

The Gauteng Biodiversity Stewardship Programme

Legacy Document



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Acronyms

Acronym	Meaning	Acronym	Meaning
AGM	Annual General Meeting	GDARD	Gauteng Department of Agriculture and Rural Development
APP	Annual Plan of Operation	GEF	Global Environment Fund
BDS	Biodiversity stewardship	GIS	Geographical Information System
BDSTWG	Biodiversity Stewardship Technical Working Group	GPAES	Gauteng Protected Area Expansion Strategy
BLSA	BirdLife South Africa	GPS	Geographical Positioning System
BO	Biodiversity Officer	GSSA	Grasslands Society of Southern Africa
CBO	Control Biodiversity Officer	HOD	Head of Department
CLS	Corporate Legal Services	IBA	Important Bird and Biodiversity Area
CN	Cape Nature	JPTT	Joint Planning Technical Task Team
CO	Conservation Outcomes	KNP	Kruger National Park
CoJ	City of Johannesburg	KPA	Klipkraal Protected Area
CoT	City of Tshwane	KZN	KwaZulu-Natal
C-Plan v3.3	Gauteng Conservation Plan	LRBSI	Land Reform and Biodiversity Stewardship Initiative
DAFF	Department of Agriculture, Forestry and Fisheries	LRG	Legal Reference Group
DD	Deputy Director	MEC	Member of Executive Council
DEA	Department of Environmental Affairs	MoA	Memorandum of Agreement
DFFE	Department of Forestry, Fisheries and Environment	MoU	Memorandum of Understanding
DMR	Department of Mineral Resources	MPTA	Mpumalanga Parks and Tourism Authority
DPE	Devon Protected Environment	NACSSA	National Association of Conservancies and Stewardship of South Africa
DPELA	Devon Protected Environment Landowner's Association	NEM: PAA	National Environmental Management: Protected Areas (Act No. 57 of 2003)
DALRRD	Department of Land Reform and Rural Development	NEMA	National Environmental Management (Act No. 107 of 1998)
DRDLR	Department of Rural Development and Land Reform	NEMBA	National Environmental Management of Biodiversity (Act No. 10 of 2004)
DWS	Department of Water and Sanitation	NFEPA	National Freshwater Ecosystem Priority Areas
EES	Environmental Empowerment Services	NGO	Non-Governmental Organisation
EMI	Environmental Management Inspectorate	NGT	WWF Nedbank Green Trust
EPPC	Environmental Policy & Planning Coordination	NHRA	National Heritage Resources Act, 25 of 1999
EWT	Endangered Wildlife Trust		
FPA	Fire Protection Association		
GBDSWG	Gauteng Biodiversity Stewardship Working Group		
GBSP	Gauteng Biodiversity Stewardship Programme		
GBSRP	Gauteng Biodiversity Stewardship Review Panel		
GCSA	Gauteng Conservation and Stewardship Association		

Acronym	Meaning
NPAES	National Protected Area Expansion Strategy
NR	Nature Reserve
NRM	Natural Resource Management
PA	Protected Area
PAE	Protected Area Expansion
PAMP	Protected Area Management Plan
PATTT	Protected Area Technical Task Team
PE	Protected Environment
PMC	Project Management Committee
PSC	Project Steering Committee
QGIS	Quantum Geographic Information System
SAHGCA	South African Hunters and Game Conservation Association
SANBI	South African National Biodiversity Institute
SCCP	Symposium of Contemporary Conservation Practice
SG	Surveyor General
SUE	Sustainable Utilization of the Environment
TOR	Terms of Reference
VCA	Veld Condition Assessment
WC	Western Cape
WfW	Working for Water
WfWet	Working for Wetlands
WWF	World Wide Fund for Nature

Executive Summary

The Gauteng Province is a hub for South Africa's economic growth, but the urbanisation and population growth in the province places significant stress on its natural resources, and the Sustainability Report for 2019/2020 (GDARD, 2018) indicates that approximately 5,000 ha of threatened ecosystems were affected by approved developments, around 27,400 ha of land was transformed between 1990 and 2014, and approximately 56,100 ha between 2014 and 2018. The ecological infrastructure that provides essential services to the inhabitants of the province is under severe threat, and it is necessary to implement significant conservation measures now.

Protected area expansion (PAE) is a high conservation priority in Gauteng Province. The Gauteng Department of Agriculture and Rural Development (GDARD) committed to expanding its conservation estate by 30,000 ha by 2019, with the operational target subsequently being revised to adding 9,000 ha by 2019, 2,000 ha in 2019/2020, and adding another 1,000 ha each year until 2024.

The GDARD Biodiversity Stewardship (BDS) unit was established in 2009, as part of the South African National Biodiversity Institute's (SANBI) Grasslands Programme. Due to limited institutional capacity in the department and a lack of operational budget for the protected area declaration process, the programme gained very little momentum until the WWF Nedbank Green Trust in 2015 funded the Gauteng Biodiversity Stewardship Programme (GBSP), a partnership between the GDARD and the Endangered Wildlife Trust (EWT). The EWT is a Non-Governmental Organisation (NGO) with extensive experience implementing BDS, which served as a conduit for the external funding, and facilitated day-to-day project operations.

The overall goal of the resulting public-private partnership was to catalyse the implementation of biodiversity stewardship (BDS) in Gauteng through the development of capacity within the GDARD, as well as to develop and support strong and relevant institutional structures for long-term impact and sustainability of BDS in the province. The measurable target for this programme was to publish the intent to declare 5,000 hectares of privately and/or communally owned land as protected areas, under the National Environmental Management: Protected Areas Act, 57 of 2003 (NEM: PAA), within three years (2015–2018).

The five primary objectives for the programme were to:

1. Develop formal institutional arrangements within the GDARD, to support the implementation of biodiversity stewardship in the Gauteng Province.
2. Understand the environmental and institutional characteristics of the biodiversity stewardship landscape in Gauteng.
3. Strengthen capacity for the implementation of biodiversity stewardship in Gauteng through working case studies that lead to the intent to declare (and eventual declaration) of at least 5,000 ha.
4. Identify, evaluate and adopt sustainable mechanisms for BDS in Gauteng.
5. Develop the capacity of the GDARD to lead on BDS work in the province after project completion.

The GBSP was launched on 1 August 2015 and the GBSP team set about to develop a plan of operation to meet the project targets and objectives, gain a better understanding of the conservation landscape in Gauteng, and develop and entrench institutional processes in the GDARD, to ensure effective implementation of BDS in Gauteng going forward. The EWT and the GDARD signed a Memorandum of Agreement (MoA) to formalise the partnership for the duration of the programme and identify the roles and responsibilities of each organisation. The GBSP project team consisted of officials from the GDARD BDS unit and representatives from

the EWT. The project team then established the necessary management and steering committees to oversee the strategic implementation of the project, and a Review Panel to recommend an appropriate protected area category, as per the NEM: PAA, for each potential BDS site.

This strong partnership forged between the GDARD and the EWT not only unlocked short-term resources needed for site visits, attendance of events and meetings, and for capacity building purposes, but also enabled more productive engagements with landowners who were initially reticent to engage with the GDARD, but amenable to meeting with the EWT. The EWT therefore approached the landowners first, and introduced the project, and described the role the GDARD was to play. The landowners were less tentative once they understood the voluntary nature of the programme, in which they were allowed to continue with their agricultural activities under certain conditions. Thereafter, members of the GDARD BDS unit engaged extensively with the landowners in the priority sites and engendered a level of trust and mutual respect.

From project inception in August 2015, the GBSP consistently achieved tasks required for the BDS process to be effective. Some processes took longer than the work plan specified, because it was necessary to adapt existing processes and tools to best fit the physical, social and economic landscapes in Gauteng, and to lay a solid foundation from which the GDARD could continue to implement BDS effectively after the external funding of the GBSP was depleted. Throughout the programme's lifespan, the team took the time to involve other GDARD units, such as Scientific Services and Corporate Legal Services, in relevant stewardship activities, to assist with tailoring the institutional processes for the province, and to further upskill members of these units to provide extension services to BDS landowners. The delays caused by the adaptation of the biodiversity stewardship processes were worthwhile because the result was a much more suitable, relevant, effective, and institutionalised BDS process to follow in the province.

GDARD's Scientific Services unit was consulted to interrogate and adapt site selection and prioritisation processes based on those from other provinces. The team then used the adapted process to select sites of conservation importance in the province, and prioritise these, placing them either on a list of primary sites, or one of secondary sites. These processes considered both ecological factors, and social factors such as landowner willingness.

To foster a sense of collaboration with landowners, an external veld management specialist was engaged to provide guidance on the management of the sites from both a conservation and an agricultural livestock grazing perspective. Because the specialist was independent, with years of experience in responsible grassland management, he was able to connect with the landowners more effectively and illustrate the importance of conservation to agriculture. Members of the GDARD Scientific Services unit were included in field excursions with landowners and the veld management specialist, to better equip them to balance the agricultural needs of the landowner with the conservation management targets.

The GBSP team endeavoured to attend all events related to biodiversity stewardship and management of protected areas, which included:

- internal and external meetings and work sessions
- workshops (convened and attended)
- farmers' union meetings and agricultural shows
- technical task team meetings and working groups
- symposia and conferences (attended and presented)
- learning exchanges

- formal and informal and formal training.

However, much of the team's knowledge and confidence to implement BDS came from being directly involved in its implementation. All team members were included in every step in the stewardship process, from identifying important criteria for site selection, engaging with landowners, conducting site assessments, compiling dossiers and drawing up contracts, to the development of protected area management plans, including a strategy for sustained post declaration support to the sites once declared. The lessons learned from their experiences were documented to ensure that benefits gained are sustainable and transferrable past the lifetime of this project.

After ultimately prioritising four sites for declaration through the GBSP, totalling 14,805 ha, declaration notices for two of these sites have been published in the government gazette (10,634 ha). As a result of the increased knowledge and capacity within the team, as well as within other GDARD units, the GDARD BDS unit already applied the knowledge and experience gained through the GBSP to assist with the declaration processes required to establish a third proposed protected area made up of more than 100 landowners, situated south west of the city of Pretoria in the buffer zone of the Cradle of Humankind World Heritage Site.

An independent evaluation of the GBSP, in July 2019, concluded that the programme had been successful in achieving its objectives, and that the GDARD BDS unit has been sufficiently resourced to implement biodiversity stewardship using best practice principles. Recommendations to ensure the sustainability of the GBSP were to:

- ensure that the programme is sustainable through the continuation of the partnership between the EWT and the GDARD
- the establishment of a mechanism, such as a task team, to coordinate the standardized implementation of biodiversity stewardship in the province
- to embrace partnership opportunities with a wide range of stakeholders.

The GDARD BDS unit and the EWT are preparing a draft long-term strategic Memorandum of Understanding (MoU) to further their partnership. This will facilitate future collaboration on the implementation of biodiversity stewardship in the province, and potentially other conservation issues. The partners have also developed draft Terms of Reference (ToR) for a Gauteng Biodiversity Stewardship Working Group (GBDSWG), which will consist of the GDARD, other contributing government departments, and municipalities, NGOs, and other interested stakeholders, to maintain and build on the strong foundation created by the GBSP.

Despite the initial foundations laid in 2009, little progress was made towards actual BDS implementation until the public-private partnership between the GDARD, the EWT and the WWF Nedbank Green Trust was established in 2015. The GBSP has demonstrated how the essence of biodiversity stewardship is truly cross cutting between different mandates and functions within government departments, and that successful, and sustained implementation is dependent on a multi-stakeholder approach. A solid partnership between stakeholders who demonstrate mutual respect and trust in each other instils a level of trust among landowners, who can get overwhelmed by the complexities of different government mandates, functions and requirements. The GBSP provided a strong, cohesive, and consistent point of contact for the landowners, utilising the different resources available to each partner optimally, to ensure that a holistic approach was taken to site declaration and post declaration support. The project has highlighted the benefits that strong partnerships can have in BDS implementation. Trust, collaboration, and consistency are fundamental to the success of biodiversity stewardship programmes. The landowners of the sites that were declared as per the NEM: PAA in 2019, are true ambassadors for biodiversity stewardship, as they were bold enough to question

their own actions and to venture into the relative unknown of working in partnership with government to manage the natural resources in their care, for the benefit of both their agricultural interests and the conservation of habitats and biodiversity.

This legacy document is intended to demonstrate what strong partnerships can achieve through BDS implementation, and how the implementation process was adapted for Gauteng – a province unlike others in its layout and multiple competing land uses. The document reports on challenges encountered and lessons that were learned during the project period and proposes recommended next steps for the Gauteng BDS unit in this vastly different context. It also aims to provide a useful background record of the process followed by the GBSP, to ensure that there remains institutional memory within the GDARD to sustain BDS in Gauteng in the long-term.

1. Introduction

With an estimated population of 14,7 million in 2018 and a land surface area of 1,681,336 ha, the Gauteng province is not only the most populated province in the country but also the smallest (GDARD, 2018).

The Gauteng Province is also the economic hub of the country, contributing approximately 34.5% of the country's Gross Domestic Product (GDP). Of the total R4.3 Trillion generated by the South African Economy in 2019/2020, R1.5 Trillion originated in the Gauteng Province. Gauteng's agricultural sector recorded Gross Value Add (GVA) of R5.9 billion – which constituted 0.5% of the province's economic activity. The following breakdown of the GVA from Gauteng's Agriculture industries was recorded:

- Agriculture & hunting – R5.1 billion
- Forestry & logging – R376 billion
- Fishing & operation of fish farms – R409 billion.

While critical for South Africa's economy, the province's economic and population growth places significant stress on its natural resources, including habitats, clean air, and the provision of sufficient clean water. The GDARD's Annual Environmental Sustainability Report for 2019/2020 (GDARD, 2018) indicates that approximately 5,000 ha of threatened ecosystems were affected by approved developments, around 27,400 ha of land was transformed from natural to built-up land cover between 1990 and 2014, and approximately 56,100 ha of land was transformed from natural to built-up land cover between 2014 and 2018. In addition, 715 ha of wetlands which amount to 958 wetland development impact points, mostly valley bottom and seep wetlands, being affected.

The GDARD River Health Programme monitors the three primary catchments (Olifants, Crocodile and Upper Vaal) in the province on a quarterly basis, and its 2018 data indicate that river health over the past four seasons has been variable, but overall there is a decreasing trend indicative of worsening water quality (GDARD, 2018). With massive levels of pollution from traffic, industrial activity, and poor waste management in high-density urban areas, and less remaining functional green spaces that provide ecosystem services, the province is rapidly approaching a state in which the environment can no longer support the health of its inhabitants.

Conserving the remaining intact ecosystems and species is thus a provincial imperative, and the expansion of the conservation estate under formal protection is a valuable instrument in achieving critical conservation objectives, and achieving the targets set out in the National Biodiversity Strategy and Action Plans (NBSAP).

1.1. Why conservation of biodiversity and habitats is so important in Gauteng

Plants and animals provide essential ecosystem services in both rural and urban environments, experienced by humans both directly and indirectly, and also play a significant role in socio-economic development (Secretariat of the Convention on Biological Diversity, 2009). While the linkages between biodiversity and human health, economic development, and poverty alleviation are often not immediately clear to the public, there is substantial evidence that they are strong and relevant (Secretariat of the Convention on Biological Diversity, 2009).

Grasslands are one of South Africa's most important and threatened biomes and are crucial in Gauteng as they play an important role in mitigating the effects of climate change through carbon sequestration, drainage and other functions performed by associated wetlands. The ground water zone in Gauteng represents critical ecological infrastructure, supplying water to the region while maintaining water quality and ensuring flood regulation. Collectively these features contribute to the ecological integrity of the province and provide

important ecological services to marginalised communities and protection from climate change impacts such as flooding.

South Africa is obligated to protect its temperate indigenous grasslands, firstly as a signatory to the *Convention on Biological Diversity* signed in June 2008 (Figure 1), and more specifically as a signatory to the *Hohhot Temperate Grasslands Declaration* (signed February 2010). According to the draft 2016 National Protected Area Expansion Strategy (NPAES), Grasslands are the second most under-represented terrestrial biozone, with 24 ecosystem types (33%) classified as Not Protected and 37 types (51%) as Poorly Protected.

Box 1: What are biozones?
 Biozones are major habitat units. In the terrestrial environment, they are the same as biomes, but the term biozone is used so that equivalent river, wetland and marine habitat units can be included (NPAES, 2016).

According to the Department of Forestry, Fisheries, and Environment (DFFE), previously known as the Department of Environmental Affairs (DEA) (2016), protected areas are vital nodes within South Africa’s ecological infrastructure, contributing to functional landscapes that provide stable environments for the benefit of human well-being. Protected areas can also support rural livelihoods and local economic development, especially in marginal agricultural areas.

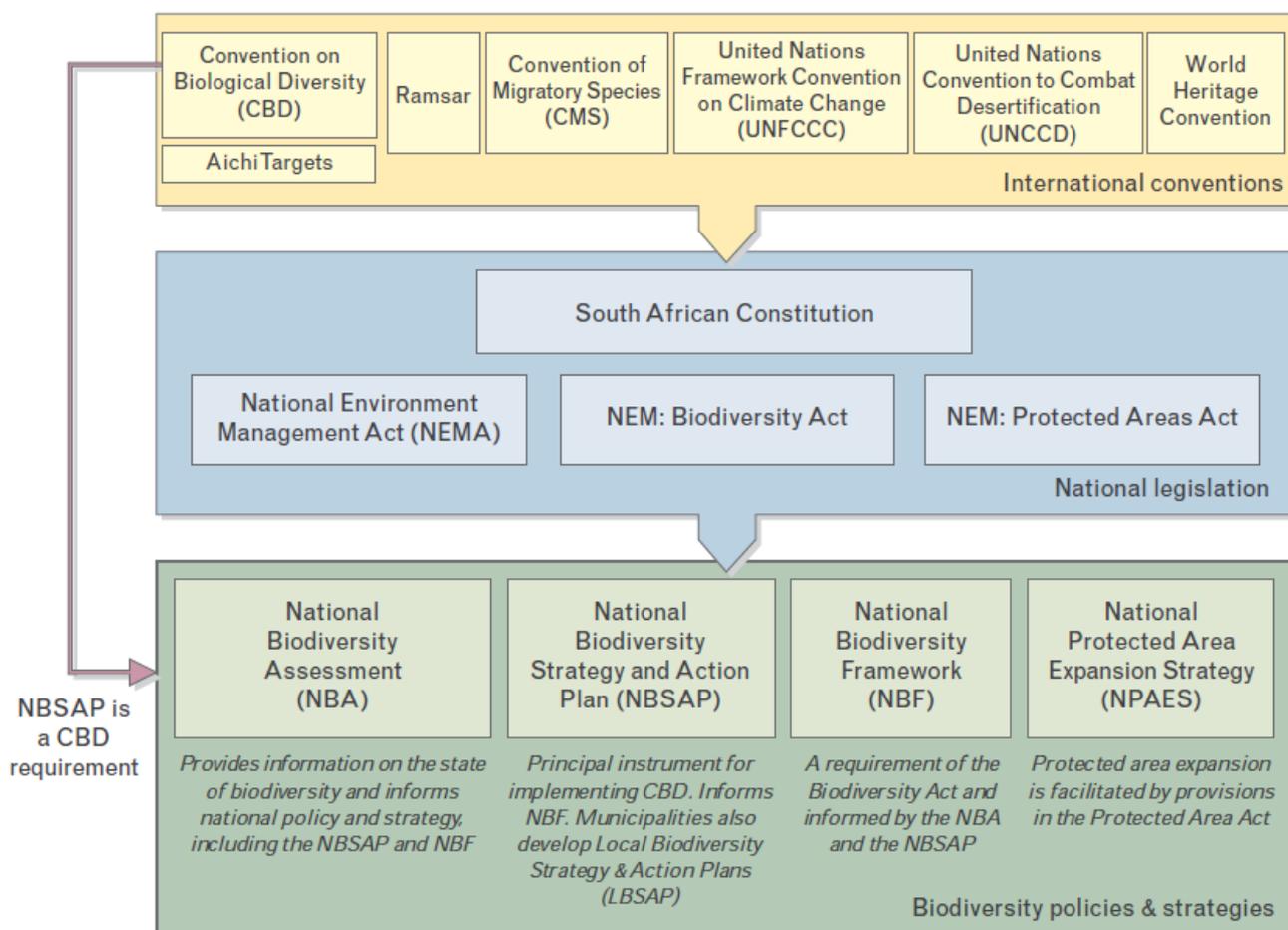


Figure 1: The relationships between international conventions, national legislation and biodiversity policies and strategies (SANBI, 2014, pg 19)

1.2. Biodiversity stewardship

“Stewardship” is the careful and responsible management of something entrusted to one’s care.

(www.merriam-webster.com/dictionary/stewardship)

Biodiversity stewardship is an approach to securing land in priority biodiversity areas by entering into agreements with private and communal landowners, municipalities and other government entities, led by conservation authorities. The objective of biodiversity stewardship is to conserve and manage high priority biodiversity areas through voluntary participation of landowners. Biodiversity stewardship programmes are aimed at setting up positive, proactive partnerships with private landowners, to support and encourage them as they take on the responsibility of managing and protecting the natural assets that are in their care.

Strategically located protected areas established through the BDS mechanism can complement the province’s existing protected area networks, and their support of rural livelihoods and local economic development. These networks also contribute to the mitigation of threats resulting from climate change.

Box 2: Principles of biodiversity stewardship (SANBI, 2018)

1. Biodiversity priority areas must be protected first
2. BDS is based on voluntary commitment
3. conducted through cooperative governance and partnerships
4. based on formal agreements and legal contracts (not all resulting in formal PAs)
5. landowner/ land user focussed

1.3. Challenges for conservation in Gauteng

Considering the province’s economic and population statistics, it is clear that unsustainable development activities, and other competing land uses will continue to deplete the natural grasslands in Gauteng dramatically, in turn worsening the need for the services provided by Grassland ecosystems. The province is facing enormous challenges with regards to the availability of functional ecological infrastructure, and its abilities to support biodiversity and provide healthy and safe environments. These challenges include:

- High human population numbers and pressures
- Loss and degradation of habitat through urbanisation and industrialisation
- Multiple competing land uses in a highly populated province
- Employment opportunities
- Residential, retail, and industrial development
- Roads
- Small- and large-scale agriculture
- Recreational space available
- Increasingly high levels of air, water and land pollution from mines, industry, travel, landfills, development, etc.)
- High levels of infestations of alien or invasive species (fauna and flora)



Figure 2: Contributing factors to the strain placed on natural resources in Gauteng

- Small, fragmented land portions that do not contribute meaningfully to ecological corridors and ecosystem services.

Because of these multiple and urgent competing land and resource uses, few choices exist for meeting protected area targets in Gauteng’s Grasslands. The province needed to act quickly to secure remaining areas of conservation value, and efforts to conserve threatened grassland areas need to involve private and communal landowners and communities, and the support of provincial stewardship officers is crucial. Thus, in 2015, the EWT, GDARD, and the WWF Nedbank Green Trust launched a programme to implement BDS in Gauteng Province.

1.4. Purpose of this legacy document

Biodiversity stewardship implementation in Gauteng required a tailored approach and was shaped by the scale and pace of the urbanisation, rapid population growth, and industrialisation of the province. This document is not intended to replace or reproduce any of the supporting materials referred to throughout the document, but to demonstrate how BDS implementation was adapted for Gauteng – a province unlike others in its layout and multiple competing land uses, the lessons that were learned, and the recommended next steps for the Gauteng BDS unit in this vastly different context. It also aims to provide a useful background record of the process followed by the GBSP, to ensure that there remains institutional memory within the GDARD should these records be required sometime down the line. This document will detail the relevant implementation procedures that were used in the GBSP, challenges encountered, how these challenges were resolved, and lessons learned during the project period.

To facilitate continuity and ongoing learning, the following processes and outcomes are included in this legacy document:

- The process that the partnership followed to establish the GBSP.
- The amendments made to the national standardized biodiversity stewardship processes in order for the process to be more suited to the fragmented Gauteng landscape.
- The processes and document templates that were institutionalized within the GDARD, including the relevant GDARD portfolios responsible for each step.
- The forums that were established by the GBSP to facilitate the implementation of BDS.
- The role that the NGO, the EWT, played in the successful implementation of the GBSP, and what roles NGOs can play providing post-declaration support to BDS sites.
- The responsibilities expected from extension officers (e.g. GDARD BDS officers) for post-declaration support.

This document is best used alongside existing documents, with particular reference to the National Biodiversity Stewardship Guideline (SANBI, 2018), and will show how the GBSP started making real progress in 2017, using the solid existing foundations developed by the SANBI’s Grasslands Programme and the GDARD seven years prior, without which it would have been significantly more difficult for the GBSP to hit the ground running.

Furthermore, the original foundations were laid through adapting and learning from BDS units in other provinces, primarily the Western Cape (WC) and KwaZulu-Natal (KZN), and the National BDS Community of Practice; spearheaded by the National Biodiversity Technical Working Group (BDSTWG). This working group is convened by the South African Biodiversity Institute (SANBI) and the Department of Forestry, Fisheries, and Environment (DFFE), and includes representatives from provincial BDS units, and NGOs involved in BDS

implementation. It is a strong and productive community that is always looking ahead to take BDS further through collaboration across the country.

Through the partnerships and extensive experience within the national BDSTWG, documents and learning materials have been developed that demonstrate the benefits of BDS to a range of stakeholders, or that detail the procedures required for BDS implementation. Included amongst these is an updated version of the National Biodiversity Stewardship Guideline (SANBI, 2018), which provides further details about the working groups, templates of Protected Area Management Plans (PAMP) and relevant legal documents to assist the under resourced provincial units.

