of this study means that it can in no way be considered the final product. As proposed by the NGBP, the most effective way of refining the model at a more detailed level and thereby informing policy, will be by testing it in a pilot project within the selected demonstration area.

The study identified the Upper Olifants River Catchment in Mpumalanga as an appropriate catchment in which to test the proposed model. Various wetland offset initiatives were identified in the catchment that are either in the process of being planned or are being implemented. One of these emerged as the preferred project and the relevant mining company have expressed their interest in partnering with WfW in implementing a pilot mitigation bank.

The document concludes with high level recommendations in the form of a framework for implementing the pilot project. The recommendations include proposed location, likely resources and indicators for monitoring success of the pilot.