

The Biodiversity Finance Initiative (BIOFIN) South Africa

Biodiversity Expenditure Review

Final Report

November 2016

Acknowledgements

The Biodiversity Expenditure Review involved many people and the writers would like to acknowledge them:

- International donors of the global BIOFIN project, namely the European Union (EU) and the governments of Flanders, Germany, Norway, and Switzerland.
- Leadership and support from the Department of Environmental Affairs (DEA), the lead organisation of the Biodiversity Finance Initiative (BIOFIN) South Africa, in particular the BIOFIN South Africa Project Leader Tracey Cumming, and the BIOFIN South Africa team of Kamlesh Pillay, Anthea Stephens, Aimee Ginsburg, Hugo van Zyl and Lucia Motuang.
- Support from the United Nations Development Programme (UNDP), specifically Maria Mbengashe and Aubrey Manamela at the UNDP Country Office, and David Meyers, Onno van den Heuvel, Fabiana Issler, Marlon Flores and Annabelle Trinidad of the UNDP Global BIOFIN Team.
- The South African BIOFIN Steering Committee, made up of John Dini (SANBI), Tertius Carinus (SANParks), Joe de Beer (StatsSA), Robert Parry (StatsSA), Wilma Lutsch (DEA), Ronette Engela (National Treasury) and Maria Mbengashe (UNDP Country Office), and the South African BIOFIN Technical Reference Group, made up of Pravin Pillay (EKZN), Tom Bouwer (SA Tourism), Saliem Fakir (WWF-SA), Deshni Pillay (SANBI), Ricardo Andrews (National Treasury) and Andries Wessels (DEA).
- The many stakeholders supporting the BIOFIN South Africa by providing their insight and guidance for the development of this report.

Suggested citation:

Department of Environmental Affairs (DEA) (2016). Biodiversity Finance Initiative - South Africa: Biodiversity Expenditure Review. Final report, written by Juan Bester. Department of Environmental Affairs, Pretoria.

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High-level summary for decision-makers

Overview of the Biodiversity Expenditure Review

This report is the output of the Biodiversity Expenditure Review (BER) performed in South Africa from March to August 2016 with support from the United Nations Development Programme (UNDP) Biodiversity Finance Initiative (BIOFIN). A BER constitutes detailed bottom-up assessments to accurately identify biodiversity expenditure in South Africa. The BER is a key piece of evidence informing decisions on mobilising resources to progressively attain desired levels of biodiversity-related expenditure and ultimately meet biodiversity targets. The BER report contains the qualitative analyses and selected quantitative analyses of revenue and expenditure estimates of key finance actors during the Government of South Africa's fiscal years (FY) 2008/09 to 2014/15 and future projections from FY 2015/16 to 2023/24. As far as was possible, only externally audited financials were consulted for the 2009 to 2015 period. Data and analyses were conducted on public, private and civil society actors.

Expenditure reviews and analyses were performed on the biodiversity-related expenditure of the following key finance actors: a) national and provincial departments responsible for environmental affairs, water affairs, forestry, fisheries and agriculture, b) municipalities, c) national and provincial conservation management authorities, d) landowners of private protected areas (PPAs) and e) seven non-governmental (NGOs) that are involved in conservation in South Africa. Sources of revenue for each key finance actor were identified and the actual revenue amounts captured for the period under review. Limitations and assumptions are covered in the methodology section.

Key findings

The latest revised estimates for government (FY 2015/16) report revenue of R1,223.1 billion, consisting of, among other things: R392 billion from personal income taxes, R278 billion from value-added taxes and R189 billion from corporate taxes. Government's consolidated total expenditure (for all spheres, all departments and all government entities) for the same period was R 1,380.9 billion.

The Government of South Africa, through the National Revenue Fund, is the single biggest funder as well as implementer of biodiversity-related activities. Historic total biodiversity expenditure by the Government of South Africa (all departments and their entities) totalled R59.94 billion from 2009 to 2015. The percentage of total consolidated government expenditure directed towards biodiversity conservation-related activities was approximately 0.93% per year between 2009 and 2015. National government departments and their entities spent R36,1 billion, or 60%, on biodiversity from 2009 to 2015, compared to provincial government departments and entities (R19,7 billion, or 33%) and local government (R4,1 billion, or 7%).

National Department of Environmental Affairs (DEA): DEA is the single biggest key finance actor, alone accounting for an average of 33% of total public sector biodiversity expenditure from 2009 – 2015. Total expenditure on biodiversity related activities in 2015 amounted to R3,2 billion. DEA ensures that other actors such as the South African National Parks (SANParks) and the South African National Biodiversity Institute (SANBI) are partially funded for their activities in biodiversity conservation and management through fiscal transfers.

SANParks spent a total of R12,9 billion on biodiversity from 2009 to 2015, 21% of total public spend on biodiversity during this time, with R2,8 spent in 2015. SANBI spent a total of R3 billion on biodiversity from 2009 to 2015, 5% of total public spend on biodiversity during this time, with R622 million spent in 2015.

Spending on biodiversity management and conservation at the provincial level is done by provincial departments in all nine provinces, and provincial agencies falling under these departments in five of the nine provinces. Provincial funds for biodiversity are dependent on allocations from the Provincial Refund Funds, which are invariably made at the discretion of provincial governments. The KwaZulu-Natal province is the largest spender on biodiversity among provinces, with R11,5 billion spent from 2009 to 2015 (32% of all provincial spend on biodiversity), and R2 billion spent in 2015. This is followed by the Western Cape, spending 17% of the total provincial spend on biodiversity.

Tracking Official Development Assistance (ODA) in South Africa is challenging, as earlier studies have shown. A substantial amount of ODA is not channelled through the on-budget system via the designated Reconstruction and Development Programme (RDP) Fund in National Treasury, but rather channelled directly to public or private sector implementing agencies. These funds are more difficult to track.

The OECD reports that ODA for South Africa averages between 1% and 1.5% of government's total budget for the period 2008 to 2014. ODA tagged for biodiversity-related projects makes up 1.6% of all ODA for this period, reported as USD 12 million in 2014, and USD 127 for the period 2008 – 2014. Biodiversity-related ODA specifically from the Global Environment Facility (GEF) amounted to USD 21.68 million for the 2010-2014 period (on average USD 4.34 million per year).

The Biodiversity Expenditure Review considered two sources of private sector expenditure, NGO expenditure and the expenditure related to the ongoing management of South Africa's private protected areas (PPAs). NGOs spending funds on biodiversity in South Africa receive their funds from a range of sources. Of the seven NGOs analysed, the largest source of funds came from international private sector sources (39%). Total biodiversity expenditure by NGOs operating in South Africa from 2009 to 2015 was estimated to be R1.78 billion.

It was estimated that expenditure on the management of existing private protected areas (making up around 30% of the land-based protected area network in South Africa) was around R4.1 billion from 2009 to 2015. This does not include cost of the land already secured through these PPAs, which represent a substantial cost saving for the state.

Based on an analysis of government financing trends and existing budgets, it is expected that there will be close to zero real growth in biodiversity expenditure by government departments and their entities in the medium-term (2017 to 2019). This points to the ability to sustain current biodiversity activities and the related current payments, and leaves little room for new large-scale projects, especially infrastructure-related projects. A deterioration in provincial allocations from 2017 onwards to EKZNW (allocation in 2016: R718 million; allocation in 2017: R604 million) raises concerns about the sustainability of funding to this relatively large and important conservation management agency. There are varying abilities of protected area management authorities to raise their own revenue. SANParks is exemplary with its diversified portfolio of sources of total revenue, its large proportion of own revenue collected

(51,1% for FY 2014/2015). Of the provincial conservation agencies, the North West Tourism Board generated own review making up 37% of total revenue for the period under review, followed by Ezemvelo KZN Wildlife with 29%. The remaining conservation agencies all generated own revenue was under 13% of total revenue for this period. The lack of other agencies' ability to collect substantial site-based revenue is a concern in terms of managing the risk of future budget cuts in allocations.

Recommendations

Recommendation 1 – Setting for Public Biodiversity Finance Targets: To increase the number of biodiversity initiatives and their subsequent impact, the Government of South Africa would need to allocate more resources over the medium and long term to biodiversity. The downward prediction in the proportion of biodiversity expenditure relative to total government expenditure over the medium term is a concern. In striving to protect South Africa's unique and important biodiversity, public investment would at least need to be in line with investments that other sectors such. The allocation of more resources should ideally be fixed to a hard-fiscal rule, for example a target of 1% of total consolidated government expenditure over the medium-term, to ensure that all sectors are compliant and investigating innovative ways of ensuring sustainability.

Recommendation 2 – Improved Reporting on Biodiversity Financial Flows: A soft-fiscal rule could be the directive for all government departments and entities to report on their plans to invest in biodiversity-related initiatives and actual biodiversity expenditure to relevant authorities. This could be a standard indicator in the Estimates of National Expenditure (ENE), Budget Book (National Treasury). The linkages between the National Development Plan (NDP), which is the 30-year developmental vision for SA, is enabled in five year terms through the Medium Term Strategic Framework (MTSF) and the allocated budgets to fund the MTSF activities are in the ENE. This strategic decision is a function of cooperation and consultations between all biodiversity key finance actors and National Treasury. Tracking of plans and expenditure on biodiversity at the municipal level should also be improved as many natural resource management decisions are made at this level. DEA and National Treasury should provide guidance or practice notes in this regard.

Recommendation 3 – Making the Improved Case for Increased Biodiversity Finance: The case for increased funding for protected area management authorities (be they departments or entities) needs to be researched and strengthened, to ensure increased sustainable funding for these authorities, according to their allocated mandate. This could include the integration of the benefits of ecosystem services into mainstream accounting systems (for example, the Environmental Economic Accounts Compendium) while investigating the economic and social co-benefits of biodiversity initiatives (for example, job creation and local economic development). The allocation of resources should be diversified and not just for operational expenditure, but capital expenditure that can generate income. The allocation of funding should be offset by the improved generation of own revenue by protected area management authorities. SANBI, in collaboration with DEA and National Treasury, could take the lead in such research.

Recommendation 4 – Improved Monitoring of ODA Flows for Biodiversity-related Initiatives: Biodiversity-related ODA should be better identified and tracked outside the official budget system, i.e. outside the auspices of the RDP Fund. Closer monitoring and evaluation would be beneficial to measure the benefits and impact of this type of funding and also pave the way for closer cooperation and coordination among all biodiversity actors in South Africa. Such a monitoring and evaluation system should also identify the

areas that are being funded and determine the alignment with national biodiversity priorities. DEA, in consultation and collaboration with National Treasury, should be the owner of such a system.

Recommendation 5 – NGO and Government Collaboration for Biodiversity Initiatives: NGOs play an important role in the identification and spending of international and national funding. The engagement and possible collaboration of NGOs and government departments and entities could improve the effectiveness of biodiversity finance, allowing for common plans and initiatives to be implemented. NGOs should also be encouraged to report on the priority areas that have been identified for funding. DEA should take a lead role in this regard.

Recommendation 6 - Private protected areas should continue to be recognised and supported: Private protected areas make up around 30% of the land-based protected area network in South Africa. The management cost of this land is borne by the private sector, allowing for public sector savings. In addition, the protected of private and communal land saves the state the cost of purchasing land for protected area expansion. The continued recognition and increased support for private protected areas should be a priority for DEA, SANParks, and provincial conservation authorities and agencies.

Recommendation 7 – Developing a Biodiversity-Focused Budget Tagging System: It is recommended that in order to progressively achieve the NBSAP targets, a biodiversity-focused budget tagging system needs to be integrated into existing budgeting and accounting systems to ensure accurate apportionment of biodiversity expenditure within planning, budgeting and budget execution. One aspect of this is the need for governmental ministries, departments and agencies to overtly link NBSAP targets with their programme budgets in their annual budget submissions and again in their expenditure accounts and reports. Such a budget tagging system would enable more frequent biodiversity expenditure reviews and more regular monitoring of expenditure on key NBSAP strategies and activities. The responsible parties could be DEA supported by National Treasury.

Abbreviations and Acronyms

| | |
|-----------------|--|
| ABS | Access and Benefits Sharing |
| AFS | Annual Financial Statements |
| BAS | Basic Accounting System (of the Government of South Africa) |
| BER | Biodiversity Expenditure Review |
| BIA | Beneficiary Incidence Assessment |
| BIOFIN | Biodiversity Finance Initiative |
| CBD | Convention on Biological Diversity |
| CSO | Civil Society Organisation |
| DAFF | Department of Agriculture, Forestry and Fisheries |
| DEA | Department of Environmental Affairs |
| DEAT | Department of Environmental Affairs and Tourism (now DEA) |
| DMR | Department of Mineral Resources |
| DWS | Department of Water and Sanitation |
| ECPTA | Eastern Cape Parks and Tourism Agency |
| EKZNW | Ezemvelo KwaZulu-Natal Wildlife |
| ENE | Estimates of National Expenditure (substituted in-text with Estimates of National Revenue and Expenditure) |
| ENRE | Estimates of National Revenue and Expenditure |
| EPE | Estimates of Provincial Expenditure (substituted in-text with Estimates of Provincial Revenue and Expenditure) |
| EPRE | Estimates of Provincial Revenue and Expenditure |
| GDP | Gross Domestic Product |
| GEF | Global Environment Facility |
| GFS | Government Finance Statistics (of the International Monetary Fund – IMF) |
| GTAC | Government Technical Advisory Centre |
| LTA | Limpopo Tourism Agency |
| MDAs | Ministries, Departments and Agencies |
| NGO | Non-Governmental Organisation |
| NPAES | National Protected Area Expansion Strategy |
| NRM | Natural Resource Management |
| MTPA | Mpumalanga Tourism and Parks Agency |
| MTEF | Medium-term Expenditure Framework |
| MTSF | Medium-term Strategic Framework |
| NBSAP | National Biodiversity Strategy and Action Plan |
| NT | National Treasury |
| NWTB | North West Tourism Board |
| ODA | Official Development Assistance |
| OOF | Other Official Flows |
| OECD | Organisation for Economic Co-operation and Development |
| PACA | Protected Areas Conservation Areas Database (administered by national Department of Environmental Affairs) |
| PEFA | Public Expenditure and Financial Accountability |
| PER | Public Expenditure Review |
| PETS | Public Expenditure Tracking Survey |
| PFM | Public Finance Management |
| PIR | Policy and Institutional Review |
| PPA | Private Protected Area |
| PSR | Project Synthesis Report |
| RDP | Reconstruction and Development Programme (of the Government of South Africa) |
| SANBI | South African National Biodiversity Institute |
| SANParks | South African National Parks |
| SCoA | Standard Chart of Accounts |
| SEEA | System of Environmental-Economic Accounting |
| WAVES | Wealth Accounting and the Valuation of Ecosystem Services |
| WWF | World Wildlife Fund |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environment Programme |
| WESSA | Wildlife and Environment Society of South Africa |

1. Introduction to Report

This report constitutes the review of biodiversity-related public and private expenditure in South Africa, in short: The Biodiversity Expenditure Review (BER). The BER occurs under the auspices of the United Nations Development Programme's (UNDP) Biodiversity Finance Initiative (BIOFIN). Specifically, the BER is the appraisal of the amount and trends of biodiversity-related public and private expenditure in South Africa. The BER provides a status quo scenario for the future biodiversity expenditure in South Africa, employing a conservative growth trajectory in budgets for both public and private sector actors. The BER is a crucial input for the BIOFIN Finance Needs Assessment and the BIOFIN Biodiversity Finance Plan, which respectively costs South Africa's National Biodiversity Strategy and Action Plan (NBSAP) and develops a resource mobilisation strategy to optimise current finance and fund the gap between actual and targeted expenditure.

The structure of the BER is as follows:

- Part 2: a description of the BER methodology;
- Part 3: the methodology, including a description of the data collection process;
- Part 4: the BER data analysis; and
- Part 5: findings and recommendations.

2. Background to the Biodiversity Expenditure Review (BER)

2.1 Rationale for Biodiversity Expenditure Review (BER)

The BER analyses funding allocations for biodiversity across the public and private sectors, analyses the links between public and private sector expenditure on biodiversity and national planning on biodiversity, and provides evidence on whether financial and non-financial plans are commensurate with spending on biodiversity. The BER asks the following key questions: Who spends? How much? On what?

This BER takes into account spending on the following BIOFIN categories:

- Access and Benefit Sharing (ABS)
- Biodiversity Knowledge
- Pollution
- Conservation Areas
- Ecosystem Management and Restoration
- Sustainable Use
- Targeted Species and Genetic Conservation

The BER helps stakeholders to understand how complex structures such as regulations and budgeting systems impact on biodiversity. The BER also adds to the growing body of evidence necessary to map the future of environmental fiscal reform, i.e. “both taxation and pricing instruments that are able to raise revenue as well as furthering environmental goals” (Cumming, 2015: 40). The objectives of environmental fiscal reform include rewarding behaviour that has positive effects on biodiversity, penalising behaviour

that is harmful to biodiversity, and removing perverse incentives. Results of the BER will contribute to policy review and amendments with positive effects on biodiversity.

The BER provides evidence to support the motivation and advocacy for improving public and private investment in biodiversity management concerns. Greater awareness among law- and policymakers would arguably allow for the improved alignment of biodiversity plans, policy objectives and expectations with the resources made available for their implementation. The benefit of an expenditure review, in the context of private sector expenditure, would allow for the identification and appraisal of the extent of private sector expenditure on biodiversity, in order to support and enhance this expenditure. This will have a direct link to the 6th National Country Report (December 2018) and Strategic Plan for Biodiversity (2011-2020), all of which are reporting mechanisms of the Convention on Biological Diversity (CBD).

2.2 The National Biodiversity Strategy and Action Plan of South Africa

South Africa's 2015 NBSAP is the country's primary national planning instrument for implementing the Convention on Biological Diversity (CBD) (Government of South Africa, 2015a). The NBSAP is aligned with the Aichi Biodiversity Targets agreed at the 2010 Nagoya CBD Conference of Parties (Secretariat of the Convention on Biological Diversity, 2016). The NBSAP has the following six Strategic Objectives for biodiversity management in South Africa for the period 2015 to 2025 (Government of South Africa, 2015a: 25), each of which has prioritised targeted outcomes that need to be met:

1. Management of biodiversity assets and their contribution to the economy, rural development, job creation and social wellbeing is enhanced.
2. Investments in ecological infrastructure, enhance resilience and ensure benefits to society
3. Biodiversity considerations are mainstreamed into policies, strategies and practices of a range of sectors.
4. People are mobilized to adopt practices that sustain the long-term benefits of biodiversity.
5. Conservation and management of biodiversity is improved through the development of an equitable and suitably skilled workforce.
6. Effective knowledge foundations, including indigenous knowledge and citizen science, support the management, conservation and sustainable use of biodiversity.

3. Methodology

Below is the process followed for the implementation of the BIOFIN BER in South Africa.

3.1 BER Inception Report

The BER Inception Report facilitated the agreement on the scope of analysis, timelines, milestones, deadlines, assumptions and risks. It contains the rationale for the BER and the step-by-step methodology to be conducted in South Africa. There is a standard methodology that is prescribed for all BIOFIN countries to use. The step-by-step methodology is informed by the BIOFIN Workbook template (UNDP, 2015). Each country has the opportunity to customise it according to their particular needs. The BER was further guided by the South Africa BIOFIN Inception Report (Cumming, 2015) and the BIOFIN Policy and Institutional Review (PIR) (DEA, 2016). The PIR was an important foundation for the ensuing deliverables, namely the BER, Financial Needs Assessment and Biodiversity Finance Plan. The PIR provided an appraisal

of the salient strategic, policy and implementation factors. In turn, the BER is a key input for the costing of South Africa's NBSAP and the development of a resource mobilisation strategy to fund the gap between actual and targeted expenditure.

Key elements of the methodology provided by the UNDP BIOFIN project (UNDP, 2014) are discussed below.

Thematic focus: Biodiversity means the wide variety of plants, animals and micro-organisms on earth, genetic differences within each species, and ecosystems and their diversity (Secretariat of the Convention on Biological Diversity, 2000: 2). In the absence of a sectoral focus (e.g. water security or sustainable tourism), the BER took into account all types of positive biodiversity expenditure, which are focused on the three objectives of the CBD: Conservation, Sustainable Use, and Fair and Equitable Sharing of Benefits.

Scope: A 5 to 6 year time horizon of data was required by the BIOFIN project methodology. Accordingly, the time horizon of the data required for the BER in South Africa is from the fiscal year (FY) 2008/09 until the most recently finished fiscal year, FY 2014/15. The Government of South Africa's fiscal year runs from 1 April to 31 March of the following year. This aligns adequately with the financial year horizons of the private sector in South Africa, which are typically from 1 March to 28 February. National accounts compiled by Stats SA and macroeconomic variables such as the consumer price index (CPI) and gross domestic product (GDP) are typically provided for in terms of the calendar year. This allows for adequate alignment with public and private sector datasets. In future BERs, even closer alignment between the government fiscal year data and macroeconomic statistics may be achieved by using the quarterly GDP statistics and monthly CPI statistics.

Public sector revenue and expenditure: Public sector biodiversity-related revenue and expenditure data (past budgets, actual revenue and expenditure, and projected revenue and expenditure) was retrieved from the Government of South Africa's official budget system and includes a voted component and non-voted off-budget revenue and expenditure¹. For a budget to be voted, it needs to be approved in the form an Appropriations Act in the relevant national or provincial Legislature. Non-voted expenditure is prohibited by the prevailing financial management legislative frameworks in South Africa. On the other hand, substantial 'extra-budgetary' revenue and expenditure occurs within entities of government, such as the national and provincial conservation management agencies. This means that their revenue and expenditure estimates are not appropriated as such by Legislatures, except for intergovernmental fiscal transfers from parent departments, which are often required for the normal functioning of these entities. Varying degrees of oversight over entities are performed by parent departments and the relevant legislature. Off-budget revenue and expenditure in this case does not refer to ODA provided directly to biodiversity implementing partners, such as government departments, their agencies, and NGOs involved in nature conservation. Such off-budget expenditure has been retrieved from the individual financial statements of the relevant public sector entities. While the government budget system is typically geared to account for voted revenue and expenditure, the annual financial statements of individual entities account for non-voted revenue and expenditure as well. Consolidated expenditure by the Government

¹ Off-budget expenditure refers to financial transactions that are not accounted for in the budget (Schick, 2007: 3). Such expenditure are typically unique transactions originating from outside the core government departments or ministries. ODA is one example of such a transaction in the case of South Africa.

of South Africa and all government entities are compiled annually, typically by the National Treasury, which takes into account expenditure on voted and non-voted funds. The consolidated expenditure estimates by the National Treasury is discussed elsewhere in this report.