One of the reasons behind the success of the GBSP is that, throughout the project, the unit has taken a broader, holistic, and long-term approach to implementing BDS in Gauteng. The document will look at the GBSP's return on conservation investment, and how the GBSP leveraged the strong collaboration within the GDARD, the BDS community of practice and other stakeholders to achieve objectives with minimum resources (particularly in Gauteng with the competing land use issues). It will be shown how this was made possible by the extensive support provided by other units within the GDARD, particularly the Scientific Service and Corporate Legal Services units, and the break-down of silos between GDARD units throughout the course of the GBSP because BDS is a cross-cutting mechanism that contributes to different government imperatives. Different climate change mitigation measures are currently being promoted and implemented by the GDARD and it is imperative that the substantial contribution BDS makes towards other conservation imperatives such as climate change and species conservation is highlighted.

The aim of this document is to contribute to standardising best practice for BDS implementation in the Province, through the sharing of processes, protocols and lessons learned.

Best practice can be defined as ("Best practice," 2018) *"... a method or technique that has been generally accepted as superior to any alternatives because it produces results that are superior (or most desirable) to those achieved by other means or because it has become a standard way of doing things, e.g., a standard way of complying with legal or ethical requirements"*

2. Biodiversity Stewardship in South Africa

A revised draft of the NPAES in 2016 identifies BDS as a key mechanism to achieve protected area expansion – reinforced by the fact that between 2008 and 2016, 68% of all protected area expansion was achieved through biodiversity stewardship. National best practice advises that NEM: PAA be the only piece of legislation used to declare PAs at a provincial level when considering a property for nature reserve and or protected environment status.

2.1. Categories of protected areas implemented through biodiversity stewardship

There are different categories of protected areas in South Africa, each offering a different level of formal protection and support. The nature reserve and protected environment categories are two protected area categories that afford legal protection, as per the NEM: PAA, and are the most applicable to biodiversity stewardship as they allow for an entity other than a government institute to be appointed as the management authority. This is formally catered for and recognised in terms of the NEM: PAA. These will be the focus of this document, but all details regarding the other categories of PAs are provided in the National Biodiversity Stewardship Guideline (2018).

	TYPE OF AGREEMENT	LEGAL MECHANISM	DESCRIPTION
<p>Increasing biodiversity importance</p> <p>Increasing support from conservation authority</p> <p>Increasing commitment to conservation</p>	BIODIVERSITY STEWARDSHIP CATEGORY 1: PROTECTED AREAS		
	Nature Reserve or National Park	National Environmental Management: Protected Areas Act (Act 57 of 2003)	<ul style="list-style-type: none"> Suitable for sites with highest biodiversity importance Binding on property: declaration of Nature Reserve, and a title deed restriction Binding on landowner: contract with landowner usually for 99 years/in perpetuity** Considered to be part of South Africa's protected area estate, and contributes to meeting protected area targets
	Protected Environment	National Environmental Management: Protected Areas Act (Act 57 of 2003)	<ul style="list-style-type: none"> Suitable for declaration over multiple properties Less restrictive land use than Nature Reserve or National Park Binding on property: declaration of Protected Environment. Optional title deed restriction. Binding on landowner Considered to be part of South Africa's protected area estate, and contributes to meeting protected area targets
	BIODIVERSITY STEWARDSHIP CATEGORY 2: CONSERVATION AREAS		
	Biodiversity Management Agreement	National Environmental Management: Biodiversity Act (Act 10 of 2004)	<ul style="list-style-type: none"> Less restrictive than protected area declaration Must have a Biodiversity Management Plan (in terms of Biodiversity Act) on all/part of the property Binding on landowner: contract with landowner for a minimum of 5 years, or longer in 5 year increments
	Biodiversity Agreement	Contract law	<ul style="list-style-type: none"> Less restrictive than protected area declaration Binding on landowner: contract with landowner for a minimum of 5 years or longer
	Conservation Servitude	Property	<ul style="list-style-type: none"> Less restrictive than protected area declaration Binding on landowner: notarial deed registered at the Deeds Registry for a minimum of 99 years or in perpetuity Binding on successor in title Provides management conditions particular to the area in question
	Business, Industry and Biodiversity initiatives		<p>Examples:</p> <ul style="list-style-type: none"> Conservation Champions Programme Water Stewards Sustainable Farming
	Conservation agreements		<ul style="list-style-type: none"> Offers direct incentives for conservation through a negotiated benefit package in return for conservation actions by communities. Signed for a 3-year duration (with the option for renewal)
	BIODIVERSITY STEWARDSHIP CATEGORY 3: PARTNERSHIP AREAS		
	<p>This is an informal category of biodiversity stewardship which involves a registration of a site within this category by the provincial conservation authority or conservation NGO.</p> <ul style="list-style-type: none"> No legal certainty, duration and intent Involves collective action by landowners or communities Biodiversity conservation management benefits without formal agreements or accountability Registration of mechanisms is advised 		<p>Examples of such include (but are not limited to):</p> <ul style="list-style-type: none"> Conservancies Buffer Zones and Transition Zones of Biosphere Reserves Sites of Conservation Significance Community conservation areas
	** Eligibility for tax incentives requires a minimum of a 99 year or in perpetuity title deed restrictions		

Figure 3: Biodiversity Stewardship Categories implemented in South Africa (DFE, 2018)

2.2. Protected Area Expansion in Gauteng

The Gauteng Department of Agriculture and Rural Development (GDARD) is committed to protecting the biodiversity and habitats remaining in the province and has identified protected area expansion (PAE) as one of the strategies to achieve this. Guided by the NPAES, the Gauteng Protected Areas Expansion Strategy (GPAES) was developed in 2011 and updated in 2013, and identifies 30,800 ha and 166,811 ha of habitat to be formally secured within Gauteng's protected area network, in five and 20 years, respectively. However, due to resource constraints within the GDARD to implement the GPAES, the PAE targets were subsequently revised to operational targets of adding 9,000 ha by 2019, 2,000 ha by 2020, and 1,000 ha each year until 2024.

The conservation of biodiversity and habitats in Gauteng had, in the past, been implemented through the management of statutory protected areas on public land, and through privately owned reserves declared under the Transvaal Nature Conservation Ordinance 12 of 1983 ("the Ordinance"). These properties have maintained their legal status, as Section 12 of the NEM: PAA states that "A protected area which immediately before this section took effect was reserved or protected in terms of provincial legislation for any purpose for which an area could in terms of this Act be declared as a nature reserve or protected environment, must be regarded to be a nature reserve or protected environment for the purpose of this Act." However, the Ordinance does not require specific management or monitoring requirements, and conservation authorities are unable to regulate what land uses occur on these properties, and so nature reserves declared as per the Ordinance provides no long-term security for biodiversity. As a result of this, there are private nature reserves across the province that have been developed or used for alternative land uses not aligned with biodiversity conservation.

The alternative approach of purchasing additional land with conservation value for PAE also proved to be inadequate and unaffordable to the state, particularly in Gauteng with high land prices and fragmented land portions. There is also little land with natural habitat available for purchase, even if the state could afford it. In addition to the high price and unavailability of land, once purchased the department would have the financial burden of managing these areas. The inefficacy of these two approaches to achieve PAE, and the need to meet provincial PAE targets, encouraged the GDARD to employ other PAE mechanisms, biodiversity stewardship among them. The advantages offered through the BDS mechanism are summarised in (SANBI, 2018).

While the way to achieve PAE through BDS was paved by national and provincial BDS experience and guidelines, Gauteng experiences challenges not as prevalent in larger, less urbanised provinces. The GBSP therefore had to navigate through complex social, political, and ecological quagmires to ensure that BDS contributes to GPAES targets and conserves the little rural habitat remaining in the province.

The GDARD Biodiversity Stewardship unit was established in 2009, as part of the South African National Biodiversity Institute's (SANBI) Grasslands Programme, funded by the Global Environment Facility. The Grasslands Programme was a partnership of government, non-governmental organisations, and private sector parties, and its purpose was to mainstream biodiversity conservation and objectives into land-use planning and decision making, industrial operations, agriculture, mining and the urban economies in the Grasslands Biome (SANBI, 2014).

In November 2009, the Grasslands Programme commissioned SRK Consulting to conduct a situational analysis and draft operations manual for BDS in Gauteng. This document provided an overview of BDS practices in Gauteng at that time, the legislative and policy frameworks for BDS, and the institutional frameworks, tools, and resources required for the implementation of BDS (SRK Consulting, 2009). The document is aligned to the

existing national guidelines and was modelled on existing BDS frameworks in other provinces, including the principles of BDS, and the recommended objectives identified for the province.

The original objectives towards securing the conservation of conservation priority sites, as identified in the draft operations manual by SRK consulting (2009), included:

- Developing durable **relationships** with landowners, communities, local authorities, and other government departments responsible for biodiversity priority areas.
- **Equitable** sharing of the costs of biodiversity conservation between the state local municipalities the landowner and any beneficiaries of the resources conserved.
- Providing recognition for **voluntary commitment** to biodiversity conservation within farming and other land use systems.
- Securing **conservation investments** through the provision of conservation options that are durable legally sound and resilient to changing opinion on land use.
- Ensuring that conservation objectives are achieved on **critical biodiversity sites** through planning judicious cooperative management and monitoring.
- Ensuring the **sustainability** of conservation efforts and funding.

Box 3: The advantages of biodiversity stewardship for conservation

The Biodiversity Stewardship Programme offers several key advantages

- ✓ This programme provides a cost effective conservation mechanism for expanding protection of important biodiversity areas in production landscapes, in many cases without taking land out of agricultural production and thus impacting on food security
- ✓ it contributes to national targets for protecting vegetation types and threatened ecosystems, expanding protected areas, maintaining the diversity and integrity of natural systems and landscapes, and the provision of vital ecosystem goods and services
- ✓ it can create nodes of investment in rural areas, contributing to livelihoods and supporting the land reform agenda, providing innovative options in agriculturally marginal areas
- ✓ it provides political, social, economic, and environmental benefits, while achieving national goals

It will become evident throughout this document that the purpose and objectives of the current GBSP are essentially to achieve those identified in the original operations manual (SRK Consulting, 2009). The GBSP included a realistic project timeframe and measurable targets and objectives to achieve within that timeframe. The target was to publish the intent to declare 5,000 hectares of privately and communally owned land as protected areas, under the National Environmental Management: Protected Areas Act, 57 of 2003 (NEM: PAA) within three years (2015–2018).

While significant groundwork was achieved under the Grasslands Programme, and all steps in the stewardship process was laid out, the GDARD lacked sufficient operational budget and institutional capacity for implementing the protected area declaration process. Unfortunately, these challenges and others prevented the programme from gaining sufficient momentum, and potentially created despondency towards biodiversity stewardship for some stakeholders in Gauteng. BDS in Gauteng lay dormant until 2015, during which a partnership between the GDARD and the Endangered Wildlife Trust (EWT) was formed, and funding for a pilot

BDS programme in Gauteng was provided by the WWF Nedbank Green Trust. The overall goal of the resulting public-private partnership was to catalyse the implementation of BDS in Gauteng through the development of capacity within the GDARD, as well as to develop and support strong and relevant institutional structures for long-term impact and sustainability of BDS in the province.

2.3. Planning tools guiding the implementation of BDS in Gauteng

Protected area expansion (PAE) in Gauteng is guided by the Gauteng Protected Area Expansion Strategy (GPAES), 2013, which identifies the areas in which protected area expansion should be focused and identifies BDS as the primary mechanism to conserve these areas. This GDARD-approved policy provides the framework for protected area expansion in Gauteng over the next 20 years, and is underpinned by the Gauteng Conservation Plan, v3.3 (C-Plan, 2011). The C-Plan is a systematic biodiversity plan to be used as a basis for municipal-level planning and provincial-level decision making. The C-Plan v3.3 identifies Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) (Figure 4) that are important to biodiversity in Gauteng.

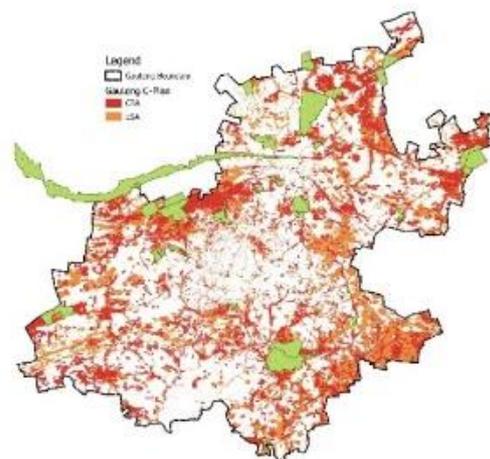


Figure 4: The Gauteng Conservation Plan (C-Plan version v3.3, 2011)

Critical Biodiversity Areas (including important and irreplaceable areas) are areas required to meet biodiversity targets for ecosystems, species and ecological processes, as identified in a systematic biodiversity plan.

Ecological Support Areas are not essential for meeting biodiversity targets but play an important role in supporting the ecological functioning of Critical Biodiversity Areas and/or in delivering ecosystem services.



The Gauteng C-Plan is hosted for the GDARD on the SANBI Biodiversity GIS (BGIS) website (<http://bgis.sanbi.org/gauteng/project.asp>), available to view online, or can be downloaded as a shapefile for use on GIS platforms.

On a municipal level, bioregional plans break the two C-Plan categories down further to identify conservation priorities on a finer scale and inform land-use planning within the municipality, and on a provincial level. It must be noted that the GDARD has been without a conservation planner for over ten years and so the C-Plan has not been updated since 2011. This is a serious issue in a province transforming as rapidly as Gauteng.

In addition to the C-Plan, planning tools and sources consulted for the development of the GPAES included:

- The NPAES focus areas layer¹, including fragments of land smaller than 5,000 ha
- The draft Threatened Ecosystem layer², showing the remaining extent of threatened ecosystems

¹ South African National Parks. NPAES Focus Areas 2010 [vector geospatial dataset] 2010. Available from the Biodiversity GIS website

² South African National Biodiversity Institute. National List of Threatened Ecosystems 2011 [vector geospatial dataset] 2011. Available from the Biodiversity GIS website

- The 2009 land cover layer³, focussing on the largest remaining fragments of natural or near-natural habitat within each vegetation type

The GPAES categorises priority areas for conservation into three levels:

Level 1 – The largest intact areas in which the C-Plan Version 3 irreplaceability layer, NPAES spatial priority layer and threatened ecosystem layer overlap in areas of natural habitat.

Level 2 – The largest intact areas in which two of the three layers overlap in areas of natural habitat.

Level 3 – The largest intact areas within one of the three layers in areas of natural habitat.

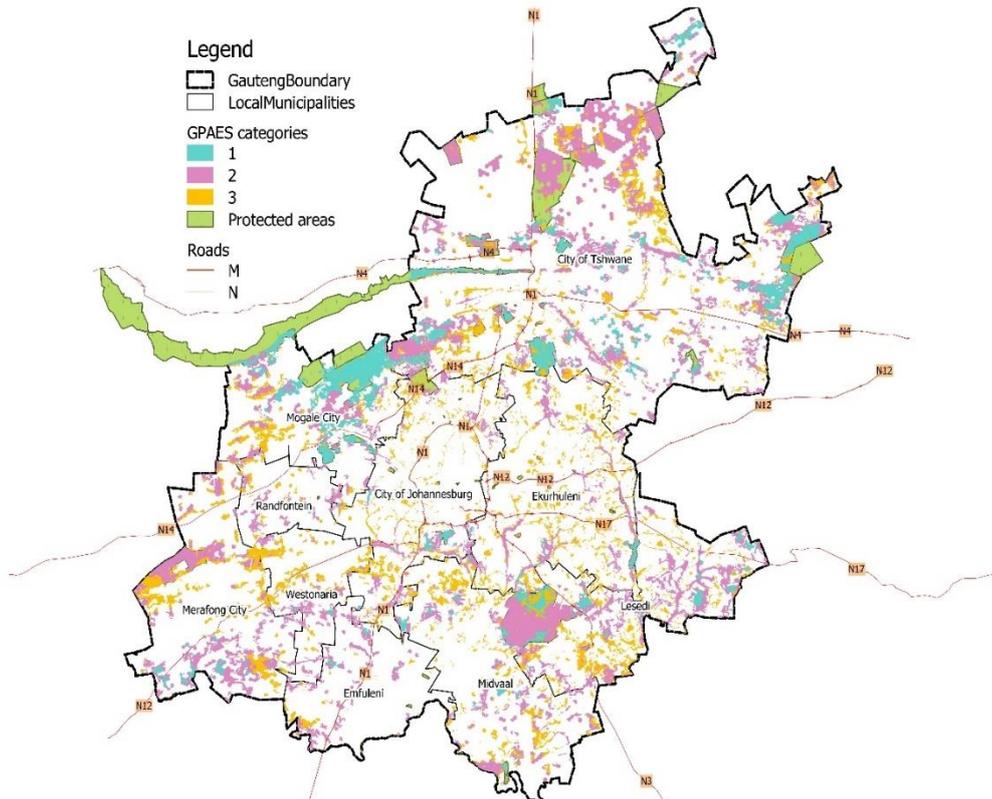


Figure 5: The Gauteng Protected Area Expansion Strategy (GPAES)

2.4. Stakeholder roles and responsibilities

There are multiple stakeholders involved in BDS implementation, and each play different roles. These roles are explained in detail in Table 3, p. 31 of the *Biodiversity Stewardship Guideline* (2018). In summary, on a national level, the DFFE is responsible for setting national policy, and providing implementation guidance and support to provinces. BDS is implemented largely on a provincial level, underpinned by systematic provincial land-use planning guidelines and PAE targets. Ideally various provincial departments such as Agriculture, Land Reform

³ South African National Biodiversity Institute. Archived National Land Cover 2009 [vector geospatial dataset] 2008. Available from the Biodiversity GIS website

and Rural Development, and Mineral Resources, should be involved, but the BDS programme is generally led by the provincial nature conservation agency (**Error! Reference source not found.**).

Additional role players include national departments and agencies, NGOs, local and municipal governments, conservancies, and the private sector (e.g. tourism). All guideline documents and reports on BDS consulted highlight the vital role that NGOs play in the implementation process, particularly performing functions that complement the actions of provincial authorities (Box 4).

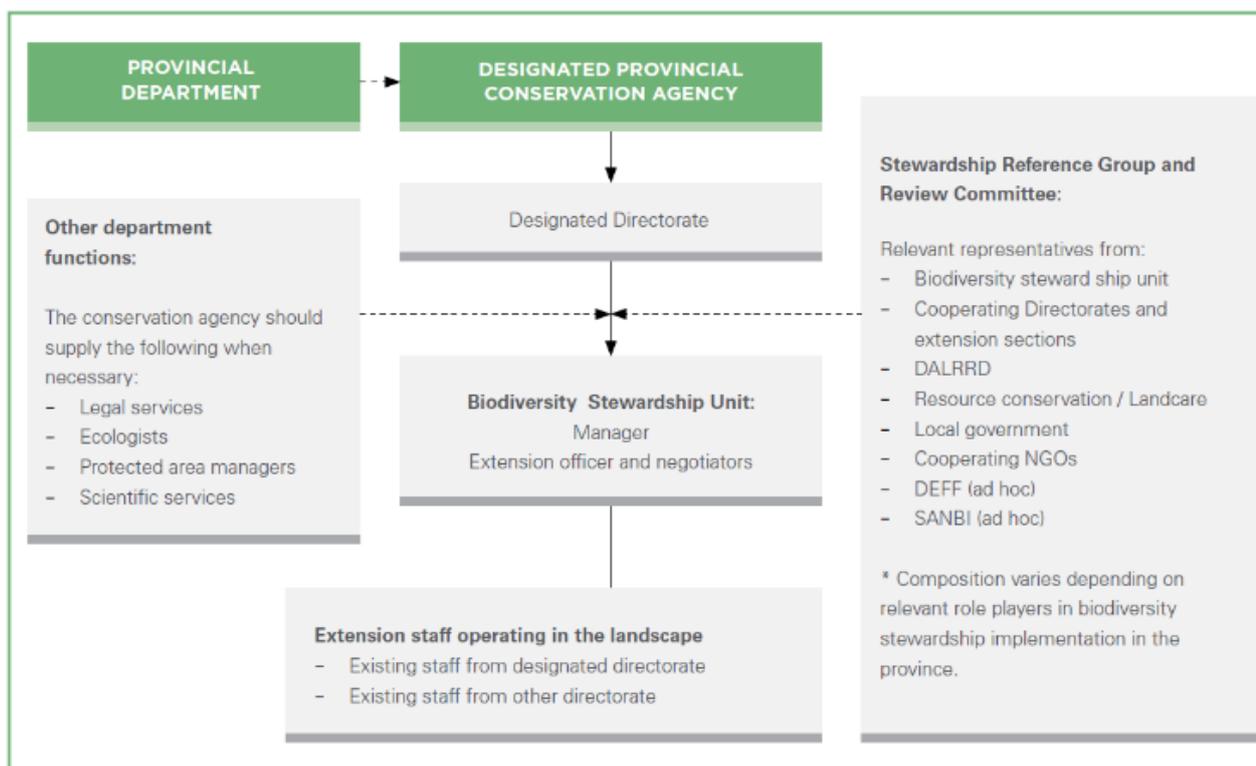


Figure 6: Basic institutional model for a provincial biodiversity stewardship model (SANBI, 2018, pg. 29)

Box 4: The role of NGOs in the conservation of habitat and biodiversity through BDS

When necessary funding is available, NGOs perform the following:

- Act as conduits for funding to supplement under resourced provincial departments
- Conduct site selections and assessments
- Initiate and facilitate landowner engagement
- Contribute towards skill-development within departments
- Providing incentives for the landowners
- Pioneer new tools and processes
- Integrate bds into other related initiatives such as land reform or the wildlife economy
- Provide auditing and extension support

2.5. Biodiversity stewardship categories used in Gauteng

In Gauteng, nature reserves (NR), as per Section 23 of the NEM: PAA, and protected environments (PE), as per Section 28 of the NEM: PAA, are currently the only two protected area categories being implemented in the province, as only these categories provide the levels of protection that contributes to the official targets for protected area expansion. The GDARD BDS unit is however mindful of the fact that the Biodiversity Agreement (described in Table 3) will be a more suitable option for communally owned land, as it is less restrictive than a NEM: PAA declaration and has fewer monitoring requirements. It should thus be considered and promoted on a case-by-case basis.

3. Project objectives for the GBSP

The objectives for the GBSP established in 2015 were as follows:

1. Develop formal institutional arrangements within and between the GDARD, Biodiversity Management Directorate, Environmental Empowerment Services (previously known as Sustainable Resource Management) Directorate and the Endangered Wildlife Trust (EWT) to support the implementation of biodiversity stewardship in the Gauteng Province.
2. Develop an understanding of the current and potential future environmental and institutional characteristics of the biodiversity stewardship landscape in Gauteng.
3. Strengthen capacity for the implementation of biodiversity stewardship in Gauteng – within the GDARD, and the broader network of biodiversity stewardship partners – through working biodiversity stewardship case studies that will lead to the intent to declare (and eventual proclamation) of at least 5,000 ha, as the catalytic foundation for achieving the target of 30,000 ha set by the GDARD for 2019. This catalytic phase therefore represents at least 17% of the provincial protected area expansion target.
4. Identify, evaluate, and adopt sustainable mechanisms for biodiversity stewardship in Gauteng.

3.1. Institutional relationships and governance

The GDARD and EWT entered into a Memorandum of Agreement (MoA) that clearly outlined each party's roles and responsibilities, as well as the terms of reference (TOR) for a Project Steering Committee (PSC) and a Project Management Committee (PMC) (Appendix A:). The purpose of the PSC was to provide overall and strategic coordination of the project, and the PMC to oversee operational management of the Project.

At the time of programme's inception, the EWT was represented on the PSC by the EWT Head of Conservation and the Urban Conservation Programme Manager, while the GDARD was represented by the Head of Component: Biodiversity Management (portfolio subsequently renamed to Director: Biodiversity Management) and the Deputy Director (DD) of Biodiversity Mainstreaming and Stewardship (this post has not been absorbed into the GDARD organogram since it became vacant in February 2016).

The PMC consisted of the EWT Urban Conservation Programme Manager and the EWT Urban Conservation Project Field Officer, while the GDARD was represented by the DD: Biodiversity Mainstreaming and Stewardship, the Control Biodiversity Officer (CBO): Biodiversity Stewardship, Senior Foreman: Nature Conservation and two Biodiversity Officers: Biodiversity Stewardship. However, several staff changes within

both organisations over the project period resulted in changes in the portfolios represented on both committees.

The Gauteng Biodiversity Stewardship Review Panel (“the Review Panel”) was formed to recommend the most suitable protected area category, as per the NEM: PAA, for a particular site, and this function assists with ensuring that decision making is standardised, consistent and scientifically robust. The Review Panel consists of a team of scientists, stewardship managers and natural resource managers from the GDARD, and relevant EWT staff members. More details around the review process can be found on page 27, and the official Terms of Reference (TORs) for the Review Panel are attached as Appendix B:.

3.2. Operational activities

The EWT, as the direct recipient of the project funding, conducted all necessary administrative and logistical tasks, such as the procurement of equipment and appointing consultants, managing the project budget, ensuring progress reports and financial reports were compiled and submitted on time, facilitating initial landowner engagement, and arranging for the GBSP team to attend relevant symposia, workshops and events. However, all GDARD team members were included in relevant training, exposed to all aspects of the stewardship process, and conducted and attended functions that provided positive exposure for the project, and stakeholder engagement. These opportunities were critical to building capacity and professional confidence within the team, and for developing relationships with members of the stewardship community of practice, which has provided the team with support, and will continue to do so going forward.

The partnership between the WWF Nedbank Green Trust, EWT, and the GDARD, provided smoother facilitation of attendance at relevant symposia, workshops and events, and encouraged knowledge exchanges between the partners, and exposure to stakeholder engagement, and high-level strategic planning meetings. These are detailed further on page 13.

3.2.1. Project branding and exposure

The logo designed for the project shows four blocks representing different relevant elements of Gauteng: agriculture, urban spaces, grasslands and wildlife (Figure 7). This was accompanied by the tagline:

“Conservation | Cooperation | Communities”

To provide exposure for the project, the team also produced a number of communications materials, as listed in , starting with a project brochure. The brochure introduced the concept of biodiversity stewardship, the various options available to landowners, frequently asked questions and references.

Early on, the GBSP team conducted a scoping exercise to identify existing fact sheets on issues such as agricultural and environmental management, and what gaps there were so that the team could focus on those, so as not to duplicate efforts and costs. Gaps the team felt needed to be filled included:

- Fire Management in Savannahs.
- Alien and Invasive Vegetation Control – while there is a lot of information available on identification of alien and invasive species, there is a lack of operational details on how best to control these species.



Figure 7: The Gauteng Biodiversity Stewardship logo and tagline

- Grazing and Fire Management in Wetlands, in collaboration with EWT's African Crane Conservation Programme (ACCP).

After further research into available and accessible resources on the control of Alien and Invasive Species (AIS), and finding abundant sources of high quality, comprehensive and accessible information, the team decided that it would only print selected resources on a need's basis, and not develop any further if not required. One resource identified as a priority to print was the poster versions of the "*Grazing and Burning Guidelines for Grasslands*", compiled by the SANBI. The team printed a number of these for distribution at subsequent landowner meetings, information sharing days and conservancy meetings. The posters were printed in three languages, English, Afrikaans and Zulu.

Box 5: Communication materials produced by the GBSP

Gauteng Biodiversity Stewardship Programme Brochure

To provide exposure and concise, clear, and transparent information about the GBSP.

GBSP Banner

To provide exposure at events

Wetland Factsheet

Importance of wetlands, relevant legislation, and guidelines for sustainable use of wetlands.

Booklet: Bird species of the proposed Devon Protected Environment (DPE)

Provides information about the birds present in the DPE, as landowners in this popular birding area are often approached by the public with requests for information and guidance.

Newsletters for partner organisations and interested parties

Communications: WhatsApp groups with landowners

In addition to printing and utilising existing informative literature and resources (with due acknowledgement), the team developed a fact sheet about wetlands, their vital role in the provision of ecosystem goods and services, and some recommendations around management to reduce impact of agricultural activities (Appendix D:).

The Devon grasslands (south east Gauteng) are a hotspot for birders in Gauteng, and the area has been registered by BirdLife SA as an Important Bird and Biodiversity Area (IBA), spanning across the provincial boundary to Mpumalanga. The landowners of the Devon Protected Environment (DPE) expressed an interest in learning more about key bird species that attract birders. A photographic bird identification guide, containing basic information about some of the bird species occurring in Devon and surrounding areas, was compiled to provide the landowners with a better understanding of the birds' behaviour, and activities that should be avoided in order to protect them. This guide, entitled "*Bird species of the proposed Devon Protected Environment*" was compiled in collaboration with the GDARD ornithologist, the EWT and BirdLife SA. The guide was printed in February 2019 and has been distributed to landowners and contributors.

To keep our partner organisations and interested parties up to date with the GBSP's progress, the team created and distributed three newsletters over the project period.

Throughout the project period the GBSP presented its work at relevant national symposiums and conferences and attended meetings of the National Biodiversity Stewardship Technical Working Group. The GDARD stewardship unit also presented on the GBSP's work at the DFFE Protected Area Technical Task Team (PATTT) meetings, local conservancy meetings, the regional departmental Rural Development meetings, and at quarterly Gauteng Climate Change Project Steering Committee meetings.

The GBSP exhibited at shows such as the annual Jacaranda Agricultural Show in April 2016, the annual Transvaal Agricultural Union (TLU) National Young Farmer Conferences in 2017, 2018, and 2019. Attendance of these events gave the GBSP team opportunities to engage with delegates regarding biodiversity stewardship, conservation-oriented farming, and how conservation and farming can be complementary rather than competing land uses. Delegates included landowners involved in farming, agricultural students, learners, and other role-players involved in the agricultural sector. The GBSP attended the annual general meeting (AGM) of the National Association of Conservancies / Stewardship of South Africa (NACSSA), in August 2016, to promote the GBSP and to potentially obtain additional landowner information and support and have since attended and presented at several other provincial conservancy meetings.

On invitation from the Conservation Manager of the South African Hunters and Game Conservation Association (SAHGCA), a member of the GBSP team presented on the GBSP to a monthly meeting of the SAHGCA Springbok branch, in February 2019, in Brakpan. The EWT also has a stand at the NAMPO Agricultural Show every year, showcasing their conservation work and engaging with farmers around conservation issues and practices, including biodiversity stewardship.

3.2.2. The GBSP in the media

For the first year and a half, the GBSP team was developing an understanding of Gauteng’s natural, social, and political landscape, and laying foundations for the work to come, and therefore did not have much media exposure. As the project progressed and produced positive news to share, the project’s exposure and media coverage steadily increased.

The GBSP was featured in the EWT’s bi-monthly publication *Conservation Matters* magazine for its attendance of the Transvaal Agricultural Union’s (TLU) Young Farmers Conference in March 2017, and the GDARD BDS unit also published two inserts in the GDARD internal communications, the *Weekly Brief*, about the site assessments conducted during March 2017.

A highlight for the GBSP team was in September 2017 when the project was awarded the *Mail and Guardian’s Greening the Future Award* in in the ‘Community Conservation and Resilience’ category⁴. We received some welcomed exposure for the project through this achievement, and the team was afforded some deserved



Figure 8: The Gauteng Biodiversity Stewardship Programme's banner

⁴ <https://mq.co.za/article/2017-09-22-00-gauteng-has-grasslands-that-are-being-developed-for-ecotourism>

acknowledgement for their hard work within a difficult landscape. The award was further publicised through an article which appeared on the WWF Nedbank Green Trust's website.⁵

Box 6: Exposure of the GBSP at events

Attended and presented at:

Bi-annual Biodiversity Stewardship Technical Working Group meetings
Grassland Society of Southern Africa (GSSA) in 2017, 2018 and 2019
Symposium of Contemporary Conservation Practice (SCCP) in November 2016 and 2017, in poster format at the Conservation Symposium (formerly the SCCP) in November 2018 and 2019
National Biodiversity Stewardship Conference in 2018
Protected Area Technical Task Team (PATTT) meetings from 2016 to 2019
Local conservancy meetings
Regional Department of Rural Development meetings
Quarterly Gauteng Climate Change Project Steering Committee meetings

The GDARD BDS unit published articles on the GBSP in the GDARD Quarterly Magazine, *The Public*, released in September 2018 and December 2019. This magazine is circulated throughout the department and is also available to members of the public at government office buildings.

The EWT's *Conservation Matters* magazine released in July 2019 (The Good News Edition) also contained a spread entitled 'The little province that could', which provides an overview of the project and the positive impacts that it has had for protected area expansion, including biodiversity conservation in Gauteng.

Once active in the landscape, and with positive and interesting stories to share, the GBSP team worked hard to increase the social media coverage of the project. Collaboration with the GDARD Communications Directorate contributed substantially to the increased presence of the GBSP on social media platforms. The GDARD Social Media Communications representative accompanied the GBSP on several site visits and posted live updates, photos and videos whilst on site. A total of nine posts about the GBSP were posted on the EWT's Facebook page between October 2017 and July 2019, and 11 on the GDARD Facebook page between April 2018 and March 2019. The GDARD BDS unit intends to maintain



Figure 9: Noza Mathebula (GDARD), Christina Seegers (GDARD), and Emily Taylor (EWT) in attendance at the 2019 Conservation Symposium in Howick.

⁵ <https://www.nedbank.co.za/content/nedbank/desktop/qt/en/news/nedbankstories/affinityprojects/2017/gauteng-project-wins-greening-the-future-award.html>.

this social media presence, as well as to submit articles to the GDARD quarterly magazine to keep the subject of protected area expansion through biodiversity stewardship relevant.

3.3. Partnership and collaboration

Throughout the lifespan of the GBSP, the team collaborated extensively and developed partnerships and arrangements with other national, provincial, and municipal government departments, NGOs, academic institutions, and independent consultants to ensure that landowners were provided as much support and opportunities as possible. These relationships will be detailed throughout the document.

To identify potential partners (including other NGOs) and possible landowner incentives (support mechanisms) that could be leveraged through existing programmes such as these in the province, the GBSP held a workshop on 16 March 2016. The workshop was attended by a diverse array of stakeholders from government departments, municipalities and NGOs involved in natural resource management in Gauteng. The GBSP team presented on the purpose of the GBSP, what the project objectives were, the 39 potential sites identified, and how we selected and prioritised these sites. Representatives from DEA and Department of Agriculture, Forestry and Fisheries (DAFF), now known as the Department of Agriculture, Land Reform and Rural Development (DALRRD), presented on some of their existing projects, and the potential for those projects to contribute towards biodiversity stewardship implementation in Gauteng. The NGO, Conservation Outcomes, presented case studies of stewardship sites in KZN, in which natural resource management departments had effectively contributed to the successful implementation of stewardship.

The GBSP met with each of the following municipalities individually, in early 2016, to introduce the programme and obtain their in-principle buy-in: Lesedi, Midvaal, City of Tshwane Metro and the Merafong Municipality. The GBSP also met with other stakeholders from the agricultural sector, such as the Gauteng representative of the Transvaal Agricultural Union (TLU) in March 2016, to whom the GBSP team outlined the concept of biodiversity stewardship, how implementation of BDS in Gauteng was planned, and the potential benefits of creating mixed-use landscapes in the province. The response from the union was positive and led to invitations from the TLU for the GBSP to exhibit every year at their annual Young Farmers' conferences from 2016 to 2019. A meeting with a representative of AGRI-SA, in May 2016, also resulted in an invitation to exhibit, this time at the Jacaranda Agricultural Show in Pretoria in August 2016. The GBSP is also of the opinion that this early engagement with the TLU contributed to one landowner's decision to become involved with the DPE in 2018, as he indicated during a meeting that he had discussed the GBSP and its activities in the Devon area with the TLU's regional manager for Gauteng.

In March 2017, the GBSP team met with the Department of Land Reform and Rural Development (DALRRD), formerly known as the Department of Rural Development and Land Reform (DRDLR), to introduce the GBSP to their staff, particularly those operational in Gauteng, and to understand what sort of extension services they could potentially render to commercial farmers in the province. The DALRRD expressed interest in the potential of using stewardship sites declared as protected areas in the future for a national zoning scheme that they are planning, and the GDARD biodiversity stewardship unit will remain in contact.

The SAHGCA Springbok branch extended an invitation to the GDARD CBO: Biodiversity Stewardship, as a follow up to the engagement mentioned previously, to do a presentation to their members in March 2019. Through these engagements, the branch expressed interest in collaborating with the GBSP on conservation projects.

Lesson learned

Engaging stakeholders such as organised agriculture early in the process so that their buy-in promotes participation from landowners.

The nature of this collaboration is still to be determined, but preliminary ideas include potentially providing post declaration support to declared stewardship sites in relevant areas.

4. Implementation of the GBSP

4.1. Phase 1: Site selection and prioritisation processes

The original potential biodiversity stewardship sites in Gauteng were selected using the site selection and scoring matrix developed for the GDARD in 2009 by SRK Consulting, as part of the SANBI's Grasslands Programme. To ensure that the current GBSP used the most scientifically robust selection processes, which also considered social variables such as landowner willingness, the GBSP team undertook to review, refine and update existing site selection and prioritisation processes, including those used by other provinces as reference. This was done over several work sessions with the GBSP team and members of the GDARD's Scientific Services unit.

Issues identified as in need of amendment included the following:

- i. The structure of the matrix gave all criteria equal weighting. A multiplication factor was introduced to reflect the relative significance of the different criteria resulting in a hierarchical ranking approach
- ii. Some criteria were found to be inter-related resulting in double scoring of the same features, for example, Red Database species and priority species databases contain many of the same species. The list of criteria was rationalised, and some criteria were rearticulated to remove duplication
- iii. The score options were reduced to reflect the number of categories within each criterion and differences in importance between criteria were accommodated in a weighting system.
- iv. To rank the criteria in order of significance, a Pairwise Comparison Method (Table 2) was used to identify a multiplication factor that would reflect the relative significance of the different criteria. This process contributed to the project's overall goal to, not only develop capacity within GDARD, but also to encourage and nurture the relationships between members of different departments within GDARD.
- v. Two social criteria were added to the scoring matrix – landowner willingness and the potential for community upliftment.

4.1.1. Scoring Matrix

In QGIS the shapefile for each potential site is overlaid with shapefiles relevant to each criterion, one by one. Each criterion is given a score according to the relevant attributes contained within that site, and the scores for each criterion are then multiplied by their corresponding weightings and totalled to produce a site score. The highest potential score that a site can receive is 90.

Once the site selection and scoring matrix were finalised, the project team initiated a desktop exercise, firstly to interrogate the 19 sites identified in 2009 to see if they were still untransformed, viable and appropriate for this project, and secondly to identify additional sites for biodiversity stewardship implementation in the province.

The GBSP team began a prioritisation exercise utilising the following criteria to generate a preliminary map of potential stewardship sites, supplementing outdated GIS data with updated cadastre information from the DALRRD

- Sites within Critical Biodiversity Areas (CBAs, Figure 4)

- Sites within climate change corridors
- Protected Area Expansion Priorities (Figure 5)
- Sites located within 5 km of provincial nature reserves and
- Sites larger than 1,000 ha

Shape files of relevant planning tools (GPAES, C-Plan, NFEPA, GEMF) were overlaid on cadastre layers and a search query was run on QGIS (GIS software) to extract sites greater than 1,000 ha. In a fragmented and highly subdivided landscape such as Gauteng, 1,000 ha was deemed an appropriate size to pursue for protected area expansion efforts. This exercise provided the team with 63 potential stewardship sites.

- A spatial database was developed and regularly updated. The database includes GIS shapefiles of all iterations of the potential sites in relation to the above criteria, as illustrated in the Gauteng Protected Area Expansion Strategy (GPAES), the Gauteng Conservation Plan (C-Plan version v3.3), the National Freshwater Ecosystem Priority Areas (NFEPAs), the Gauteng Environmental Management Framework (EMF), as well as municipal planning tools and frameworks.
- Expert knowledge was used to obtain information about the 63 identified sites, e.g. ownership, landowner willingness, conservation viability, etc.
- To gather missing landowner or site information, the GBSP team used WinDeed⁶, which allows registered users, amongst others, to do searches on ownership of land portions; Google Search, and consulted other organisations working in the identified area.
- Google Earth was used to visually determine the level of transformation per site and eight sites were removed from the database using this desktop method.
- A further 14 sites were deemed viable for conservation based on expert knowledge within the GDARD, and so did not necessitate site visits (e.g. Nooitgedacht 471-JQ portion 13 and Blaauwbank 125-IQ portion 12).
- Six additional sites were added to the database based on information from the GDARD specialists (e.g. Klipkraal Cluster).
- Forty site visits were conducted by the project team and, from these visits, 22 were found not to be viable for conservation and 18 sites were considered viable for conservation. This was an essential step in such a rapidly transforming landscape, as aerial imagery may be outdated.
- Through this filtering process, 39 remaining potential sites were then put through the site selection and scoring matrix and ranked in order of priority for stewardship implementation.

The original decision to select only sites exceeding 1,000 ha proved to be a limiting factor as landowners sometimes own more than one land parcel which, combined, could be more than 1,000 ha. This became particularly apparent in Devon, where several landowners expressed a willingness to participate but only one site in Devon was included in the original database of viable sites with larger land parcel sizes. This site currently forms one of the core areas for the Devon Protected Environment due to its large, intact natural grasslands.

4.1.2. GBSP potential sites database

Once the site selection and scoring matrix was finalised, the project team had a list of 39 potential biodiversity stewardship sites, but by the end of the first year of the GBSP, the project team had further reduced the

⁶ www.Windeed.co.za

number of identified potential sites from 39 to 34 (an area of 50,839 ha). The list of potential sites was dynamic, and sites were removed if landowners were unwilling to participate in the stewardship process, if the sites were deemed not viable for conservation, or for other reasons including:

- The site was an existing protected area, declared under provincial legislation.
- There was not enough land viable for conservation on site, as identified by relevant GDARD units during site visits and inspections.
- There was development planned and approved for the property.

New potential stewardship sites were also added after recommendations by other units within the GDARD who have on-the-ground knowledge of sites that are viable for conservation, and where there is likely to be landowner willingness.

The GBSP team allocated each of the 34 sites to one of two lists, primary and secondary, according to priority and feasibility. The primary site list included 13 high priority sites (19,924 ha) and the secondary list includes 21 sites (30,915 ha). Sites were allocated to the secondary site list for the following reasons:

- Sites are state-owned, and therefore require strategic, high level engagement from the GDARD. These sites either belong to the Department of Public Works (DPW) or the DALRRD, and some are currently leased to commercial cattle farmers or project beneficiaries of the GDARD Nguni Cattle project.
- The sites are municipal-owned, and the GBSP has no control over the time frame of municipal processes to initiate and complete the NEM: PAA process.
- The potential for biodiversity stewardship was contingent on the declaration of larger adjacent sites, such as Klipkraal.
- The sites required extensive engagement with multiple landowners, and therefore could only be considered if the programme's capacity increases.

The 13 sites on the primary list were prioritised for engagement by the GBSP and the sites on the secondary list will remain part of the GBSP's potential site database. In addition to these sites, the team continued to investigate other opportunities in the landscape by following leads for potential sites from the GDARD's General Investigations (GI) and Scientific Services units and responding to engagement requests from landowners who had heard about the project and were keen to get involved.

Lesson learned

When data is absent or outdated, consult colleagues and specialists who are active in the landscape and have on-the-ground knowledge of the biodiversity value, and social dynamics of an area.

Lesson learned

Gauteng's fragmented landscape requires careful consideration and investigation of adjoining small properties, instead of filtering for size as was done originally by the GBSP and is done in other provinces with larger land portions.

When gathering data on potential sites, it is best to consult multiple sources to ensure that biodiversity data, and site information are up to date. This will prevent delays later in the site selection phase, or in the

By July 2017, the GBSP team had reduced their focus to six of the potential stewardship sites, totalling 12,083 ha, 7,700 ha of which is untransformed. Four of these sites were included in the 13 sites the team had prioritised, and the additional two lie adjacent to one of the primary sites. These two sites were on the secondary list due to their smaller sizes, but because the landowners expressed keen interest and their participation could expand a potential nature reserve by over 1,000 ha, they

were added to the list of priority sites. The landowner of one of these sites declined to pursue BDS, in preference for agricultural plans for the property.

One of the sites from the primary list, which was originally only one property in Devon, was also expanded to include the properties of seven other landowners who showed willingness to participate. Through a random engagement in Devon in February 2018 between the GDARD ornithologist and another interested landowner in Devon, the GBSP added another property to the DPE, expanding it by an additional 1,900 ha of untransformed grasslands.

Box 7: Best practice: Identifying BDS priority areas

Two components are key to identifying priority areas for biodiversity stewardship (according to best practice):

- ✓ A provincial or other systematic biodiversity or bioregional **plan**, that has **identified CBAs** (and ESAs) using a systematic biodiversity planning approach; and
- ✓ A **situation analysis** which has reviewed all viable protected area expansion mechanisms, including but not limited to biodiversity stewardship. All key protected area expansion stakeholders, their roles and responsibilities, scope, and implementation opportunities and constraints have been identified.

These developments ultimately resulted in four priority sites with 11 landowners and a total hectareage of 14,806 ha, made up of:

1. The **Klipkraal Protected Area** (three sites with two landowners):
 - Klipkraal Hollenbach Protected Environment – 515 ha
 - Klipkraal Protected Environment – 1,198 ha
 - Klipkraal Nature Reserve – 942 ha
2. **Devon Protected Environment** (seven landowners) – 7,979 ha
3. **Klipplaatdrift proposed Protected Environment** – 1,967 ha
4. **Kranspoort proposed Protected Environment** – 2,204 ha



Figure 10: The farm manager of Kranspoort showing the property to the GBSP team

Table 1: Site Selection and Scoring Matrix

Criteria		Rating	Max	Weighting	Scoring Rule
1	Does it fall within the Gauteng Conservation Plan (C-Plan) framework?	CBA = 3 / ESA = 2/ None = 0	3	5	If any is CBA, scored as CBA
2	Does the site fall within the PA expansion plan?	Border onto=3; Not=0	3	1	-
3	Does the site fall within the macro ecological corridor?	Yes = 3; No = 0	3	3	-
4	Does the site contain special landscape features such as ridges and caves?	Yes=3; No=0	3	1	-
5	Are there any Threatened vegetation types? (check the Irreplaceability layer)	CE = 3, EN = 2, VU = 1, Least Concern/not = 0	3	3	Scored acc.to highest status found
6	Is it a listed Threatened Ecosystem (according to NEM: BA)?	CE = 3, EN = 2, VU = 1, Least Concern/not = 0	3	5	Scored acc.to highest status found
7	Does it contain a known RDB species / population: Yes or No, which species?	CE = 3, EN = 2, VU = 1, Least Concern/not = 0	3	3	Scored acc.to highest status found
8	Has it been identified as part of a NFEPA /provincial layer?	Yes = 3, No = 0	3	3	If any NFEPA features, then "Yes"
9	Area (ha)	0 = 1000 ha, 1 = 1000 - 2000 ha, 2 = 2000 - 3000 ha, 3 = >3000	3	1	
10	Is it an existing NHS, Conservancy?	Yes=3; No=0	3	1	
11	Is there potential for community upliftment?	Yes = 3; No = 0; unknown = 1	3	1	
12	Is there landowner willingness to participate?	Yes=3; No=0; unknown=1	3	1	
13	Is there a champion/Implementer/external advisor to the site/project?	Yes = 3, No = 0	3	1	
14	Urgency	<u>Urgent = 3, Intermediate = 2, Not Urgent =1, Unknown = 0</u>	3	<u>1</u>	Threats prevalent, e.g. mining applications
15	Land claim	Yes = -3, Unknown = 0, No = 1	0	1	
Maximum score possible				90	

Table 2: The Pairwise Comparison Method used in determining criteria to be included in the site selection and scoring matrix, and the relative significance of each criterion

Pair-wise comparison for prioritisation (Coombes): 1 = more relevant		Criteria as numbered in corresponding column										Notes					
		1	2	3	4	5	6	7	8	9	10						
1	Does it fall within the Gauteng Conservation Plan (C-Plan) framework?		0	0	0	0	0	0	0	0	0	Criteria 11, 12, 13 and 14 were not included in the exercise as it was intended to rank the significance of the biodiversity factors. While the social criteria were not ranked in this process, they were still included in the scoring matrix. It was decided that criteria 8 and 9 should be excluded from the scoring matrix due to lack of available data for the province. Data are only available for some of the taxa and so any scoring of these criteria would be inconsistent and biased towards those taxa.					
2	Does the site fall within the PA expansion plan?	1		1	0	1	1	1	0	0	1						
3	Does the site fall within the macro ecological corridor?	1	0		0	0.5	0.5	0.5	0	0	0						
4	Does the site contain special landscape features such as ridges and caves?	1	1	1		1	1	0	0	0.5	0.5						
5	Are there any Threatened vegetation types? (check the Irreplaceability layer)	1	0	0.5	0		1	0	0	0	0.5						
6	Does a listed Threatened Ecosystem occur on the property (according to NEM: BA)?	1	0	0.5	0	0		0	0	0	0.5						
7	Does it contain a known RDB species / population: Yes or No, which species?	1	0	0.5	1	1	1		0	0	1						
8	Does it contain any Gauteng Priority Species that are not Red data listed or endemic to GP?	1	1	1	1	1	1	1		1	1						
9	Does it contain a known Gauteng or SA endemic species / population: Yes or No, which species?	1	1	0.5	0.5	1	1	1	0		1						
10	Has it been identified as part of a NFEPA /provincial layer?	1	0	1	0.5	0.5	0.5	0	0	0.5							
11	Area (ha)																
12	Is it an existing Natural Heritage Site (NHS), Conservancy, Potential Community Project?																
13	Is there a champion/Implementer/external advisor to the site/project?	-	-	-	-	-	-	-	-	-	-						
14	Urgency																
15	Land claim																
TOTAL		9	3	6	3	6	7	3.5	0	2	5.5						
Ranking of Criteria		5	2	4	2	4	4	2		2	3						
Weighting of Criteria		5	1	3	1	3	5	3	-	-	1	1	-	1	1	1	

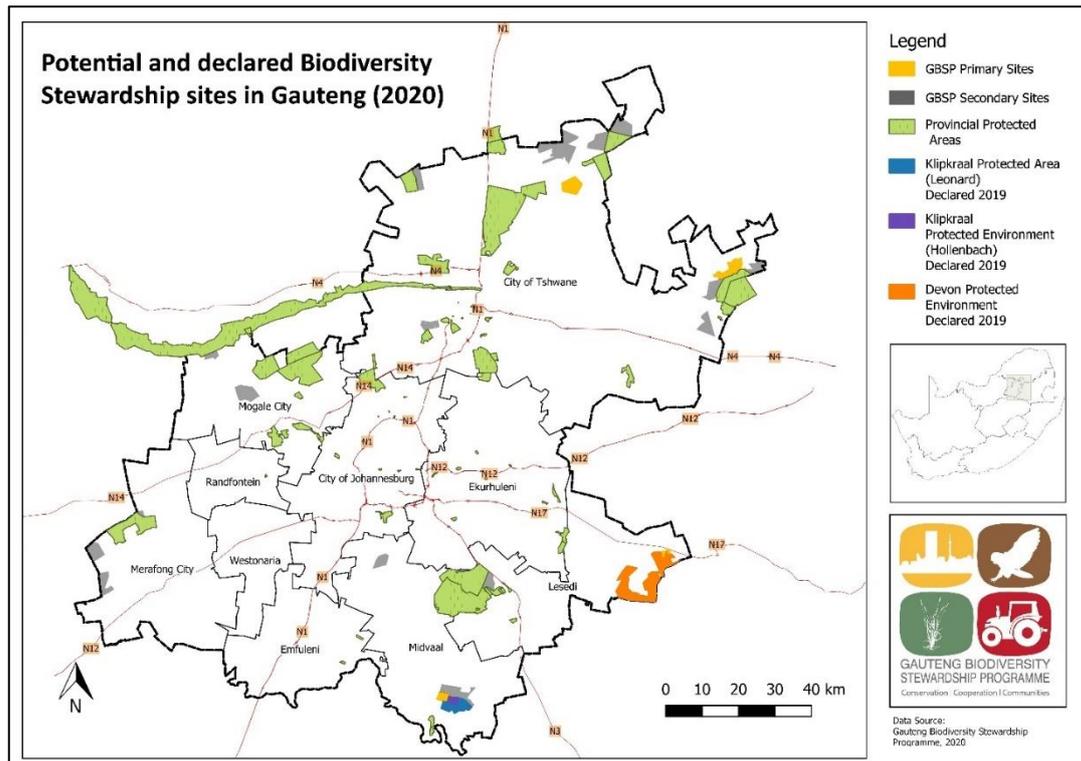


Figure 11: Map of potential and declared Gauteng Biodiversity Stewardship sites (2020)

4.2. Phase 2: Initiation of landowner interactions

As mentioned, the project team endeavoured to attend relevant events that would facilitate engagement with Gauteng landowners to further promote the GBSP, potentially obtain additional landowner information and support, to provide exposure for the project, and to get better acquainted with the physical, social and political characteristics of the Gauteng landscape.