Official development assistance (ODA) and Other official flows (OOF): Biodiversity-related ODA to South Africa was deemed an important segment to understand and assess. ODA comprises flows to countries and multilateral development institutions from official agencies, including state and local governments, or by their executive agencies. “ODA is administered with the promotion of the economic development and welfare of developing countries as its main objective, is concessional in character (for example loans need to have generous terms), and conveys a grant element of at least 25%” (OECD, 2008: 1).

The tagging of official donor funding as biodiversity through the ‘Rio Markers’ and recorded per donor and recipient by the Organisation for Economic Development and Co-operation (OECD) (discussed in detail elsewhere in this report) considers both ODA and OOF. However, since the definition OOF includes transactions that are not primarily aimed at development (such as official subsidies to private firms), and sufficiently concessional (i.e. generous in terms), it was assumed that OOF typically does not fund biodiversity in South Africa.

ODA such as the Global Environment Facility (GEF) financing of environment-related programmes impact not only on biodiversity management but also key related issues such as climate change adaptation and mitigation. From the discussion above, it is clear that all biodiversity-related ODA and OOF channelled to the Government of South Africa is accounted for in the individual financial statements of ministries, departments and agencies (MDAs), while the government budget system may only account for a part of such ODA. The BER made a point of identifying all significant sources of revenue of public entities within their annual financial statements. Whenever ODA was directed to non-governmental organisations (NGOs), the accounting of such biodiversity-related ODA formed part of the private sector revenue and expenditure review.

Estimations of future expenditure: South Africa's early adoption of a medium-term expenditure framework (MTEF) and the generally very good transparency in budgetary data means that budget projections for each government finance actor can be relied upon to a large extent. It was deemed prudent to not use historic average annual growth rates to project future expenditure, because of the government stance on fiscal prudence, in part driven by a constrained fiscal framework. The assumptions for estimates of future expenditure are detailed in the relevant section below.

Private sector engagement strategy: The major goal of the strategy is to obtain key datasets in an efficient and timely manner. These includes financial data and non-financial data from which biodiversity-related revenue and expenditure could be identified, classified and apportioned. For the purposes of the BER, the private sector refers to firms as well as non-profit entities, which include NGOs and civil society organisations (CSOs), and private individuals. This BER focused specifically on NGOs and private and communal owners of private protected areas.

The BER private sector engagement strategy involved obtaining publically available annual reports containing financial and non-financial information, as well as approaching NGOs directly for supplementary information. The identified key finance actors publish stakeholder and/or annual reports,

from which valuable historic and planned activities impacting on biodiversity management in South Africa was identified. A significant constraint of publicly available annual reports was that these actors in general do not provide detailed projected expenditure (i.e. future expenditure) and details on projects and sources of revenue. Disaggregated details of revenue per source were obtained from five of the seven NGOs reviewed.

Care was exercised in avoiding double-counting ODA expenditure and NGO expenditure in the event that an NGO receives ODA funding. Information on operational and investment expenditure for Private Protected Areas (PPAs) was approximated based on past research (SANBI, 2015).

The private sector data collection tools were a) stakeholder meetings with key finance actors and their representative bodies and b) off-site financial and non-financial primary data (e.g. budgets, reports) and secondary data (e.g. third party research) collection. The materiality and 80/20 principles described below was applied in focusing the lens of the analyses. For the purposes of the BER, extrapolations of actual expenditure formed the basis of future expenditure. **Step 6** of the BER methodology below details how public and private expenditure financial and accounting classifications were reconciled in the BER.

Sources of biodiversity-related revenue: The BER data collection tools include identifying the sources and magnitude of funding for key finance actors and by implication funding originating from biodiversity-related activities. Revenue and financing is categorised as follows:

- public financing includes internal sources (e.g. tax revenue collected by the government, internal borrowing by government and revenue generated through internal operations such as entrance fees to protected areas) and external sources (e.g. aid from bilateral and multilateral institutions such as ODA, external borrowing by government).
- private financing refers to internal sources (e.g. user fees to providers) and external sources (e.g. donations by individuals, trusts and firms).

A cursory review pointed to the adequate availability of public sector financing datasets in the form of detailed government budgetary reports. The private sector engagement strategy discussed above included obtaining sources of funding as well.

Materiality and Pareto principle: The principle of materiality refers to the practice of focusing evidence-based research on those variables and datasets that are significant for the purposes of a project. Materiality in terms of the BER exercise focuses effort and time on obtaining and analysing datasets from key finance actors that are responsible for the most significant or largest magnitude of private and public expenditure, both actual and potential. The Pareto principle was also assumed, which means that 20% of biodiversity finance actors contribute to 80% of expenditure.

3.2 Stakeholder engagement

South Africa's NBSAP lists a large number of stakeholders, while the South Africa BIOFIN Project Inception Report narrowed this down substantially. The PIR identified key finance actors through its discussion of ten negative trends and five positive trends and drivers of change in biodiversity in South Africa. The following key finance actors have been identified for each trend and driver of change in biodiversity in South Africa:

- Cross-cutting: National Department of Environmental Affairs (DEA), provincial departments responsible for environmental affairs, municipalities (both local and district municipalities).
- Water security: National Department of Water and Sanitation (DWS).
- Agriculture (food security): National Department of Agriculture, Fisheries and Forestry (DAFF), National Department of Rural Development and Land Reform (DRDLR).
- Biodiversity conservation and sustainable tourism: SANParks, iSimangaliso Wetland Park Authority, provincial conservation management authorities, NGOs involved in conservation (BirdLife South Africa, Conservation South Africa, Endangered Wildlife Trust, Peace Parks Foundation, Wilderness Foundation, Wildlands Conservation Trust, and World Wildlife Fund), and PPAs.

BIOFIN engaged with stakeholders in a number of ways. BIOFIN is guided by a national Steering Committee, and receives technical input from a national Technical Reference Group. BIOFIN is a standing item on the DEA convened Working Group 1 – a meeting of national and provincial government entities in the environmental sector addressing biodiversity management and conservation. A national BIOFIN workshop was held as part of the PIR process, and another focussed on the Biodiversity Finance Plan. In addition, BIOFIN received technical guidance from a global UNDP BIOFIN team. Based on the complex nature of the information requirements of the various components of BIOFIN, including but not limited to the BER, a large degree of stakeholder engagements were bi-lateral engagements with key informants, in order to enable focused technical discussion. The BER specifically required the organisation of bi-lateral consultations with national level stakeholders to define the attribution of biodiversity significance in all relevant expenditures. Although there are numerous stakeholders in biodiversity management in South Africa, the focus was on key stakeholders. Key stakeholders were key finance actors and those entities that provided entry-points to key finance actors, relevant datasets, technical guidance and the validation of analyses.

The Technical Reference Group assisted with validating the representative sample of key finance actors and their biodiversity-related expenditure activities to inform accurate apportionment and categorisation of expenditure. Validations are important inputs for the BER. In particular, key stakeholder engagement and validation helped to define a thematic lens for the BER, ensuring that the most appropriate sectors were prioritised given the South African context. Key stakeholder engagements also provided valuable key contacts and entry-points for primary and secondary data collection. The summarised key stakeholder identification and data requirements are provided below in **Appendix 1**.

3.3 BER data requirements

The BIOFIN Inception Report identified various funding sources of expenditure data on the environment in South Africa, including national government expenditure such as allocations to national and provincial departments and local government, investment through various donors and donor-funded projects, programmes or funds, and private sector investments, such as the creation and management of private protected areas (Cumming, 2015: 42).

The BER required financial and non-financial datasets from each key finance actor. The prime source of financial public sector data was government's Basic Accounting System (BAS), which collates financial budgeting, accounting and reporting data for most if not all of the Government of South Africa's ministries, departments and agencies. Financials and narratives were provided in the form of publicly available

estimates of national revenue and expenditure (officially called ENE, but substituted with ENRE in this report), provincial revenue and expenditure (officially called EPE, but substituted with EPRE in this report) and municipal revenue and expenditure, as well as medium-term expenditure estimates for all three spheres of government (this is typically contained within the latest set of estimates for each sphere). Avoidance of double-counting of biodiversity-related expenditures across the spheres and among ministries, departments and agencies was imperative. The BER methodology required a clear distinction between biodiversity-related actual expenditure on the one hand and transfer payments or subsidies to other entities, of which the latter should not be considered biodiversity-related expenditure by the transferring entity. Only in instances where the received transfer payments are spent on biodiversity, and the recipients are not considered key finance actors, the transfer payments were also considered biodiversity expenditure. These instances are clearly distinguished and discussed in this report.

The White Paper on Biodiversity (1997) calls for the Government of South Africa to “maintain, adjust, or develop new financial and other incentives” that stimulate local stewardship (Government of South Africa, 1997: 51). The White Paper acknowledges that “additional financial investments” are required to implement the Paper's objectives, including “continued state funding, pursuing private sector funding, the introduction of incentives and disincentives, revenue generation, and attaining international and donor funding” (Government of South Africa, 1997: 97). Although expenditure on private protected areas may not be significant for the period under review in comparison with the expenditure of national and provincial management authorities of protected areas, this modality is important for leveraging private sector investment in protected areas and will be unpacked in the BER section dealing with projected biodiversity-related revenue and expenditure. Related to private sector protected areas is the need to cast the net wider: anecdotal evidence pointed to WWF-South Africa as the second largest conservation-related land holder after government. The analysis below provides details on WWF’s activities and financials.

In conclusion, the following datasets were required from each key finance actor for the period under review:

- Financial and non-financial data that covers past/current/future plans (in terms of programmes, projects and activities) and budgets. These are typically contained in annual reports and forward-looking medium to long term strategic plans, and short to medium term business or operational plans.
- Past/current/future financing, support, or sponsorships of biodiversity-related programmes, projects and activities. These are typically contained in annual reports and forward-looking medium to long term strategic plans, and short to medium term business or operational plans.

Key finance actors also provided entry-points in the form of contacts and introductions to other public and private sector key finance actors.

3.4 BER data collection

The objective of BER data collection tools was to extract disaggregated data from the identified stakeholders, as per best practice BER methodology (UNDP, 2014). Primary data was collected during stakeholder meetings and interactions. Datasets included financial and non-financial datasets (defined in

Step 2 above). Secondary data was collected through referrals and references to third party entities that operate within the biodiversity sphere in South Africa and internationally, as well as desktop studies of relevant documentation.

3.5 The BER analysis and populating the BER worksheets

This step represents the core BER work and consists of the review and analysis of public and private biodiversity expenditure by key finance actors, projections of future expenditure trends and a review of revenue per source generated by biodiversity actors in South Africa. These reviews and analyses are contained in Part 4 of this report.

3.6 Development of co-efficient database and classification system

A coherent expenditure classification system and database: The collected and extracted information was processed into a coherent and comparable system in terms of currency, sources, expenditure categories, timing of expenditures and data format in the BIOFIN excel worksheets.

Public and private sector expenditure in the BER was classified under the following headings: a) Budget/Expenditure (to determine whether the amount is historic actual or historic or future budgeted expenditure), b) Recurrent vs Investment, c) Expense Unit (the actual term used by the key finance actor in its financials). Transfer payments by government departments under “Transfers and subsidies” were accounted for as far as possible, but in general not included in calculating biodiversity expenditure so as to avoid double-counting (accounting for expenditure in the financials of the transferring as well as receiving entity). Where transfer payments were included in calculations, the individual cases were explained in this report.

Public and private sector revenue in the BER was classified under the following headings: a) Revenue Source / Type (the basic classification of the revenue) b) Revenue Source Name (the actual term used by the key finance actor in its financials), and c) Financing Solution / Mechanism (a general description of the revenue source for use in follow-up resource mobilisation exercises).

Public sector revenue and expenditure classifications: Government’s revenue and expenditure classifications are aligned to standardised classifications in the form of a Standard Chart of Accounts (SCoA). SCoA allows for the consistent capturing of budgeting, accounting and reporting in all of the Government of South Africa’s ministries, departments and local government authorities, and most agencies and entities. The following major expenditure classifications of SCoA were employed for public expenditure: current payments (i.e. recurrent expenditure), payments for capital assets (i.e. investment expenditure), and transfers and subsidies. Transfers and subsidies are payments to entities outside the government department, including the following: a) households (i.e. individuals), b) local government (i.e. municipalities), other provincial departments, agencies of government, entities under the control of the transferring government department. In the case of the above public expenditure categories, all expenditure is voted and on-budget, i.e. approved in terms of an act of National Parliament or the relevant provincial legislature. In some instances the above delineation was lost due to the fact that the ENRE do not provide detailed expenditure classifications for the sub-programme level – in such cases, only total expenditure for sub-programmes were accounted for. Coefficients were applied to account for varying

degrees of contributions to total expenditure. This report discusses these specific cases. Care was taken to deduct transfer payments from such expenditure to avoid double-counting.

Government departments are broadly financed through the respective National or Provincial Revenue Funds. They collect insignificant amounts of revenue, mostly in the form of sale of land and goods. Funds provided to departments are either consumed or transferred. Departmental revenues are typically channelled via or surrendered to the relevant Revenue Fund. Transferred funds are reflected in the receipts of receiving entities. The 3-tier classifications described above assisted to bring conformity and comparability in public sector revenue and expenditure. In general, revenue for most if not all government entities are in the form of fiscal transfers from parent departments and originate from the National Revenue Fund or the relevant Provincial Revenue Fund. However, biodiversity entities under the control of parent departments generate substantial own revenues, such as entrance fees to protected areas. These revenues are not channelled via or surrendered to the relevant Revenue Fund. For entities that collect substantial revenues, the revenue per source has been collated for the 2009 to 2015 period.

Private sector revenue and expenditure classifications: Financial statements of the NGOs proved to be fragmented. Whereas most actors recognised revenue under similar items such as “income” or “revenue,” the terms used for naming sources of revenue differed. Private sector actors were typically funded by their own internally-generated revenue and donor funding. As far as possible, donor revenue was categorised in terms of the following four (4) categories: a) public sector South Africa, b) private sector South Africa, c) public sector international and d) private sector international. Expenditure classifications were in general dissimilar, in that some actors termed overhead or management and programmatic or core expenditure differently. As was the case for the public sector, the 3-tier classifications described above assisted to bring conformity and comparability in private sector revenue and expenditure.

Direct and indirect biodiversity-related expenditure: The BIOFIN methodology requires identifying direct and indirect biodiversity-related expenditure by key finance actors. The identification of direct costs was relatively straight-forward, namely expenditure with the explicit intent of achieving one of the three objectives of the Convention on Biological Diversity. The three objectives of the Convention are: the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.

Indirect costs refer to costs where the primary intent is not biodiversity, but there may be a biodiversity conservation or management co-benefit. This could include overhead or administration costs such as general management, awareness raising costs, marketing costs, legal/litigation costs, as well as costs directly intended for an outcome in another sector, such as agriculture or fisheries. For entities that only conduct biodiversity-related activities, a distinction between direct and indirect expenditure was not made or such distinction was not considered to be relevant. All of these entities’ expenditure was considered biodiversity-related.

For all expenditure, a set of coefficients was used to determine the proportion of biodiversity expenditure by an entity when the financials provided were too high-level and aggregated. Coefficients are numerical factors expressed as a percentage. The expenditure attributed to a specific finance actor is calculated by multiplying the total expenditure with this percentage. These coefficients are set out in the table below.

The set of coefficients also assisted in determining the proportion of indirect expenditure of an entity that should be considered biodiversity-related. Only in the case of material expenditure within large programmes of a key finance actor was a proportion of that actor’s separate indirect expenditure accounted for. This was the case in apportioning a part of expenditure from DEA’s Programme 1: Administration as biodiversity-related. The method employed to calculate this apportioning is detailed below in Part 4 of this report. The much smaller biodiversity expenditure within sub-programmes of sector departments such as DWS and DAFF did not merit the apportionment of their Administration Programmes towards biodiversity expenditure.

Table 1: Coefficients for attributing to biodiversity expenditure

| Coefficient / Attribution to Biodiversity Expenditure | “Complete” 100% | “Very High” 75-90% (Target 80%) | “Medium” 25-75% (Target 50%) | “Low” 5 - 25% (15%) | “Marginal” 1 - 5% (2%) | “None or immeasurable” 0% |
|---|--|---|---|---|---|---|
| Definitions | Principal Intent of Organisation / Activity is to accomplish one of three CBD objectives | Main intent at least one of the CBD objectives coupled to a lesser degree with other related / supportive intents | One at least one of the CBD Objectives coupled with other - non biodiversity related intents / actions in balanced proportion | Intent primarily for non-biodiversity related activities but have a stated intent for positive BD impacts | Small BD impacts expected from much larger non-BD programs with at least safeguards in place. | None or immeasurable intent or positive impact on BD or insufficient information to determine attribution |
| Relation to RIO Markers | RIO Marker 2 | RIO Marker 1 | | | RIO Marker 0 | |

Source: UNDP BIOFIN Global Team, 2016.

Tagging biodiversity expenditure with BIOFIN and NBSAP categories: Biodiversity expenditure was tagged in terms of the following BIOFIN “Level 1” categories:

- Access and Benefit Sharing (ABS)
- Biodiversity Knowledge
- Pollution
- Conservation Areas
- Ecosystem management and restoration
- Sustainable Use
- Targeted species and genetic conservation

All biodiversity expenditure was also tagged with the relevant NBSAP Strategic Objectives. In this regard, the BER followed the tagging method employed by the Financial Needs Assessment.

Validation of expenditure review: Validation of the BER was provided through a process of peer reviews by both the national and global BIOFIN teams and through consultation with the Technical Reference Group. The validity of the primary data from both the public and private sector was assured through the use of externally audited figures as far as possible.

3.7 Limitations

The BER Inception Report identified the main potential limitation as low levels of buy-in of the key public and private sector key finance actors and their provision of the required financial and non-financial datasets. However, in general all entities were both willing and able to provide the requested datasets.

A limitation was the lack of detailed levels of disaggregation of expenditure (e.g. per activity, project, or programme) in the financials of private sector key finance actors, namely NGOs. Bilateral ad hoc discussions with individual entities ensued in order to explain the BER data request, including inviting inputs from entities on how to apportion their biodiversity expenditure and disaggregate and categorise their sources of revenue, especially in terms of donor funding. The requested disaggregated data was received from five of the seven NGOs reviewed. The remaining NGOs provided aggregated data, which was also included in the review.

A limitation was obtaining financials from landowners of PPAs, since this group is diverse and large. The BER dealt with this by using proxies for operational and capital expenditure by this group. The method is detailed below in the BER analyses.

3.8 Assumptions

The public revenue and expenditure data was mostly obtained from government's ENRE and EPRE. It is generally the case that externally audited figures portrayed in the ENRE and EPRE are the same as the on-budget revenue and expenditure figures contained in the annual financial statements of individual key finance actors. In numerous cases, especially with respect to the top spenders, Annual Reports were consulted to verify financials and to gather more quantitative and qualitative data, including details on revenue per source that are not part of the ENRE or EPRE (typically assistance received in the form of ODA). Government entities' Annual Reports contain the entity's externally audited financial statements. In addition, as far as was possible, only audited annual financial statements from private sector key finance actors were used.

The following assumptions applied in the use of the datasets in the BER:

- All historical revenue and expenditure data was captured at current (nominal) prices, as portrayed in the ENRE, EPRE, and financials of public and private sector actors. This means that revenue and expenditure data has not been adjusted with historic inflation, i.e. figures are not 'real' amounts. This makes comparison with future official budget estimates possible, because such estimates are typically portrayed in terms of current prices.
- Financial data obtained from the financials from public and private sector actors invariably was prepared according to a mix of accrual-basis (typically encountered in private sector financials), cash-basis and modified cash-basis accounting (typically encountered in national and provincial departments' financials). It was assumed that the large data set compiled for the period under review evens out the relative differences (for example in terms of when certain revenue and expenditure items were captured versus when they were reflected in the financials of an actor).

The following paragraphs discuss the qualitative and quantitative factors and “business-as-usual” assumptions that determined the increment to employ in forecasting expenditure for FY 2015/16 and beyond.

From a qualitative perspective, no new recurrent or development funding is assumed for all key finance actors, i.e. a “business-as-usual” scenario is assumed. In other words, the trajectory for capital expenditure (e.g. investments, payment for capital assets, etc.) is based on the latest available budget (where available) or latest financial statements. Conversely, it is also assumed that none of the existing activities will be stopped as entities reprioritise their expenditure.

Also from a qualitative perspective, this report took cognisance of the general overt government message about the need for fiscal prudence in the medium-term due to the constrained fiscal framework. The fiscal framework is constrained primarily due to sluggish economic growth, which depresses tax revenue growth forecasts and therefore public expenditure growth forecasts.

Another qualitative factor was that, for the purposes of the wide distribution of the BER within the contexts of the South African and global BIOFIN projects, the projection methodology needed to be simple, robust, easily-understood and replicable. One aspect of replicability refers to the ease of annual updates to the BER calculations once the latest government medium-term estimates become available.