The GBSP team initiated engagement with individual landowners in April 2016, and the team went to meet those who were willing to hear more about the BSD mechanism. There were challenges attracting some landowners to meet with the team because of past negative experiences with government departments, and so the EWT made initial contact via telephone, after which the whole team visited each landowner. Some of the landowners were tentative about the programme at first, but proceeded once they had seen the unit's commitment to supporting them and realised that, instead of jeopardising their livelihoods, biodiversity stewardship can, and does, contribute to improved veld management, which can lead to better grazing for livestock as well. There are also potential additional benefits for those landowners interested in venturing into game farming and ecotourism through national government funding schemes. Two areas in the Midvaal and Lesedi Municipalities were identified and prioritised for the programme going forward, fulfilling all identified requirements for legal declaration as protected areas.

Lesson learned

When approaching a landowner, learn as much as you can about the property (e.g. land uses practiced, biodiversity value), the landowner, (e.g. first language), and the socio-economic dynamics of the area (e.g. immediate neighbours, nearest town, and stakeholders already operational in the landscape). This may provide an indication of how best to approach the landowner so that he/she is willing to meet with you and learn more about BDS. Where possible, involve local stakeholders with an existing relationship with the landowner.



Figure 12: Introducing BDS to landowners in a TLU meeting in Devon

of two coal prospecting applications, as well as the progress made with the protected area declaration process.

Another benefit of on-the-ground engagement was that some landowners reached out to us for inclusion, which expanded both of our primary sites considerably. This was a factor in the successful declaration of sites, because for successful and sustainable implementation of BDS to take place, it is essential that landowners commit to the process a hundred percent. This means that some sites that had high conservation value were not included in this phase of the programme, because the owners were not interested. During the NEM: PAA public participation and consultation processes, landowners adjoining onto the Devon Protected Environment (DPE), that were contacted telephonically, expressed interest to be considered for BDS inclusion. These sites have been added to the GBSP landowner database, recording details about properties, their biodiversity and protected area expansion value, and their owners.

4.3. Phase 3: Site assessment and review

4.3.1. Site assessments

The first ecological site assessment for the GBSP was conducted on 12 and 13 April 2016, on the initial Klipkraal site. This was followed by an assessment of Klipplaatdrift on 14 and 15 June 2016. The GBSP team was accompanied and supported by members of the GDARD Scientific Services Unit for all site assessments, and by an amateur botanist from the Lesedi Municipality for the Klipkraal site. The landowners of the Klipkraal site knew this gentleman and the GBSP believes that his presence at the site assessment assisted to instil a sense of confidence in the programme.

The GBSP team was therefore confident that the assessments for these two sites were scientifically robust. However, when the site assessment results were presented to the Review Panel, concerns were raised that there may be inherent

After struggling to contact landowners in the Devon grasslands area, the GBSP team consulted with the regional manager of BirdLife SA's, who frequented the area and could provide the contact details of a landowner to liaise with. This landowner organised for the GBSP team to attend a TLU meeting in the town of Devon in February 2017 to introduce the programme to attending landowners. This meeting enabled the GBSP to identify six interested landowners with properties possibly suitable for the Devon Protected Environment (DPE), and subsequently conduct site assessments on these properties in March 2017. Another TLU meeting was attended in Devon, in October 2017, to update the landowners on the status



Figure 13: GDARD officials conducting avifaunal assessments in Devon

shortcomings in the site assessment form and scoring methodologies (as detailed below). The meetings were well attended by the GDARD Scientific Services and the Stewardship Unit, which facilitated constructive discussions around these shortcomings.

Concerns raised in the Review Panel meeting included:

1. Whether the Veld Condition Assessment (VCA) method is sufficient to determine the condition of the vegetation on site.
2. Whether the weighting of different categories (e.g. habitat, species, ecosystem services, ecological processes) should be reconsidered, as they should not all be scored equally.
3. Whether the national threat status for species should be used, in conjunction with the global status.
4. Whether we should rather not consider species with Least Concern (LC) status when determining a score for endemism, as giving a site with widespread or abundant species a higher score based on endemism could undermine efforts to identify those sites that offer higher potential conservation returns.
5. Whether different types of wetlands can be scored equally, as condition may differ between sites. There is a need to consider making the scoring system more robust to allow for a higher score for a site with a wetland that is in good condition.
6. Whether to reconsider the scoring of a site's spiritual, cultural, or heritage value – i.e. placing more emphasis on the value that people associate with open spaces and natural areas.

Lesson learned
Before a site assessment, make sure that due diligence is conducted, and you are certain of the farm portions to be assessed and the ownership structure. For example, do a WinDeed Search to confirm ownership and land portion

To address these concerns, the GBSP held a workshop in September 2016, attended by the GDARD's Scientific Services Unit and scientists from the EWT, to look at ways of revising the ecological site assessment form, and review the assessment and scoring process to continue to improve on the methodology for future assessments.

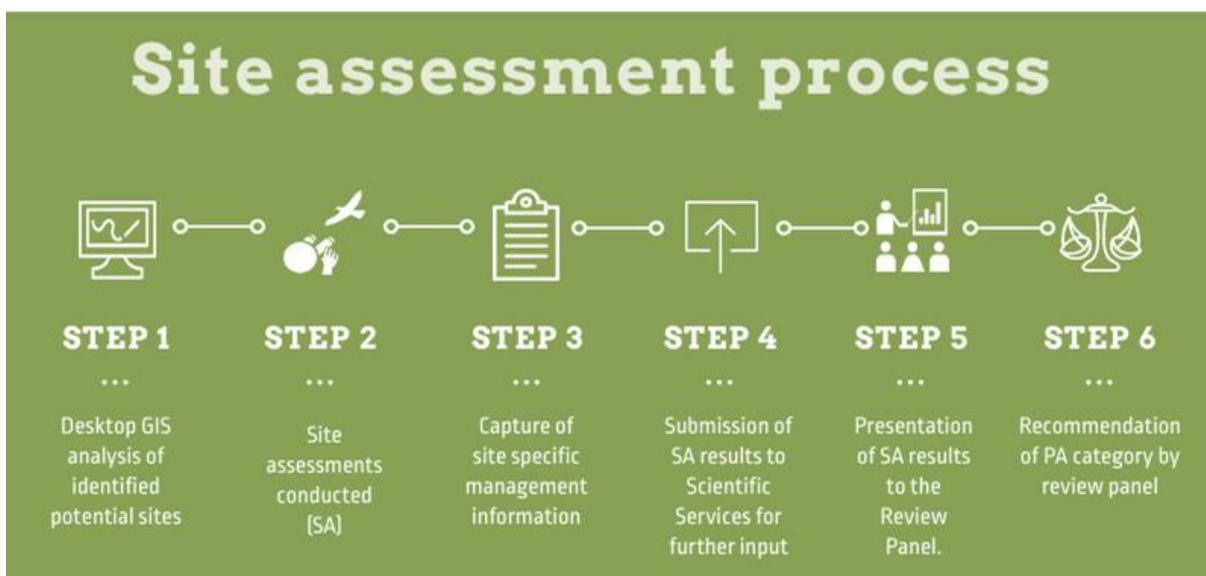


Figure 14: Site assessment process implemented by the GBSP

The site assessment form was largely based on the one from the Ezemvelo KwaZulu-Natal Wildlife Biodiversity Stewardship Programme's, supplemented with additional sections from other provinces. The workshop attendees ran a pairwise comparison exercise on all categories considered for scoring (e.g. habitat, species, ecosystem services, ecological processes) to ascertain if assigning different weightings to the various categories would change the overall score significantly. The difference in the overall scores proved to be insignificant and the meeting concluded that the current scoring system was indeed sufficiently robust. The final assessment scores for each site were based on 17 criteria from four categories (Figure 16) – habitats, species, ecological processes, and ecological goods and services (including cultural services).

4.3.2. Present ecological site assessment results to the Review Panel

Once the sites assessment results have been presented by the GDARD BDS officer, the Review Panel uses a decision framework combining scores of a site from the four categories (habitats, species, ecological processes, and ecological goods and services), to guide the discussion of what protected area (PA) category the site qualifies for. Total scores of 0–6 would qualify a site for Conservation Area (not considered under the GBSP), 6–12 indicate that the site be considered for the protected environment (PE) category, and scores of 12–20 for the nature reserve (NR) category. The scores only serve as a guideline, and motivation can be made for a site to be allocated an alternative category, provided motivation is based on specialist inputs and the landowner's management objectives are considered. Of the six site assessments that were conducted, three were recommended for NR status and three for PE status (Appendix C:), the only two options currently implemented by the GBSP due to capacity constraints within the GDARD BDS unit. The GDARD BDS unit is however mindful of the fact that should communally owned and/or land reform sites be identified as qualifying for inclusion in the GBSP, the Biodiversity Agreement (BA) category must be considered. This category is less stringent than the NR and PE categories with regards to obligations from the landowner and can be used as a foundation to work from to build a relationship of trust between the parties. It does not entail a NEM: PAA declaration but uses contract law to establish a legal agreement between the parties that stipulates each parties' roles and responsibilities and the best management principles for responsible natural resource management.

Six Gauteng Biodiversity Stewardship Review Panel meetings were held over the project period.

1. Klipkraal (first landowner engaged) Review Panel meeting held 19 July 2016
2. Klipplaatdrift Review Panel meeting held 16 September 2016
3. Kranspoort Review Panel meeting held 14 July 2017
4. Klipkraal (two neighbouring land portions of initial Klipkraal site) Review Panel meeting held 31 August 2017

Lesson learned

the biodiversity stewardship site assessment form is a guideline and specialist input can be used to motivate for a different protected area category. If the site is situated in an area with competing land uses, involve the Department of Agriculture to provide support for maintaining the existing land use of agriculture for food security, ensure that all relevant personnel are present at every Review Panel meeting to prevent challenges in the future.



Figure 15: The GBSP team conducting veld condition assessments on Klipkraal Protected

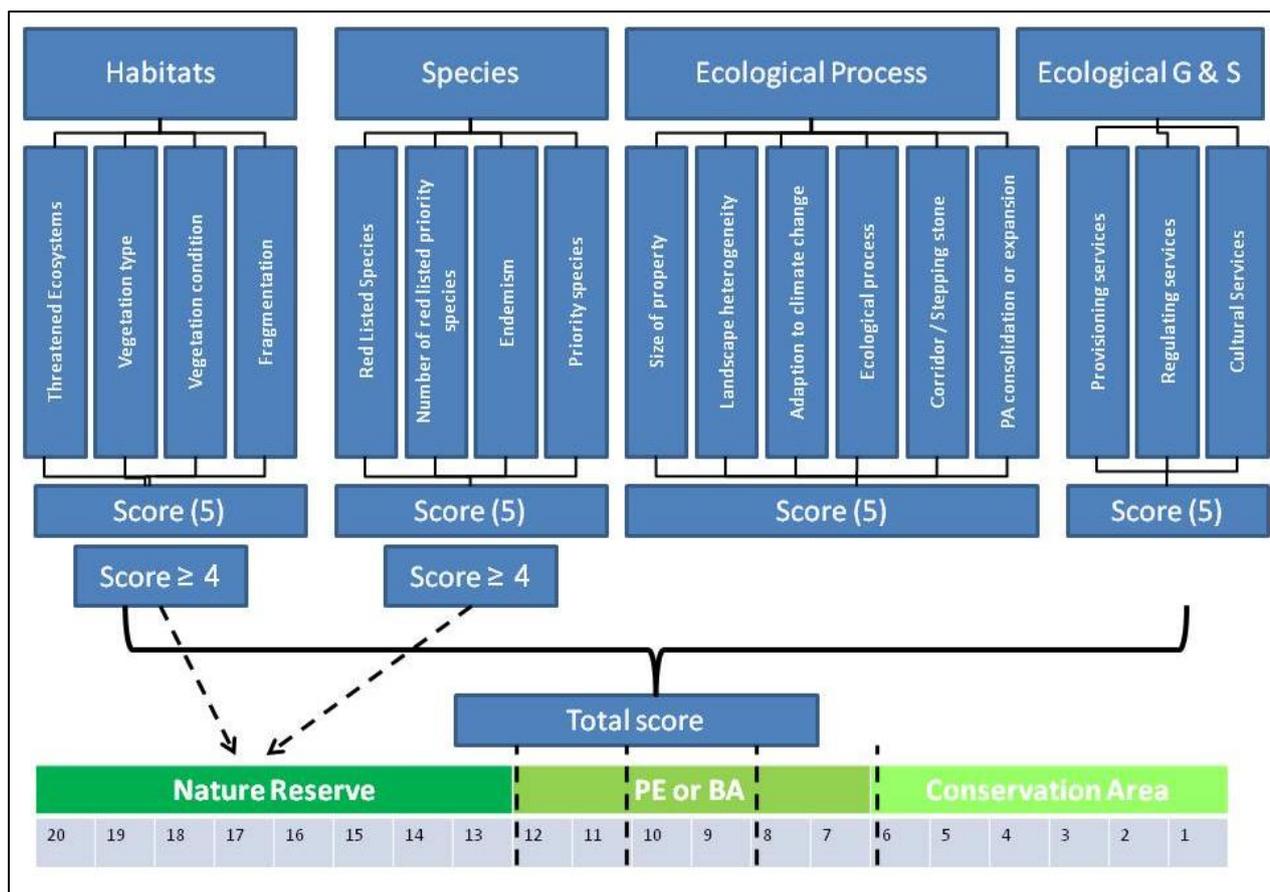


Figure 16: Review Panel decision framework for site qualification

5. Devon Protected Environment Review Panel meeting held 14 July 2017
6. Additional Devon properties Review Panel meeting held 23 April 2018.

4.3.3. Results of the reviews and conditions

Of the six site assessments that were conducted, three were recommended for NR status and three for PE status (Appendix C:), the only two options currently implemented by the GBSP due to capacity constraints within the GDARD BDS unit. The GDARD BDS unit is however mindful of the fact that should communally owned and/or land reform sites be identified as qualifying for inclusion in the GBSP, the Biodiversity Agreement (BA) category must be considered. This category is less stringent than the NR and PE categories with regards to obligations from the landowner and can be used as a foundation to work from to build a relationship of trust between the parties. It does not entail a NEM: PAA declaration but uses contract law to establish a legal agreement between the parties that stipulates each parties' roles and responsibilities and the best management principles for responsible natural resource management.

4.4. Phase 4a: Contract negotiation and draft management plan development

4.4.1. Negotiate legal contracts

Legal contracts, including a Memorandum of Agreement (MoA), Power of Attorney, Notarial Agreement, Management Agreement, and Declaration Agreement needed to be drafted and negotiated with the landowners. These had to be adapted for Gauteng, as the GBSP initially investigated the legal contract templates used in the Western Cape, but found that the MoA was not suitable for the BDS process in

Gauteng, as the provincial nature conservation structure in the Western Cape is in the form of an agency and not a department.

The landowners of the Klipkraal Nature Reserve, the Klipkraal Protected Environment, and the Hollenbach Protected Environment signed the necessary stewardship legal contracts between June and August 2018. Certain clauses in the Declaration Agreement were revised on request of the landowner for the Klipkraal Nature Reserve. For instance, to safeguard institutional knowledge, the standardised clause referring to the recoupment of money from the landowner should he/she terminate the declaration of the protected area, was kept as per the original clause in the official templates, but under the GBSP was revised to stipulate that declaration costs will not be recouped from the landowner (or successors in title), as the site's NEM: PAA declaration costs were provided by an external funder.

The Devon Protected Environment Landowner's Association (DPELA) was initiated and came into being at a group meeting with the GBSP held on 24 April 2018. The meeting also provided the landowners with an opportunity to communicate to the GBSP any NRM issues experienced in the DPE. The GBSP made a note of these issues to better understand what sort of extension services would be beneficial to the landowners. The DPELA's constitution was signed off at a follow-up meeting on 30 May 2018. All landowners in the DPE signed individual consent to the DPE's NEM: PAA declaration, and resolutions (where needed), between 28 August and 7 September 2018. These consents also gave the chair of the DPELA the authority to sign the declaration agreement with the GDARD Member of the Executive Council (MEC) on behalf of the landowners, which he did on 18 October 2018.

Lesson learned

Ensure the landowner is comfortable with the content of the contracts by including relevant detail such as conditions attached to a protected area declaration and go through the contracts with the landowner so that issues can be addressed up front. It is also advisable that the landowner submit the draft contract to his/her lawyer, and other interested parties, such as members of a trust. This will help to reduce delays and disappointments down the road.

4.4.2. Draft Protected Area Management Plan (PAMP) aligned with the Management Agreement

4.4.2.1 Klipkraal Protected Area

To lay the groundwork for the development of the Klipkraal PAMP, the GBSP team spent ten days mapping infrastructure (e.g. hiking trails, roads) and alien vegetation on Klipkraal and the neighbouring property, the Hollenbach PE, during 2018. This familiarised the team with the type of data needed for the compilation of a PAMP, the correct use of GPS devices, the use of Geographical Information System (GIS) software, as well as the geographical layout of the site. We took the decision to include the neighbouring property (the Hollenbach PE) under the same PAMP. The KPA PAMP was based on an example developed by the Mpumalanga Parks and Tourism Agency's BDS unit for a nature reserve.

The GBSP conducted ten PAMP information sessions on the proposed KPA PAMP with the GDARD Scientific Services during 2018 and 2019, and five sessions with the landowners during this time. A veld management specialist was appointed in September 2017 to conduct five veld condition assessments (VCA) and provide veld management recommendations for the PAMP. Five VCAs were regarded as the most financially feasible for the specialist to make broad best practice veld management recommendations, and to illustrate his recommendations practically. This approach was taken by the GBSP so that the independent veld management specialist could determine the baseline condition of the vegetation, and make management recommendations to the landowner, based on his experience in agricultural veld management.

Participating in the specialist's VCAs provided the GBSP team and the GDARD Scientific Services personnel opportunities to observe and learn from a simplified VCA method aimed at informing livestock grazing management, as well as to learn best practices for the compilation of a holistic livestock rotational grazing plan. The services of the specialist was also procured because the team felt that the landowners, being commercial livestock farmers, may be inclined to respond more positively to



Figure 17: Maurice Leonard (owner of Klipkraal Nature Reserve and Klipkraal Protected Environment), signing the KPA declaration agreement in August 2018.

management recommendations prescribed by an independent veld management specialist. His experience with both agricultural practices and conservation projects better equipped him to more clearly explain the benefits that improved veld management can have, for both the biodiversity of the site and the grazing capacity available to livestock.



Figure 18: Workshop with veld management specialist and KPA landowners

The specialist's feedback provided to the GBSP team and the landowners in November 2017 was received positively, including the recommended use of veld management tools such as fire, which had been actively excluded for decades. The GBSP team and the GDARD Scientific Services subsequently conducted VCAs in the remaining camps of the KPA in April and May 2019 to provide baseline data for all the grazing camps in order to determine the impacts of livestock grazing and / or potential rest needed according to the livestock rotational grazing plan.

The November 2018, January and December 2019 PAMP sessions with the landowners also included the veld management specialist, who was instrumental in the designing of the rotational livestock grazing system for the KPA. The veld management recommendations provided by the specialist were again received positively by the landowners and have been incorporated into the KPA's PAMP. These group planning sessions for the compilation of the Klipkraal PAMP familiarized the team with the NEM: PAA compliant management plan template.

In addition to biodiversity data and management thereof, it is essential to also consider social and cultural features of the property. The GBSP facilitated a site visit for the GDARD Diepkloof Museum curator and qualified anthropologist to visit the KPA in July 2018 to identify and evaluate heritage resources. One landowner and foreman showed the anthropologist the different sites and he identified stone tools dating

back to the Late Stone Age (20,000–1,000 years ago) and ruins dating back to the Late Iron Age (500–150 years). Infrastructure from the post-colonial era was also identified. A detailed report on the assessment is included in the KPA PAMP.

4.4.2.2 Devon Protected Environment

The GBSP team used a simplified version of the KPA PAMP when developing the PAMP for the Devon Protected Environment (DPE), in accordance with the less stringent requirements for protected environments than for nature reserves. Management plans for other protected environments were also consulted to better understand the different requirements than those for nature reserves. For example, it was noted that zonation plans in other PE PAMPs were much simpler than the one developed for the KPA, identifying only two zones. The team followed this practice when developing the DPE PAMP and identified only “conservation” and “private” zones, as opposed to the six zones included in the KPA PAMP. The private zones in the DPE PAMP include the agricultural lands and the built environment around the main farmhouses and staff houses, which has relatively low biodiversity value. The conservation zones include the remaining areas of the DPE not demarcated as private and includes areas of natural grasslands, rivers, and wetland areas, and known locations of threatened species.

Adhering to the lesson learned, the GBSP requested that the veld management specialist used for the KPA also conduct one VCA per DPE landowner in February 2020. As with the KPA, the specialist provided grassland management recommendations to commercial livestock and maize farmers, that favours both biodiversity and aims to improve veld condition where needed. As a protected environment, the grazing management section of the DPE PAMP is more succinct than that of the KPA. It is however preferable for more detailed VCAs to be conducted across the DPE to inform better grazing management recommendations. The PAMP’s annual monitoring and reporting schedule will also be simpler, as the parameters to be monitored and reported on in a protected environment are less stringent than for a nature reserve.

The GBSP conducted two internal planning sessions for the DPE PAMP in June 2019. The GDARD BDS unit will schedule more sessions with the landowners and the GDARD Scientific Services to refine the plan and ensure that it is in line with the landowners’ objectives. As is the case for the Klipkraal PAMP, the DPE PAMP is scheduled to be submitted to the MEC for Economic Development, Agriculture, Environment and Rural Development in Gauteng within one year of the site’s NEM: PAA declaration.

The GDARD Diepkloof Museum curator and qualified anthropologist accompanied the GBSP to visit three landowners in the DPE in June 2019 to identify and evaluate heritage resources. Old milking stables were found on two different properties, as was an old farmhouse dating back to the 1930’s to 1950’s. The landowners were interested to learn that such infrastructure is protected legally under the National Heritage Resources Act, 25 of 1999 (NHRA). Seven different gravesites were visited on the three properties, the oldest grave dating back to 1905. These are also protected under the NHRA.

4.4.3. Procurement of a land surveyor and conveyance lawyer

Title deed endorsements are applicable to nature reserves declared as per section 23 of the NEM: PAA and is the final step in the NEM: PAA protected area declaration process. The GDARD’s Corporate Legal Services

Lesson learned

The use of an independent veld management specialist to conduct and communicate results of assessments and associated management recommendations, was integral to the commitment of the landowners to the BDS process.

(CLS) advised that the State Attorney's Office (SAO) in Pretoria be consulted to understand their requirements for title deed endorsements before a private conveyance lawyer is engaged for this purpose. Meetings were held in October 2016 and September 2018 between the GDARD CLS, BDS unit and the SAO and an arrangement was reached with the SAO that they will render their services to the GBSP as conveyance lawyers at a nominal deeds office cost.