From a quantitative perspective, it was important to use the very latest budget estimates. Estimates for all national and provincial government departments and entities for 2016 to FY 2019 were obtained from the official MTEF estimates published in the latest ENRE and EPRE. The ‘revised estimates’ for the 2015/16 were employed as if they were the final actual expenditure, albeit not yet audited. It was clear from a global perspective that the general government medium-term estimates point to below zero real growth (i.e. taking the effect of headline inflation into account). It can be argued that budget cuts have already been phased in in the medium-term (2017-2019).

The initial bottom-up calculations of biodiversity expenditure by all government departments and their entities during the BER exercise for the 2016 to 2019 period (which itself is largely a function of the official medium-term estimates as published in the ENRE and EPRE for 2017 to 2019) point to an average year-on-year growth of approximately 3%. In this regard, please refer to *Table 46: Total historic and projected expenditure on biodiversity by all government key finance actors, 2016-2024*, discussed later on in this report. This 3% growth happens to be the lower bound of South Africa’s inflation-target. The upper bound is 6%. The BER presumes generally low government expenditure increases beyond the official medium-term estimates (published for 2017 to 2019) contained in the ENRE and EPRE.

A 3% increment was proposed to the Technical Review Group, based on the qualitative and quantitative factors discussed above. Follow-up bilateral discussions also pointed to the need to be prudent in projecting biodiversity expenditure beyond 2019. It was deemed that using historical data and applying and annual average growth would only have been a theoretical exercise. The conservative increment of 3% applied to projections of biodiversity expenditure beyond 2019 is therefore a function of a) the quantitative approach taking into account the average medium-term year-on-year growth in government biodiversity expenditure and b) a qualitative approach taking into account the fiscal framework constraints foreseen beyond 2019, the publicly known and widely understood lower bound of inflation-targeting, and the need for a simple and replicable projection methodology.

Future and follow-up BERs could include references to official budget analyses based on the budget votes of national and provincial government departments, which typically contain both real and nominal growth rates. More importantly, future BERs could be annually updated using the BER data with the very latest medium-term budget estimates as provided for in the ENRE and EPRE. For example, the 2017 MTEF to be tabled in National Parliament during February 2017, will provide medium-term estimates until FY 2019/2020. The updated estimates for the revised outer years could then be employed to compute a new biodiversity trend. If markedly different, it would provide grounds for significant adjustments to both figures and the methodology. A next round of BER will compute bottom-up biodiversity expenditure calculations (expected to occur 4 or 5 years from now), although these calculations may be based on the expenditure of new key finance actors as identified in a new Policy and Institutional Review.

The general lack of forward-looking plans and budgetary data in the private sector meant that projections had to rely on either historic growth figures or some judgement on the projected growth environment. From a qualitative stance, it was deemed not prudent to extrapolate historic growth to arrive at projected expenditure increments. Secondly, it was deemed appropriate to apply a similar forecasting method to that of biodiversity expenditure in government, partly for the sake of consistency as well as simplicity. The lower bound of 3% of inflation-targeting was therefore also deemed to be a prudent increment for future expenditure growth from 2016 to 2024.

All historic (2009 to 2015) expenditure amounts are current / nominal, i.e. not adjusted for inflation, except in very limited cases where historic expenditure was estimated based on past inflation rates – these cases are clearly highlighted in the worksheets.

A further note to the methodology and assumptions in projecting future expenditure: in-year budget adjustments are allowed (albeit under very specific circumstances) under both the Public Finance Management Act (No. 1 of 1999) and the Municipal Finance Management Act (No. 56 of 2003) and their respective regulations. Adjustments are typically called for in supplementary budget submission by government departments. Therefore, even though the official budget (2017) and medium-term estimates (2018 to 2019) are provided in the ENRE and EPRE, they are invariably and on legal grounds susceptible to change, dramatic budget cuts included. Suffice to say that all projections are assumptions based on very low growth in government expenditure and that budget cuts can be expected across many government programmes in the next MTEF.

4. BER analyses

The analyses in Part 4 are provided in three sections. Section 4.1 provides disaggregated data per sector and key finance actor while 4.2 provides consolidated data for all actors. Section 4.3 assesses historic revenue per source, such as own (internally-generated) income and ODA.

Please note that only key datasets and results are presented below. DEA will also be provided with a database and other results in the BER MS Excel file. It contains both the raw database (revenue, expenditure and selected budget estimates for all key finance actors for the 2009 to 2024 period) and detailed analyses for each key finance actor, as well as consolidated analyses.

4.1 Biodiversity expenditure

This Section provides a snapshot of each key finance actor in biodiversity management in South Africa, detailing their individual expenditure items and patterns for the FY 2008/09 to FY 2014/15 period. For each actor, it is detailed how biodiversity expenditure was apportioned and classified in terms of the latest BIOFIN taxonomy.

For some government entities, in particular government departments, the official budget for 2017 has been appropriated already in the various National and Provincial Legislatures and medium-term budget estimates (still unappropriated) for 2018 and 2019 are provided in the ENRE and EPRE. The latest financials from the NGOs have been used, with the latest being, across the board, the financials of 2015. Whenever historic and projected biodiversity expenditure tables are presented, these figures are the results of the application of the coefficients to apportion biodiversity expenditure.

4.1.1 Public sector

A high level Public Environmental Expenditure Review by the Government Technical Advisory Centre highlights the “very complex environmental expenditure landscape” in South Africa (GTAC, 2016: 1). Since biodiversity management is subsumed by the larger area of the environment sector, this complexity arguably applies to expenditure on biodiversity. Besides the DEA, eleven (11) other national departments also contribute to environmental expenditure (GTAC, 2016:1). Only the key biodiversity finance actors are described below.

The public sector budgeting system is characterised in the following paragraphs.

Box 1: Background to South Africa’s public sector budgeting system

Legislative framework: annual planning, budgeting, budget execution, reporting, auditing and oversight are prescribed through a comprehensive set of legislation. South Africa’s supreme law, the Constitution of 1996, lays the foundation for transparent and participative public sector planning, budgeting, financial management and public sector procurement. It called for the enactment of further legislation to deal with key process in the budget cycle, including: planning for results, results-based budgeting, revenue and expenditure management, cash management, auditing, and legislative oversight. Key legislative pieces have been enacted, such as the Public Services Act (No. 103 of 1994), dealing with public service planning, performance management and human resource management, and the Preferential Procurement Policy Framework Act (No. 5 of 2000), dealing with public sector procurement. The Public Finance Management Act (No. 1 of 1999) and the Municipal Finance Management Act (No. 56 of 2003) and their regulations

provide detailed prescriptions for public financial management and applying to all aspects of the budget cycle. The Money Bills Amendment Procedure and Related Matters Act (No. 9 of 2009) provides Parliament with the tools to interrogate and change aspects of tabled budgets (i.e. a certain type of Money Bill).

Institutional framework: Interrelated yet distinct annual budget processes are prescribed for the three tiers of the Government of South Africa (national, provincial and local). National and provincial government departments and their entities (including agencies, boards and government-owned firms) typically submit annual performance plans, budgets and budget execution reports to the relevant national or provincial executive authority and in turn to the relevant national or provincial legislature for review and approval. Municipalities and their entities follow a similar approach, with municipal councils constituting the legislative branch of local government.

Oversight and Accountability: Various processes exist within the Legislative Branch of the Government of South Africa (consisting of National Parliament, Provincial Legislatures and Municipal Councils) that provide for the scrutiny of plans, budgets and expenditure reports. Strategic plans with a medium- to long-term focus on performance are periodically assessed and approved, whereas annual performance plans are considered alongside tabled annual budgets. The annual Division of Revenue Bill provides for the division of nationally collected revenue to all tiers of government and the Legislative Branch through its scrutiny and enactment of this Bill also gets insights into the various conditions attached to grant frameworks. Annual Appropriation Bills, which specify detailed revenue and expenditure estimates per major segments of departments and entities of government, are considered and enacted. The above-mentioned Money Bills Amendment Procedure and Related Matters Act provides for the development of grounds for the adjustment of medium-term budget allocations. Recommendations are made by the Parliamentary Committees to influence the Medium Term Budget Policy Statement, after analysis of the previous years' financial and non-financial performance.

Accounting and reporting systems: The Basic Accounting System (BAS) provides for the coordinated recording of transactions of national and provincial government departments. Their entities generally conduct their accounting in terms of generally recognised accounting practices for both public and private sectors. Government's programme-based budgeting follows the SCoA framework, which is aligned to the IMF's GFS framework. As described earlier, reporting of national and provincial government employs SCoA for budgeting, accounting and reporting. Reporting is provided in a broad set of qualitative and quantitative public and non-public reports, such as the annual ENRE and EPRE. Municipalities have greater freedom in the financial management systems they employ, as long as these systems conform to the Municipal Finance Management Act and related prescriptions.

Audit: External audits of most public sector institutions are conducted by the Auditor-General. While routine audits of financial information and compliance and periodic performance audits are conducted, the Auditor-General increasingly is performing audits of performance information, i.e. assessing the quality of performance management systems. Internal audit functions are required for all public sector institutions, although often sourced out to private firms or shared by other horizontal institutions (for example, some low capacity local municipalities share the internal audit services with the district municipality). Internal audit committees also monitor and make recommendations to put control mechanisms in place.

From the above characteristics, it is evident that there are numerous entry-points for collecting data on biodiversity expenditure. The following public sector data sources contributed to the BER analyses:

- National government departments and entities under their control: ENRE and annual reports from 2009 to 2016 for historic expenditure and ENRE for projected expenditure.
- National government entities: A combination of annual reports (containing the audited annual financial statements) and ENRE from 2009 to 2016 for historic expenditure and ENRE for project expenditure.
- Provincial government departments and provincial conservation management agencies under their control: EPRE and annual reports (containing the audited annual financial statements), from 2009 to 2016.
- From 2020 and onwards, the baseline is the total expenditure of the medium-term estimate for 2019 (excluding transfers and subsidies, unless explicitly required for the purposes of the BER). A conservative 3% increase was applied from the latest official medium-term estimates across the board from 2020 to 2024.

Biodiversity expenditure by national government departments and their entities

Department of Environmental Affairs (DEA): The national Department of Environmental Affairs implements a substantial number of environmental programmes, many of which are classified as biodiversity-related. The Department’s importance in biodiversity management in South Africa is reflected in its large budget for both high-level coordination and transfer payments to other key finance actors (notably SANParks, iSimangaliso Wetland Park Authority and SANBI). The department’s budget vote (i.e. on-budget programme expenditure) is fully funded by the National Revenue Fund. Extra-budgetary revenue in the form of international aid is minimal and discussed later in this report in the section on consolidated revenue.

DEA is the main responsible entity for achieving Outcome 10 (Environmental Assets and Natural Resources that are Valued, Protected and Continually Enhanced) of the 12 Government Outcomes of the Government of South Africa’s Medium-term Strategic Framework 2014-2019 (Government of South Africa, 2014). A review of the 2014 and 2015 Annual Reports reveal no material findings that would adversely affect the planning, budgeting and expenditure on biodiversity in South Africa. The Department received an unqualified audit report/opinion from the Auditor General of South Africa (AGSA) for the 2014 and 2015 financial years. The systems to plan and report on performance information for key programmes, such as Environmental Programmes, were found to be reliable. Voted funds to be surrendered to the Revenue Fund (i.e. allocated funds not spent by the department) are negligible for 2014 and 2015.

The tables below provide the actual (historic), official forward estimates and calculated projected biodiversity expenditure of DEA and its programmes.

Table 2: DEA historic biodiversity expenditure, 2009 to 2016

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|------------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------|---------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Historic biodiversity expenditure: 2009 to 2016* | | | | | | | | | |
| Department of Environmental Affairs (DEA) | 1,276 | 1,594 | 2,161 | 2,723 | 3,197 | 2,792 | 3,165 | 3,396 | 20,305 |
| Programme 1: Administration | 143 | 169 | 219 | 188 | 333 | 278 | 286 | 366 | 1,983 |
| Programme 2: Legal, Authorisations and Compliance | - | 38 | 43 | 36 | 57 | 46 | 46 | 64 | 330 |
| Programme 3: Oceans and Coasts | 224 | 354 | 644 | 876 | 523 | 325 | 349 | 400 | 3,694 |
| Programme 5: Biodiversity and Conservation | 44 | 41 | 56 | 59 | 89 | 91 | 112 | 186 | 678 |
| Programme 6: Environmental Programmes | 865 | 988 | 1,194 | 1,559 | 2,188 | 2,042 | 2,363 | 2,370 | 13,569 |
| Programme 7: Chemicals and Waste Management | - | 4 | 4 | 5 | 7 | 9 | 9 | 11 | 51 |
| Grand Total | 1,276 | 1,594 | 2,161 | 2,723 | 3,197 | 2,792 | 3,165 | 3,396 | 20,305 |
| Grand Total year-on-year increase | | 25% | 36% | 26% | 17% | -13% | 13% | 7% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities, except for transfer payments to implementing agents of EPWP projects under Programme 6: Environmental Programmes.

Source: National Treasury, various years.

Table 3: DEA projected biodiversity expenditure, 2017 to 2019

| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
|--|-----------------------|--------------|--------------|--|--------------|--------------|--------------|--------------|---------------|
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Projected biodiversity expenditure: 2017 to 2024* | | | | | | | | | |
| Department of Environmental Affairs (DEA) | 3,774 | 4,053 | 4,212 | 4,338 | 4,469 | 4,603 | 4,741 | 4,883 | 35,072 |
| Programme 1: Administration | 358 | 368 | 373 | 385 | 396 | 408 | 420 | 433 | 3,141 |
| Programme 2: Legal, Authorisations and Compliance | 86 | 90 | 90 | 92 | 95 | 98 | 101 | 104 | 757 |
| Programme 3: Oceans and Coasts | 475 | 489 | 492 | 507 | 522 | 537 | 554 | 570 | 4,146 |
| Programme 5: Biodiversity and Conservation | 166 | 126 | 133 | 137 | 141 | 146 | 150 | 154 | 1,153 |
| Programme 6: Environmental Programmes | 2,674 | 2,965 | 3,107 | 3,200 | 3,296 | 3,395 | 3,497 | 3,602 | 25,734 |
| Programme 7: Chemicals and Waste Management | 15 | 16 | 17 | 17 | 18 | 19 | 19 | 20 | 141 |
| Grand Total | 3,774 | 4,053 | 4,212 | 4,338 | 4,469 | 4,603 | 4,741 | 4,883 | 35,072 |
| Grand Total year-on-year increase | 11% | 7% | 4% | 3% | 3% | 3% | 3% | 3% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities, except for transfer payments to implementing agents of EPWP projects under Programme 6: Environmental Programmes.

Source: National Treasury, various years.

Total biodiversity expenditure by DEA in general grew above inflation, relating to real growth. Growth slows to zero real growth in the medium-term estimates. The relatively large size of Programme 6: Environmental Programmes means that growth in its programme budget overshadows growth in all other programmes. The 11% growth in total biodiversity expenditure by DEA from 2016 to 2017 is the effect of

growth in the sub-programme Working for Water and Working on Fire, under Programme 6. General fiscal spending pressures are expected to further keep growth down to zero real growth after that.

The list below unpacks the approved 2017 current budget (National Treasury, various years) for each programme and which aspects were classified as biodiversity-related. Programme 4: Climate Change and Air Quality was the only programme of DEA that was not considered biodiversity-related. Activities related to ecosystem based adaptation on biome response to climate change are addressed under Programme 5: Biodiversity and Conservation.

- **Administration:** Of its R808.2 million budget, R652 million is for current payments, R16 million is transferred to other entities and R140.3 million spent on capital payments. A proportion of the indirect costs incurred within this programme was classified as biodiversity-related as an acknowledgement that biodiversity-related expenditure in the Department is dependent on overhead and management services performed under this programme. The expenditure under this programme apportioned as biodiversity-related equalled the proportion of the sum of direct biodiversity-related programme expenditure in the department to total departmental expenditure for a given year. In other words, the proportion of indirect expenditure categorised as biodiversity is equal to the proportions of the expenditure in the department's biodiversity-related programmes and sub-programmes to the total departmental expenditure for each year under review. Each year's biodiversity expenditure by this programme is therefore a different proportion of total expenditure by DEA.
- **Legal, Authorisations, Compliance and Enforcement:** Close to 100% of its R164.6 million budget is for current payments. A certain degree of this programme's expenditure is biodiversity-related. The apportionment employed the same method as for apportioning Administration (described above).
- **Oceans and Coasts:** The budget of R475 million is spent on current payments (R460.7 million) and capital payments (R14.3). All of the expenditure under this programme is biodiversity-related.
- **Climate Change and Air Quality:** Of its budget of R289.6 million for 2017, R82 million is for current payments and R1.2 million for capital payments. R206.5 million is transferred to the South African Weather Service for the management of meteorological services. No biodiversity-related expenditure occurs under this programme.
- **Biodiversity and Conservation:** This programme's R718.2 million budget for 2017 is spent on current payments of R165.3 million and capital payments of R0.7 million, all of which is classified as biodiversity-related. The rest (R552.2 million) is transferred in an approximately half-half split to SANParks and SANBI, [with a small portion going to iSimangaliso](#). Trends in these transfers are discussed elsewhere in this report.
- **Environmental Programmes:** With its R3.865 billion budget for 2017, this is the biggest programme of the Department (60% of the total departmental budget). Only R643.1 million is spent on current payments, while R3.22 billion is transferred to the recipients described in sub-bullet points below. A coefficient of 85% was applied to this programme's current expenditure to

account for some activities which are not biodiversity-related, including youth skills development and waste management.

- Departmental agencies iSimangaliso Wetland Park Authority, SANParks and SANBI will receive R539.4 million. This is accounted for in the review under “Transfers and subsidies” but not added to the biodiversity expenditure of this programme in order to avoid double-counting. The expenditure of these agencies is biodiversity-related and shown separately.
- The Development Bank of Southern Africa will receive R180 million towards funding the Green Fund, which finances investments in green projects. The portfolio is complex with more than 20 long term active funds. The review of these projects fall outside the scope of the biodiversity expenditure review. It would be prudent not to include this expenditure as biodiversity-related until the results of the projects could be verified.
- R2.498 billion is transferred to the activities of selected Expanded Public Works Programmes overseen by DEA, namely Environmental Protection and Infrastructure Programme, Working for Water and Working on Fire. Implementing agents, such as municipalities, contracted to DEA receive the transfers, which then also fund labourers in the form of wages. This means that transfers to agents fund their management and operational costs. The expenditure review does not include expenditure by implementing agents nor households. Part of the transfers are incentive grants to reward municipalities for implementing labour intensive methods. It was deemed that a significant portion of the transfer payments by DEA to its particular Expanded Public Works Programmes is biodiversity-related and therefore a coefficient of 85% was applied. This is the only other instance where transfer payments are included in the estimation of total biodiversity-related expenditure, since no double counting will be performed by doing so.
- **Chemicals and Waste Management:** This programme will spend R101.8 million on current payments and R0.6 million on capital payments in 2017. Based on the BIOFIN Coefficient Table described above, 15% of this programme’s expenditure (R15 million in 2017) is classified as biodiversity-related.

South African National Parks (SANParks): SANParks is the largest national government entity responsible for conserving South Africa’s fauna, flora and ecosystems (apart from DEA). It is mandated to conserve biodiversity through the establishment and management of national parks, as per the National Environmental Management: Protected Areas Act (No. 57 of 2003). All of its expenditure is deemed biodiversity expenditure.

The tables below provide the historic and projected expenditure. Its historic revenue trends are also unpacked, as well as past and projected trends in a key source of its revenue: fiscal transfers from DEA.

Table 4: South African National Parks (SANParks) historic and projected biodiversity expenditure, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|-------|-------|--|-------|-------|-------|------------------|---------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| South African National Parks (SANParks) | 1,185 | 1,342 | 1,559 | 1,804 | 1,882 | 2,418 | 2,797 | 2,409 | 15,396 |
| Grand Total year-on-year increase | | 13% | 16% | 16% | 4% | 28% | 16% | -14% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| South African National Parks (SANParks) | 2,391 | 2,184 | 2,109 | 2,172 | 2,237 | 2,304 | 2,374 | 2,445 | 18,215 |
| Grand Total year-on-year increase | -1% | -9% | -3% | 3% | 3% | 3% | 3% | 3% | |

* Audited outcomes from 2009 to 2015 are from SANParks Annual Reports 2009 to 2015. From 2016, the amounts are from ENE.

Source: National Treasury, various years; SANParks Annual Reports, various years.

Table 5: South African National Parks (SANParks) historic revenue per source, 2009 to 2015

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Grand Total |
|--|------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Actual revenue: 2009 to 2015* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| Total revenue | 986 | 1,174 | 1,386 | 1,682 | 1,665 | 2,259 | 2,767 | 11,919 |
| Own (internal) revenue | 726 | 763 | 880 | 964 | 1,082 | 1,321 | 1,414 | 7,149 |
| Other operating income: Various | 22 | 23 | 53 | 22 | 20 | 20 | 26 | 187 |
| Sales - fauna and flora | 39 | 13 | 12 | 45 | 4 | 43 | 31 | 186 |
| Tourism, Retail, Concession and Other | 664 | 728 | 815 | 897 | 1,058 | 1,258 | 1,356 | 6,776 |
| National Government (various departments, undefined in Annual Financial Statements) | 257 | 407 | 503 | 717 | 580 | 933 | 1,341 | 4,738 |
| Donor funding (various, undefined in Annual Financial Statements) | 3 | 4 | 3 | 1 | 3 | 5 | 13 | 32 |
| Grand Total | 986 | 1,174 | 1,386 | 1,682 | 1,665 | 2,259 | 2,767 | 11,919 |
| Grand Total year-on-year increase | | 19% | 18% | 21% | -1% | 36% | 23% | |

Source: National Treasury, various years; SANParks Annual Reports, various years.

SANParks collects substantial internally generated revenue from accommodation and entrance fees. These cannot be reliably predicted due the complexity of variables.