These engagements also enabled the GDARD to make the necessary queries with regards to endorsing the title deeds of other nature reserves declared under older legislation. Initial planning by the GBSP also made provision for the appointment of a land surveyor, and although Terms of Reference (ToRs) were drafted, none of the GBSP sites required land surveying and a land surveyor was not employed.

4.5. Phase 4b: Site approvals by GDARD

4.5.1. Create a dossier

The GDARD BDS unit compiled what are referred to as legal dossiers to facilitate the NEM: PAA declaration process for the KPA and the DPE in 2018, which were submitted to the GDARD line management in October and November 2018, respectively. The purpose of the first submission of a legal dossier is to request the GDARD Corporate Legal Services (CLS), via the GDARD line management, to review the dossier to ensure it is legally sound. Once CLS are satisfied with the contents of the dossier, another memo is submitted by the GDARD CLS to the GDARD HoD to request the HoD to recommend to the MEC that they initiate the NEM: PAA public participation process for the proposed protected areas by signing the intent to declare notices.

The first legal dossier submission

As per NEM: PAA requirements for PA declaration, evidence must be shown that the site followed the national standardised biodiversity stewardship processes for the recommended protected area status. This must include:

1. The approved (by the Director: Biodiversity Management) Proposal to Declare. This document includes a summary of the property's land uses, its regional context and alignment with other environmental spatial planning tools, a summary of the site assessment results (more details provided in nr. 3 below), as well as the approved minutes of the Review Panel (with the recommended protected area category).
2. Copies of the title deeds of all the land portions.
3. The declaration agreement signed by the landowner(s) is needed to illustrate to the GDARD line management the landowner's intent to declare.
4. Supporting legal documentation such as a trust and/or company resolution appointing a representative with signing rights for the entity and a copy of the representative's identification document.
5. Draft intent to declare notices (to be ratified by CLS and signed by the MEC).
6. A list of names and contact details of the direct neighbours of the proposed protected area order for the intent to declare notices to be sent via registered post.
7. A list of affected organs of state.

8. Motivations for the site's protected area declaration as per the NEM: PAA, including but not limited to:

- The site's alignment with applicable spatial planning tools, e.g. the Gauteng Conservation Plan (C-Plan v3.3), the Gauteng Protected Area Expansion Strategy (GPAES, 2013), the National Protected Area Expansion Strategy (NPAES), the Gauteng Environmental Management Framework (EMF, 2015) and municipal Spatial Development Frameworks (SDFs).
- The site's location in relation to other protected areas, including world heritage sites, biosphere reserves and important birding areas (IBAs).
- The presence of threatened ecosystems, vegetation types, species; water sources etc.
- The site's contribution to climate change mitigation and the supply of ecosystem services.
- The presence of cultural and heritage features.

The KPA and DPE submissions were successful, and the MEC signed the notices of intent to declare in January 2019.

4.6. Phase 5: Declaration processes

4.6.1. Develop notices

The intent to declare notices for the DPE and the KPA were compiled by the GDARD BDS unit in collaboration with the GDARD CLS and published in the government gazette. The notices from the government gazette were published in two national newspapers in March and April 2019, as required by the NEM: PAA. The notices for both sites were also posted on the GDARD's and the EWT's social media platforms on 4 March 2019. These social media platforms serve as additional means of consulting the public at large regarding the intent to declare these protected areas, over and above the NEM: PAA required processes. Copies of the notice of intent to declare were sent via registered post to all landowners whose properties are part of the KPA and the DPE. It is a NEM: PAA requirement to send copies of the intent to declare notices to owners of land portions to be declared as part of a protected environment, and notices were thus distributed by registered post to the DPE and the KPA landowners.

4.6.2. Public Participation Process

The publication of the intent to declare notice in the government gazette initiated the NEM: PAA required 60-day public participation process (PPP). However, because the GDARD BDS unit omitted sending consultation letters to organs of state in the first submission, an additional memo had to be submitted by the GDARD CLS, requesting the signing of the letters by the MEC. This resulted in a time delay because it is best practice to allow 30 days for comment from organs of state, from the date of the consultation letter. This meant that the PPP was effectively 90 days in total, as opposed to the 60 days required by the NEM: PAA. No objections to the protected area declarations were received from members of the public or organs of state during the 90-day PP and consultation process. The PPP thus ended on 31 May 2019, after which the second legal dossier was compiled and submitted to recommend to the MEC to legally declare the proposed protected areas.

Lesson learned

Ensure the letters to organs of state are distributed as close as possible to the publication date of the notice of intent to declare, and ensure due process is followed to prevent challenges in the future of due process followed.

The second submission includes:

1. A summary of all comments and inputs received from the public and organs of state during the public participation and consultation processes.
2. A list of affected organs of state.
3. The declarations agreements (as per number 3 above, to be signed by the MEC).
4. The declaration notices to be signed by the MEC to affect the protected area declaration.
5. All the motivations for the protected area declaration, as per number (3) above.

Due to staff changes in the Lesedi Municipality, a follow-up meeting had to be held, in December 2018, to introduce the NEM: PAA declaration of the DPE, during which the Executive Manager: Land Use Planning indicated that he supports the declaration in principle but would need a formal GDARD communication from the department. A letter to this effect was submitted in February 2019 from the GDARD Acting Director: Biodiversity Management.

4.6.3. **Publish the final notice in the provincial government gazette.**

The second submissions to the MEC, via the GDARD line management and CLS, to recommend the declaration of the DPE and the KPA, were submitted on 24 June 2019. These submissions included the declaration notices to be signed by the MEC and reached the MEC's office in early August 2019. The process of engaging the government printers is managed by the GDARD CLS. The procurement process is then managed collectively between the GDARD CLS and the EWT to facilitate payment. It is important to note that when requests for quotes are submitted to national newspapers for the publication of the intent to declare notices, it must be specified that the quote should be for notice space, and not advertisement space.

The signed notices were published in the government gazette on 2 October 2019 (gazette no. 302 of 2019 and notice no. 967), formally declaring the sites as protected areas. The GBSP notified the Minister of DFFE of the declaration, as is required under NEM: PAA.

These sites included:

- Klipkraal Protected Area (three sites with two landowners):
 - Klipkraal Hollenbach Protected Environment – 515 ha
 - Klipkraal Protected Environment – 1,198 ha
 - Klipkraal Nature Reserve – 942 ha
- Devon Protected Environment (seven landowners) – 7,979 ha
- The Crocodile River Reserve (> 100 landowners) – 2,620 ha (this protected area was pursued primarily by the GDARD BDS unit with knowledge and experience gained through the GBSP).

Box 8: Why do landowners need support?

Recognise landowners for securing their land over the long-term

Assist the landowner in performing the best practice management

Improves the financial sustainability / viability of the property

Supports alternative opportunities / businesses within the Green Economy to support improved biodiversity management and financial sustainability

National Biodiversity Stewardship Guideline, 2018

4.7. Phase 6: Site post-declaration support and annual review of the PAMP

The final Protected Area Management Plans for both the KPA and the DPE are near completion. These documents are detailed and the length of time it has taken is due to the intensive engagement with landowners over management plans actions, to ensure that the GBSP team has a good understanding of the kind of short and long-term assistance and support each site requires. The GDARD will endeavour to honour its obligations as per the PAMP and will draw in relevant internal and external partners such as Working for Wetlands, Working on Fire, and NGOs such as the EWT where they can be of assistance. The GDARD BDS' unit support will conduct, in consultation with the landowners, an annual review of the annual plan of

operation (APO) to ensure that the PA is NEM: PAA compliant and will revise it as accordingly.

Support, assistance, and advice was provided to landowners where necessary and possible from the initiation of contact with the landowners, and this level of support will continue to be rendered by the GDARD BDS unit. This included among other things the introduction of the veld management specialist to participate in relevant aspects of management planning, assistance with providing comment on prospecting applications, and advice and the facilitation of assistance in Alien and Invasive Vegetation Control (AIV).



Figure 20: The GBSP and members of the Economic Empowerment Services meeting with the Klipkraal

4.7.1. Klipkraal Protected Area

To aid landowners in “reading” their veld, the GBSP facilitated a grass identification field day with a veld management specialist at Klipkraal in January 2018. Three landowners and one farm worker attended the field day, which covered basic principles of grass identification and general grassland management. The small group size enabled the participants to really tap into the specialist’s infield knowledge, by asking very specific grassland management questions pertaining to their specific properties. The GBSP received very positive feedback from the participants afterwards and having an independent veld management specialist who confirmed the principles which the GDARD Scientific Services also promoted, added substantial credibility.

The GBSP took the GDARD Environmental Empowerment Services (EES) to the KPA in April 2018 for the EES officials to introduce their programme to the landowners. The GDARD EES are implementing agents for the Expanded Public Works Programme (EPWP) and were invited to visit the KPA to discuss the possibility of providing alien and invasive vegetation clearing assistance to the landowners. This engagement enabled the GBSP to also introduce biodiversity stewardship to the GDARD EES and to motivate for their assistance to other stewardship sites as well. The Hollenbach Protected Environment subsequently signed an EES landowner agreement in June 2018 in order to receive assistance in 2021/2022. The GBSP and the GDARD EES then spent one day on the Hollenbach Protected Environment in September 2018, to accurately map

the alien and invasive vegetation present on the property. The GDARD EES unit is an essential partner to the BDS unit as it renders essential and tangible benefits for landowners who have signed BDS contracts.

The Klipkraal Protected Area (KPA) falls within the Midvaal municipality. The GBSP introduced the programme to the municipality in early 2016 when the first site assessments were taking place and remains in contact with the Midvaal Municipality's Director: Land Use Planning (LUP). The Midvaal Municipality underwent a Spatial Land Use Management Act (SPLUMA) process, and due to the GBSP ensuring that the Director: LUP be kept up to date with regards to progress on the declaration process for the KPA, it ensured that the KPA is reflected correctly in the SPLUMA zoning scheme. The Director: LUP also expressed interest in receiving job creation statistics from the KPA, in order to motivate for eco-tourism as a preferred land use rather than other potentially less sustainable options.

At the inaugural Gauteng Environmental Research Symposium, convened by the GDARD in November 2019, a Lecturer from the University of the Witwatersrand's (Wits) School of Animal, Plant and Environmental Sciences (APES), expressed interest in using the Klipkraal Protected Area (KPA) as a research site for two post-graduate students. Once approved by GDARD Scientific Services, the projects will be conducted during 2020/21. One of the projects will identify and map all the different habitats on the KPA, whilst attempting to predict the likelihood of the occurrence of small to medium sized mammals on the protected area. The second study will identify small to medium



Figure 21: Veld management specialist in the field with the GBSP team and landowners

sized mammal species recorded and ascertain how the species use the different habitats in the landscape, as well as how they move around between these habitats. Both studies will contribute data to the management plan of the KPA and its operational management going forward. Wits is also considering using

the site for more long-term research studies that could potentially improve the KPA's operational management strategies and monitoring over time.

A member of the GDARD biodiversity stewardship unit has also applied to do a Masters study on the phytodiversity of the KPA through the Tshwane University of Technology (TUT). The study intends to establish the current phytodiversity present, to make informed management recommendations on improving the state of the phytodiversity in the future.

Lesson learned

Maintain regular contact with the landowners, even if no PAMP management actions needs assistance, consider creating a WhatsApp group for coordinated communication and ongoing support.

4.7.2. Devon Protected Environment

The GBSP used the meeting held with the DPE landowners on 30 May 2018 as an opportunity to introduce the same veld management specialist used at the KPA. The specialist addressed some of the NRM issues raised in the April 2018 meeting, such as how to manage areas dominated by *Hypparrhenia hirta* (common

thatch grass) and spoke about general grassland management principles. The meeting was also attended by Birdlife SA's regional manager for Gauteng, who gave insight into his experience of the establishment of protected environments (PEs) in the Free State Province. The GBSP believes that providing landowners with information on the progress of establishing PEs in other provinces, would make them feel like part of a 'stewardship community of practice', and strengthen peer-to-peer support for the BDS process.



Figure 22: Grass identification course conducted by the veld management specialist for landowners in the DPE

Three additional events / engagements were arranged by the GBSP for the DPE landowners in 2019:

- Two members of the GBSP team, accompanied by one of the GDARD's scientific technicians provided a grass identification excursion for one of the DPE landowner's church group.
- A grass identification day for all the landowners with a veld management specialist.
- A site visit by the GDARD Diepsloot Museum Curator to identify cultural and heritage features of the Devon area.
- The external veld management specialist contracted by the GBSP to conduct veld condition assessments (VCAs) on the Klipkraal Protected Area (KPA), conducted seven in the Devon Protected Environment (DPE) in February 2020. The specialist spent four days in the field with some of the landowners, providing the landowners with an opportunity to discuss natural grassland management practices and challenges.

The DPE's NEM: PAA declaration has afforded approximately 10.5 % (7,979 out of 75,633ha) of the Devon Grasslands Important Bird and Biodiversity Area (IBA) legal protection. IBAs are registered by BirdLife SA, a NGO focussing on bird species conservation and their habitats. IBAs are identified nationally through multi-stakeholder processes using globally standardised, scientifically agreed upon criteria and are thus sites of global significance for bird conservation. There are 112 in South Africa, three of which are in Gauteng.⁷ This is particularly important for the bird species of national, and international conservation concern that frequent the area. It has also created much interest, and support, via social media from birders across the country, but especially Gauteng and Mpumalanga. The photographic bird guide produced by the GBSP for the area created awareness amongst the DPE landowners about the importance of the bird species and one landowner has since in allowing access to organised birding groups accompanied by a BirdLife SA recognised bird guide. While this collaboration is still in development phase, it illustrates the important positive spin-offs that can result from the implementation of BDS, and the support provided to landowners post declaration in the area.

⁷ <https://www.birdlife.org.za/what-we-do/landscape-conservation/what-we-do/protecting-ecosystems>

4.7.2.1 Coal prospecting applications within the south east of the Gauteng province

Further support to the DPE landowners was provided when the GBSP was made aware of a pending coal prospecting application over a portion of the proposed DPE. This presented a challenge and delayed the declaration process. A positive step was achieved in September 2017, when the then GDARD HoD gave approval for the biodiversity stewardship process to proceed for the DPE, despite the pending prospecting application. The GDARD BDS unit submitted a record of this approval to the GDARD unit that provides comments on behalf of the department on mining applications, to request that the unit object to any prospecting and / or mining applications in the vicinity of the DPE. This submission was strengthened by the fact that the DPE falls within an identified Agricultural Hub, thus recognised as an area important to conserve for food production.

At least three known coal mining prospecting applications have been submitted within the vicinity of the DPE over the past four years, with an estimated seven pending applications at any given time. The GBSP took the approach of engaging each applicant individually early in the process to make prospectors and consultants aware of the intent to establish the DPE and to provide them with the necessary biodiversity information.

4.8. Capacity building

A key objective of the GBSP was to improve legal and technical capacity to implement biodiversity stewardship processes within the GDARD through developing the institutional structures, processes, and capabilities required. Through the GBSP case studies, this institutionalisation of BDS in all relevant echelons of GDARD was successful, and the necessary processes for the implementation of BDS were standardised and approved. The execution of these can now be monitored over the long-term.

While the GBSP benefitted from other provinces' vast experience with BDS, most of the unit did not have stewardship experience at the start of the project, and the implementation process in the Gauteng context presented very different challenges, and opportunities. Every step of every process had to be learned and adapted for the Gauteng landscape. This was a long and complex process but exposing the team to every step was an effective method of developing multiple skill sets within the unit. The GBSP team constantly sought opportunities to gain knowledge and experience through planned and targeted capacity building activities and *ad hoc* learning gained during implementation. For example, to learn from BDS officers in other provinces, the team visited BDS sites in Mpumalanga that were comprised of more than one landowner, as this type of experience within the team was limited. The team engaged in extensive informal discussion with the BDS implementers on site, and their experience benefitted the GBSP when it came to working with multiple landowners further along the line.

Collaboration between different units within the GDARD and the EWT exposed staff from both organisations to new processes and dynamics within the landscape that would otherwise not be readily available to them. For example, the project team's field work skills improved through participation in site assessments and monitoring with Scientific Services and taking part in Review Panel meetings. Each site assessment provided an opportunity for the GBSP team to learn about a wide range of aspects related to protected area management, from species identification to the short- and long-term effects of different management approaches. The benefit was not one directional, and officials from other units, such as Scientific Services, were exposed to the large-scale planning and operational aspects of stewardship, and became familiar with

the processes involved, and how they can support the BDS unit. This is discussed in more detail on page 54 **Error! Bookmark not defined.**

The GDARD operates on submitting hard copy memorandums (memos) to senior management to communicate information and or obtain approval for activities. Since the GBSP's inception in 2015, at least ten memos per year was routed by the GDARD BDS unit to the department's head of department (HoD) to either obtain approval to attend a conference and/or workshop outside of the province, for attendance of indicative training (as per the department's HR policy), approval needed for the Gauteng Protected Area Expansion Strategy (GPAES) etc. Despite staff turnover in senior management positions since 2015, these memos, and the effort put into communicating the work of the BDS unit on the department's internal communication network and its social media platform, contributed to creating awareness of the work of the BDS unit amongst senior management.

Memos submitted were mostly routed to senior management involved in natural resource management, but the unit maintained its presence in the Rural Development Branch through attendance of quarterly meetings, and of the Agricultural Branch through engagement with operational staff involved with Resource Technology Development Services.

The former GDARD Head of Department (HoD) attended the National Biodiversity Stewardship Conference, from 27–29 September 2017, in Salt Rock, KZN, and the team believes that this was a very positive step for the work of the GBSP and potentially resulted in a greater understanding of the BDS process, its successes and its potential. The subsequent national conference on Land Reform and Biodiversity Stewardship, was co-hosted by the GBSP, DFFE (then DEA), the SANBI and the then DRDLR in October 2018 in Gauteng at Maropeng. Both the GDARD People and Parks Programme and the Agricultural and Rural Development Branches attended, and the event contributed to increased knowledge and support for the BDS process throughout the GDARD.

To remain current with ever evolving BDS implementation practices, it was important that the team members be included in relevant formal training and conducted and attended functions that provided positive exposure for the project, and extensive stakeholder engagement. These opportunities were critical to knowledge development and professional confidence within the team, and for developing relationships with members of the stewardship community of practice, which provided the team with support in the long term. The partnership between the WWF Nedbank Green Trust, EWT and the GDARD provided smoother facilitation of attendance at relevant symposia, workshops and events, and encouraged knowledge exchanges between the partners.

The attendance by the GDARD BDS unit and CLS of other national biodiversity stewardship and protected area establishment forums, such as the DEA PATTT meetings, and the national BDSTWG meetings also provided the team and CLS continuous exposure to the different legal contracts required for the declaration of PAs through BDS. Developing and adapting existing contracts and templates exposed the CLS to novel processes and requirements, and through the GBSP case studies, CLS officers were significantly upskilled to support the GBSP team.

The successful concurrent declaration by the BDS unit of a protected area outside the scope of the GBSP is a strong indicator of the successful development of an effective GDARD BDS unit because of the GBSP. However, members of the GDARD BDS unit require more experience in implementing PAMPs and rendering the required post-declaration support to landowners. This will require regular follow-ups with the management authority of the PA and/or landowner, and a recommended site visit at least once a quarter

in order to maintain the relationship of trust that was established during the course of the NEM: PAA declaration.

The team is eager to ensure that the momentum of consistent skills development is maintained and expanded upon and is exploring relationships for knowledge exchange with academic institutions, NGOs, and other government departments. It was to this end that the GBSP presented at one of the break-away sessions of the Gauteng Environmental Research Symposium in November 2019. The resulting collaboration with Wits University conducting research on the KPA, and the member of the BDS unit's study through the TUT will not only contribute to biodiversity knowledge databases for the area, but also to skills development. The studies will provide the BDS unit, the GDARD Scientific Services, and the landowners with valuable fieldwork opportunities to increase individual and collective knowledge and skillsets.

In addition to developing expertise and abilities within the GDARD, the GBSP has resulted in the development of extensive expertise within the EWT as well, and this will likely improve the level of support that the organization can provide landowners and the GDARD BDS unit in the long term.

4.9. Challenges and how they were addressed

4.9.1.1 Data availability and accuracy

Site selection and prioritisation was delayed at the beginning of the project due to the Province's out-dated biodiversity and spatial data. The Gauteng Conservation Plan (C-Plan v3.3) and the GPAES were compiled in 2011 and have not been updated, except for a non-spatial update of the GPAES in 2013. The province has also been operating without a conservation planner for more than ten years. The GBSP thus approached the Department of Rural Development and Land Reform (DRDLR), and the South African National Space Agency (NASA) for updated spatial imagery, and individuals within the GDARD Scientific Services who advised on site selection and prioritisation of areas, based on their local knowledge of the landscape.

The Gauteng office of the Surveyor General has been very helpful during the GBSP's lifecycle to confirm outdated subdivisions and/or surveyor general diagrams, and the City of Tshwane Geographical Information System (GIS) also proved to be much more current than the GDARD dataset, particularly with regards to recent subdivision information. A lack of accessible up-to-date landowner information necessitated the GBSP to register a WinDeed account to obtain this information for specific land portions. WinDeed assisted the GBSP to confirm previously incorrectly identified land portions in the Klipkraal Protected Area (KPA), and at the Kranspoort site. However, during the drafting of the DPE stewardship legal contracts, the GBSP realised that certain land portions' title deeds stipulate that the portion is situated within Mpumalanga, and not Gauteng. This unfortunately led to some delay as the GBSP had to ascertain first how to describe the specific land portion in the contracts. The GDARD CSL recommended that in light of a WinDeed report confirming that the land portion is situated within Gauteng and written confirmation from the Surveyor General (SG) Office in Gauteng, the declaration process can proceed, with the State Attorney's Office in Pretoria offering assistance to amend the title deed at no cost to the landowner. Differing identification (ID) numbers were also identified and the State Attorney's Office indicated that they could also assist with this process. These challenges contributed to a delay in the signing of the stewardship contracts, and the subsequent submission of the DPE legal dossier to the GDARD line management.

The GBSP also used conservation partners in the landscape to make contact with identified landowners, for instance, BirdLife South Africa's regional manager for Gauteng facilitated contact with landowners in the

Devon Grasslands Important Bird and Biodiversity Area (IBA), in order for the GBSP to introduce the programme to the landowners on the Gauteng side of the provincial boundary.

4.9.1.2 Social, political, and economic constraints

Some landowners view government in a negative light, in several instances due to prior breakdowns in relationships and/or negative experiences. The EWT played a valuable facilitation role by initiating engagement with landowners before introducing them to the GDARD BDS unit. Language represented a further challenge in communicating with landowners, with one landowner refusing to engage with the GBSP unless an Afrikaans speaking team member was present. Both of these challenges are likely to apply to other provinces, and a reality when having to deal with the social component of implementing biodiversity stewardship. Where possible, is important to consider these challenges upfront and prepare or do the necessary research to understand the landowner's needs and expectations.

Some of the GBSP's priority sites have been subject to unresolved land claims since before 2015, which means the biodiversity stewardship process could not proceed for these specific sites. The GBSP developed a good working relationship with the Gauteng Regional Land Claims Commissioner, which assists the programme in determining the status of a land claim for a specific site quite quickly. Although land claims may be regarded as a barrier with regards to the speed at which biodiversity stewardship is implemented, it should also be seen as an opportunity to promote alternative and diversified land uses to land claim beneficiaries and communities. This is particularly so in the north of the province, where argument can be made that traditional livestock agricultural is not necessarily the most economical land use.

Competing land uses within the south east of the Gauteng province has resulted in at least three known coal mining prospecting applications, submitted within the vicinity of the Devon Protected Environment (DPE) over the past four years. As mentioned above, the GBSP engaged each applicant individually early in the process to make them aware of the intent to establish the DPE and to provide them with the necessary biodiversity information. A positive development in September 2017, was when the then GDARD HoD gave approval for the biodiversity stewardship process to proceed for the DPE, despite a pending prospecting application. The GDARD BDS unit submitted this approval to the relevant GDARD unit to support potential opposition to future prospecting or mining applications in the areas. Another factor to be included in any submission is that the DPE falls within an identified Agricultural Hub and is therefore recognised as an area important food production security.

Another obstacle experienced by the team was that several primary sites identified for engagement have been up for sale since the inception of the GBSP, one of which contains the only breeding colony of Cape Vultures (*Gyps coprotheres*), classified as Endangered, in the Gauteng province. The other is a property consisting of more than 5,000 ha of untransformed bushveld in the north of the province. It is possible that the unstable political climate in South Africa over the last two years, certain proposed land policies and changes to national agricultural legislation may have played a role in the decisions of some landowners to become involved with the GBSP or not.