Table 6: Historic and projected transfers from DEA to SANParks, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|-------------|-------------|--|------------|------------|------------|------------------|--------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Transfers received from DEA | | | | | | | | | |
| Programme 5: Biodiversity and Conservation | 205 | 184 | 189 | 161 | 255 | 237 | 275 | 278 | 1,784 |
| Current payments | 136 | 109 | 155 | 142 | 228 | 209 | 245 | 247 | 1,471 |
| Payment for capital assets | 69 | 75 | 34 | 19 | 27 | 28 | 30 | 31 | 313 |
| Programme 6: Environmental Programmes | 307 | 185 | - | 60 | 63 | 306 | 315 | 268 | 1,504 |
| Payment for capital assets | 307 | 185 | - | 60 | 63 | 306 | 315 | 268 | 1,504 |
| Grand Total | 512 | 369 | 189 | 221 | 318 | 543 | 590 | 546 | 3,288 |
| Grand Total year-on-year increase | | -28% | -49% | 17% | 44% | 71% | 9% | -7% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Transfers received from DEA | | | | | | | | | |
| Programme 5: Biodiversity and Conservation | 278 | 285 | 302 | 311 | 320 | 330 | 340 | 350 | 2,516 |
| Current payments | 245 | 285 | 302 | 311 | 320 | 330 | 340 | 350 | 2,483 |
| Payment for capital assets | 33 | - | - | - | - | - | - | - | 33 |
| Programme 6: Environmental Programmes | 358 | 208 | 104 | 107 | 110 | 114 | 117 | 121 | 1,239 |
| Payment for capital assets | 358 | 208 | 104 | 107 | 110 | 114 | 117 | 121 | 1,239 |
| Grand Total | 636 | 493 | 406 | 418 | 431 | 444 | 457 | 471 | 3,755 |
| Grand Total year-on-year increase | 16% | -22% | -18% | 3% | 3% | 3% | 3% | 3% | |

Source: National Treasury, various years; SANParks Annual Reports, various years.

Consistent declines in its total expenditure from 2016 casts doubt whether SANParks can expand its activities, such as incorporating and managing more protected areas. Just below half of its annual revenue is from government grants, with grants from DEA making up the largest segment. Operating income from tourism activities, retail transactions and concessions contribute to roughly the other half of total revenue for the period under review. Fiscal transfers from DEA look set to drastically decrease from 2018 and the question is begged how sustainable this is given the mandate of SANParks to manage the largest part of protected areas in South Africa. However, consistently strong (above inflation) growth in its internally generated revenue is a sign that its business model is working. SANParks has been consistently adding surpluses (net profit) to its balance sheet from 2009 and 2015. It would need to continue the upward trend in own revenue and maintain to off-set the declines in DEA grants.

iSimangaliso Wetland Park Authority: The Authority was established in 2000 pursuant to the World Heritage Convention Act of 1999. It manages South Africa's first World Heritage site, which includes 332,000 ha of coastal land from Maphelane in the south to Kosi Bay in the north, including all of Lake St Lucia. Its work is carried out by the following programmes: Administration, Infrastructure, land care and park establishment, Local economic development, Research and monitoring, and Commercialisation. The Authority's total expenditure for the period under review was considered biodiversity expenditure.

Table 7: iSimangaliso Wetland Park Authority historic and projected biodiversity, 2009 to 2024

| Rand Millions (R' 000 000s) | Entity started operations in 2009 | | Audited outcomes | | | | | Revised estimate | Grand Total |
|--|-----------------------------------|------|------------------|--|------|------|------|------------------|--------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Historic and projected biodiversity expenditure: 2011-2016* | | | | | | | | | |
| iSimangaliso Wetland Park Authority | n/a | n/a | 120 | 149 | 98 | 112 | 144 | 137 | 760 |
| Grand Total year-on-year increase | n/a | n/a | | 24% | -34% | 15% | 28% | -4% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Historic and projected biodiversity expenditure: 2017-2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| iSimangaliso Wetland Park Authority | 170 | 154 | 162 | 167 | 172 | 177 | 182 | 187 | 1,370 |
| Grand Total year-on-year increase | 23% | -9% | 5% | 3% | 3% | 3% | 3% | 3% | |

* Audited outcomes from 2011 to 2015 are from Annual Reports 2009 to 2015. From 2016, the amounts are from ENE.

Source: National Treasury, various years; Entity's annual reports, various years.

Table 8: iSimangaliso Wetland Park Authority revenue per source, 2009 to 2015

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | Grand Total |
|--|------------------|------------|-------------|-----------|------------|-------------|
| Actual revenue: 2009 to 2015 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| iSimangaliso Wetland Park Authority | 81 | 140 | 79 | 86 | 126 | 513 |
| Donor funding: Public Sector - national and international | 69 | 114 | 64 | 72 | 106 | 424 |
| Grants | 69 | 114 | 64 | 72 | 106 | 424 |
| Own (internal) revenue | 12 | 26 | 16 | 15 | 21 | 89 |
| Interest income, Park revenue, Penalties, Other income | 12 | 26 | 16 | 15 | 21 | 89 |
| Grand Total | 81 | 140 | 79 | 86 | 126 | 513 |
| Grand Total year-on-year increase | | 73% | -43% | 9% | 47% | |

Source: National Treasury, various years; Entity's annual reports, various years.

Table 9: Historic and projected transfers from DEA to iSimangaliso Wetland Park Authority, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|-------------|-------------|--|------------|------------|------------|------------------|--------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Transfers received from DEA | 18 | 20 | 21 | 25 | 26 | 28 | 30 | 31 | 199 |
| Programme 5: Biodiversity and Conservation | 18 | 20 | 21 | 25 | 26 | 28 | 30 | 31 | 199 |
| Current payments | 18 | 20 | 21 | 25 | 26 | 28 | 30 | 31 | 199 |
| Payment for capital assets | - | - | - | - | - | - | - | - | - |
| Programme 6: Environmental Programmes | - | 30 | 23 | 42 | 44 | 96 | 101 | 61 | 397 |
| Payment for capital assets | | 30 | 23 | 42 | 44 | 96 | 101 | 61 | 397 |
| Grand Total | 18 | 50 | 44 | 67 | 70 | 124 | 131 | 92 | 596 |
| Grand Total year-on-year increase | | 178% | -12% | 52% | 4% | 77% | 6% | -30% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Transfers received from DEA | 33 | 34 | 36 | 37 | 38 | 39 | 41 | 42 | 300 |
| Programme 5: Biodiversity and Conservation | 33 | 34 | 36 | 37 | 38 | 39 | 41 | 42 | 300 |
| Current payments | 33 | 34 | 36 | 37 | 38 | 39 | 41 | 42 | 300 |
| Payment for capital assets | - | - | - | - | - | - | - | - | - |
| Programme 6: Environmental Programmes | 99 | 100 | 111 | 114 | 118 | 121 | 125 | 129 | 917 |
| Payment for capital assets | 99 | 100 | 111 | 114 | 118 | 121 | 125 | 129 | 917 |
| Grand Total | 132 | 134 | 147 | 151 | 156 | 161 | 165 | 170 | 1,217 |
| Grand Total year-on-year increase | 43% | 2% | 10% | 3% | 3% | 3% | 3% | 3% | |

Source: National Treasury, various years.

Total expenditure growth is erratic. Of concern is that total expenditure declines in the medium-term from the peak in 2017. The Authority receives grant funding, mostly in the form of a transfer from DEA, which averages approximately 80% of total revenue for the period under review. These transfers experienced a drastic dip in 2016, but the dip will be corrected in 2017 and sustained in the medium-term. The bulk of the rest of its revenue comes from park fees and international aid. A clear pattern for its internally generated revenue through park fees is not observable. Its international aid is discussed elsewhere in this report.

South African National Biodiversity Institute (SANBI): SANBI, a public entity established pursuant to the National Environmental Management: Biodiversity Act of 2004 (No. 10 of 2004) and accountable to DEA. SANBI manages key biodiversity and natural heritage assets, and devotes resources to evidence-based research and policy advocacy to promote biodiversity management in South Africa. All of its expenditure is considered biodiversity expenditure.

Table 10: SANBI historic and projected biodiversity, 2009 to 2024

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|--|-----------------------|------|------|--|------|------|------|------------------|--------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| South African National Biodiversity Institute (SANBI) | 377 | 346 | 343 | 389 | 423 | 514 | 622 | 610 | 3,624 |
| Grand Total year-on-year increase | | -8% | -1% | 13% | 9% | 22% | 21% | -2% | |
| <i>Rand Millions (R' 000 000s)</i> | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| South African National Biodiversity Institute (SANBI) | 661 | 714 | 761 | 784 | 808 | 832 | 857 | 883 | 6,301 |
| Grand Total year-on-year increase | 8% | 8% | 7% | 3% | 3% | 3% | 3% | 3% | |

* Audited outcomes from 2009 to 2015 are from SANBI Annual Reports 2009 to 2015. From 2016, the amounts are from ENE.

Source: National Treasury, various years; SANBI Annual Reports, various years.

Table 11: SANBI revenue per source, 2009 to 2015

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Grand Total |
|--|------------------|------------|------------|------------|------------|------------|------------|-------------|
| Actual revenue: 2009 to 2015 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| South African National Biodiversity Institute (SANBI) | 361 | 358 | 321 | 386 | 442 | 577 | 679 | 3124 |
| Donor funding: Private Sector South Africa | 3 | 3 | 4 | 5 | 6 | 6 | 4 | 31 |
| Corporate | 1 | 2 | 2 | 2 | 3 | 3 | 1 | 15 |
| Individuals and organisations (NGOs, Trusts) | 2 | 1 | 1 | 2 | 3 | 3 | 2 | 16 |
| Donor funding: Public Sector International | 47 | 55 | 12 | 18 | 20 | 29 | 23 | 203 |
| Foreign | 47 | 55 | 12 | 18 | 20 | 29 | 23 | 203 |
| National Government: National Department of Environmental Affairs (DEA) | 270 | 257 | 259 | 316 | 363 | 481 | 569 | 2513 |
| Government grants: close to 100% from DEA | 129 | 151 | 161 | 220 | 207 | 264 | 290 | 1422 |
| Other grants, sponsorships and donations, including additional grants from DEA | 141 | 106 | 98 | 96 | 155 | 217 | 279 | 1091 |
| Own (internal) revenue | 41 | 44 | 46 | 48 | 53 | 60 | 84 | 377 |
| Revenue from exchange transactions (other than Admission fees) | 19 | 17 | 20 | 18 | 21 | 24 | 34 | 153 |
| Revenue from exchange transactions: Admission fees | 22 | 26 | 26 | 30 | 32 | 37 | 50 | 223 |
| Grand Total | 361 | 358 | 321 | 386 | 442 | 577 | 679 | 3124 |
| Grand Total year-on-year increase | | -1% | -10% | 20% | 15% | 30% | 18% | |

Source: National Treasury, various years; SANBI Annual Reports, various years.

Table 12: Historic and projected transfers from DEA to SANBI, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|-------------|-------------|--|-------------|-------------|-------------|------------------|--------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Transfers received from DEA | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Programme 5: Biodiversity and Conservation | 128 | 138 | 147 | 205 | 194 | 208 | 223 | 232 | 1,475 |
| Current payments | 128 | 138 | 147 | 205 | 194 | 208 | 223 | 232 | 1,475 |
| Payment for capital assets | - | - | - | - | - | - | - | - | - |
| Programme 6: Environmental Programmes | - | 12 | 13 | 15 | 15 | 55 | 66 | 72 | 248 |
| Payment for capital assets | - | 12 | 13 | 15 | 15 | 55 | 66 | 72 | 248 |
| Grand Total | 128 | 150 | 160 | 220 | 209 | 263 | 289 | 304 | 1,723 |
| Grand Total year-on-year increase | | 17% | 7% | 38% | -5% | 26% | 10% | 5% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Transfers received from DEA | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Programme 5: Biodiversity and Conservation | 237 | 249 | 264 | 272 | 280 | 288 | 297 | 306 | 2,194 |
| Current payments | 237 | 249 | 264 | 272 | 280 | 288 | 297 | 306 | 2,194 |
| Payment for capital assets | - | - | - | - | - | - | - | - | - |
| Programme 6: Environmental Programmes | 81 | 75 | 79 | 81 | 84 | 86 | 89 | 92 | 667 |
| Payment for capital assets | 81 | 75 | 79 | 81 | 84 | 86 | 89 | 92 | 667 |
| Grand Total | 318 | 324 | 343 | 353 | 364 | 375 | 386 | 398 | 2,861 |
| Grand Total year-on-year increase | 5% | 2% | 6% | 3% | 3% | 3% | 3% | 3% | |

Source: National Treasury, various years.

SANBI had very strong growth in total expenditure up to 2016. In the medium-term, SANBI expenditure is projected to grow above inflation. SANBI is funded primarily by transfer payments from DEA. The key transferring programmes are Programme 5: Biodiversity and Conservation and Programme 6: Environmental Programmes. The growth in transfers from these programmes slows to close zero real growth in the medium-term. However, a collection of other government grants supported revenue so that a very strong year-on-year growth can be seen in SANBI's total revenue. SANBI receives donor funding from abroad (discussed elsewhere in this report) and from South African sources. These sources are dwarfed by its own internally generated revenue, mostly from admission fees from assets such as Kirstenbosch Botanical Gardens.

Department of Agriculture, Forestry and Fisheries (DAFF): DAFF is the policy, strategic and programmatic lead in agricultural, forestry and fisheries resources management in the country. These functions are performed by six (6) key programmes: Food Security and Agrarian Reform, Trade Promotion and Market Access, Forestry and Natural Resources Management, and Fisheries.

Table 13: DAFF historic and projected biodiversity expenditure, 2009 to 2024 (excluding biodiversity expenditure by Marine Living Resource Fund)

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|--|-----------------------|------------|-------------|--|------------|------------|------------|------------------|--------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Department of Agriculture, Forestry and Fisheries (DAFF) | 331 | 348 | 218 | 388 | 290 | 260 | 290 | 159 | 2,283 |
| Programme 5: Forestry and Natural Resources Management, Sub-programme 5.4: Natural Resources Management (excluding LandCare conditional grant to provincial departments responsible for agriculture) | 297 | 312 | 193 | 350 | 89 | 85 | 54 | 52 | 1,432 |
| Programme 6: Fisheries, Sub-programme 6.4: Marine Resources Management | 22 | 23 | 14 | 26 | 187 | 162 | 222 | 92 | 749 |
| Grand Total | 12 | 12 | 11 | 11 | 13 | 13 | 14 | 15 | 102 |
| Grand Total year-on-year increase | | 4% | -13% | 6% | 15% | 3% | 7% | 6% | |
| <i>Rand Millions (R' 000 000s)</i> | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Department of Agriculture, Forestry and Fisheries (DAFF) | 178 | 180 | 207 | 214 | 220 | 227 | 233 | 240 | 1,700 |
| Programme 5: Forestry and Natural Resources Management, Sub-programme 5.4: Natural Resources Management (excluding LandCare conditional grant to provincial departments responsible for agriculture) | 55 | 59 | 62 | 64 | 66 | 68 | 70 | 72 | 517 |
| Programme 6: Fisheries, Sub-programme 6.4: Marine Resources Management | 106 | 104 | 127 | 131 | 135 | 139 | 143 | 148 | 1,033 |
| Grand Total | 17 | 17 | 18 | 18 | 19 | 20 | 20 | 21 | 149 |
| Grand Total year-on-year increase | 9% | 3% | 4% | 3% | 3% | 3% | 3% | 3% | |

Source: National Treasury, various years.

The following sub-programmes and conditional grants to provincial departments were deemed to be biodiversity-related:

- **Programme 5: Forestry and Natural Resource Management, Sub-programme Natural Resource Management:** Based on the BIOFIN Coefficient Table, thirty percent (30%) of expenditure of this sub-programme under the Forestry and Natural Resource Management programme was apportioned biodiversity as an estimation of what is spent towards preserving and developing indigenous forests, LandCare Programme activities, and risk and disaster management. The reason for this apportioning is because of this sub-programme's other activities involving commercial woodlands and climate change mitigation, which is not biodiversity-related. The LandCare conditional (non-discretionary) grant to provincial departments responsible for agriculture is part of this sub-programme's budget in the form of a transfer payment under 'Transfers and Subsidies.' This grant serves the purposes of the National LandCare Programme, which includes promoting sustainable land and soil management practices, preventing land degradation and desertification in rural areas, and contributing to job creation.² Specific activities include mitigating the spread of invasive alien plants, protecting agricultural land against degradation, water resources conservation, and stopping the loss of topsoil. It was deemed that a high degree of the expenditure by provinces on the LandCare conditional grant is biodiversity-related. Based on the coefficient table, 80% of expenditure is biodiversity-related. Since it is a conditional grant, the BER assumes that receiving provincial departments spend a) close to all of the grant and b) only on activities approved in terms of the grant. The historic and projected estimates of the LandCare grant is separated out from the sub-programme's budget and depicted as a separate heading in the expenditure review. *It is the only other instance in the BER where a transfer payment is accounted for as biodiversity-related, since no double counting will be performed by doing so.*
- **Programme 6: Fisheries, Sub-programme Marine Resources Management:** Seventy-five percent (75%) of the expenditure of this sub-programme under the Fisheries programme was apportioned as biodiversity. While most of this sub-programme's activities are biodiversity-related, it also is involved in developing commercial fishing, which was deemed not to be biodiversity-related.

Biodiversity expenditure by DAFF (excluding the Marine Living Resources Fund) grows in line with the upper limit (6%) of the inflation-targeting regime, in essence close to zero real growth. The deduction is that DAFF's programmes would sustain funding of existing biodiversity-related activities, but that no new activities, especially infrastructure-related projects, would be feasible. The Agricultural Research Council has not been identified as a biodiversity key finance actor, although future BERs need to take note of the role the Council plays in for example maintaining seed banks and alien invasive control.

The Marine Living Resources Fund: The Marine Living Resources Fund is a public entity established pursuant to the Marine Living Resources Act (No. 18 of 1998) and is controlled by DAFF. The Fund manages the development and sustainable use of South Africa's marine resources. The Fund also protects the integrity and quality of the marine ecosystem. It was considered a separate key finance actor due to the substantial revenue it receives in the form of intergovernmental transfers.

² For more information on the National LandCare Programme, please see: <http://www.daff.gov.za/daffweb3/Programme/LandCare>.

Table 14: Marine Living Resources Fund historic and projected biodiversity, 2009 to 2024

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|------|------|--|------|------|------|------------------|-------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Marine Living Resources Fund | 6 | 5 | 5 | 6 | 3 | 6 | 7 | 20 | 58 |
| Programme 2: Marine resources management | 6 | 5 | 5 | 6 | 3 | 6 | 7 | 20 | 58 |
| Grand Total | 6 | 5 | 5 | 6 | 3 | 6 | 7 | 20 | 58 |
| Grand Total year-on-year increase | | -28% | 10% | 12% | -53% | 129% | 18% | 180% | |
| <i>Rand Millions (R' 000 000s)</i> | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Marine Living Resources Fund | 23 | 24 | 26 | 26 | 27 | 28 | 29 | 30 | 214 |
| Programme 2: Marine resources management | 23 | 24 | 26 | 26 | 27 | 28 | 29 | 30 | 214 |
| Grand Total | 23 | 24 | 26 | 26 | 27 | 28 | 29 | 30 | 214 |
| Grand Total year-on-year increase | 14% | 5% | 5% | 3% | 3% | 3% | 3% | 3% | 0 |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years.

Apart from the above-mentioned transfers, it also receives revenue from levies on fish and fish products, permits, licences and application fees, and proceeds from the sale of confiscated fish and related products. The Fund runs the following programmes: marine resources management, aquaculture and economic development, marine resources research, and monitoring, compliance and surveillance. However, due the extent of its operations related to commercial fishing, only 50% of the expenditure within its Programme 2: Marine resources management was deemed to be on biodiversity. A considerable boost to this programme's expenditure in 2016 is sustained throughout the medium-term (on average 8% growth year-on-year).

Department of Water and Sanitation (DWS): All of the expenditure under the sub-programme: Water Ecosystems within Programme 2: Water Planning and Information Management was classified as biodiversity related. This sub-programme implements measures to “protect water resources by classifying water resource systems, determining reserves, conducting resource quality assessments, developing pollution control guidelines, and rehabilitation measures and protocols” (National Treasury, various years). Anecdotal evidence points to biodiversity-relevant work on compliance and monitoring of the conservation of water resources under the sub-programme: Compliance Monitoring within Programme 5: Water Sector Regulation. As a measure of flagging this expenditure, a very small amount is apportioned to biodiversity expenditure for the period under review, namely 5%. The table below points to strong biodiversity expenditure growth in DWS, but it stalls at the end of 2018.

Table 15: DWS historic and projected biodiversity, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|-------------|-------------|--|-------------|-------------|-------------|------------------|-------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Department of Water and Sanitation (DWS) | 28 | 43 | 27 | 36 | 32 | 47 | 49 | 46 | 307 |
| Programme 2: Water Planning and Information Management, Sub-programme 2.3: Water Ecosystems | 28 | 43 | 27 | 36 | 32 | 47 | 48 | 43 | 303 |
| Programme 5: Water Sector Regulation, Sub-programme 5.5: Compliance Monitoring | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 4 |
| Grand Total | 28 | 43 | 27 | 36 | 32 | 47 | 49 | 46 | 307 |
| Grand Total year-on-year increase | | 56% | -38% | 33% | -10% | 47% | 4% | -7% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | Grand Total | |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Department of Water and Sanitation (DWS) | 57 | 63 | 64 | 66 | 68 | 70 | 72 | 74 | 533 |
| Programme 2: Water Planning and Information Management, Sub-programme 2.3: Water Ecosystems | 54 | 60 | 61 | 63 | 64 | 66 | 68 | 70 | 506 |
| Programme 5: Water Sector Regulation, Sub-programme 5.5: Compliance Monitoring | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | |
| Grand Total | 57 | 63 | 64 | 66 | 68 | 70 | 72 | 74 | 533 |
| Grand Total year-on-year increase | 25% | 11% | 1% | 3% | 3% | 3% | 3% | 3% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years.