The landowners of the KPA who had initially agreed to proceed with nature reserve status in May 2017 changed their decision to protected environment in February 2018, after all the stewardship contracts had already been drafted and vetted by the GDARD CLS. This resulted in the need for the contracts to be revised to reflect the protected environment category. After further negotiation, the landowners agreed to proceed with nature reserve status on those land portions with no transformed areas. These delays and challenges are considered part of the natural social dynamics of implementing biodiversity stewardship, with

landowners potentially going through different phases of understanding and deciding which protected area category would be most suited to them. Stewardship references received from participating landowners in KZN contributed to the landowners' decision to proceed with the process in general, which demonstrates the value of the standardised implementation of biodiversity stewardship, and how this can influence landowners positively across provincial boundaries. Sadly, the landowner of the KPA with whom the GBSP made initial contact in 2016 passed away unexpectedly in September 2019. This resulted in delays in some of the planning and practical management activities agreed upon, as his family was not intimately familiar with his management objectives and strategies. This has unfortunately, but understandably, resulted in the family re-prioritising NRM APO activities to focus instead on activities related to the maintenance of farming infrastructure. This has understandably been a very difficult transition for the family and highlights the effect of social dynamics and changes on biodiversity stewardship implementation. The APO has been amended accordingly and the GDARD BDS unit will remain in contact to ensure other best practice NRM activities are adhered to. A further delay was caused by a change in the MEC, as the declaration notices had to be resigned by the new MEC.

Since the GBSP has communicated the recommended protected area status of nature reserve to the landowner of the Kranspoort site in February 2018, no communication has been received from him and the GBSP has also been unable to secure a meeting with him to promote the protected environment category.

The GBSP was informed about a landowner in the DPE (before the NEM: PAA declaration) who had potentially irreversibly transformed a natural grassland area after the GBSP site assessments of March 2017. It is possible that this was done without the necessary permits and environmental authorisation, and was problematic for the other landowners, as this landowner's property falls on a watershed. Provisional investigations resulted in a review of this landowner's participation in the DPE, and the property was removed from the protected area declaration. One positive outcome of this was that the landowner learned from the interaction, and thereafter informed a TLU meeting at the local town hall that environmental authorisations are needed to establish new agricultural lands.

One site that the GBSP has been negotiating with since middle 2016 and that had consented to proceed with the protected environment category, declined to proceed in October 2019 after extensive negotiations. This site consists of two land portions with intact habitat, not far away from one of the GDARD provincial nature reserves, so this was very disappointing for the GBSP. The programme will however remain in contact with the landowner.

Conservation practises as a land use through the biodiversity stewardship mechanism can offer an alternative, and or additional land use, to land reform and/or communally owned sites, and one of the intended outcomes of the GBSP was to build on the current programme and implement the BDS process in such sites. Unfortunately, despite extensive investigation into land ownership in the Gauteng landscape, and engaging the then Department of Rural Development of Land Reform, the GBSP has been unable to identify any land reform or community owned sites that are viable for conservation.

4.9.1.3 Logistical arrangements

Accessing high-clearance vehicles in the GDARD for site visits was a challenge for the biodiversity stewardship unit. The GBSP had, in one instance, to hire a high-clearance double cab bakkie for the Klipplaad drift site assessment. To address this challenge, the GDARD biodiversity stewardship unit has an understanding with one regional GDARD office to allocate suitable vehicles to the number of officials and the purpose of a visit.

To enable successful grass identification, it is preferable to conduct site assessments during the summer months when the grasses are in flower. This delayed the GBSP's progress in the beginning of the project, although some assessments in areas with more bushveld, such as the Klipplaatdrift took place in June 2016. The GBSP scheduled project tasks not impacted on by seasonality, to the colder months, so that the spring and summer months were available for site assessments. These tasks included as the development of fact sheets, negotiations with landowners, and the development of protected area management plans (PAMPs). Because the GDARD officials need departmental approval for each official trip across the provincial boundary, the biodiversity stewardship unit applied every financial year for standing approval to attend meetings with landowners who reside in another province, e.g. the landowner of Klipplaatdrift resides in Pienaarsriver, Limpopo.

4.9.1.4 Personnel capacity constraints within the GBSP

The GBSP operated without sufficient direct management support from the GDARD for ten months in 2016, and certain project activities were significantly delayed as a result. These included the GDARD approval of the terms of reference (ToRs) of the Gauteng Biodiversity Stewardship Review Panel, the GDARD approval for the stewardship unit to travel across the provincial boundary for the November 2016 Conservation Symposium, the timeous GDARD approval of the protected area category recommended by the Review Panel for the KPA, and the initiation of the negotiation process with interested landowners. To provide the necessary management support to the stewardship unit and the GBSP, the GDARD arranged for a deputy director to assist in an acting capacity from December 2016 to June 2017. In December 2017 one of the BDS officers was appointed as a manager, which assisted significantly in the timeous implementation of stewardship processes. The vacancy in the portfolio of a deputy director (DD) however, is not reflected in the GDARD organogram and as such the BDS unit is hindered with regards to attending to necessary strategic protected area expansion actions, such as:

- Attend to the NEM: PAA declaration process, and the finalisation of the process, e.g. title deed endorsements for nature reserves and caveats for protected environments.
- Regularisation (making historic PAs NEM: PAA compliant) of existing PAs in the province, including the Magaliesberg Protected Natural Environment. There are examples in the Gauteng landscape where historic PAs have been irreversibly transformed and, if not de-proclaimed, it is difficult to quantify the percentage of land categorised under formal conservation in the province.
- Attending to queries re: the legal standing of historic PAs.
- Attending to GPAES queries.
- Engaging internal and external stakeholders to raise awareness of the work of the GBSP, including municipalities, conservancies, etc.
- Promote to municipalities to rezone nature reserves to a more conservation suited land use scheme and the implementation of a rates rebate for nature reserves.
- Represent the GBSP on relevant provincial and national platforms and present on the work of the GBSP.

A motivation should be made to the GDARD management to provide for a DD portfolio (Control Biodiversity Officer: Grade B) for the BDS unit in the department's organogram to provide strategic management of the

BDS unit. In addition, the Director: Biodiversity Management portfolio was vacant for three years from May 2017 until May 2020. To address this, several managers acted in this position during the three years.

The GBSP started with seven operational project team members and was subject to several staff changes over the four years, which resulted in understandable delays in achieving certain project activities on time. Despite this, the current GDARD biodiversity stewardship unit is regarded as well-established within the department with cost to company budget.

A significant challenge the GBSP is currently facing is that the EWT will no longer be able to provide the same level of support to the GDARD BDS unit, or to the protected areas post-declaration. A common theme throughout BDS reports and guidelines is the critical role NGOs play in the implementation of BDS (SANBI, 2018; Wright, Stevens, & Marnewick, 2018), through their support of under-resourced provincial departments. Unfortunately, due to a lack of available funding, and short funding cycles when it is available, NGOs are often no longer able to commit any more time and resources to programmes they helped to build. This places even bigger burdens on departments, and ultimately it is the integrity of the BDS process that might suffer.

Table 3: Common challenges encountered and potential solutions to overcome these challenges

Challenge	Solution
Out-dated data and inaccurate property and landowner information delays site selection, prioritisation, and declaration processes, and can result in inaccurate desktop planning and assessments.	Multiple sources may need to be consulted in order to gather all necessary information. Sources that may be able to assist include: Other government departments Academic institutions Colleagues who work on the ground Other NGOs South African National Space Agency (NASA) Windeed ⁸ search
Landowners are sometimes distrusting of government departments, due to negative prior experiences or public perception.	NGO partners can facilitate positive engagement between government officials and landowners. Engage organised agricultural institutions early to introduce the BDS programme, so that they can provide correct information when receiving queries from landowners about BDS. Government officials must prove to be reliable and earn the trust of the landowners from the start.
Hesitation by landowners to enter into BDS agreements.	Attend to concerns with the landowner, answer any questions they have honestly and where possible, negotiate a middle ground. Provide the landowner with references so that they can contact landowners who have been involved in BDS for some time, about their experiences.

⁸ Lexis WinDeed provides access to South Africa's major registration offices including the Deeds Office, Surveyor General Office and various Credit Bureaus. www.Windeed.co.za

Challenge	Solution
BDS process delayed by unresolved land claims.	Developing a good working relationship with the Regional Land Claims Commissioner assists in determining the status of a land claim for a specific site.
Applications for prospecting or mining on land under BDS	Encourage landowners to actively participate in public participation processes. Engage relevant environmental assessment practitioners (EAP) early on in the process to provide them with the necessary data for the BDS site.
Delays due to beurocratic processes required by government departments.	Where possible, NGO partners can perform procurement processes etc.
Sustainable support from NGO sector.	Establish a multi-stakeholder provincial working group to maximise NGO support Look for additional, long term funding for implementation of BDS processes, and post-declaration support to landowners.

5. Evaluation of the GBSP

An independent evaluation of the GBSP was conducted by Conservation Outcomes, in July 2019. The overall assessment of the GBSP was very positive, particularly regarding the correct implementation of the BDS processes, and the consistent positive engagement with landowners. The recommendation made in the report have been or are being implemented. The summary of the review findings is in Table 4, and the full report is available on request. The findings will also be discussed in the following sections.

Table 4: Key findings from an independent evaluation of the GBSP conducted by Conservation Outcomes

The key findings of the evaluation of the Gauteng Biodiversity Stewardship Programme are:

1. The programme has been highly successful, largely achieving the objectives and outcomes that it set out to.
2. Through the programme, a number of new protected areas that will contribute significantly to protected area expansion and biodiversity targets will be established, adding considerably to Gauteng's protected area system.
3. Both the EWT and GDARD have developed significant capacity and expertise in the implementation of biodiversity stewardship.
4. The EWT and GDARD have forged a strong working relationship that has highlighted the collaborative nature of biodiversity stewardship and the successes that can be achieved through partnerships between landowners, provincial conservation authorities and NGOs.
5. Biodiversity stewardship, as an approach to effective protected area expansion, has been embraced by GDARD and all indications are that a successful permanent programme has been established.
6. A rigorous approach to the declaration of new protected areas, through the Gauteng Biodiversity Stewardship Programme has been established, which is based on tools and

approaches that have been tailored to the particular conditions of Gauteng, whilst meeting the legislative requirements of the Protected Areas Act.

Conclusion

The WWF Nedbank Green Trust funded Gauteng Biodiversity Stewardship Programme has successfully instituted biodiversity stewardship as a practice in Gauteng. This has enabled the process to declare a number of new protected areas in the province that will contribute significantly towards its ecological integrity and the maintenance of ecological functions and processes in areas of high biodiversity value. The programme has every likelihood of growing and continuing to secure other high priority areas for biodiversity conservation. It is essential that GDARD be supported in its efforts in this regard and that EWT and other key partners support and participate in these efforts.

Recommendations

- The EWT and GDARD enter into an ongoing strategic MOU, whereby the organisations agree to continue partnering together in the implementation of biodiversity stewardship in the province, within their respective financial constraints.
- A Biodiversity Stewardship Reference Group/Advisory Group be established, aimed at maintaining momentum for the good work achieved through the project. This should include partners such as other NGOs operating in the province, conservancies, key government stakeholders and others as required.
- It is important that the capacity and expertise that the EWT has gained in implementing biodiversity stewardship be retained and utilised across a range of biodiversity stewardship and other protected area work that it is doing outside of Gauteng.
- Through its reference/advisory group, in collaboration with partners, opportunities for additional and supplementary finance for the implementation of the programme should be explored. These may include aligning with programmes such as the biodiversity economy, the Land Reform and Biodiversity Stewardship Initiative and the Natural Resource Management Programme.
- Specific attention should be given to the role of offsets within the Gauteng Biodiversity Stewardship Programme. Given the immense developmental pressures in Gauteng and the extensive and ongoing loss of remnant biodiversity in the province, offsets may have a strong role to play in financing the programme and securing key biodiversity priorities.

6. Lessons learned, project evaluation and recommendations

6.1.1. Lessons learned from the GBSP

The GBSP learned early in the first term of the project that the implementation of biodiversity stewardship in Gauteng would need to be adapted to suit the context of Gauteng's smaller parcels of land and transformed and fragmented landscape, with constant development pressures. The lessons learned, adaptations and recommendations resulting from the GBSP include:

1. **The lack of available, updated GIS information presented a significant challenge for desktop site selection and prioritisation.** This proved to be a challenge as what was happening on the ground was often vastly different to the GIS layers, and sometimes even to Google Earth images. The GBSP learned that the only way to assess the land uses and transformation within the province was to

ground truth what was indicated in the desktop exercise, either through a site visit by members of the team, or consulting experts from other GDARD units active in specific areas. In fact, it was consultations with members of the GDARD Scientific Services unit that suggested that the GBSP team consider the sites that soon became our champion sites, despite not being identified during the initial desktop selection process due to their small size (less than 1,000 ha). Overall, the site selection and scoring process was an extremely valuable exercise for the team, engaging with issues such as double-layering and the consideration of more social or cultural criteria. The process allowed us to interrogate the criteria used in the site selection matrix and led to a better understanding of considerations to take note of throughout the project.

2. **Ground truthing remained a priority even once the sites had been engaged.** There were instances where the team conducted site assessments, and spent a considerable amount of time on compiling the assessment results, only to discover that the properties were under land claim, or the properties were already up for sale, and all stewardship activities would have to cease temporarily until the claim was resolved. It is thus prudent to conduct a thorough screening process upfront to establish ownership, correct land portions, pending development/prospecting applications and/or land claims.
3. **Property boundaries must be verified.** Similarly, the team learned that, before investing time and resources, a title deed and Surveyor General (SG) Diagram of a property must be located, and to verify the boundaries of a property upfront with the landowner. One of our sites had already been assessed and presented to the review panel when it was discovered that the property consisted of other farm portions, registered under a different name. Additional errors on title deeds were found, such as incorrect ID numbers, or the location of a property in Gauteng listed as being in Mpumalanga. Performing due diligence is key to avoiding future delays due to these errors.
4. **Get to know all stakeholders.** The GBSP team took the time to introduce the programme to various stakeholders, including agricultural unions, landowners' associations, municipalities, and other government departments active in the landscape, to garner their support for the project from the beginning. This facilitated some positive engagements with landowners and was found to be a valuable step that can bear fruit in the long term.
5. **Include independent veld management specialist in relevant engagements with landowners.** One of the most important lessons the GBSP learned was that, when engaging a landowner around the conditions required for their property to be declared as a protected area, it was invaluable to facilitate site assessments and information sessions in which both the landowners and the veld management specialist were present. This is however not always possible due to limited funding, and the GDARD BDS unit must thus apply the skills gained through these experiences with the GBSP to fulfil this role. In the case of the KPA, the specialist was able to articulate the positive links between management for conservation and agricultural management, and why some recommendations are crucial to implement for the efficacy of both goals. For example, many of the landowners the GBSP has engaged began with a steadfast aversion to utilising fire as a veld management tool, yet after the benefits were explained and workshopped with the landowners, they were so eager to see the effects that they went ahead and implemented a controlled burn without consultation with the GBSP. Fortunately, the fire was well controlled and represented a major, positive shift in the landowners' thinking around the management of their properties going forward.

6. It is also helpful to put landowners in touch with those who have entered into a biodiversity stewardship agreement elsewhere, to provide an **independent reference** for the landowner to better understand and see the benefits of the process.
7. Where external specialists are contracted to work alongside the GBSP and / or to render extension services to landowners, it is important to **clearly identify the roles of the different parties**, e.g. that of the specialist, of the EWT, the GDARD and the landowner. This results in less duplication of work, more efficient progress on tasks best suited to the relevant parties, and opportunities to learn from each other.
8. The **lack of resources** freely available to landowners and conservation agencies, such as legal expertise and other management resources, are a limiting factor. The funding for the GBSP and the involvement of the EWT made it much easier to procure and employ these resources. This highlights the key role NGOs can play in providing resources for the stewardship process itself, but also for necessary post-declaration support of landowners. Short funding cycles make NGO involvement limited and hinders long-term support of both the landowners and conservation authorities.
9. An oversight by both the EWT and the GDARD was that the MoU should have been for the long-term, not only for the duration of the GBSP, to allow for continued support of the project by the EWT. The EWT and the GDARD BDS unit are now drawing up a **longer-term strategic Memorandum of Understanding** to ensure that present and future BDS sites in Gauteng are well supported.



Figure 23: The GBSP won the 2017 Mail and Guardian's Greening the Future Award

While many of the delays, mistakes and obstacles were frustrating, the team firmly believes that they were integral to the project team's understanding of the issues inherent in the BDS process. Through extensive internal and external engagement, and taking the time to ensure that the whole team was aware of the issues and lack of resources or skills, the team was able to problem solve and work with relevant stakeholders that could provide appropriate guidance or assistance. While the GBSP did require an extension of the project due to obstacles and delays, these frustrations contributed to development of a more streamlined approach, and certainly a more knowledgeable team.

Despite the significant challenges relating to land issues in South Africa, particularly in the rapidly transforming Gauteng the GBSP managed to not only meet our target, but more than double it! The GBSP also won the *Mail and Guardian's* "Greening the Future" award under the "Community Conservation and Resilience" category, in 2017. The team attributes its success to the strong partnership between the GDARD and the EWT, by ensuring that engagement with landowners was transparent and respectful, that the unit maintained a constant presence in the landscape, and that they followed through on each and every promise and commitment made. The team has also collaborated extensively with other governmental departments and NGOs, opening doors for exciting future projects in the stewardship space in Gauteng.

It is highly recommended that the GDARD CLS to be better equipped to assist with the vetting of draft BDS legal contracts, and, where needed, to include the rendering of legal advice to landowners on the content

of the contracts. The GBSP attained its targets, and exceeded them, primarily through the assistance of one official in the CLS unit, who was the only official available to do so.

6.1.2. Lessons from other BDS initiatives

The GBSP team was in a fortunate position at the start of the project because many provinces had already implemented stewardship extensively and had over the years adapted and streamlined the BDS process. Experienced BDS implementers, through the National Biodiversity Stewardship Technical Working Group (BDSTWG) documented their lessons learned over the years, and how they addressed them, in a national guideline for implementing BDS, which was revised and updated in 2018. The guideline includes “red flags” throughout the document, which draw attention to possible issues that have been, and may be encountered and hinder the achievement of BDS objectives. Some of the best practise principles identified in the guideline were developed from these challenges and lessons learned. Where relevant, these principles have been highlighted throughout this document as well.

Some of these best practice principles identified in the guideline, and applicable to the GBSP, advise:

1. To use only the NEM: PAA for the declaration of PAs when using the biodiversity stewardship mechanism. To address the shortcomings of the provincial nature conservation ordinance, the GBSP has, and will only continue to utilize the NEM: PAA when declaring land portions belonging to private and communally owned land.
2. To keep the requirements of section 23 (2) of NEM: PAA in mind when identifying sites for biodiversity stewardship, as activity and development restrictions may apply to both nature reserves and protected environments (as per sections 49, 50 and 51 of NEMPAA), and these restrictions are controversial in rapidly urbanising areas such as Gauteng.
3. Use robust and updated conservation plans when identifying sites, and ensure that a full situational analysis of needs, challenges, and opportunities associated with a potential site is conducted. The GBSP was able to supplement the lack of updated biodiversity data in the province by using on the ground knowledge from the GDARD’s Scientific Services team to identify sites to consider for a NEM: PAA status.
4. Landowner engagement should be approached from a very considered perspective, tailored to each context. Engagement for example, will likely not be the same when approaching one versus multiple landowners. The BDS officer must gather as much information about landowners as possible prior to engagement, this will help in understanding the landowner’s management objectives, challenges they face, and needs that could be addressed through the implementation of BDS. When approaching a landowner, the BDS officer must always be honest and transparent, and not pressure a landowner – quick decisions can cause serious issues down the road.
5. Due diligence must be done regarding the property details, including the ownership structure, history, property boundaries (as identified as a lesson above), land claim status, and authorisation from the landowner must be obtained before site assessments are conducted. After a year of negotiations with one of the KPA landowners the GBSP team discovered that he owns another land portion directly adjacent to the KPA that can also be incorporated into the PA.
6. The PA category selected must be informed by biodiversity value, and reviewed by a review panel with consistent membership, to ensure standardised selection of categories.

Other documents, such as the *Business Case for Biodiversity Stewardship* (SANBI, 2017), highlight the economic value for provincial authorities of implementing BDS stewardship over alternative protected area expansion mechanisms. The report also provides recommendations for the authorities and the community of practice to implement going forward. A document entitled *Enhancing Biodiversity Stewardship in South Africa* (2018) was funded by the Table Mountain Fund to provide a stakeholder driven assessment of the challenges faced by BDS officers in the country, as well as opportunities that are available to improve implementation and make it more sustainable (Wright, 2018). The document mentions many of the points stated above, highlights the key role government and NGO partnerships play in the effective implementation of

BDS, and recommends the establishment of reference groups at a provincial level, partnerships that maximize contextual requirements, and integrated spatial planning. Wright (2018) also emphasises the need for greater political will and support, and inter-departmental collaboration for timeous and sustainable PA declarations. The document suggests that support can be enhanced through the effective communication of BDS successes and value, as well as its potential for integration into other large-scale government initiatives involving the wildlife economy, land reform, and natural resource management.

Box 9: Recommendations from the *Business Case for Biodiversity Stewardship* (SANBI, 2017)

- BDS units in conservation authorities should be sufficiently and sustainably resourced
 - NB:** detailed requirements for individual provinces need to be worked out
- Partnerships between BDS programmes and NGOs should continue to be strengthened
- Land reform BDS sites should receive additional support
- Suitable incentives to support uptake and effective management of BDS sites should be further developed
- BDS programmes should have suitable support from DEA and SANBI
- The community of practice for BDS should be strengthened and expanded upon.

7. The future of biodiversity stewardship in Gauteng



The GDARD BDS unit wasted no time in putting the institutional processes and knowledge built through the GBSP to work. This is highlighted by the additional sites that were independently pursued by the GDARD stewardship unit over the same period as the GBSP. These include the Crocodile River Reserve ($\pm 2,6200$), the Smuts Koppie Protected Environment (± 16 ha), the Tswaing Meteorite Crater ($\pm 2\ 000$ ha) and several proposed City of Johannesburg (CoJ) and City of Tshwane (CoT) sites. Going forward, the GDARD stewardship unit will thus continue to assist these sites through the NEM: PAA protected area declaration process.

To ensure the sustainability of biodiversity stewardship implementation in the province, and build on the

momentum of the GBSP's work achieved over the past four years, the BDS unit and the EWT's People in Conservation (PIC) unit have compiled a draft long-term, strategic MoU between the GDARD and the EWT. The MoU will aid in fostering a mutually beneficial partnership to promote the conservation of biodiversity in the Gauteng province, and promote collaboration between the parties on many different biodiversity conservation projects within the province, not only the implementation of biodiversity stewardship. This strategic partnership will allow the EWT to maintain its presence as an independent party on the Gauteng Biodiversity Stewardship Working Group (GBDSWG), to provide input where possible, ensure that parties are held accountable, and to continue to look for funding and resources for post-declaration support of the GBSP sites. The GBDSWG will be a platform from which GDARD can coordinate the standardized implementation of biodiversity stewardship in the province, and to embrace partnership opportunities with a wide range of stakeholders. The GDARD and the EWT will play a central role in this working group, as the lead organisations implementing biodiversity stewardship in the province, and the work of this group will be conducted under the auspices of the GBSP.

The GDARD biodiversity stewardship unit will continue to build on the tremendous work achieved by the GBSP, through servicing the stewardship sites declared as protected areas, and engaging landowners of additional sites that meet the requirements for declaration as protected areas. The GDARD stewardship unit will continue to engage the EWT for support and assistance, when necessary, with facilitating landowner engagements when approaching new sites, and in participating in the one-day annual audit of stewardship sites declared through the GBSP. The unit is of the opinion that this will instil confidence in the stewardship process and build on the strong foundations laid by the GBSP. It is also critical for effective conservation of biodiversity in the province that the units within the Biodiversity Management Directorate work towards common goals, as recommended in the evaluation of the GBSP. While the BDS unit will endeavour to support the other units, there is scope for them to effectively complement and promote the work of the BDS unit.

The contribution that other units within the GDARD can make to enhance implementation of BDS in Gauteng

An exciting outcome and opportunities as a result of the GBSP has been the steadfast and comprehensive support shown by the other units, the benefits they received, in turn, and how it is contributing to the effective implementation of their own mandates from the programme. As recommended by the evaluation of the GBSP, Wright (2018) and the Biodiversity Stewardship Guideline (2018), the GBSP encourages other departments to collaborate in the following ways:

- Resource Management (nature reserves) – need to be aware of the declared BDS PAs within their area of operation, can be engaged to provide historic engagement information with priority sites (where applicable) and can potentially be engaged to provide specialist input into PA management, when requested
- Environmental Empowerment Services (EES) – ideally their resources should be channelled, where possible, to protected areas, as this supports landowner's own efforts of responsible NRM, e.g. alien vegetation plant clearing, soil erosion, fire management etc.
- Corporate Legal Services – to ensure sustainability of their support to BDS, one more staff member must be tasked with rendering support to BDS as currently only one staff member supports the work of the BDS unit's work.