Water Research Commission: The Water Research Commission was established pursuant to the Water Research Act (No. 34 of 1971) and is an entity of the Department of Water and Sanitation. A small amount of biodiversity-related expenditure occurs under Programme 2: Research and Development, where research contributes to Outcome 10 (Environmental Assets and Natural Resources that are Valued, Protected and Continually Enhanced) of the 12 Government Outcomes of the Government of South Africa's Medium-term Strategic Framework 2014-2019 (Government of South Africa, 2014). A coefficient of 15% was applied to apportion biodiversity expenditure. The table below points to growth in biodiversity expenditure (after applying the 15% coefficient) that beats inflation until the end of 2016, but in the medium-term growth is on average below the upper limit of 6%, pointing to zero real growth.

Table 16: Water Research Commission historic and projected biodiversity, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|--|-----------------------|-------------|-------------|--|-------------|-------------|-------------|------------------|-------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Water Research Commission | 17 | 17 | 16 | 20 | 22 | 22 | 26 | 28 | 169 |
| Grand Total year-on-year increase | | 2% | -6% | 25% | 6% | 2% | 17% | 11% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | Grand Total | |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Water Research Commission | 28 | 30 | 32 | 33 | 34 | 35 | 36 | 37 | 262 |
| Grand Total year-on-year increase | -2% | 6% | 6% | 3% | 3% | 3% | 3% | 3% | 0 |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years; SANBI Annual Reports, various years.

Department of Rural Development and Land Reform (DRDLR): The expenditure of the Environmental Planning Unit, a sub-directorate within Programme 2: National Geomatics Management Services conducts activities that are biodiversity-related, including guidance on land use for parks.

Table 17: DRDLR historic and projected biodiversity, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|--|-----------------------|------------|------------|--|------------|------------|-------------|------------------|-------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Department of Rural Development and Land Reform (DRDLR) | 3.1 | 3.3 | 3.4 | 3.6 | 3.8 | 4.0 | 2.0 | 3.8 | 26.8 |
| Programme 2: National Geomatics Management Services, Sub-directorate: Environmental Planning Support Unit (EPSU) | 3.1 | 3.3 | 3.4 | 3.6 | 3.8 | 4.0 | 2.0 | 3.8 | 26.8 |
| Grand Total year-on-year increase | | 7% | 4% | 5% | 6% | 6% | -50% | 88% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Department of Rural Development and Land Reform (DRDLR) | 6.0 | 6.2 | 6.4 | 6.5 | 6.7 | 6.9 | 7.1 | 7.4 | 53.2 |
| Programme 2: National Geomatics Management Services, Sub-directorate: Environmental Planning Support Unit (EPSU) | 6.0 | 6.2 | 6.4 | 6.5 | 6.7 | 6.9 | 7.1 | 7.4 | 53.2 |
| Grand Total year-on-year increase | 60% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years.

Biodiversity expenditure by provincial government departments and their entities

Provincial departments responsible for environment: Financials were obtained from the EPRE 2008-2016 (National Treasury, various years) and audited annual reports of individual agencies. Most activities under 'environment' and 'biodiversity management' programmes and their sub-programmes were deemed biodiversity-related. Due to the lack of detailed and dis-aggregated sub-programme-based budgets in the EPRE, it was not possible to identify and strip out non-biodiversity-related expenditure, such as on waste management. It was deemed that a very high coefficient needed to be assigned for apportioning the expenditure of provincial departments and programmes responsible for environment as biodiversity expenditure, namely 85%. This coefficient applies to apportioning the biodiversity expenditure of all nine provincial departments responsible for 'environment and 'biodiversity management.' Some provincial departments are responsible for conservation agencies; all of the expenditure of these agencies are biodiversity-related, i.e. a coefficient of 100% applies. These agencies are discussed below each department. Transfers and subsidies to their entities were omitted in the calculation of departmental expenditure so as to avoid double-counting. Specifically, allocations to provincial conservation agencies are not included in departments' biodiversity expenditure; these allocations are spent by conservation agencies themselves and accounted for separately.

- **Eastern Cape Provincial Government:** Biodiversity expenditure was incurred by the **Department of Economic Development, Environmental Affairs and Tourism**, within Programme 3: Environmental Affairs. This department oversees the **Eastern Cape Parks and Tourism Agency (ECPTA)**, funded from within Programme 3. All of this agency’s expenditure is biodiversity-related.

Table 18: Eastern Cape historic and projected biodiversity, 2009 to 2024

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|--|-----------------------|------------|------------|--|------------|------------|------------|------------------|--------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Eastern Cape Provincial Government: Department of Economic Development, Environmental Affairs and Tourism | 40 | 47 | 56 | 60 | 60 | 66 | 69 | 76 | 474 |
| Programme 3: Environmental Affairs | 40 | 47 | 56 | 60 | 60 | 66 | 69 | 76 | 474 |
| Eastern Cape Parks and Tourism Agency (ECPTA) | 114 | 122 | 261 | 345 | 403 | 570 | 488 | 278 | 2,581 |
| Grand Total | 154 | 169 | 317 | 405 | 463 | 637 | 556 | 354 | 3,055 |
| Grand Total year-on-year increase | | 9% | 88% | 28% | 14% | 38% | -13% | -36% | |
| <i>Rand Millions (R' 000 000s)</i> | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Eastern Cape Provincial Government: Department of Economic Development, Environmental Affairs and Tourism | 83 | 89 | 96 | 99 | 102 | 105 | 108 | 111 | 794 |
| Programme 3: Environmental Affairs | 83 | 89 | 96 | 99 | 102 | 105 | 108 | 111 | 794 |
| Eastern Cape Parks and Tourism Agency (ECPTA) | 286 | 295 | 304 | 313 | 322 | 332 | 342 | 352 | 2,545 |
| Grand Total | 369 | 384 | 400 | 412 | 424 | 437 | 450 | 463 | 3,339 |
| Grand Total year-on-year increase | 4% | 4% | 4% | 3% | 3% | 3% | 3% | 3% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years.

Table 19: ECPTA revenue per source, 2009 to 2015

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Grand Total |
|--|------------------|----------|------------|------------|------------|------------|------------|-------------|
| Actual revenue: 2009 to 2015 | 2009* | 2010* | 2011 | 2012 | 2013 | 2014 | 2015 | |
| Eastern Cape Parks and Tourism Agency (ECPTA) | - | - | 123 | 174 | 195 | 248 | 218 | 959 |
| Own (internal) revenue | - | - | 3 | 11 | 12 | 9 | 11 | 46 |
| Government transfers, of which close to 100% from Eastern Cape Provincial Government | - | - | 120 | 163 | 183 | 239 | 207 | 913 |
| Grand Total | 0 | 0 | 123 | 174 | 195 | 248 | 218 | 959 |
| Grand Total year-on-year increase | | | | 41% | 12% | 27% | -12% | |

* ECPTA established in 2010/11. Previously the Eastern Cape Parks Board.

Source: National Treasury, various years; Entity’s Annual Reports, various years.

Table 20: Historic and projected transfers from EC Government to ECPTA, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|--|-----------------------|-------|-------|--|------|------|------|------------------|-------------|
| Transfers received from: | 2009* | 2010* | 2011* | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Eastern Cape Provincial Government: Department of Economic Development, Environmental Affairs and Tourism | 105 | 102 | 126 | 143 | 190 | 196 | 207 | 193 | 1,262 |
| Grand Total year-on-year increase | | -3% | 24% | 13% | 33% | 3% | 6% | -7% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Transfers received from: | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Eastern Cape Provincial Government: Department of Economic Development, Environmental Affairs and Tourism | 196 | 199 | 211 | 217 | 224 | 231 | 237 | 245 | 1,760 |
| Grand Total year-on-year increase | 2% | 2% | 6% | 3% | 3% | 3% | 3% | 3% | |

* Transfers to the previous Eastern Cape Parks Board.

Source: National Treasury, various years.

Due to the size of its expenditure, ECPTA dominates biodiversity expenditure in this province. Strong growth peaked in 2015, with a drastic cut in 2016. Expenditure remains flat at zero real growth over the medium-term. ECPTA is close to fully reliant on transfers from the provincial government to conduct its activities. These transfers grow below zero real growth over the medium-term. Of concern is the lack of growth of historically collected internally generated revenue.

- Free State Provincial Government:** Biodiversity expenditure was incurred by the **Department of Economic and Small Business Development, Tourism and Environmental Affairs**, within Programme 2: Environmental Affairs.

Table 21: Free State historic and projected biodiversity, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|------|------|--|------|------|------|------------------|-------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Free State Provincial Government: Department of Economic and Small Business Development, Tourism and Environmental Affairs | 123 | 106 | 100 | 136 | 131 | 113 | 105 | 120 | 933 |
| Programme 2: Environmental Affairs | 123 | 106 | 100 | 136 | 131 | 113 | 105 | 120 | 933 |
| Grand Total year-on-year increase | | -13% | -6% | 37% | -4% | -14% | -6% | 14% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Free State Provincial Government: Department of Economic and Small Business Development, Tourism and Environmental Affairs | 146 | 151 | 159 | 164 | 169 | 174 | 180 | 185 | 1,328 |
| Programme 2: Environmental Affairs | 146 | 151 | 159 | 164 | 169 | 174 | 180 | 185 | 1,328 |
| Grand Total year-on-year increase | 22% | 3% | 6% | 3% | 3% | 3% | 3% | 3% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years.

Zero real growth in biodiversity expenditure in the Free State up to 2015 was reversed in 2016, from where expenditure grew on average 17% per year up to 2017. Medium-term expected growth (2018 to 2019) is on par with inflation.

- **Gauteng Provincial Government:** Biodiversity expenditure was incurred by Programme 3: Environmental Affairs within the **Department of Agriculture and Rural Development**.

Table 22: Gauteng historic and projected biodiversity, 2009 to 2024

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|------|------|--|------|------|------|------------------|-------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Gauteng Provincial Government: Department of Agriculture and Rural Development | 39 | 41 | 49 | 55 | 109 | 113 | 128 | 167 | 702 |
| Programme 3: Environmental Affairs | 39 | 41 | 49 | 55 | 109 | 113 | 128 | 167 | 702 |
| Grand Total year-on-year increase | | 4% | 19% | 13% | 99% | 4% | 13% | 30% | |
| <i>Rand Millions (R' 000 000s)</i> | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Gauteng Provincial Government: Department of Agriculture and Rural Development | 185 | 211 | 223 | 230 | 237 | 244 | 251 | 259 | 1,838 |
| Programme 3: Environmental Affairs | 185 | 211 | 223 | 230 | 237 | 244 | 251 | 259 | 1,838 |
| Grand Total year-on-year increase | 11% | 14% | 6% | 3% | 3% | 3% | 3% | 3% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years.

Biodiversity expenditure by the Gauteng Provincial Government grew drastically since 2009 due a doubling in budget in 2013. From there on and into the medium-term, expenditure grew comfortably at a few basis points above inflation.

- **KwaZulu-Natal (KZN) Provincial Government:** Biodiversity expenditure was incurred by the **Department of Economic Development, Tourism and Environmental Affairs**, within Programme 7: Environmental Affairs. **Ezemvelo KZN Wildlife (EKZNW)**, is the provincial conservation management agency responsible for managing all protected areas in the provinces, as well as holding the responsibility of biodiversity management outside of protected areas.

Table 23: KZN historic and projected biodiversity, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|--------------|--------------|--|--------------|--------------|--------------|------------------|---------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| KZN Provincial Government: Department of Economic Development, Tourism and Environmental Affairs | 142 | 157 | 167 | 191 | 220 | 197 | 184 | 163 | 1,421 |
| Programme 7: Environmental Affairs | 142 | 157 | 167 | 191 | 220 | 197 | 184 | 163 | 1,421 |
| Ezemvelo KZN Wildlife | 570 | 668 | 778 | 784 | 735 | 817 | 864 | 1,214 | 6,430 |
| Ezemvelo KZN Wildlife | 570 | 668 | 778 | 784 | 735 | 817 | 864 | 1,214 | 6,430 |
| Grand Total | 711 | 825 | 945 | 976 | 956 | 1,013 | 1,048 | 1,377 | 7,850 |
| Grand Total year-on-year increase | | 16% | 15% | 3% | -2% | 6% | 3% | 31% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| KZN Provincial Government: Department of Economic Development, Tourism and Environmental Affairs | 210 | 215 | 227 | 234 | 241 | 248 | 256 | 263 | 1,894 |
| Programme 7: Environmental Affairs | 210 | 215 | 227 | 234 | 241 | 248 | 256 | 263 | 1,894 |
| Ezemvelo KZN Wildlife | 880 | 935 | 990 | 1,020 | 1,050 | 1,082 | 1,114 | 1,148 | 8,219 |
| Ezemvelo KZN Wildlife | 880 | 935 | 990 | 1,020 | 1,050 | 1,082 | 1,114 | 1,148 | 8,219 |
| Grand Total | 1,089 | 1,150 | 1,217 | 1,254 | 1,292 | 1,330 | 1,370 | 1,411 | 10,113 |
| Grand Total year-on-year increase | -21% | 6% | 6% | 3% | 3% | 3% | 3% | 3% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years.

Table 24: EKZNW revenue per source, 2009 to 2015

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Grand Total |
|---|------------------|------------|------------|------------|------------|------------|------------|--------------|
| Actual revenue: 2009 to 2015 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| Ezemvelo KZN Wildlife | 556 | 605 | 634 | 688 | 734 | 849 | 921 | 4,987 |
| Own (internal) revenue | 205 | 201 | 192 | 188 | 186 | 249 | 251 | 1,474 |
| Government transfers, of which close to 100% from KwaZulu-Natal Provincial Government | 350 | 404 | 442 | 500 | 547 | 600 | 670 | 3,513 |
| Grand Total | 556 | 605 | 634 | 688 | 734 | 849 | 921 | 4,987 |
| Grand Total year-on-year increase | | 9% | 5% | 8% | 7% | 16% | 8% | |

Source: National Treasury, various years.

Table 25: Historic and projected transfers from KZN Government to EKZNW, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|--|-----------------------|------|------|--|------|------|------|------------------|-------------|
| Transfers received from: | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| <i>Department of Economic Development, Tourism and Environmental Affairs</i> | 340 | 397 | 431 | 491 | 549 | 588 | 703 | 718 | 4,217 |
| Grand Total year-on-year increase | | 17% | 9% | 14% | 12% | 7% | 20% | 2% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Transfers received from: | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| <i>Department of Economic Development, Tourism and Environmental Affairs</i> | 604 | 624 | 661 | 681 | 701 | 722 | 744 | 766 | 5,504 |
| Grand Total year-on-year increase | -16% | 3% | 6% | 3% | 3% | 3% | 3% | 3% | |

Source: National Treasury, various years.

EKZNW collects substantial own revenue, often more than a third of total revenue during the period under review, but could only grow its own revenue by 22% in total from 2009 to 2015. There is a drastic cut in fiscal transfers from the provincial government in 2017, with low digit and close to zero real growth beyond that. Unless the cuts in fiscal transfers are fully compensated by increased internal (own) revenue, there may be serious impact on the ability of EKZNW to perform its mandated activities.

- Limpopo Provincial Government:** Biodiversity expenditure occurred within the *Department of Economic Development, Environment and Tourism*, Programme 3: Environmental Affairs. The department oversees its conservation management agency, the *Limpopo Tourism Agency (LTA)*.

Table 26: Limpopo historic and projected biodiversity, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|------------|------------|--|------------|------------|------------|------------------|--------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Limpopo Provincial Government: Department of Economic Development, Environment and Tourism | 108 | 107 | 142 | 131 | 158 | 160 | 192 | 192 | 1,190 |
| Programme 3: Environmental Affairs | 108 | 107 | 142 | 131 | 158 | 160 | 192 | 192 | 1,190 |
| Limpopo Tourism Agency (LTA) | 103 | 74 | 89 | 205 | 204 | 159 | 255 | 246 | 1,336 |
| Limpopo Tourism Agency (LTA) | 103 | 74 | 89 | 205 | 204 | 159 | 255 | 246 | 1,336 |
| Grand Total | 210 | 181 | 231 | 336 | 363 | 319 | 447 | 438 | 2,526 |
| Grand Total year-on-year increase | | -14% | 28% | 45% | 8% | -12% | 40% | -2% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Limpopo Provincial Government: Department of Economic Development, Environment and Tourism | 203 | 219 | 231 | 238 | 245 | 253 | 260 | 268 | 1919 |
| Programme 3: Environmental Affairs | 203 | 219 | 231 | 238 | 245 | 253 | 260 | 268 | 1919 |
| Limpopo Tourism Agency (LTA) | 249 | 251 | 259 | 266 | 274 | 283 | 291 | 300 | 2174 |
| Limpopo Tourism Agency (LTA) | 249 | 251 | 259 | 266 | 274 | 283 | 291 | 300 | 2174 |
| Grand Total | 452 | 471 | 490 | 505 | 520 | 535 | 552 | 568 | 4092 |
| Grand Total year-on-year increase | 3% | 4% | 4% | 3% | 3% | 3% | 3% | 3% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years.

Table 27: LTA revenue per source, 2009 to 2015

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Grand Total |
|---|------------------|-------------|------------|-----------|-------------|------------|------------|-------------|
| Actual revenue: 2009 to 2015 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| Limpopo Tourism Agency (LTA) | 90 | 73 | 88 | 94 | 82 | 139 | 185 | 752 |
| Own (internal) revenue | 30 | 12 | 20 | 14 | 13 | 0 | 0 | 89 |
| Government transfers, of which close to 100% from Limpopo Provincial Government | 60 | 61 | 69 | 80 | 69 | 139 | 185 | 662 |
| Grand Total | 90 | 73 | 88 | 94 | 82 | 139 | 185 | 752 |
| Grand Total year-on-year increase | | -18% | 20% | 6% | -12% | 68% | 33% | |

Source: National Treasury, various years.

Table 28: Historic and projected transfers from Limpopo Government to LTA, 2009 to 2024

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|------------|------------|--|-------------|-------------|------------|------------------|-------------|
| Transfers received from: | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Limpopo Provincial Government: Department of Economic Development, Environment and Tourism | 60 | 61 | 68 | 80 | 69 | 138 | 168 | 156 | 800 |
| Grand Total year-on-year increase | | 2% | 11% | 18% | -14% | 100% | 22% | -7% | |
| <i>Rand Millions (R' 000 000s)</i> | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | Grand Total | |
| Transfers received from: | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Limpopo Provincial Government: Department of Economic Development, Environment and Tourism | 97 | 102 | 107 | 110 | 114 | 117 | 120 | 124 | 891 |
| Grand Total year-on-year increase | -38% | 5% | 5% | 3% | 3% | 3% | 3% | 3% | |

Source: National Treasury, various years.

Biodiversity expenditure in Limpopo peaked in 2015, from where growth is zero in real terms. The EPRE indicate a dwindling of own revenue collected by LTA until it reached zero in 2014 and 2015. This means LTA is fully reliant on provincial government transfers to conduct its operations. Fiscal transfers from the responsible department peaked in 2015, from where they decrease up to 2019 to levels last seen in 2014. It is doubtful whether the agency can fulfil its mandate given the budget cuts and the size of protected areas under its control.

- Mpumalanga Provincial Government:** Biodiversity expenditure was incurred by the **Department of Agriculture, Rural Development, Land and Environmental Affairs**, within Programme 9: Environmental Affairs. The **Mpumalanga Tourism and Parks Agency (MTPA)** is the province's conservation management agency and falls under the control of this department.

Table 29: Mpumalanga historic and projected biodiversity, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|------|------|--|------|------|------|------------------|-------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Department of Agriculture, Rural Development, Land and Environmental Affairs | 73 | 57 | 58 | 58 | 59 | 80 | 59 | 74 | 520 |
| Programme 9: Environmental Affairs | 73 | 57 | 58 | 58 | 59 | 80 | 59 | 74 | 520 |
| Mpumalanga Tourism and Parks Agency | 296 | 305 | 312 | 305 | 292 | 299 | 398 | 370 | 2,577 |
| Mpumalanga Tourism and Parks Agency | 296 | 305 | 312 | 305 | 292 | 299 | 398 | 370 | 2,577 |
| Grand Total | 369 | 362 | 370 | 363 | 351 | 379 | 457 | 444 | 3,096 |
| Grand Total year-on-year increase | | -2% | 2% | -2% | -3% | 8% | 20% | -3% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Department of Agriculture, Rural Development, Land and Environmental Affairs | 79 | 78 | 93 | 95 | 98 | 101 | 104 | 107 | 755 |
| Programme 9: Environmental Affairs | 79 | 78 | 93 | 95 | 98 | 101 | 104 | 107 | 755 |
| Mpumalanga Tourism and Parks Agency | 381 | 392 | 404 | 416 | 429 | 442 | 455 | 469 | 3,388 |
| Mpumalanga Tourism and Parks Agency | 381 | 392 | 404 | 416 | 429 | 442 | 455 | 469 | 3,388 |
| Grand Total | 460 | 470 | 497 | 512 | 527 | 543 | 559 | 576 | 4,143 |
| Grand Total year-on-year increase | 4% | 2% | 6% | 3% | 3% | 3% | 3% | 3% | |

Source: National Treasury, various years.

Table 30: MTPA revenue per source, 2009 to 2015

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Grand Total |
|--|------------------|------|------|------|------|------|------|-------------|
| Actual revenue: 2009 to 2015 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| Mpumalanga Tourism and Parks Agency | 43 | 237 | 291 | 243 | 293 | 325 | 331 | 1,763 |
| Own (internal) revenue | 43 | 43 | 50 | 30 | 19 | 20 | 20 | 225 |
| Government transfers, of which close to 100% from Mpumalanga Provincial Government | - | 194 | 241 | 213 | 275 | 304 | 311 | 1,538 |
| Grand Total | 43 | 237 | 291 | 243 | 293 | 325 | 331 | 1,763 |
| Grand Total year-on-year increase | | 450% | 23% | -17% | 21% | 11% | 2% | |

Source: National Treasury, various years.

Table 31: Historic and projected transfers from Mpumalanga Government to MTPA, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|------|------|--|------|------|------|------------------|-------------|
| Transfers received from: | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Department of Economic Development and Tourism | 192 | 211 | 240 | 260 | 274 | 304 | 310 | 309 | 2,100 |
| Grand Total year-on-year increase | | 10% | 14% | 8% | 5% | 11% | 2% | 0% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Transfers received from: | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Department of Economic Development and Tourism | 345 | 376 | 398 | 410 | 422 | 435 | 448 | 461 | 3,295 |
| Grand Total year-on-year increase | 12% | 9% | 6% | 3% | 3% | 3% | 3% | 3% | |

Source: National Treasury, various years.

A nominal decrease in total biodiversity expenditure (which is driven by MTPA’s expenditure) in 2016 and low digit growth in the medium-term relates to zero real growth for the 2016 to 2019 period. MTPA experience gradual declines in its internally generated revenue up to a point where its 2015 own revenue is half of that collected in 2009. Fiscal transfers from the provincial government also gradually grew slower from 2015 to 2016. The medium-term growth on average is comfortably above inflation, although the growth trend is downward.

- **Northern Cape Provincial Government:** Biodiversity expenditure was identified within the **Department of Environment and Nature Conservation**. All the programmes (Administration; Environmental Policy, Planning and Coordination; Compliance and Enforcement; Environmental Quality Management; Biodiversity Management; Environmental Empowerment Services) were deemed to contribute to biodiversity expenditure.

Table 32: Northern Cape historic and projected biodiversity, 2009 to 2024

| Rand Millions (R' 000 000s) | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|------|------|------|--|------|------|------------------|-------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Historic biodiversity expenditure: 2009 to 2016* | | | | | | | | | |
| Northern Cape Provincial Government: Department of Environment and Nature Conservation | 58 | 68 | 76 | 83 | 86 | 100 | 108 | 111 | 690 |
| All programmes: Administration; Environmental Policy, Planning And Coordination; Compliance And Enforcement; Environmental Quality Management; Biodiversity Management; Environmental Empowerment Services. | 58 | 68 | 76 | 83 | 86 | 100 | 108 | 111 | 690 |
| Grand Total year-on-year increase | | 18% | 11% | 9% | 4% | 16% | 9% | 3% | |
| Rand Millions (R' 000 000s) | Medium-term estimates | | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Northern Cape Provincial Government: Department of Environment and Nature Conservation | 116 | 122 | 126 | 129 | 133 | 137 | 141 | 146 | 1,050 |
| All programmes: Administration; Environmental Policy, Planning And Coordination; Compliance And Enforcement; Environmental Quality Management; Biodiversity Management; Environmental Empowerment Services. | 116 | 122 | 126 | 129 | 133 | 137 | 141 | 146 | 1,050 |
| Grand Total year-on-year increase | 4% | 5% | 3% | 3% | 3% | 3% | 3% | 3% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years.

Northern Cape incurred consistent albeit low digit growth in biodiversity expenditure from 2009 to 2016. Expenditure is projected to be zero in real terms over the medium-term.

- **North West Provincial Government:** Biodiversity expenditure was identified within the **Department of Rural, Environment and Agricultural Development**, which delivers Programme 9: Environmental Services. The Department oversees its conservation agency, the **North West Tourism Board (NWTB)**.

Table 33: North West historic and projected biodiversity, 2009 to 2024

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|--|-----------------------|------------|------------|--|------------|------------|------------|------------------|--------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Department of Rural, Environment and Agricultural Development | 42 | 49 | 53 | 52 | 59 | 87 | 145 | 107 | 594 |
| Programme 9: Environmental Services | 42 | 49 | 53 | 52 | 59 | 87 | 145 | 107 | 594 |
| North West Parks and Tourism Board | 202 | 212 | 218 | 242 | 212 | 278 | 269 | 266 | 1,898 |
| North West Parks and Tourism Board | 202 | 212 | 218 | 242 | 212 | 278 | 269 | 266 | 1,898 |
| Grand Total | 244 | 261 | 270 | 295 | 270 | 364 | 414 | 373 | 2,493 |
| Grand Total year-on-year increase | | 7% | 4% | 9% | -8% | 35% | 14% | -10% | |
| <i>Rand Millions (R' 000 000s)</i> | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Department of Rural, Environment and Agricultural Development | 125 | 143 | 150 | 155 | 159 | 164 | 169 | 174 | 1,238 |
| Programme 9: Environmental Services | 125 | 143 | 150 | 155 | 159 | 164 | 169 | 174 | 1,238 |
| North West Parks and Tourism Board | 279 | 294 | 302 | 312 | 321 | 330 | 340 | 351 | 2,529 |
| North West Parks and Tourism Board | 279 | 294 | 302 | 312 | 321 | 330 | 340 | 351 | 2,529 |
| Grand Total | 404 | 436 | 452 | 466 | 480 | 494 | 509 | 525 | 3,767 |
| Grand Total year-on-year increase | 8% | 8% | 4% | 3% | 3% | 3% | 3% | 3% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years.

Table 34: NWTB revenue per source, 2009 to 2015

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Grand Total |
|--|------------------|------------|------------|------------|------------|------------|------------|--------------|
| Actual revenue: 2009 to 2015 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| North West Parks and Tourism Board | 208 | 186 | 180 | 247 | 208 | 274 | 264 | 1,567 |
| Own (internal) revenue | 95 | 66 | 53 | 121 | 71 | 82 | 97 | 584 |
| Government transfers, of which close to 100% from North West Provincial Government | 113 | 120 | 127 | 126 | 137 | 191 | 167 | 982 |
| Grand Total | 208 | 186 | 180 | 247 | 208 | 274 | 264 | 1,567 |
| Grand Total year-on-year increase | | -11% | -3% | 37% | -16% | 31% | -3% | |

Source: National Treasury, various years.

Table 35: Historic and projected transfers from North West Government to NWTB, 2009 to 2024

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|--|-----------------------|------|------|--|------|------|------|------------------|-------------|
| Transfers received from: | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Department of Rural, Environment and Agricultural Development | 112 | 119 | 127 | 135 | 79 | 111 | 97 | 96 | 876 |
| Grand Total year-on-year increase | | 6% | 7% | 6% | -41% | 41% | -13% | -1% | |
| <i>Rand Millions (R' 000 000s)</i> | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Transfers received from: | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Department of Rural, Environment and Agricultural Development | 101 | 106 | 112 | 115 | 119 | 122 | 126 | 130 | 931 |
| Grand Total year-on-year increase | 5% | 5% | 6% | 3% | 3% | 3% | 3% | 3% | |

Source: National Treasury, various years.

Biodiversity expenditure in the North West decreased by 10% from 2015 to 2016, from where it grew slightly higher than zero in real terms until 2019. The trend is downward, with only 4% nominal growth in expenditure expected for 2019. NWPTB does not seem to be able to significantly grow its internally generated revenue, with 2015 actual own revenue at the same level as in 2009. Total actual revenue growth of the agency is erratic, although the trends is upward. Fiscal transfers reduced sharp in 2015 by 13%, from where fiscal transfers barely grow above zero percent in real terms from 2016 to 2019.

- Western Cape Provincial Government:** Biodiversity expenditure was incurred by **Department of Environmental Affairs and Development Planning**, through all of its programmes. The department oversees its conservation agency, the **Western Cape Nature Conservation Board (CapeNature)**.

Table 36: Western Cape historic and projected biodiversity, 2009 to 2024

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|------------|------------|--|------------|------------|------------|------------------|--------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Western Cape Provincial Government: Department of Environmental Affairs and Development Planning | 91 | 110 | 117 | 132 | 142 | 161 | 172 | 204 | 1,127 |
| All programmes | 91 | 110 | 117 | 132 | 142 | 161 | 172 | 204 | 1,127 |
| Western Cape Nature Conservation Board (CapeNature) | 189 | 211 | 228 | 266 | 293 | 291 | 306 | 318 | 2,101 |
| Western Cape Nature Conservation Board (CapeNature) | 189 | 211 | 228 | 266 | 293 | 291 | 306 | 318 | 2,101 |
| Grand Total | 279 | 320 | 345 | 397 | 435 | 451 | 478 | 521 | 3,228 |
| Grand Total year-on-year increase | | 15% | 8% | 15% | 10% | 4% | 6% | 9% | |
| <i>Rand Millions (R' 000 000s)</i> | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Projected biodiversity expenditure: 2017 to 2024* | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Western Cape Provincial Government: Department of Environmental Affairs and Development Planning | 218 | 251 | 240 | 247 | 255 | 262 | 270 | 278 | 2,023 |
| All programmes | 218 | 251 | 240 | 247 | 255 | 262 | 270 | 278 | 2,023 |
| Western Cape Nature Conservation Board (CapeNature) | 332 | 335 | 353 | 364 | 375 | 386 | 398 | 410 | 2,953 |
| Western Cape Nature Conservation Board (CapeNature) | 332 | 335 | 353 | 364 | 375 | 386 | 398 | 410 | 2,953 |
| Grand Total | 550 | 586 | 594 | 611 | 630 | 649 | 668 | 688 | 4,977 |
| Grand Total year-on-year increase | 6% | 6% | 1% | 3% | 3% | 3% | 3% | 3% | |

* Excluding transfer payments ('Transfers and Subsidies') to entities.

Source: National Treasury, various years.

Table 37: CapeNature revenue per source, 2009 to 2015

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Grand Total |
|--|------------------|------------|------------|------------|------------|------------|------------|--------------|
| Actual revenue: 2009 to 2015 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| Western Cape Nature Conservation Board (CapeNature) | 174 | 185 | 216 | 259 | 276 | 287 | 299 | 1,694 |
| Donor funding (various, undefined) | 49 | 17 | 19 | 16 | 10 | 38 | 22 | 171 |
| Own (internal) revenue | 23 | 23 | 24 | 25 | 27 | 27 | 31 | 181 |
| Government transfers, of which close to 100% from Western Cape Provincial Government | 102 | 144 | 172 | 218 | 239 | 222 | 245 | 1,342 |
| Grand Total | 174 | 185 | 216 | 259 | 276 | 287 | 299 | 1,694 |
| Grand Total year-on-year increase | | 6% | 17% | 20% | 7% | 4% | 4% | |

Source: Entity's annual reports, various years.

Table 38: Historic and projected transfers from Western Cape Government to CapeNature, 2009 to 2024

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|------------|------------|--|-----------|-----------|------------|------------------|-------------|
| Transfers received from: | 2,009 | 2,010 | 2,011 | 2,012 | 2,013 | 2,014 | 2,015 | 2,016 | |
| <i>Western Cape Provincial Government: Department of Environmental Affairs and Development Planning</i> | 94 | 133 | 160 | 192 | 208 | 221 | 246 | 252 | 1,506 |
| Grand Total year-on-year increase | | 41% | 20% | 20% | 8% | 6% | 11% | 2% | |
| <i>Rand Millions (R' 000 000s)</i> | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Transfers received from: | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| <i>Western Cape Provincial Government: Department of Environmental Affairs and Development Planning</i> | 261 | 270 | 285 | 294 | 302 | 311 | 321 | 330 | 2,374 |
| Grand Total year-on-year increase | 4% | 3% | 6% | 3% | 3% | 3% | 3% | 3% | |

Source: National Treasury, various years.

The Western Cape has steadily grown biodiversity expenditure above inflation from 2009, but this trajectory halts at the start of the medium-term. Expenditure is expected to be close to zero in real terms in the medium term, from 2017 to 2019. CapeNature is dependent on fiscal transfers from the department, which grows zero in real terms from 2016 to 2019. The agency grew its own revenue on par with inflation over the 2009 to 2015 period.

Biodiversity expenditure by local government

One of the functional areas of government provided for in the Constitution of South Africa, which can be considered mostly biodiversity-related, is “Land Restoration, Rehabilitation, and Biodiversity and Nature Conservation.” Within this functional area, the administration of indigenous forests, nature conservation, (excluding national parks and national botanical gardens), soil conservation, and urban and rural development are all concurrent or shared functions of national and provincial government. Municipal parks and recreation is a function solely reserved for local government (GTAC, 2015, citing the 1996 Constitution of South Africa).

In South African local government there are eight metropolitan municipalities, 44 district municipalities and 226 local municipalities (278 in total). The key mandates of municipalities are providing basic municipal infrastructure and services (including water, electricity and refuse removal) and developing local economies. The total geographic area of South Africa is divided into the above local government jurisdictions³.

These jurisdictions have in varying degrees spent on biodiversity management. A review of annual reports and annual financial statements of the three largest metros, Johannesburg, Cape Town and eThekweni, found some instances of biodiversity-related qualitative reporting in terms of units responsible for environment. For example, the City of Cape Town provides detailed narratives on its biodiversity initiatives, including those targeting its Integrated Metropolitan Environmental Policy and implemented by its Environmental Resource Management Department (ERMD) (City of Cape Town, 2015). eThekweni's Environmental Planning and Climate Protection Department is responsible for the Durban Botanic Gardens, facilitates biodiversity-sensitive spatial planning and land use within its bioregional mind-set, and systematically buys small tracts of environmentally sensitive land in its jurisdiction. The metro has steadily been introducing the Biodiversity Stewardship initiative (eThekweni Municipality, 2015).

The City of Joburg mentions biodiversity less often in its reports, yet provides more functional and quantitative reporting: e.g. the Environment and Infrastructure Services Department expenditure for 2014/15 was R147.6 million (City of Joburg, 2015: 46). An entity of City of Joburg, Johannesburg City Parks and Zoo (following the merger of Johannesburg City Parks and Joburg Zoo in January 2013) conducts activities closely associated with biodiversity. Its mission according to its 2015 annual report is: "To develop, maintain and conserve public open spaces, cemeteries and animal life for present and future generations" (2015: 5). The entity manages a range of biodiversity-related services, including botanical gardens, nature reserves and zoos, while other such as cemeteries and urban parks are not so. This entity had operational and capital expenditure (with capital expenditure equated with payments for property, plant and equipment in the annual financial statements) of close to R800 million for 2014/15.

Consolidated local government revenue and expenditure data was reviewed. The International Monetary Fund's (IMF) Government Finance Statistics (GFS) classification codes have been applied to classify the whole of the Government of South Africa's expenditure in StatsSA's 'Financial Statistics of consolidated general government 2008/09 to 2013/14' (StatsSA, various years). These statistics provide expenditure data categorised in terms of national government, provincial government, extra-budgetary accounts and funds (including expenditure by entities of national and provincial departments, in particular the conservation management agencies) and municipalities. One area of expenditure is on 'Protection of biodiversity and landscape' (GFS functional classification code 7054), itself a sub-set of expenditure on 'Environmental Protection' (GFS functional classification code 705). All of the expenditure under code 7054 by municipalities for the period under review is deemed as biodiversity expenditure. These statistics are scheduled to be updated by StatsSA with 2014/15 figures in November 2016.

Biodiversity expenditure occurred in terms of other functional classifications. For example, GFS code 7082: 'Cultural Services' (under code 708: Recreation, Culture, and Religion) includes expenditure on zoological

³ For information on the South African local government, please see the official Government of South Africa website: <http://www.gov.za/about-government/government-system/local-government>.

and botanical gardens (IMF, 2001: 102). For 2013/14 (the latest dataset available from StatsSA), the amount spent on 'Cultural Services' by municipalities is R14.9 billion. Lower level functionally disaggregated datasets are not publicly available and it was therefore not possible from the data collected to assess which specific activities were spent on by municipalities in terms of this GFS code, or for any other codes for that matter.

In another set of local government financial data, the estimates of municipal revenue and expenditure for infrastructure (as part of capital expenditure), among other things also tagged past municipal budgets with 'Environment Protection' to the amounts of: a) 2014/15: R 187.3 million; b) 2015/16: R130.3 million; and c) 2016/17: R131.8 million (National Treasury, 2015). The lack of disaggregation to lower levels of expenditure than 'Environmental Protection' in terms of this classification meant that it could not be used for the purposes of the BER.

The Municipal Infrastructure Grant makes up 46% (R65 billion in total) of all grants to local government over the period 2008/09 to 2013/14 (GTAC, 2016: 26). This grant's architecture includes various components of municipal infrastructure, such as basic municipal service infrastructure (e.g. electricity, water) and community infrastructure (e.g. parks and street lighting), for which municipalities provide their context-specific business plans. There is arguably a portion spent that has direct and indirect positive biodiversity-related benefits. However, municipalities have varying backlog levels for various infrastructure categories and invariably spend on different proportions. How individual municipalities spend their Municipal Infrastructure Grant and which expenditure is biodiversity-related calls for an intensive scrutiny of local government finances, something that falls outside the scope of the BER. For the purposes of this report and taking into account the 80/20 principle, it is assumed that no significant biodiversity-related expenditure has been funded by the MIG during the period under review.

The inability to accurately identify biodiversity-related expenditure in local government financial reports is partly due to the fact that publicly available financial reporting for the above metros is administratively organised in terms of major cost items, which are too generic and too aggregated to enable the identification of biodiversity-related expenditure. This is in contrast to the provincial and national budget classification system which allows for detailed programme-based reporting, i.e. functional reporting as opposed to administration-based reporting. Municipal operational expenditure and budgets are invariably aggregated and classified in terms of expenditure of the key municipal functions.

In conclusion, a lack of disaggregation in financial reporting by local government, especially on functional expenditure on biodiversity, meant that it was not possible to identify biodiversity expenditure bottom-up from financial reports. The GFS-classified consolidated expenditure by local government was deemed to be the best basis for estimations of biodiversity expenditure. Total historic expenditure on biodiversity in local government was therefore estimated to be a function of the following coefficients:

- All of the local government expenditure under GFS code 7054, i.e. 100%
- A small percentage of local government expenditure on GFS code Cultural Services: 5%. This coefficient allows for the recognition of all expenditure on at least botanical and zoological services by municipalities.

The table below depicts the above-mentioned assumptions. A 3% per year increment was applied from 2014 to arrive at projections for the 2015 to 2024 period. Expenditure from 2009 to 2014 is in a strong upward trajectory, comfortably above inflation.

Table 39: Biodiversity expenditure by local government, based on StatsSA's consolidated statistics, 2009 to 2024

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | 3% increment applied | | Grand Total |
|---|----------------------|------------|------------|------------|------------|------------|----------------------|--------------|--------------|
| Biodiversity key finance actor | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| Local Government | 418 | 441 | 485 | 492 | 682 | 781 | 805 | 829 | 4,932 |
| 100% of Protection of biodiversity and landscape (GFS functional classification code 7054) under Environmental Protection (GFS functional classification code 705). | 13 | 18 | 52 | 32 | 24 | 36 | 37 | 38 | 250 |
| 5% of Cultural Services (GFS functional classification code 7082) under Recreation, Culture and Religion (GFS functional classification code 708). | 406 | 423 | 432 | 460 | 658 | 745 | 768 | 791 | 4,681 |
| Grand Total | 418 | 441 | 485 | 492 | 682 | 781 | 805 | 829 | 4,932 |
| Grand Total year-on-year increase | | 5% | 10% | 2% | 39% | 15% | 3% | 3% | |
| <i>Rand Millions (R' 000 000s)</i> | 3% increment applied | | | | | | | | Grand Total |
| Biodiversity key finance actor | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Local Government | 854 | 879 | 906 | 933 | 961 | 990 | 1,019 | 1,050 | 7,590 |
| 100% of Protection of biodiversity and landscape (GFS functional classification code 7054) under Environmental Protection (GFS functional classification code 705). | 39 | 40 | 42 | 43 | 44 | 45 | 47 | 48 | 348 |
| 5% of Cultural Services (GFS functional classification code 7082) under Recreation, Culture and Religion (GFS functional classification code 708). | 814 | 839 | 864 | 890 | 917 | 944 | 972 | 1,002 | 7,242 |
| Grand Total | 854 | 879 | 906 | 933 | 961 | 990 | 1,019 | 1,050 | 7,590 |
| Grand Total year-on-year increase | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | |

Source: StatsSA, various years.

4.1.2 Private sector

The BER focused on the review of seven NGO's, whose activities focus largely on biodiversity across the country. The table below provides the historical expenditure (obtained from annual financial statements) and projected expenditure. The conservative increment of 3% was deemed the most prudent way to forecast expenditure, given the erratic historical figures and the difficulty in finding a reliable trend for growth in NGOs' expenditure from 2016.

Table 40: Historic and projected biodiversity expenditure of NGOs operating in South Africa, 2009 to 2015

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Grand Total |
|---|------------------|------------|------------|------------|------------|------------|------------|--------------|
| Historic biodiversity expenditure: 2009 to 2016* | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| World Wildlife Fund (WWF) | 70 | 61 | 68 | 96 | 90 | 106 | 133 | 624 |
| Wildlands Conservation Trust | 20 | 29 | 45 | 45 | 68 | 109 | 127 | 443 |
| Peace Parks Foundation (PPF) | 28 | 28 | 28 | 28 | 30 | 45 | 61 | 249 |
| Endangered Wildlife Trust | 0 | 0 | 0 | 30 | 0 | 45 | 37 | 113 |
| Conservation South Africa (CSA) | 12 | 12 | 7 | 10 | 11 | 18 | 24 | 93 |
| Wilderness Foundation | 13 | 20 | 22 | 25 | 24 | 24 | 22 | 151 |
| BirdLife South Africa | 12 | 11 | 14 | 14 | 16 | 18 | 22 | 106 |
| Grand Total | 155 | 160 | 185 | 248 | 239 | 366 | 427 | 1,780 |
| Grand Total year-on-year increase | | 3% | 15% | 34% | -3% | 53% | 17% | |

Source: Entities' annual reports, 2009 to 2015.