- Agriculture – a more concerted effort from the BDS unit is needed to raise awareness of the important link between biodiversity and agriculture. However, currently the department’s support is mostly focussed on small-scale farmers, who do not necessarily own land within high priority areas – thus a limitation of BDS – but it must be remembered that BDS must ALWAYS be biodiversity focussed. Agriculture’s Land Use Management unit must however be always be engaged when incompatible land uses are foreseen for a potential BDS site, e.g. in the case of a prospecting and / or mining application.
- Impact Management (EIAs) – this unit should be cognisant of what types of developments are considered within critical biodiversity areas (CBAs) and ecological support areas (ESAs) and in the buffer zone of existing PAs.
- Rural Development – The GDARD BDS unit remains involved in their existing forums to communicate on the work of the GBSP. It is important to raise awareness re: the ability of PAs in the rural landscape to assist in stimulating the rural economy, e.g. through job creation, skills diversification and skills development.
- Biodiversity Enforcement and Compliance Monitoring – it is important for this unit to be aware of any additional protected areas established through BDS to enforce the relevant environmental legislation accordingly. Biodiversity crime statistics can also be submitted by landowners of PAs to feed into the provincial database. In this way, hotspots can be identified to be prioritised for patrols. Such patrols have already been instituted for the Crocodile River Reserve, declared in October 2019 and situated in the City of Tshwane, where the poaching of wildlife and the removal of indigenous trees, including aloes, have increased over the past two years.
- Communications - the GDARD BDS unit need to maintain the presence of the GBSP’s work in the relevant printed publications in order to create awareness of the importance of PAs.
- Environmental Policy and Planning Coordination (EPPC) that spearheads, amongst others, the department’s climate change initiatives. The GDARD hosts an annual Climate Change Forum and the province’s draft 2017 Climate Change Adaptation Plan focuses on biodiversity and ecosystems and identifies protected area expansion as a mechanism to conserve natural resources.
- The department implements, amongst others, the following climate mitigation initiatives: awareness campaigns focussed on schools (including science and renewable energy exhibitions), A2B Green Transport Challenge, rain harvesting and waste reduction projects, restoration of ecosystems through the Expanded Public Works Program (EPWP), hosting the provincial Climate Change Indaba, etc. The GDARD BDS unit made contact with EPPC in order to become contribute to the climate change initiatives and has since presented on the GBSP’s work at the GDARD Climate Change Steering Committee meetings in March and December 2019 and March 2020⁹.

Going forward, the GDARD BDS would like to investigate opportunities for case studies in Gauteng of other area-based conservation measures such as conservation servitudes and elevate the important role that biodiversity offsets can play in the achievement of protected area expansion. Currently the technical skills are lacking within the GDARD to drive this process and the province is losing out on immense biodiversity opportunities, especially in a highly fragmented and developed province where the demand for more

⁹ The GDARD BDS unit has proposed that the provincial BDS Technical Working Group (WG) be a sub-committee of the GDARD Climate Change Steering Committee in order to provide it with sustainability and to keep the topic of the benefits of PAs relevant

development space are growing by the day. The GBSP should follow-up with the national department of Agriculture to promote a closer working relationship for the benefit of protected areas that also practice commercial agriculture. The GBSP should also work closer with the provincial Agricultural Rural Development Branches in the GDARD to promote collaboration, where focus areas overlap, to maximise available GDARD resources.

Capacity permitting, the BDS unit intends to engage some of the existing PNRs declared under older legislation, as highlighted on page 7, in order to investigate the feasibility of assisting these PAs to become NEM: PAA compliant. The process, known as regularisation, will assist the province to formalize and support a dynamic PA network that is monitored and reported on, and thus actively contributes towards a functional, climate resilient PA network for the province.

The GDARD BDS unit is grateful to the department for its support in implementing the BDS mechanism as a means of achieving protected area expansion and is confident that its implementation will go from strength to strength in the province to contribute to supporting rural livelihoods, support rural economies and promote the diversification of skills and capacity. The GBSP will also continue to seek opportunities to promote the work of the GBSP and lobby for support from the LRBSI and other stakeholders, through maintaining a presence at the relevant existing rural development platforms.



Figure 24: GDARD Scientific Services officials conducting site assessments in Devon

8. Acknowledgments

The GDARD and the EWT are very grateful to the WWF Nedbank Green Trust for its support of this project, providing the opportunity to establish the GBSP and catalyse the implementation of biodiversity stewardship in the province, and contribute to the conservation of ecologically irreplaceable areas in Gauteng, in the face of extreme economic pressures for the rapid development of natural open areas.

To our partners and the greater BDS community of practice, particularly members of the Biodiversity Stewardship Technical Working Group, we sincerely appreciate your support, knowledge sharing, and the many opportunities for capacity building that were freely provided.

The GDARD and EWT would like to express sincere gratitude towards the landowners of the Klipkraal Protected Area (KPA) and the Devon Protected Environment (DPE) for their unwavering determination to legally protect the unique biodiversity of the province for future generations.

In loving memory of Maurice Leonard, the first landowner in Gauteng to give biodiversity stewardship a chance. The GBSP is proud to have been a part of ensuring that his legacy, the Klipkraal Protected Area, that will, in collaboration with the Hollenbach Family Trust, be conserved into perpetuity.

9. References

- GDARD. (2018). *Gauteng Annual Environmental Sustainability Report 2018*. Johannesburg: Gauteng Department of Agriculture and Rural Development.
- SANBI. (2014). *Biodiversity Mainstreaming Toolbox for land-use planning and development in Gauteng*. ICLEI.
- SANBI. (2017). The Business Case for Biodiversity Stewardship. In *SANBI Factsheet Series*. Pretoria, South Africa.
- SANBI. (2018). *National Biodiversity Stewardship Guideline. A guideline produced for the Department of Environment, Forestry and Fisheries* (N. (SANBI) Wilson, P. (DEFF) Kershaw, D. (Birdlife S. A. Marnewick, & A. Purnell, Eds.). SANBI.
- Secretariat of the Convention on Biological Diversity. (2009). *Biodiversity, Development and Poverty Alleviation: Recognizing the Role of Biodiversity for Human Well-Being*. Retrieved from <http://www.cbd.int/doc/bioday/2010/idb-2010-booklet-en.pdf>
- SRK Consulting. (2009). *Gauteng Biodiversity Stewardship Programme: Draft Operations Manual*.
- Wright, D. R. (2018). *Enhancing Biodiversity Stewardship in South Africa*. Cape Town, South Africa: Table Mountain Fund.
- Wright, D. R., Stevens, C. M. D., & Marnewick, D. (2018). *PRIVATELY PROTECTED AREAS AND BIODIVERSITY STEWARDSHIP IN SOUTH AFRICA : CHALLENGES AND OPPORTUNITIES FOR IMPLEMENTATION AGENCIES*. 24(November), 45–62.

Appendix A: GBSP Brochure

Together, Moving Gauteng City Region Forward

Gauteng Biodiversity Stewardship Programme

Definition of Biodiversity Stewardship

"Stewardship" is the careful and responsible management of something entrusted to one's care. (www.merriam-webster.com/dictionary/stewardship)

Biodiversity stewardship is an approach to securing land in priority biodiversity areas by entering into agreements with private and communal landowners, municipalities and other government entities, led by conservation authorities. The objective of biodiversity stewardship is to conserve and manage high priority biodiversity areas through voluntary participation of landowners.

The Gauteng Department of Agriculture and Rural Development (GDARD), in partnership with the Endangered Wildlife Trust (EWT), has launched a dedicated Biodiversity Stewardship Programme which offers a range of conservation options. It framed as setting up positive, proactive partnerships with you, the landowner, to support and encourage you as you take on the responsibility of managing and protecting the natural assets that are in your care. Appropriate management support will be offered in respect of land that has been set aside for conservation. The EWT has over 40 years of conservation experience and has been instrumental in the implementation of biodiversity stewardship projects in Mpumalanga and KwaZulu-Natal.

Conservation | Cooperation | Communities

Why conservation of biodiversity is important in Gauteng

Gauteng is home to globally unique biodiversity. This is mostly attributed to the presence of the Grassland Biome which, in South Africa, is second only to the fynbos biome in terms of species richness. The Grassland Biome is a rich store of biodiversity assets, including 52 of South Africa's 122 Important Bird Areas, 15 of its endemic mammals, nearly 3,500 plant species and specialised habitats such as wetlands.

Grasslands play an important role in combatting climate change given their role in carbon sequestration and wetlands, drainage features and the ground water zone represent critical ecological infrastructure, supplying water to the region while maintaining water quality and ensuring flood regulation. Collectively these features contribute to the ecological integrity of the province, thus providing important ecological services to marginalised communities and protection from climate change impacts such as flooding.

South Africa is obligated to protect its temperate indigenous grasslands, firstly as a signatory to the Convention on Biological Diversity (signed June 2008), and more specifically as a signatory to the Hohhot Temperate Grasslands Declaration (signed February 2010). The 2004 National Spatial Biodiversity Assessment identified the Grassland Biome as one of the most severely under-protected ecosystems in South Africa. Currently, only just over 2% of South Africa's grassland biome is under formal conservation within protected areas and over 40% is irreversibly transformed. Any efforts to conserve threatened grassland areas, therefore, need to involve private landowners and communities, and the support of provincial stewardship efforts is crucial in this respect.

Whilst the province contains globally significant biodiversity, it is also the economic centre of South Africa and the rest of Africa. The pressures of increasing economic development have led to significant habitat loss and fragmentation and pose a significant threat to the province's remaining biodiversity. Already 56% of the natural habitat in Gauteng has been lost.

There are four options for Biodiversity Stewardship

1. Conservation Area
2. Biodiversity Agreement
3. Protected Environment
4. Nature Reserve

Figure 2: Different stewardship options

Why should you get involved?

- You can assist the province in achieving its conservation targets for threatened species and ecosystems
- Improved management of natural resources will secure the future for society, through improved water quality and production in catchments, and reduced erosion and flooding
- By becoming involved in conservation on your land, you will have access to support and advice from relevant experts
- Your income base can be diversified through ecotourism and conservation associated opportunities.

Frequently Asked Questions

Q: What do basic extension services include?
A: General advice, support and assistance, as well as input into the drafting of Environmental Management Plans.

Q: What do advanced extension services include?
A: Specific ecological advice and support in the implementation of the Environmental Management Plans.

Q: Who will bear the costs for drawing up the legal contracts?
A: GDARD will carry all costs for identified priority sites.

Q: What are the consequences for terminating the biodiversity agreement or withdrawing from the declaration process?
A: Anyone who withdraws and/or terminated the agreement will be liable for the total cost of GDARD's management interventions and legal costs up to the date of termination.

Q: Will the agreement lead to the removal or relocation of existing infrastructure from the identified site?
A: All existing infrastructure may remain if it is in accordance with the zoning plan identified in the Environmental Management Plan. GDARD's Scientific Services will provide expert advice on how to optimally utilise the area in a sustainable manner.

Q: Will GDARD have unlimited access to my property if it becomes a Nature Reserve?
A: Specific terms and conditions within the legal contracts will be negotiated with the landowner.

Q: Will the restrictions stipulated in the contract of the Nature Reserve portion apply to the new owner if the land is sold/changed hands?
A: A new Management Agreement and Environmental Management Plan will be negotiated with the new landowner but the same restrictions will apply.

Q: Can I be assured that GDARD can support the terms of the contract in the future?
A: As a party to the contract, GDARD is legally obliged to honour the agreement.

Q: Will the general public have unlimited access to my property?
A: Specific terms and conditions can be negotiated within the initial agreement regarding specific rules and access by the general public.

Q: Can livestock graze in a Protected Area?
A: Livestock grazing is permitted as long as it is informed by ecological stocking rates (as opposed to commercial stocking rates). In such an instance, grazing is used as a management tool, provided it is not in conflict with management objectives, as contained in the Environmental Management Plan.

Q: Does this process have an impact on a land claim?
A: The existence of a land claim needs to be verified with the relevant Land Claims Commissioner because the Restitution of Land Rights Act 22 of 1994 stipulates that land should not be declared a Protected Area until such claim has been resolved.

Q: Can only a portion of property be declared a Protected Area as opposed to the whole property?
A: Yes, the stewardship mechanism allows an entire cadastre or a portion of a cadastre to be declared a Protected Area.

Glossary

Conservation Authority: GDARD
Ecological Infrastructure: Naturally functioning ecosystems that generate and deliver valuable services to people. It includes, for example: healthy (mountain) catchments, rivers, wetlands, coastal dunes, and nodes and corridors of natural habitat, which together form a network of interconnected structural elements in the landscape. Ecological Infrastructure is the asset, or stock, from which a range of valuable services flow (SAB 2014).

Environmental Management Plan: The purpose of the management plan is to guide the development and management of the protected area in such a way that it meets the purpose for which it was declared, as required by Section 39(2) of the NEM: PAA.

NEM: PAA: National Environmental Protected Areas Act, nr. 57 of 2003.

Protected Area: A protected area is an area of land or sea that is formally protected by law (Section 9 of the NEM: PAA) and managed mainly for biodiversity conservation.

Disclaimer: This brochure is for information purposes only and shall not be binding on the GDARD or on the EWT.

OPTION	LEVEL 1 CONSERVATION AREA	LEVEL 2 BIODIVERSITY AGREEMENTS	LEVEL 3 PROTECTED ENVIRONMENT	LEVEL 4 NATURE RESERVES
Which option can be used on your land?	• Natural wetland with conservation systems on their land that can be used as a stepping stone to more security later on in the process.	• Suitable for land that is considered suitable for conservation purposes. • Requires a higher level of commitment to improving the biodiversity features. • Can be used as a stepping stone to more security later on.	• Suitable for single or multiple properties comprising contiguous conservation purposes. • Requires a higher level of commitment to conservation management, but allows for forms of extractive land use that are not detrimental to the environment. • Has legal status by virtue of a legal declaration by the provincial landowner and the conservation authority and a declaration as a Protected Environment under the NEM: PAA. Land and registered on the title deed. • Recommended minimum period of 10 years.	• Suitable for priority conservation areas, preferably adjacent to statutory self-contained ecosystems. • Requires the highest level of commitment to conservation management. • Has legal status by virtue of a legal declaration by the provincial landowner and the conservation authority and a declaration as a Nature Reserve under the NEM: PAA. Land and registered on the title deed.
Legal status / duration	• No legal status • Registration certificate provided by conservation authority	• Has legal status by virtue of a legal declaration by the provincial landowner and the conservation authority • Recommended minimum period of 10 years.	• Site must have been assessed to the standard of the provincial biodiversity features identified as important or as a priority for conservation targets of the province. • The landowner must be willing to submit to the declaration of the area as a Protected Environment, to enter into a contract with the appropriate conservation zoning	• The site must contain significant ecological value to receive this status. • The landowner must be willing to submit to the declaration of the area as a Nature Reserve under the NEM: PAA, and to manage the site according to the norms and standards gazetted for the management of Nature Reserves. • Land use limitations are those mandatory conditions legislated on the title deed.
Qualifying criteria?	• Any landowner willing to conserve the natural systems on their land that can contribute to conservation targets.	• Site must have been assessed to the standard of the provincial biodiversity features identified as important or as a priority for conservation targets of the province.	• The landowner must be willing to submit to the declaration of the area as a Protected Environment, to enter into a contract with the appropriate conservation zoning	• The site must contain significant ecological value to receive this status. • The landowner must be willing to submit to the declaration of the area as a Nature Reserve under the NEM: PAA, and to manage the site according to the norms and standards gazetted for the management of Nature Reserves. • Land use limitations are those mandatory conditions legislated on the title deed.
Benefits to the landowners	• Landowner is empowered by the current condition and restoration activities are implemented where possible. • Advice and support through basic extension services. • Guidance with management plans and farm maps.	• Land must be managed according to an approved management plan that is negotiated between the landowner and conservation authority. • Advice and support through advanced extension services. • Guidance with management plans and farm maps. • Conservation authorities will be able to lobby for incentives on behalf of the contracted landowners.	• Advice and support through advanced extension services. • Guidance with management plans and farm maps. • Conservation authorities will be able to lobby for incentives on behalf of the contracted landowners.	• Substantial assistance through habitat management through advanced extension services. • Increased recognition and marketing opportunities. • Conservation authorities will be able to lobby for incentives on behalf of the contracted landowners.

Appendix B: GBSP Review Panel: Terms of Reference

1. Background

Gauteng has some areas of irreplaceable conservation significance which are protected by national legislation e.g. the National Environmental Management: Protected Areas Act, 57 of 2003 (the NEM: PAA). Examples include provincially managed nature reserves such as the Suikerbosrand, Leeuwnfontein and Roodeplaat Nature Reserves. The management of these reserves fall under the Biodiversity Management Directorate in the GDARD.

The total area under conservation in the province amounts to approximately 4% of the land surface area of the province. However, this figure is not a true reflection of conservation management on the ground as many of the private nature reserves' land use have been irreversibly converted or the land is not effectively managed for conservation, therefore the percentage under conservation might be much lower. The Gauteng province lags with regards to percentage of land under conservation in relation to international conservation trends as well as national and provincial protected area targets.

Biodiversity Stewardship was established in Gauteng following trends in other provinces to legally conserve threatened habitats on private or communal land and to improve landowners' abilities to better manage their natural areas and natural resources. This approach enables conservation authorities to ensure the legal protection of threatened habitats and at the same time increase the area under conservation in the protected area network, without having to own or acquire the land in order to meet protected area expansion targets. The National Protected Area Expansion Strategy, 2009 (the NPAES) identifies 20-year (2028) and 5-year (2012/13) protected area expansion targets for South Africa, which have been translated into a finer scale on a provincial level with the development of the Gauteng Protected Area Expansion Strategy (the GPAES), 2013.

The GPAES identifies a 20-year target of 166,800 ha and a five-year target of 30,800ha (by 2019) for the Gauteng province.

Outside of formally protected conservation areas managed by the GDARD there are also a significant number of land parcels which contain species and habitats of conservation significance.

The GPAES also identifies several mechanisms for achieving protected area expansion targets, such as biodiversity stewardship, biodiversity offsets, land acquisition, green servitudes and payment for ecosystem services. However, as the province does not have the resources to acquire this land, it has decided to pursue the biodiversity stewardship approach.

Biodiversity stewardship can be defined as:

"The wise use, management and protection of land by landowners in order to ensure that natural systems are maintained and enhanced for present and future generations"

Biodiversity Stewardship is recognised as the most cost-effective of all the mechanisms for expanding the area under legal protection and is in line with the policies of national and provincial government. It provides a mechanism for provincial conservation authorities to engage landowners with high biodiversity land to have it legally declared under the NEM: PAA and in the process increase landowners' technical knowledge of natural resource management. By doing so, provincial conservation authorities achieve and contribute to protected area expansion targets without having to purchase land or having the burden of managing the land.

Protected Areas in the country are declared under the NEMA: PAA; which establishes the national platform for biodiversity stewardship by creating a legal framework for cooperation between the state and landowners for the declaration and management of protected areas. The Act aims to provide a representative network of protected areas on state, private and communal land, and to promote the sustainable utilisation of protected areas. The Act encourages local community participation in the management of protected areas and balances the relationship between the environment, biodiversity, human settlement and economic development.

The implementation procedure of GDARD's Biodiversity Stewardship programme begins with site identification, where sites are identified and prioritised based on a number of criteria, including conservation value and landowner willingness. Contact with the landowner is then initiated to determine willingness to commit to the project. An ecological site assessment is then completed, consisting of both a desktop assessment and a field assessment. This report of the site assessment is then reviewed by the GDARD's Biodiversity Stewardship Review Panel ("the Review Panel"), and the protected area category for which the site qualifies is determined. Landowner negotiations then commence, and management objectives for the property are determined and a management plan is drafted. Technical advice and extension support is given to the landowner by the Biodiversity Stewardship unit and identified partners, and the site is monitored and the management plan audited annually.

The establishment of a Review Panel is necessary to add experience and guidance to the technical and on-the-ground decisions and processes that need to take place throughout the biodiversity stewardship process or other mechanisms of protected area expansion.

2. General Duties of Participants to the Review Panel

The function of the Review Panel is primarily to determine the qualifying protected area category for sites, as catered for in the NEM: PAA. It will also oversee the continual technical update of the ecological site assessment form, make decisions concerning the selection of sites and the content of management plans, and support the complete stewardship process where necessary, including internal GDARD processes. The envisaged responsibilities of the Review Panel include:

- Reviewing of sites based on the results of the site assessment and determine at which protected area category sites qualify for participation in the programme.
- Providing input on the management objectives and management plans for individual sites.
- Supporting the identification of specific conditions that should be applied to particular sites.
- Supporting the identification of site-level incentives.
- Refining the site prioritisation procedure.
- Refining and updating the site assessment form.
- Refining the framework for site qualification.
- Refining the management plan template.
- Report the decisions taken to Senior Management, and make recommendations for a certain course of action to be taken.

3. Specific Roles and Responsibilities

Given the implementation procedure, the following members will have permanent representatives on the Review Panel.

3.1 GDARD Biodiversity Stewardship Unit (5-7 members)

3.1.1 Chair the Review Panel meetings

- 3.1.2 Prepare and present the site assessment results to the Review Panel
- 3.1.3 Provide secretariat support to the Review Panel meetings by compiling minutes of the Review Panel meetings and distributing it
- 3.1.4 Compile a summary of the final decision taken to be presented to the Director: Biodiversity Management for approval.

3.2 GDARD Scientific Services (number of members depend on the number of specialists that were involved with the Ecological Site Assessment)

- 3.2.1 Supply ecological decision support in determining the most appropriate protected area category under NEM: PAA
- 3.2.2 Support the ecological site assessment process
- 3.2.3 Supply ecological decision support for the compilation of management plans
- 3.2.4 Support species identification
- 3.2.5 Identify possibility of research projects for students
- 3.2.6 Provide strategic input with regards to the design of the protected area network
- 3.2.7 Provide technical input into the stewardship process (e.g. management plans, site assessments).

3.3 GDARD Natural Resource Management: North and South

- 3.3.1 Provide strategic input with regards to for example, historic interactions with landowners, site urgency, natural resource management issues in the broader area and identify existing and potential relationship forging opportunities between landowners and the nearest GDARD protected area;
- 3.3.2 Provide strategic input with regards to the design of the protected area network.

3.4 Implementing Partner (if applicable)

- 3.4.1 Provide technical input in the site selection process
- 3.4.2 Provide support in the ecological site assessment phase
- 3.4.3 Provide advice for the compilation of management plans
- 3.4.4 Identify civil society groups to support the Stewardship process.

The following members will have ad-hoc representation on the Review Panel and will attend the Review Panel meetings when their relevant input is required.

3.5 GDARD Corporate Legal Services

- 3.5.1 Develop and ensure that legal contracts are compliant with the GDARD and the NEM: PAA standards
- 3.5.2 Responsible for any other legal issues and interpretations.

4. Membership/Representation of the Review Panel

The following members will have permanent representatives (except where stipulated otherwise) on the Review Panel and a quorum is reached when all members indicated in bold below are present:

- 4.1.1 GDARD Biodiversity Stewardship at Control Biodiversity Officer level / delegated official
- 4.1.2 GDARD Biodiversity Stewardship at officers level
- 4.1.3 GDARD Scientific Manager (at Deputy Director level or a representative)
- 4.1.4 GDARD Regional Ecologist, or representative, from Scientific Services
- 4.1.5 GDARD Conservation Planner or representative
- 4.1.6 GDARD Scientist (Taxon Specialist) (as needed)
- 4.1.7 GDARD Scientific Technicians (as needed)
- 4.1.8 GDARD Corporate Legal Services (as needed)
- 4.1.9 GDARD Natural Resource Management at Deputy Director level (North or South), or a representative

4.1.10 The Implementing Partner duly authorised representative (if applicable).

5. Meetings

The Review Panel will meet on an *ad hoc* basis, but at least quarterly and all effort will be made to group more than one site together for review.

The venue for the meeting will be rotated between any GDARD offices and those offices of the Implementing Partner (if applicable).

6. Decisions of the Review Panel

All decisions will be taken on a consensus basis, jointly at the Review Panel meetings. Decisions of the meetings will be documented, and minutes circulated within two weeks after the meeting. Where consensus cannot be reached, a formal decision will be taken by simple majority. In the event of a tie, the Chairperson will have the casting vote.

Date: 22 February 2017

Appendix C: Site assessment results

Table 5: Summary of site assessments conducted on GBSP priority sites

Site	KPA	Klipplaatdrift	DPE	Kranspoort
Date assessed	12–13 April 2016; 30 May 2017 ¹⁰	14 & 15 June 2016	27–28 March 2017; 20 March 2018	22– 23 March & 10 October 2017
Size (hectares)	2,656	1,967	7,979	2,204
Contribution to GBSP project target	53.13%	Not published	159.59%	Not published
Contribution to GDARD PAE targets				
5-year PAE target (30 800 ha):	8.62%	6.39%	25.91%	7%
20-year PAE target (166 800 ha):	1.59%	1.18%	4.79%	1.3%
Contribution to GDARD Threatened Vegetation Targets				
Threatened Vegetation Type	Andesite Mountain Bushveld (LC)	Central Sandy Bushveld (VU)	Soweto Highveld Grassland (VU)	Loskop Mountain Bushveld (LC)
5-year target	1,180.49%	25.28%	38.24%	N/A
20-year target	294.58%	6.32%	N/A	N/A
Threatened Vegetation Type	Soweto Highveld Grassland (VU).	Loskop Mountain Bushveld (LC)	Eastern Temperate Freshwater Wetlands (LT)	Rand Highveld Grassland (EN)
5-year target	0.00%	N/A	37.46%	15%
20-year target	0.00%	N/A	N/A	3.7%
Threatened Ecosystem (listed)	None	None	Boesmanspruit Highveld Grassland (CE) & Soweto Highveld Grassland (VU)	Kranspoort Mountain Bushveld (EN) Rand Highveld Grassland (VU)
Threatened species conserved through the declaration:				
Threatened plants	<i>Khadia beswickii</i> (VU)	Poison Bulb <i>Boophane disticha</i> (LC)	<i>Gladilus robertsoniae</i> (NT) and <i>Habenaria bicolor</i> (NT)	Critically Endangered cycad species

¹⁰ The property neighbouring the original Klipkraal site

Site	KPA	Klipplaatdrift	DPE	Kranspoort
Threatened birds	Secretarybird (VU)	Martial Eagle (EN) and White-bellied Korhaan (VU)	African Marsh-Harrier (EN), African Grass-Owl (VU), Secretarybird (VU), Blue Crane (NT), Black-winged Pratincole (NT), Black Harrier (EN) and the Greater Flamingo, Lesser Flamingo (NT), White-bellied Korhaan (NT), Yellow-billed Stork (EN), CE), Maccoa Duck (NT)	Blue Crane (VU) Verreaux's Eagle (VU) Lanner Falcon (VU) Southern Bald Ibis (VU) 13 other threatened bird species were recorded at a pentad scale.
Threatened Mammals	Black-footed Cat (VU) and the Southern Mountain Reedbuck (EN).		African Clawless Otter (NT) and Southern African Hedgehog (NT)	Spotted-necked otter (NT), Cape clawless otter (NT) sighting reports received. Leopard (VU) Oribi (EN)
Review Panel meetings				
Date of meeting	19 July 2016 31 August 2017 ²	16 September 2016	14 July 2017 & 23 April 2019	14 July 2017
Assessment score	16 10 ¹¹	10	15	16
Category recommended	Nature Reserve Protected Environment	Protected Environment	Protected Environment (qualified for NR but priority agricultural land)	Nature Reserve (declined)

¹¹ Neighbouring original Klipkraal site

Appendix D: Fact sheet on wetland management for farmers

WETLANDS – why are they important to you as a farmer?