Table 41: Projected biodiversity expenditure of NGOs operating in South Africa, 2009 to 2015

| Rand Millions (R' 000 000s) | 3% increment applied (lowest target of inflation-targeting regime) | | | | | | | | | Grand Total |
|---|--|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| Projected biodiversity expenditure: 2016 to 2024 | | | | | | | | | | |
| NGOs operating in South Africa | | | | | | | | | | |
| World Wildlife Fund (WWF) | 137 | 142 | 146 | 150 | 155 | 159 | 164 | 169 | 174 | 1,397 |
| Wildlands Conservation Trust | 131 | 135 | 139 | 143 | 147 | 152 | 156 | 161 | 166 | 1,330 |
| Peace Parks Foundation (PPF) | 63 | 65 | 67 | 69 | 71 | 73 | 75 | 77 | 80 | 639 |
| Endangered Wildlife Trust | 38 | 39 | 41 | 42 | 43 | 44 | 46 | 47 | 49 | 389 |
| Conservation South Africa (CSA) | 25 | 25 | 26 | 27 | 28 | 29 | 29 | 30 | 31 | 251 |
| Wilderness Foundation | 23 | 23 | 24 | 25 | 26 | 26 | 27 | 28 | 29 | 231 |
| BirdLife South Africa | 21 | 22 | 23 | 23 | 24 | 25 | 26 | 26 | 27 | 218 |
| Grand Total | 438 | 452 | 465 | 479 | 494 | 508 | 524 | 539 | 555 | 4,455 |
| Grand Total year-on-year increase | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% | |

Source: BER calculations.

The descriptions and expenditure analyses of the NGOs are contained in **Appendix 2** of this document. Revenue per source for the seven NGOs incorporated into this analysis is discussed section 4.3 below. Unlike the public sector, NGOs invariably do not publish budgets for future financial years. It is therefore prudent to only portray 2015 actual audited figures in the narrative paragraphs so as to provide the most realistic snapshot.

Private Protected Areas (PPAs): PPAs are formally declared protected areas owned by private and communal landowners⁴, established in terms of the National Environmental Management: Protected Areas Act (No. 57 of 2003).

South Africa's definition of protected areas is aligned to the definition provided by the International Union for Conservation of Nature (IUCN): "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values" (Dudley, 2008: 8).

The declaration of a protected area as a PPA is accompanied with the same restrictions on development and the right for interventions on the property as a state-owned protected area of the same type. Substantial tracts of PPAs are held in South Africa, making up around 2.9 million ha by mid-2016, which is almost 30% of the total protected area estate. As noted in the BIOFIN Inception Report, PPAs leverage considerable investment from landowners into biodiversity conservation. In particular, the state saves the substantial cost of purchasing the land when landowners donate their development rights for the property to the state (Cumming, 2015: 46).

⁴ Communal land may be owned by the state (predominantly the Department of Public Works and the Department of Agriculture, Forestry and Fisheries), held in trust for the sole use of the communities who live on and use the land. It can also be owned by a Public Benefit Organisation or a Trust. For the purposes of this document, communal land users are referred to as landowners along with private landowners.

Depending on the specific model of PPA, landowners may carry the cost of managing the land, or, in the case of Contract National Parks (of which there are some 512,099 ha), the state may manage the land and carry this cost themselves. The PPA model allows for significant cost saving by the state for protected area expansion, as the state is not required to purchase the land nor manage it in many cases.

A progressively important alternative financing modality highlighted by the South Africa BIOFIN Inception Report and the PIR is biodiversity stewardship. Biodiversity stewardship is an important tool in implementing the National Protected Area Expansion Strategy (NPAES). Its business case includes the very significant savings that government realises when landowners voluntarily agree to manage and protect natural resources and biodiversity (SANBI, 2015). The financial implications for supporting privately owned protected areas are two-fold: one is the cost of management being carried by the landowner, the other is the savings of the value of the land, as the state does not need to purchase it in order to establish a protected area. The business case for the biodiversity stewardship model pointed to enormous efficiencies if government pursues conservation through private ownerships of PPAs rather than acquiring the land itself and managing these lands.

The BER has attempted to capture the cost of managing PPAs (i.e. operational expenditure) in the private expenditure review. Due to the large and fragmented population (i.e. landowners of PPAs), the following estimations were made:

- Operational expenditure per ha was the average of operation expenditure just on biodiversity management on state managed protected areas for CapeNature in the Western Cape (R132 per ha in 2013) and Ezemvelo KwaZulu-Natal Wildlife in KwaZulu-Natal (R385 per ha in 2014) (SANBI, 2015). Both averages were adjusted with headline inflation rates to arrive at a rough average expenditure per ha for South Africa for the 2009 to 2015 period.
- Multiplied by the number of hectares of PPAs for each respective year, the total operational expenditure on PPAs was derived for the 2009 to 2015 period. The PPAs hectares for each year were sourced from the Protected Areas Conservation Areas Database (PACA), an online registered managed by DEA (<http://egis.environment.gov.za/sapad.aspx?m=64>).
- From 2016 and onwards, both operational expenditure and acquisition expenditure were inflated with a 3% increment, in line with the conservative inflation of other biodiversity-related expenditure. The 'business-as-usual' scenario constrains the projection of expenditure based on what 'should' or potentially 'could' be spent on or by PPAs. For example, expanding PPAs would require government budgets commensurate with the efforts to expand, although such efforts are arguably not provided for in the conservative medium-term (official projections) and long-term (calculated) expenditure increases.

Game farms were not included in the review. While it is important to acknowledge the role game farms can play in contributing to sustainable management of ecosystems and the conservation of species, the lack of long term formal protection of game farms means they are not considered to be protected areas in South Africa. In addition, there is a broad spectrum to land management practices on game farms within the country, ranging from extensive game farming, highly compatible with biodiversity conservation, to intensive operations more akin to livestock farming. No adequate dataset exists to differentiate between these two extremes, or the gradients in between. There is a process underway to develop a certification

scheme for game farming which should make this differentiation easier in the future. In the future, it would be useful to capture these practices in a BER.

Below are the results of the estimations for historic and projected biodiversity expenditure by PPAs in South Africa. The growth in biodiversity expenditure is trending upwards and is consistently above inflation.

Table 42: Operational expenditure for Private Protected Areas, 2009 to 2015

| Inputs to calculate biodiversity expenditure | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|------------|------------|------------|------------|------------|------------|------------|
| WC OPEX/ha, adjusted with CPI rates from 2013 | 107 | 114 | 119 | 125 | 132 | 132 | 132 |
| KZN OPEX/ha, adjusted with CPI rates from 2014 | 294 | 315 | 328 | 345 | 364 | 385 | 403 |
| Average OPEX/ha RSA | 200 | 215 | 224 | 235 | 248 | 259 | 267 |
| PPA stock South Africa (ha), excluding Contract National Parks (CNPs) | 2,405,531 | 2,436,378 | 2,450,752 | 2,457,166 | 2,469,464 | 2,584,884 | 2,657,659 |
| Average OPEX RSA (R '000) (Average OPEX/ha RSA x PPA stock South Africa) | 481,886 | 522,718 | 548,411 | 577,339 | 612,721 | 668,271 | 710,680 |
| Year-on-year growth | | 8.5% | 4.9% | 5.3% | 6.1% | 9.1% | 6.3% |

Source: SANBI, 2015; DACA website, BER calculations.

4.2 Historic and projected consolidated biodiversity expenditure

This sub-section provides the consolidated historical expenditure review for the FY 2008/09 (referred to as 2009) to FY 2014/15 (referred to as 2015) period and the projected expenditure for the FY 2015/16 (2016) to FY 2023/24 (2024) period. The first sub-section deals with consolidated government biodiversity expenditure, the second with NGO biodiversity expenditure and the last with biodiversity expenditure by all actors.

4.2.1 Government biodiversity expenditure

Biodiversity expenditure and in particular public sector biodiversity expenditure needs to be understood within the context of the broader fiscal framework of government, in essence how much it collects and expects to collect in revenue and how much it spends and expects to spend, given a multitude of competing priorities. The revenue-side of government's fiscal framework is largely determined by the tax it collects, given the prevailing tax regime for corporate and personal income taxes. In good years so-to-speak (for example during upswings of the business cycle), government collects ample tax revenue and in bad years less so. The gross domestic product (GDP) is often used as an indicator of good years. The rationale is that the higher GDP is, the more profits firms and individuals make and the higher tax revenue government collects. Higher government revenue means the ability to spend more, either on existing programmes or new ones, or a combination of both. This increased ability to spend more and/or reprioritise spending, can be defined as fiscal space.

Other avenues of increasing fiscal space include charging higher taxes (which may be to the detriment of commercial activities and hence tax collected) or streamlining the tax regime so that tax returns are easier to do, leading to more tax returns filed and therefore higher government revenues. Government can also borrow more to finance its expenditure, both from domestic and international markets, although this should not be seen as revenue, only a way of financing. Lastly fiscal space can also be broadened by soliciting higher flows of international aid, such as ODA, to fund expenditure programmes or as a general budget support mechanism. All of the avenues listed here have their merits and disadvantages.

Key drivers of expenditure typically include pressure to provide more services or price inflation among the key inputs government employ. The prices of key inputs such as wages, goods and services and capital goods, are in turn typically determined by, among others, the outcomes of annual labour wage negotiations, the Rand/US Dollar exchange rate and other cost drivers such as oil price increases.

The table below provides key macroeconomic indicators, i.e. indicators that give an indication of the trends where money is spent (for example by domestic households or firms), where it is coming from (for example from international consumers through exports), prices increases and how the differences are funded (for example funding the differences between imports exports and amounts of investment flowing in and out). Although not exhaustive, they provide a snapshot of the trajectory of the fiscal framework for government.

Table 43: Macroeconomic indicators for South Africa, 2009 to 2018

| Real percentage (%) growth (except for CPI) | Actual | | | | | | Estimate | Forecast | | |
|--|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Household consumption | -1.6 | 4.4 | 4.8 | 3.4 | 2.9 | 1.4 | 1.4 | 0.7 | 1.6 | 2.2 |
| Gross fixed-capital formation | -4.3 | -2.0 | 4.5 | 3.6 | 7.6 | -0.4 | 1.1 | 0.3 | 1.4 | 2.7 |
| Exports | -19.5 | 4.5 | 5.9 | 0.1 | 4.6 | 2.6 | 9.5 | 3 | 4.6 | 5.2 |
| Imports | -17.4 | 9.6 | 9.7 | 6.0 | 1.8 | -0.5 | 5.3 | 3.7 | 4.5 | 4.9 |
| Real GDP growth | -1.5 | 3.1 | 3.5 | 2.2 | 2.2 | 1.5 | 1.3 | 0.9 | 1.7 | 2.4 |
| Consumer price inflation (CPI) | 7.1 | 4.3 | 5.0 | 5.7 | 5.8 | 6.1 | 4.6 | 6.8 | 6.3 | 5.9 |
| Current account balance (% of GDP) | -4.0 | -2.8 | -3.4 | -5.0 | -5.8 | -5.4 | -4.1 | -4 | -3.9 | -3.9 |

Source: National Treasury, various years.

Importantly, GDP growth, taking into the account of the effect of headline inflation, is expected to stay in low digits in the next three years and therefore the fiscal framework will remain constrained. Headline inflation (CPI) is expected to go above the upper limit of the official inflation-targeting regime, thereby putting pressure on the costs of existing government programmes. These aspects in turn mean that the fiscal space for biodiversity expenditure in the next three years will be constrained, at least in terms of the avenue of collecting more revenue to fund more biodiversity expenditure and reprioritisation of government expenditure away from existing programmes to biodiversity.

The table below provides the total consolidated government revenue and expenditure framework. The budget balance is the difference between revenue and expenditure. The consolidated framework accounts for all revenue and expenditure by all three spheres of government, including both voted revenue and expenditure (appropriated in the respective Legislature) and extra-budgetary revenue and expenditure (i.e. revenue collected from other sources, such as from ODA and internally-generated revenue, and expenditure of that revenue collected). Fiscal transfers or transfer payments between and among the three spheres of government are not double-counted to arrive at the consolidated figure. The ENRE contain relatively predictable medium-term government estimates and that is the reason why the 2010 to 2019 period has been used.

Table 44: Government of South Africa's consolidated fiscal framework

| Rand billion (nominal figures). Percentage (%) year-on-year and GDP | Actual outcomes (audited) | | | | | | Estimate | Medium-term estimates | | |
|---|---------------------------|--------|-------|--------|--------|--------|----------|-----------------------|--------|--------|
| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| Revenue | 664.5 | 757.2 | 836.9 | 907.6 | 1008.1 | 1100.0 | 1223.1 | 1324.3 | 1436.7 | 1571.6 |
| Percentage growth, year-on-year | | 14.0% | 10.5% | 8.4% | 11.1% | 9.1% | 11.2% | 8.3% | 8.5% | 9.4% |
| Percentage of GDP | 27.1% | 27.7% | 28.1% | 27.3% | 27.9% | 28.6% | 30.0% | 30.0% | 30.2% | 30.4% |
| Expenditure | 824.1 | 877.5 | 954.2 | 1043.4 | 1144.1 | 1237.7 | 1380.9 | 1463.3 | 1572.1 | 1695.2 |
| Percentage growth, year-on-year | | 6.5% | 8.7% | 9.3% | 9.7% | 8.2% | 11.6% | 6.0% | 7.4% | 7.8% |
| Percentage of GDP | 33.6% | 32.1% | 32.1% | 31.4% | 31.7% | 32.2% | 33.9% | 33.3% | 33.1% | 32.8% |
| Budget balance | -159.6 | -120.4 | 117.3 | -135.9 | -136.0 | -137.8 | -157.9 | -139.0 | -135.3 | -123.6 |
| Percentage growth, year-on-year | | 24.6% | -2.6% | 15.9% | 0.1% | 1.3% | 14.6% | -12.0% | -2.7% | -8.6% |
| Percentage of GDP | -4.2% | -4.4% | -3.9% | -4.1% | -3.8% | -3.60% | -3.9% | -3.2% | -2.8% | -2.4% |

Source: National Treasury, various years.

The consolidated fiscal framework highlights government's intention of containing and decreasing the budget gap (i.e. the difference between total revenue and expenditure). This fiscal policy saves high borrowing costs of financing the budget gap, while keeping the existing tax measures intact. However, fiscal austerity means less fiscal space to manoeuvre more funding towards biodiversity. The proportion of revenue and expenditure of GDP gives an indication of how big a player government is in the economy. If it becomes too big, it can generally be seen as a risk to the economy, i.e. a risk to the normal and sound flow of goods and service. One typical aspect of this risk is that high proportions are not sustainable and that often drastic adjustments would need to be made eventually, for example increased taxation or budget cuts. Another aspect to the risk of high proportions is that the sound formation and operation of firms are stifled if government becomes too big a player. Also, households may become too dependent in terms of a) receiving government services and b) selling their labour mostly to government. On the other hand, if the proportion of government expenditure of GDP is very small, it typically means there is scope (i.e. fiscal space) for government to increase its expenditure and many economists would argue for considerable interventions by governments. From the above table it can be seen that the proportions are quite stable and that government is planning to gradually close the budget gap (between revenue and expenditure) and eventually paying less for borrowed finance to fund the gap.

The table below provides the total historic and projected expenditure on biodiversity by government finance actors in all three spheres of government (and their agencies) for the 2009 to 2024 period, as calculated by the methodology of the BER. All amounts are based on bottom-up reviews of key finance actors, except for the case of local government, where the biodiversity expenditure was derived from StatsSA's consolidated government statistics.

Table 45: Total historic and projected expenditure on biodiversity by all government key finance actors, 2009-2015

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Grand Total | Relative weight |
|--|------------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|-----------------|
| Types of Key Finance Actors | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | | |
| National Government Departments | 1,639 | 1,988 | 2,410 | 3,150 | 3,523 | 3,103 | 3,511 | 19,323 | 32% |
| National Government Entities (incl. SANParks) | 1,586 | 1,711 | 2,043 | 2,368 | 2,426 | 3,072 | 3,595 | 16,802 | 28% |
| Provincial Government Entities (conservation agencies) | 1,473 | 1,592 | 1,762 | 1,973 | 1,944 | 2,166 | 2,362 | 13,271 | 22% |
| Provincial Government Departments | 716 | 742 | 817 | 899 | 1,025 | 1,076 | 1,162 | 6,437 | 11% |
| Local Government (all municipalities) | 418 | 441 | 485 | 492 | 682 | 781 | 805 | 4,103 | 7% |
| Grand Total | 5,831 | 6,473 | 7,517 | 8,882 | 9,600 | 10,198 | 11,435 | 59,936 | 100% |
| Grand Total year-on-year increase | | 11.0% | 16.1% | 18.2% | 8.1% | 6.2% | 12.1% | | |

Source: National Treasury, various years; StatsSA, various years; Annual Reports of selected entities.

Table 46: Total historic and projected expenditure on biodiversity by all government key finance actors, 2016-2024

| <i>Rand Millions (R' 000 000s)</i> | Revised estimates* | Combination of government medium-term estimates and calculated (3% increment - lowest target of inflation-targeting regime) | | | | | | | | Grand Total | Relative weight |
|--|--------------------|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-----------------|
| Types of Key Finance Actors | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | | |
| National Government Departments | 3,604 | 4,014 | 4,303 | 4,490 | 4,624 | 4,763 | 4,906 | 5,053 | 5,205 | 40,963 | 35% |
| National Government Entities (incl. SANParks) | 3,206 | 3,272 | 3,106 | 3,089 | 3,182 | 3,277 | 3,376 | 3,477 | 3,581 | 29,567 | 25% |
| Provincial Government Entities (conservation agencies) | 2,692 | 2,406 | 2,502 | 2,613 | 2,691 | 2,772 | 2,855 | 2,941 | 3,029 | 24,499 | 21% |
| Provincial Government Departments | 1,214 | 1,365 | 1,478 | 1,545 | 1,592 | 1,640 | 1,689 | 1,739 | 1,792 | 14,054 | 12% |
| Local Government (all municipalities) | 829 | 854 | 879 | 906 | 933 | 961 | 990 | 1,019 | 1,050 | 8,419 | 7% |
| Grand Total | 11,544 | 11,911 | 12,268 | 12,643 | 13,022 | 13,413 | 13,815 | 14,229 | 14,656 | 117,501 | 100% |
| Grand Total year-on-year increase | 0.96% | 3.18% | 3.00% | 3.05% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | | |

* Combination of revised estimates of government expenditure where available and 3% increment for all other actors.

Source: National Treasury, various years; Annual Reports of selected entities.

It is particularly useful to compare the individual and total amounts for government biodiversity expenditure estimated in the BER with the consolidated total government expenditure classified in terms of the GFS classifications. Below is the table presenting historical expenditure considered by this report to be biodiversity expenditure.

Table 47: Total historic consolidated government expenditure on GFS categories considered to be biodiversity expenditure, 2009-2014

| Levels of Government* | Rand Millions (R' 000 000s) | | | | | | | Grand Total |
|--|-----------------------------|--------------|--------------|--------------|--------------|--------------|---------|---------------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015*** | |
| Extra-budgetary accounts and funds | 3,015 | 3,299 | 3,543 | 4,115 | 4,107 | 4,951 | n/a | 23,030 |
| Provincial government | 1,073 | 1,092 | 1,260 | 1,399 | 1,466 | 1,659 | n/a | 7,949 |
| National government | 579 | 739 | 597 | 1,396 | 1,472 | 786 | n/a | 5,569 |
| Local government** | 418 | 441 | 485 | 492 | 682 | 781 | n/a | 3,298 |
| Grand total | 5,085 | 5,571 | 5,885 | 7,402 | 7,726 | 8,177 | | 39,846 |
| Grand total year-on-year increase | | 9.6% | 5.6% | 25.8% | 4.4% | 5.8% | | |

* All expenditure under GFS Code 7054: 'Protection of Biodiversity and Landscape.'

** Also includes 5% of expenditure by Local Government under GFS Code 7082: 'Cultural Services,' to account for botanic and zoological services.

*** Financial statistics of the consolidated general government 2014/15 scheduled to be released in November 2016.

Source: StatsSA, various years.

In comparison to StatsSA’s estimations, the BER over-estimated biodiversity expenditure by national government departments and under-estimated biodiversity expenditure by provincial government departments. Since this particular StatsSA dataset does not distinguish between national and provincial government entities within “Extra-budgetary accounts and funds,” it is not apparent where the differences are in this category. It is deduced that the consolidated statistics in terms of GFS classifications is an important benchmark for estimating historic biodiversity expenditure, in particular the expenditure under code 7054: ‘Protection of Biodiversity and Landscape.’

The following figure depicts the percentage of total biodiversity expenditure of total consolidated government expenditure, with the orange line depicting real GDP growth. A downward trend in the weight of biodiversity is observed. The ratio of biodiversity expenditure in the figure below averages 1% per year of total government expenditure, although it dips below that over the medium term. While not always the case, the average weight of a sector in total consolidated government expenditure typically illustrates a government’s commitment to that sector. From the above table, one sees that total government expenditure increases in real terms. Therefore, taking into account that total biodiversity expenditure is mostly based on the official medium-term estimates (due to the skewedness towards expenditure by national and provincial departments and their agencies) and not the assumed 3% increment which only starts from 2020, the downward trend may point to a lesser importance attached to biodiversity.

Caution must be exercised in making other deductions from the trends. The observed trend can be due to government’s declining interest in biodiversity or due to an overall bleak financial outlook that is affecting expenditure to varying degrees across all sectors of government. While it is evident that GDP real growth is expected to pick up marginally over the next three years, it must be taken into account that the effect on improved tax revenue may only be seen later than that. For example, higher GDP and profits for firms in 2019 may only related to higher government revenue in 2020. That being said, this does not explain the declining relative importance of biodiversity.