What is a wetland?

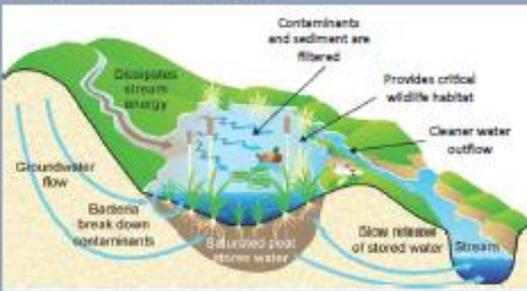
- Wetlands are the links between land and water. They are transition zones where the flow of water, the cycling of nutrients, and the energy of the sun meet to produce a unique ecosystem.
- Wetlands are not necessarily wet year-round but may only be so in the rainy season. These are called seasonal wetlands.




GAUTENG BIODIVERSITY STEWARDSHIP PROGRAMME
Cooperation | Cooperation | Communities




How do wetlands work?



What can wetlands do for you?

Clean water
Wetlands are essential for protecting our freshwater resources and are nature's water filters. The plants, animals and bacteria found in wetlands help clean your water long before it reaches you.

Reduce flooding
During wet periods, wetlands absorb and store excess water. They act as giant sponges, soaking up water, thereby reducing the risk and severity of flooding.

Minimise the effects of drought
During the dry season, wetlands help to lessen the likelihood and consequences of drought by slowly releasing the water they have stored back into surrounding areas.

Keep water bodies clear
Wetlands absorb and use excess nutrients, reducing the growth of algae and aquatic weeds. Uncontrolled algal growth can make water unsuitable and unsafe for livestock to drink, and aquatic weeds can block waterways and pumps.

Wetlands and wildlife
Wetlands provide habitats for numerous endangered or protected species of plants and animals including:

- African Grass Owl (*Tyto capensis*) which is listed as Vulnerable (VU) in South Africa.
- Giant Bullfrog (*Pyxicophalus odsparsus*) which is listed as Near Threatened (NT) in South Africa.
- Blue Crane (*Anthropoides paradiseus*) which is listed as Near Threatened (NT) in South Africa and Vulnerable (VU) globally.
- Grey Crowned Crane (*Balaenica regulorum*) which is listed as Endangered (EN) in South Africa and globally.

Applicable legislation governing wetlands

- National Environmental Management Act (NEMA) (Act 107 of 1998) and the associated Regulations as amended in December 2014;
- National Water Act (NWA) (Act No. 36 of 1998) allows for the protection of water resources, which includes wetlands.
- Conservation of Agricultural Resources Act, 1983 (Act No 43 of 1983) (CARA). Regulations 15 and 16 under this Act concern alien invasive and problem plants;
- The Biodiversity Act (Act No 10 of 2004) (NEM:BA) has a chapter dealing with alien species and invasive species.

What can you do to protect wetlands?

It is important to protect our wetlands from deterioration as the services they provide are impossible, or if possible, are far too expensive to replace. Ways in which we can reduce impacts on wetlands include the following:

- ✓ Wetlands should only be burned every two to three years, preferably in late winter.
- ✗ Do not plant crops in wetland areas, or within 32 m of a wetland, as legally required. A minimum of 30 m is recommended where possible.
- ✓ Increase the buffer zone (area between wetland and development/agriculture) to at least 32 m, but preferably 30 m.
- ✗ Do not drive through wetlands.
- ✓ Practice rotational grazing and good veld management practises so as not to over-graze wetlands.
- ✗ Do not construct dams in wetlands.
- ✓ Limit the abstraction from wetlands and boreholes.
- ✗ Avoid digging trenches or canals near or within wetlands. These can lead to the rapid draining and desiccation of wetlands.
- ✓ Where erosion is taking place, take measures to increase stabilization (e.g. placing of gabions) and rehabilitate the damage.

We are here to help

You are not alone, the following organisations are there to help:
 Endangered Wildlife Trust 011 372 3800 | www.ewt.org.za
 Working for Wetlands 086 111 2468 | www.environment.gov.za/projectprogrammes/wfw
 GGARD 011 240 2500 | Website: www.gauteng.gov.za/government/departments/agriculture-and-rural-development
 Working for Water (WfW) 086 111 2468 | www.environment.gov.za/projectprogrammes/wfw
 The Biodiversity Company info@thebiodiversitycompany.com







Figure 25: Wetland Factsheet developed by the GBSP team

Appendix E: Intent to Declare notice for Klipkraal Protected Area

GENERAL NOTICE

NOTICE NO OF 2019

GAUTENG PROVINCE

DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT

NOTICE IN TERMS OF SECTION 33(1) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT:
PROTECTED AREAS ACT, NR. 57 of 2003

INTENTION TO DECLARE NATURE RESERVE AND A PROTECTED ENVIRONMENT

I, Lebogang Maile, the Member of the Executive Council (MEC) responsible for Economic Development, Environment, Agriculture and Rural Development in the Gauteng Province, in terms of section 33(1) of the National Environmental Management: Protected Areas Act, 2003 (No 57 of 2003), do hereby publish:

- (1) the intention to declare the Klipkraal Nature Reserve under section 23 of the National Environmental Management: Protected Areas, Act nr. 57 of 2003, as amended ("the Act");
- (2) the intention to declare the Klipkraal Protected Environment under section 28 of the Act; and
- (3) the intention to declare the Klipkraal Hollenbach Protected Environment under section 28 of the Act.
- (4) The three proposed protected areas borders onto each other directly and will collectively be known as the Klipkraal Protected Area.

The proposed nature reserve and the proposed protected environments are located on the properties as indicated in Schedules 1, 2 and 3 below.

Members of the public are hereby invited to submit written representations on, or objections to, the notice on the proposed declarations of the above-mentioned Nature Reserve and the Protected Environments, within 60 days of its publication in the Provincial Gazette.

Written submissions may be submitted as follows (for the attention of Ms. Christina Seegers, Control Biodiversity Officer: Biodiversity Stewardship):

- (1) Hand Delivery: Gauteng Department of Agriculture and Rural Development, 56 Eloff Street, Umnotho House, Johannesburg, 2000; or
- (2) E-mail: christina.seegers@gauteng.gov.za

LEBOGANG MAILE

MEC: ECONOMIC DEVELOPMENT, ENVIRONMENT, AGRICULTURE AND RURAL DEVELOPMENT

Schedule 1

The proposed Klipkraal Nature Reserve, situated in the area of jurisdiction of the Midvaal Local Municipality, consisting of the following land portions:		
Property Description as per title deed	Size (hectares)	Title Deed Number
REMAINING EXTENT OF PORTION 2 (CLOSEBURN) OF THE FARM HARTBEESFONTEIN 473 REGISTRATION DIVISION I.R., TRANSVAAL	770.8788	T 1300/94
REMAINING EXTENT OF PORTION 29 (A PORTION OF PORTION 3) OF THE FARM STRYFONTEIN 477 REGISTRATION DIVISION I.R., PROVINCE GAUTENG	171.3064	T 112428/02
TOTAL	942.1852	

Schedule 2

The proposed Klipkraal Protected Environment, situated in the area of jurisdiction of the Midvaal Local Municipality, consisting of the following land portions:		
Property Description as per the title deed	Size (hectares)	Title Deed Number
PORTION 7 (A PORTION OF PORTION 1) OF THE FARM RIETFONTEIN 461 REGISTRATION DIVISION I.R., TRANSVAAL	342.6128	T 17448/95
REMAINING EXTENT OF PORTION 14 OF THE FARM RIETFONTEIN 461 REGISTRATION DIVISION I.R., TRANSVAAL	637.6098	T 73233/93
REMAINING EXTENT OF PORTION 3 (CALLED PROTEA) OF THE FARM STRYFONTEIN 477 REGISTRATION DIVISION I.R., TRANSVAAL	218.2496	T 17448/95
TOTAL	1 198.4722	

Schedule 3

The proposed Klipkraal Hollenbach Protected Environment, situated in the area of jurisdiction of the Midvaal Local Municipality, consisting of the following land portions:		
Property Description as per the title deed	Size (hectares)	Title Deed Number
REMAINING EXTENT OF PORTION 3 OF THE FARM KAFFERSKRAAL 464 REGISTRATION DIVISION I.R., PROVINCE OF GAUTENG	515.7651	T 102394/2015

Appendix F: Intent to Declare notice for Devon Protected Environment

GENERAL NOTICE

NOTICE NO OF 2019

GAUTENG PROVINCE

DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT

NOTICE IN TERMS OF SECTION 33(1) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT, NR. 57 of 2003

INTENTION TO DECLARE A PROTECTED ENVIRONMENT

I, Lebogang Maile, the Member of the Executive Council (MEC) responsible for Economic Development, Environment, Agriculture and Rural Development in the Gauteng Province, in terms of section 33(1) of the National Environmental Management: Protected Areas Act, 2003 (No 57 of 2003), do hereby publish the intention to declare the Devon Protected Environment under section 28 of the National Environmental Management: Protected Areas, Act nr. 57 of 2003, as amended ("the Act").

The proposed protected environment is located on the properties as indicated in the Schedule below.

Members of the public are hereby invited to submit written representations on, or objections to, the notice on the proposed declarations of the above-mentioned Protected Environment, within 60 days of its publication in the Provincial Gazette.

Written submissions may be submitted as follows (for the attention of Ms. Christina Seegers, Control Biodiversity Officer: Biodiversity Stewardship):

- (3) Hand Delivery: Gauteng Department of Agriculture and Rural Development, 56 Eloff Street, Umnotho House, Johannesburg, 2000; or
- (4) E-mail: christina.seegers@gauteng.gov.za

LEBOGANG MAILE

MEC: ECONOMIC DEVELOPMENT, ENVIRONMENT, AGRICULTURE AND RURAL DEVELOPMENT

SCHEDULE

The proposed Devon Protected Environment, situated in the area of jurisdiction of the Lesedi Local Municipality, consisting of the following land portions:

Farm name	Farm portions	Title Deed number	Hectares as per title deed
Palmietfontein 316-IR	R/4 (a portion of portion 1)	T4825/1981	268.0417
Palmietfontein 316-IR	7 (a portion of portion 6)	T4825/1981	54.4954
Palmietfontein 316-IR	8 (a portion of portion 4)	T4825/1981	31.1578
Palmietfontein 316-IR	31 (a portion of portion 3)	T4825/1981	85.6532
Palmietfontein 316-IR	22	T62070/95	362.0946
Wonderfontein 342-IR		T55732/83	214.9346
Palmietfontein 316-IR	R/15 (a portion of portion 1)	T04/172523	113.4733
Palmietfontein 316-IR	16 (a portion of portion 1)	T04/172523	114.3285
Palmietfontein 316-IR	R/1	T04/172523	228.6569
Groenkuil 318-IR	R/	T1691147	294.8290
Honigfontein 339-IR	1	T121735/2006	1107.1673
Honigfontein 339-IR	4	T121735/2006	171.3064
Honigfontein 339-IR	10	T1691147	128.4798
Palmietfontein 337-IR	28	T1484095	315.2009
Wolvenbank 338-IR	2	T38529/1967	368.5158
Wolvenbank 338-IR	5	T38529/1967	368.381
Honigfontein 339-IR	6 (a portion of portion 1)	T51819/1980	104.4969
Wolvenbank 338-IR	1	T22741/83	368.5158
Wolvenbank 338-IR	R/	T02274409	398.4258
Palmietfontein 337-IR	8 (a portion of portion 3)	T47122/91	642.3990
Palmietfontein 337-IR	9 (a portion of portion 3)	T000062856/2009	142.5557
Palmietfontein 337-IR	10 (a portion of portion 3)	T000062856/2009	142.5557
Palmietfontein 337-IR	11 (a portion of portion 3)	T36682/83	142.5557
Palmietfontein 337-IR	12 (a portion of portion 3)	T84249/1990	642.3990
Palmietfontein 337-IR	22 (a portion of portion 18)	T000023957/2014	83.9401
Klippan 324-IR	3	T000084954/2015	542.4964
Klippan 324-IR	4	T36682/83	542.4964
TOTAL			7 979.55

Appendix G: Declaration notice for the DPE, published in the government gazette



GAUTENG PROVINCE
AGRICULTURE AND RURAL DEVELOPMENT
REPUBLIC OF SOUTH AFRICA



GAUTENG BIODIVERSITY
STEWARDSHIP PROGRAMME
Gauteng Biodiversity Stewardship Programme



ENDANGERED WILDLIFE TRUST
Protecting forever, together.

174 No. 302

PROVINCIAL GAZETTE, 2 OKTOBER 2019

PROVINSIALE KOERANT, 2 OKTOBER 2019

No. 302 175

GAUTENG PROVINCE

DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT

NOTICE IN TERMS OF SECTION 28 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT 57 OF 2003

DECLARATION OF THE DEVON PROTECTED ENVIRONMENT

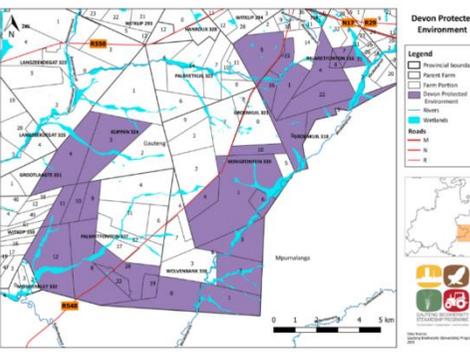
I, Kgosisentso Ramokgopa, the Member of the Executive Council (MEC) responsible for Economic Development, Agriculture and Environment in the Gauteng Province, in terms of section 28 of the National Environmental Management: Protected Areas Act 57 of 2003, do hereby declare the **Devon Protected Environment**, situated within the area of jurisdiction of the Lesedi Local Municipality.

The **Devon Protected Environment** is located on the properties as described in the Schedule hereto.



DR. KGOSIENTSO RAMOKGOPA

MEC: ECONOMIC DEVELOPMENT, AGRICULTURE AND ENVIRONMENT



Devon Protected Environment

Legend

- Provincial boundary
- Parent farm
- Farm Portion
- Devon Protected Environment
- River
- Wetland
- Roads
- M
- R

Scale: 0 1 2 3 4 5 km

T 19: 02020; S: 300 2002000; E: 300 01000; W: www.gpwonline.co.za

SCHEDULE

DESCRIPTION OF THE DEVON PROTECTED ENVIRONMENT WITH REFERENCE TO TITLE DEEDS

Property Description as per the Title Deed	Size (hectares)	Title Deed Number
PALMIETFONTEIN 316-IR R/4 (A PORTION OF PORTION 1)	268.0417	T4825/1981
PALMIETFONTEIN 316-IR 7 (A PORTION OF PORTION 6)	54.4954	T4825/1981
PALMIETFONTEIN 316-IR 8 (A PORTION OF PORTION 4)	31.1578	T4825/1981
PALMIETFONTEIN 316-IR 31 (A PORTION OF PORTION 3)	85.6532	T4825/1981
PALMIETFONTEIN 316-IR 22	362.0846	T62070/95
WONDERFONTEIN 342-IR	214.9346	T65732/83
PALMIETFONTEIN 316-IR R/15 (A PORTION OF PORTION 1)	113.4733	T04/172523
PALMIETFONTEIN 316-IR 16 (A PORTION OF PORTION 1)	114.3285	T04/172523
PALMIETFONTEIN 316-IR R/1	228.6569	T04/172523
GROENKUIL 318-IR R/	294.8290	T1891147
HONIGFONTEIN 339-IR 1	1107.1673	T121735/2006
HONIGFONTEIN 339-IR 4	171.3064	T121735/2006
HONIGFONTEIN 339-IR 10	128.4798	T1891147
PALMIETFONTEIN 337-IR 28	315.2009	T1484095
WOLVENBANK 338-IR 2	368.5158	T38529/1967
WOLVENBANK 338-IR 5	368.381	T38529/1967
HONIGFONTEIN 339-IR 6 (A PORTION OF PORTION 1)	104.4969	T51819/1980
WOLVENBANK 338-IR 1	368.5158	T22741/83
WOLVENBANK 338-IR R/	398.4258	T02274409
PALMIETFONTEIN 337-IR 8 (A PORTION OF PORTION 3)	642.3990	T47122/91
PALMIETFONTEIN 337-IR 9 (A PORTION OF PORTION 3)	142.5557	T000062858/2009
PALMIETFONTEIN 337-IR 10 (A PORTION OF PORTION 3)	142.5557	T000062858/2009
PALMIETFONTEIN 337-IR 11 (A PORTION OF PORTION 3)	142.5557	T36682/83
PALMIETFONTEIN 337-IR 12 (A PORTION OF PORTION 3)	642.3990	T84249/1990
PALMIETFONTEIN 337-IR 22 (A PORTION OF PORTION 18)	83.9401	T000023957/2014
KLIPPAN 324-IR 3	542.4964	T000084954/2015
KLIPPAN 324-IR 4	542.4964	T36682/83
TOTAL	7 979.55	

T 19: 02020; S: 300 2002000; E: 300 01000; W: www.gpwonline.co.za



The quality of water available for use in the area is poor. www.gpwonline.co.za

Appendix H: TORs for the Gauteng Biodiversity Stewardship Working Group

1. BACKGROUND TO BIODIVERSITY STEWARDSHIP IN SOUTH AFRICA

Biodiversity stewardship (BDS) is a cross-cutting approach to protected area expansion (PAE), through which landowners voluntarily enter into legal agreements with nature conservation authorities to formally conserve their land. Protected Areas established through BDS contributes to PAE targets, the legal protection of threatened ecosystems, sustainable natural resource management (NRM), job creation and skills transfer, all of which has the potential to contribute to the rural economy. BDS requires a collaborative approach across all spheres of government, civil society and non-governmental organizations (NGOs).

The BDS mechanism is supported nationally by the Department of Forestry, and Fisheries and Environment, (DFFE), previously referred to as the Department of Environment Affairs (DEA), and the South African National Biodiversity Institute (SANBI) and its implementation is guided by the National Protected Area Expansion Strategy (NPAES).

Protected areas established through the BDS mechanism recognizes landowners with land of high biodiversity value as the custodians of their land, as per the National Environmental Management: Protected Areas Act, 57 of 2003 (NEM: PAA). Under the NEM: PAA, provincial nature conservation agencies and/or departments sign legal contracts with landowners, committing to support them with technical expertise to best manage their properties as NEM: PAA compliant protected areas, in accordance with agreed upon Protected Area Management Plans. This in turn has the potential to unlock funding from external funders and/or government departments to provide these landowners with NRM support, with the insurance that their investments will be protected, supported, and monitored through the long-term involvement of the provincial nature conservation agency/department. Different BDS categories exist with some that do not require a NEM: PAA declaration, which is more suited for example, to communally owned and / or land reform sites with high biodiversity value. Such an agreement has the potential to offer an alternative land use to conventional agriculture in marginal agricultural potential areas, and / or diversify existing land use in areas unsuitable for agriculture.

A study conducted 2015 - 2017 by the DFFE and the SANBI, entitled “The Business Case for Biodiversity Stewardship”, found that BDS is the most cost-effective means of protected area expansion when compared to, for example, the purchasing of land by conservation authorities to establish protected areas. It eases the burden on already resource strained government conservation departments and/or agencies of having to manage a protected area.

BDS is thus a collaborative approach that has the ability, in addition to its evident advantages mentioned in paragraph one, to assist with the establishment of a climate-resilient protected area network, which with its associated responsible NRM practices and ecosystems goods and services, are all essential to the wellbeing of the citizens of Gauteng.

The National Development Plan (NDP) for South Africa has six pillars representing broad objectives to eliminate poverty and reduce inequality by 2030. The NDP identifies the need to sustain the country’s ecosystems and ensure sustainable use of natural resources, to which the NPAES (updated version 2016 to be released), and therefore BDS contributes significantly. According to the SANBI (2018), 68% of all land contributing to the national protected area expansion targets between 2008 and 2016 was as a result of BDS agreements.

The implementation of BDS is a national, standardized approach that is dynamic and continuously updated through the involvement of a multi-stakeholder national technical working group, which ensures that its implementation is scientifically defensible and legally sound.

2. BACKGROUND TO BIODIVERSITY STEWARDSHIP IN GAUTENG

The Gauteng Department of Agriculture and Rural Development (GDARD) and the SANBI's Grasslands Programme developed the founding documents for the implementation of the BDS mechanism in the Gauteng province in 2008/2009. This included an Operations Manual and the GDARD approved Gauteng Protected Area Expansion Strategy (GPAES) in 2011. The GPAES provides the framework for protected area expansion in Gauteng over the next 20 years, outlining key strategies for protected area expansion, and identifying spatial priorities and protected area targets.

The GDARD and the Endangered Wildlife Trust (EWT), entered into a partnership in 2015, with funding from the WWF Nedbank Green Trust, to establish the Gauteng Biodiversity Stewardship Programme (GBSP). The GBSP served as a catalyst for the implementation of the BDS mechanism through institutionalising the necessary administrative processes within the GDARD and other stakeholders, to facilitate implementation of BDS. The GBSP also facilitated knowledge and skills capacity building amongst internal and external stakeholders.

The programme facilitated the declaration of 10,635 ha as protected areas in October 2019. As a result of skills gained through the GBSP, the GDARD biodiversity stewardship unit was able to facilitate the declaration of a further 2,621 ha, bringing the total hectares declared as protected under the NEM: PAA in 2019 to 13,265 ha.

These declarations were the culmination of four years of hard work, and have laid solid foundations on which the GDARD and partners will continue to build, through the establishment of the Gauteng Biodiversity Stewardship Working Group ("the working group"), to work towards the sustained implementation of BDS in the province.

3. OBJECTIVES OF THE WG

The working group (WG) will act as an information sharing and learning platform that promotes collaboration between stakeholders for the sustained implementation of BDS as a means for protected area expansion.

It will promote the effective conservation of important biodiverse areas, including mixed land use landscapes, to support climate change mitigation measures, whilst striving to ensure the continued and standardized implementation of BDS in Gauteng.

The WG will also strive to support existing protected areas established through BDS.

4. FUNCTIONS OF THE WG

- 4.1 Provide a forum for relevant stakeholders and the BDS community of practice to introduce planned projects, share experiences and outcomes of projects and lessons learned.
- 4.2 To collaborate on any technical issues and challenges related to the implementation of BDS.
- 4.3 To investigate other potential mechanisms of protected area expansion.
- 4.4 Identify capacity and resource needs in the sector and facilitate, where possible, learning exchanges and capacity building opportunities.

5. MEMBERS OF THE WG

Members are listed in Appendix A of this document.

The WG stakeholders include the following:

- The GDARD and provincial departments whose mandate supports protected area expansion.
- Any other department whose mandate contributes towards protected area management.
- Other associations/ organisations/ entities that contribute towards protected area expansion and the objectives of the WG.
- Membership will be assessed on an annual basis.

6. REPRESENTATION

- 6.1 The GDARD is entitled to four representatives, excluding the Chairperson and the Secretariat, and may from time to time invite officials from specific components within the Department to attend a meeting or to address the meeting.
- 6.2 Each other department or organ of state, association, organisation or entity is entitled to not more than two representatives.

7. OPERATIONAL GUIDELINES AND COMPOSITION

- 7.1 The meetings will be convened and chaired by the GDARD Biodiversity Stewardship unit (“the BDS unit”), or any other relevant official from the Biodiversity Management Directorate.
- 7.2 Secretariat duties will be supplied by the Biodiversity Management Directorate’s administrative unit (“the Secretariat”), with support from the BDS unit.
- 7.3 The agenda and relevant documents should be distributed by the Secretariat to members at least one week prior to the meeting.
- 7.4 Agenda items must be submitted to the Secretariat at least two weeks prior to the meeting.
- 7.5 The Secretariat will strive to distribute the action list within two weeks and minutes within a month of the meetings.
- 7.6 The Secretariat is responsible for the co-ordination of the WG, and for the compilation and distribution of the minutes and any other relevant communication.
- 7.7 The chairperson, or his/her delegated official, is represented on the national BDS Technical WG and the DFFE Protected Areas Technical Task Team (PATTT).
- 7.8 Sub-committees to be established as required.
- 7.9 These operational guidelines will be refined at the inaugural meeting to enable all members to provide inputs.
- 7.10 The frequency and dates of working group meetings will be decided at the inaugural meeting.