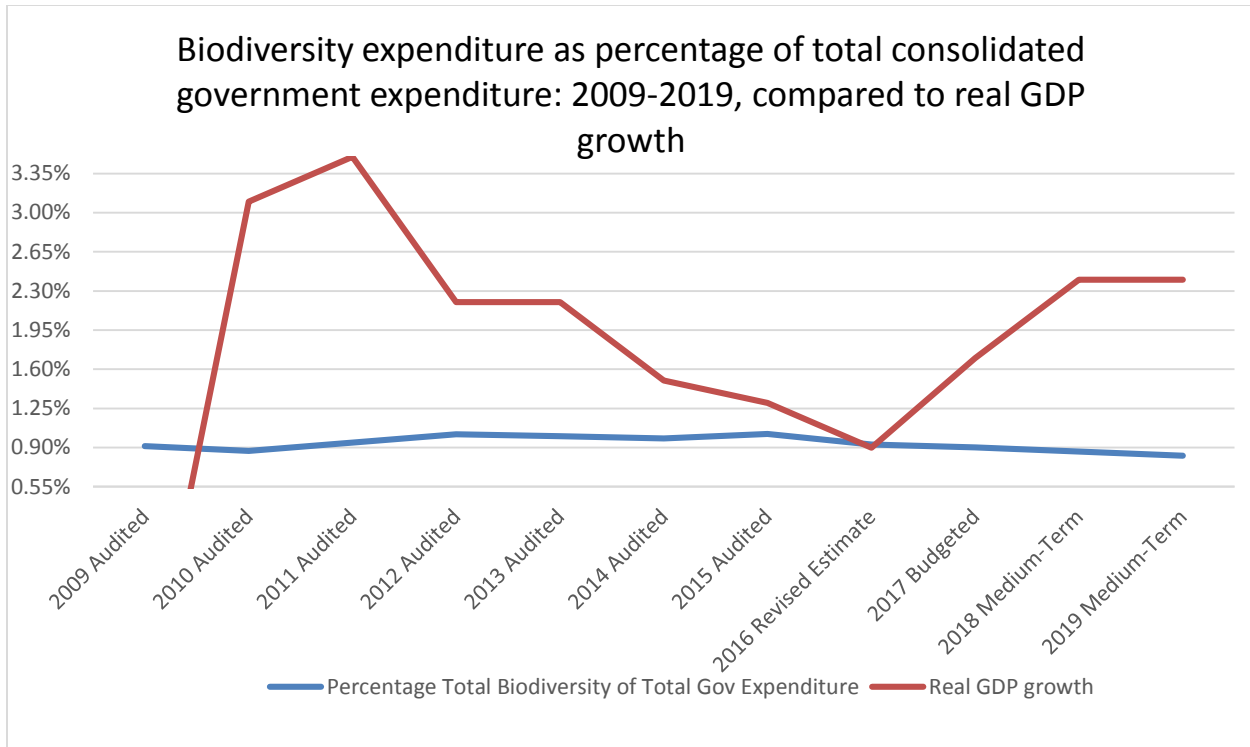


Figure 1. Biodiversity expenditure as a percentage of total consolidated government expenditure, 2009 to 2019

Source: National Treasury, various years; BER calculations.

The figure below provides the overview of total biodiversity expenditure by national departments and entities. Projected expenditure includes the official medium-term estimates published in the ENRE. Expenditure by DEA is the largest component for the whole period. Its expenditure includes a proportion of the substantial transfer payments to implementing agents in terms of the various biodiversity-related initiatives under the Expanded Public Works Programme, but excludes transfer payments to all other entities such as SANParks to avoid double-counting. A conservative 3% increment (the lowest target of the inflation-targeting regime) has been applied for projections beyond the medium-term estimates.

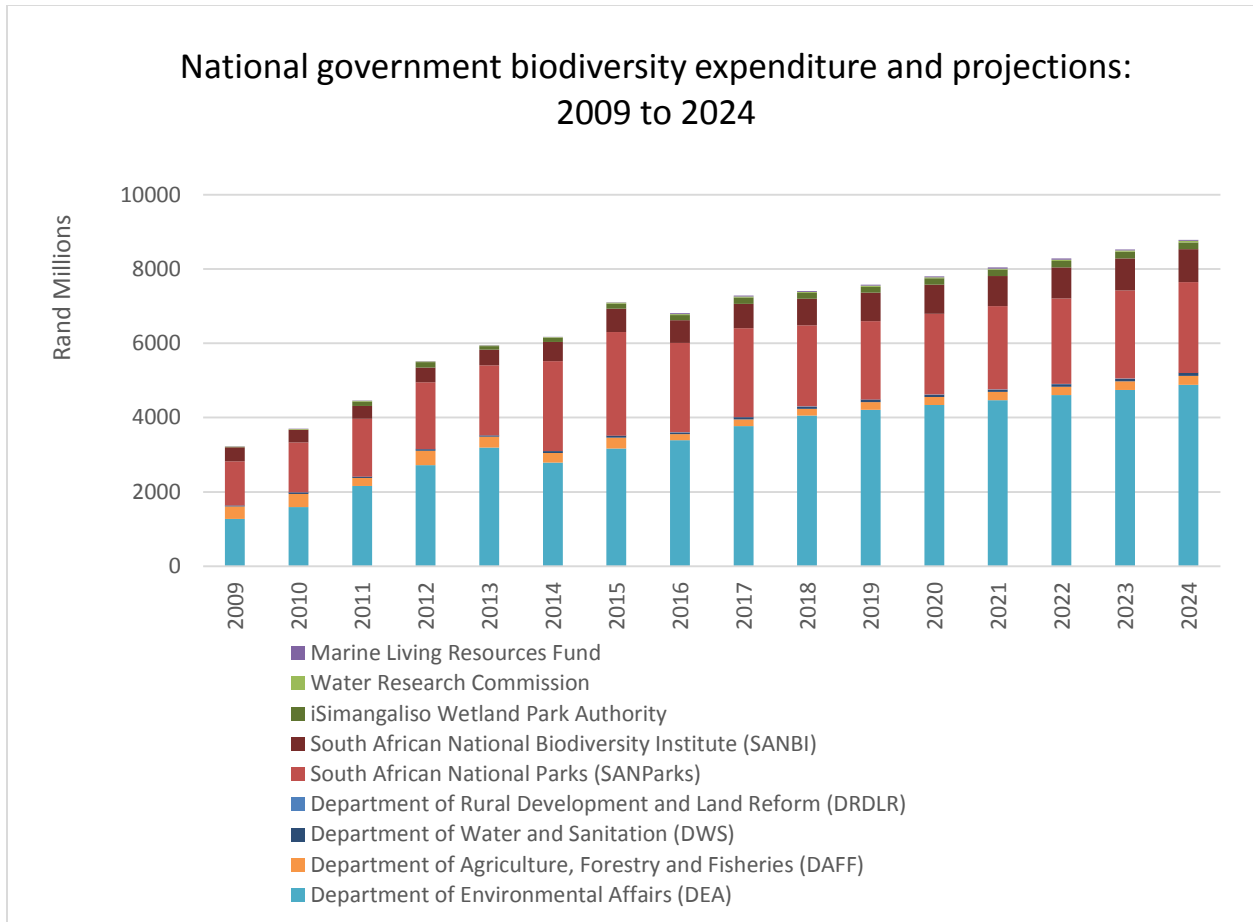


Figure 2. National government biodiversity expenditure and projections: 2009 to 2024

Source: National Treasury, various years; BER calculations.

The next figure is similar to the one above, only that it provides past and projected biodiversity expenditure of provincial departments and entities. Again, transfer payments from provincial departments have not been included to avoid double-counting with the expenditure of provincial conservation agencies. The dip in total provincial biodiversity expenditure from 2017 can largely be ascribed to a significantly reduced provincial government allocation to Ezemvelo KZN Wildlife.

Table 48: Historic and projected biodiversity expenditure (2009-2024) by provincial government departments and their entities

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|---|-----------------------|--------------|--------------|--|--------------|--------------|--------------|------------------|---------------|
| Provinces: Departments and their entities | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| KZN | 1,267 | 1,430 | 1,579 | 1,663 | 1,689 | 1,863 | 1,969 | 1,377 | 12,837 |
| WC | 551 | 642 | 726 | 855 | 926 | 967 | 1,034 | 521 | 6,223 |
| MP | 412 | 599 | 661 | 605 | 645 | 704 | 788 | 444 | 4,859 |
| NW | 452 | 447 | 450 | 542 | 479 | 638 | 678 | 637 | 4,323 |
| LP | 300 | 255 | 320 | 430 | 445 | 458 | 631 | 588 | 3,427 |
| EC | 154 | 169 | 317 | 405 | 463 | 637 | 556 | 354 | 3,055 |
| GP | 39 | 41 | 49 | 55 | 109 | 113 | 128 | 167 | 702 |
| FS | 123 | 106 | 100 | 136 | 131 | 113 | 105 | 120 | 933 |
| NC | 58 | 68 | 76 | 83 | 86 | 100 | 108 | 111 | 690 |
| Grand Total | 3,357 | 3,757 | 4,277 | 4,774 | 4,973 | 5,592 | 5,999 | 4,320 | 37,049 |
| Grand Total year-on-year increase | | 12% | 14% | 12% | 4% | 12% | 7% | -28% | |
| <i>Rand Millions (R' 000 000s)</i> | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
| Provinces: Departments and their entities | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| KZN | 1,089 | 1,150 | 1,217 | 1,254 | 1,292 | 1,330 | 1,370 | 1,411 | 10,113 |
| WC | 550 | 586 | 594 | 611 | 630 | 649 | 668 | 688 | 4,977 |
| MP | 460 | 470 | 497 | 512 | 527 | 543 | 559 | 576 | 4,143 |
| NW | 682 | 729 | 452 | 466 | 480 | 494 | 509 | 525 | 4,337 |
| LP | 580 | 601 | 490 | 505 | 520 | 535 | 552 | 568 | 4,350 |
| EC | 369 | 384 | 400 | 412 | 424 | 437 | 450 | 463 | 3,339 |
| GP | 185 | 211 | 223 | 230 | 237 | 244 | 251 | 259 | 1,838 |
| FS | 146 | 151 | 159 | 164 | 169 | 174 | 180 | 185 | 1,328 |
| NC | 116 | 122 | 126 | 129 | 133 | 137 | 141 | 146 | 1,050 |
| Grand Total | 4,176 | 4,403 | 4,158 | 4,283 | 4,411 | 4,544 | 4,680 | 4,820 | 35,476 |
| Grand Total year-on-year increase | -3% | 5% | -6% | 3% | 3% | 3% | 3% | 3% | |

Source: National Treasury, various years; BER calculations.

A general theme in the last few years' budget statements is the need for public expenditure control and even reductions where necessary. Budget cuts are legal through the annual adjustments budget process provided for in the Public Finance Management Act and the Municipal Finance Management Act. It can be argued that only a certain measure of expenditure cuts can be reflected in the 2017 (current year) and 2018 to 2019 medium-term estimates. Budget cuts may subsequently be announced during the Medium-term Budget and Policy Statement during October of each year. Cuts may be sectoral or across-the-board or any combination thereof. A zero nominal growth scenario (therefore negative real growth), where budgets for government institutions from 2017/18 and beyond are equal to the current 2016/17 budget, can readily be envisaged. The implications of budget cuts can be on many fronts. If the focus is on broad

cross-sectoral budget cuts in operational expenditure, in particular compensation of employees and maintenance of assets, and very little replacement/new infrastructure, one can expect declines in performance against biodiversity targets. If the focus is more on specific budget cuts in specific inputs items, such as expenditure by departments on luxury cars and airplane travel, the negative impact on performance against biodiversity targets may be dampened.

4.2.2 NGO biodiversity expenditure

Total biodiversity expenditure by the key NGOs in South Africa is illustrated in the relevant section above. The 3% increment applied for projections from 2016 and beyond paints a conservative picture of where NGO spending may go. Strong international donor support, especially private donors, is expected to sustain expenditure levels in the future. Upon closer scrutiny, it is clear that the two largest NGO spenders on biodiversity, WWF and Wildlands Conservation Trust, can only sustain their projected expenditure if their main sources of revenue are sustained as well, namely donor funding and grants from the South African Government.

The figure below provides the relative weights of expenditure per NGO for the 2009 to 2015 period. The importance of WWF, which is an international NGO that operates in South Africa, is illustrated through its relative large total biodiversity expenditure. Some of its activities in South Africa are related to climate resilience and once detailed disaggregated financials could be obtained, it may mean that its weighting vis-à-vis other NGOs may decrease slightly.

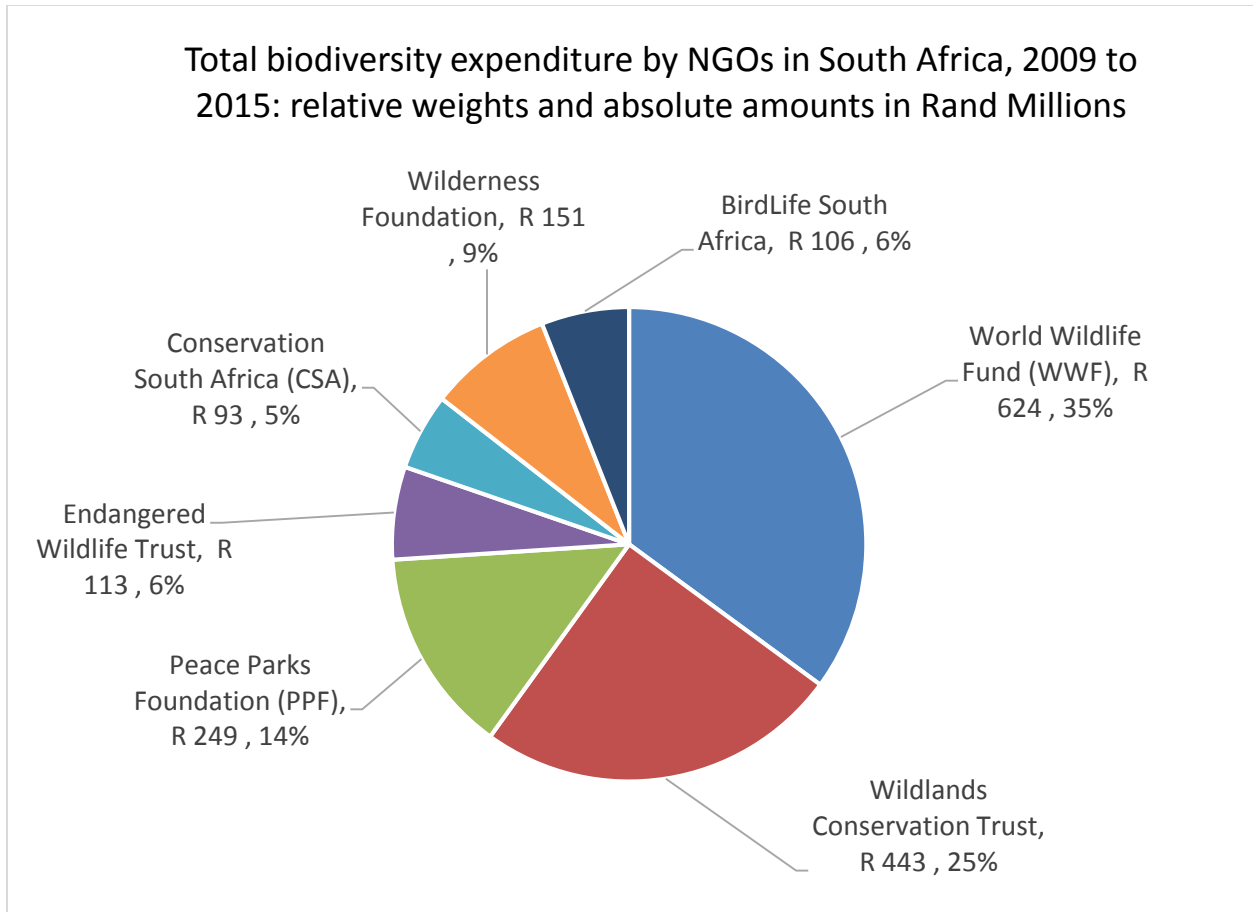


Figure 3. Total biodiversity expenditure by NGOs in South Africa for the 2009 to 2015 period

Source: Annual reports of NGOs, various years.

4.2.3 Biodiversity expenditure by all actors

The relative importance of categories of key finance actors is depicted in the table below. Each actor’s total historic expenditure (audited figures) from 2009 to 2015 and then again from 2016 to 2024 is shown as a proportion to the total expenditure of all actors for this period. It is clear that the period under review (2009 to 2015) experienced on average above inflationary increases in expenditure, but that this trajectory is replaced by a much lower one, bordering on zero increases in real terms.

Table 49: Total biodiversity expenditure by all actors, 2009-2015

| <i>Rand Millions (R' 000 000s)</i> | Audited outcomes | | | | | | | Grand Total | Relative weight |
|--|------------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|-----------------|
| Types of Key Finance Actors | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | | |
| National Government Departments | 1,639 | 1,988 | 2,410 | 3,150 | 3,523 | 3,103 | 3,511 | 19,323 | 29% |
| National Government Entities (incl. SANParks) | 1,586 | 1,711 | 2,043 | 2,368 | 2,426 | 3,072 | 3,595 | 16,802 | 25% |
| Provincial Government Entities (conservation agencies) | 1,473 | 1,592 | 1,762 | 1,973 | 1,944 | 2,166 | 2,362 | 13,271 | 20% |
| Provincial Government Departments | 716 | 742 | 817 | 899 | 1,025 | 1,076 | 1,162 | 6,437 | 10% |
| Local Government (all municipalities) | 418 | 441 | 485 | 492 | 682 | 781 | 805 | 4,103 | 6% |
| Private sector: South Africa (private protected areas) | 482 | 523 | 548 | 577 | 613 | 668 | 711 | 4,122 | 6% |
| NGOs | 157 | 163 | 189 | 252 | 246 | 377 | 501 | 1,885 | 3% |
| Grand Total | 6,470 | 7,159 | 8,255 | 9,711 | 10,458 | 11,243 | 12,647 | 65,942 | 100% |
| Grand Total year-on-year increase | | 11% | 15% | 18% | 8% | 8% | 12% | | |

Source: National Treasury, various years; StatsSA, various years. Annual reports of NGOs, various years.

Table 50: Total biodiversity expenditure by all actors, 2016-2024

| <i>Rand Millions (R' 000 000s)</i> | Revised estimates* | Combination of government medium-term estimates and calculated (3% increment - lowest target of inflation-targeting regime) | | | | | | | | Grand Total | Relative weight |
|--|--------------------|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-----------------|
| Types of Key Finance Actors | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | | |
| National Government Departments | 3,604 | 4,014 | 4,303 | 4,490 | 4,624 | 4,763 | 4,906 | 5,053 | 5,205 | 40,963 | 31% |
| National Government Entities (incl. SANParks) | 3,206 | 3,272 | 3,106 | 3,089 | 3,182 | 3,277 | 3,376 | 3,477 | 3,581 | 29,567 | 23% |
| Provincial Government Entities (conservation agencies) | 2,692 | 2,406 | 2,502 | 2,613 | 2,691 | 2,772 | 2,855 | 2,941 | 3,029 | 24,499 | 19% |
| Provincial Government Departments | 1,214 | 1,365 | 1,478 | 1,545 | 1,592 | 1,640 | 1,689 | 1,739 | 1,792 | 14,054 | 11% |
| Local Government (all municipalities) | 829 | 854 | 879 | 906 | 933 | 961 | 990 | 1,019 | 1,050 | 8,419 | 6% |
| Private sector: South Africa (private protected areas) | 732 | 754 | 777 | 800 | 824 | 849 | 874 | 900 | 927 | 7,436 | 6% |
| NGOs | 515 | 531 | 547 | 563 | 580 | 597 | 615 | 634 | 653 | 5,235 | 4% |
| Grand Total | 12,792 | 13,196 | 13,591 | 14,006 | 14,426 | 14,859 | 15,304 | 15,764 | 16,236 | 130,173 | 100% |
| Grand Total year-on-year increase | 1.15% | 3.16% | 3.00% | 3.05% | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% | 25.35% | |

* Combination of revised estimates where available and 3% increment.

Source: National Treasury, various years; StatsSA, various years. Annual reports of NGOs, various years.

The total national government biodiversity expenditure (by both departments and their entities) estimated by the BER is dwarfed by the total environmental expenditure as estimated by the high level Public Environmental Expenditure Review by the Government Technical Advisory Centre (GTAC) in 2016. For example, allocations considered as environment-related to national departments was R269.8 billion for the period 2011/12 to 2017/18 (GTAC: 2016: iv). The main drivers of environmental expenditure were the Department of Transport and the Department of Water and Sanitation. These estimations are

understandable in the context of definitions employed in the high level Expenditure Review, which included climate change (generally not considered biodiversity expenditure).

GTAC estimated that provincial government departmental environmental expenditure increased from R1.4 billion in 2009/2010 to R2.3 billion in 2015/2016 (GTAC, 2016: iv). Most of this expenditure occurred within Environmental Affairs programmes, followed by Conservation programmes and Biodiversity Management programmes. KwaZulu-Natal was by far the largest contributor to total provincial environmental expenditure in 2014/2015 at 40 percent of that year's total (R913 million).

GTAC noted the potential role that the considerable sized Municipal Infrastructure Grant and Urban Settlement Development Grant could play in providing indirect environmental benefits. For example, the former accounts for 46 percent (R65 billion) of the value of the identified grants from 2008/09 to 2013/14, and the latter accounts for 22 percent (R30 billion) (GTAC, 2016: v). As was noted above under the relevant section, it is assumed that no significant biodiversity-related expenditure has been funded by the MIG during the period under review.

4.2.4 Expenditure on the National Biodiversity Strategies and Action Plan (NBSAP)

Each biodiversity expenditure item was tagged with the relevant NBSAP Strategic Objective. The figure below provides the investment for each objective for the 2009 to 2024 period. The magnitude of the biodiversity expenditure of conservation agencies, in particular SANParks, relates to the dominance of that Strategic Objective (SO 1). It needs to be acknowledged that closer disaggregation of the ENRE, EPRE and financial statements would facilitate a more accurate apportionment of NBSAP objectives.

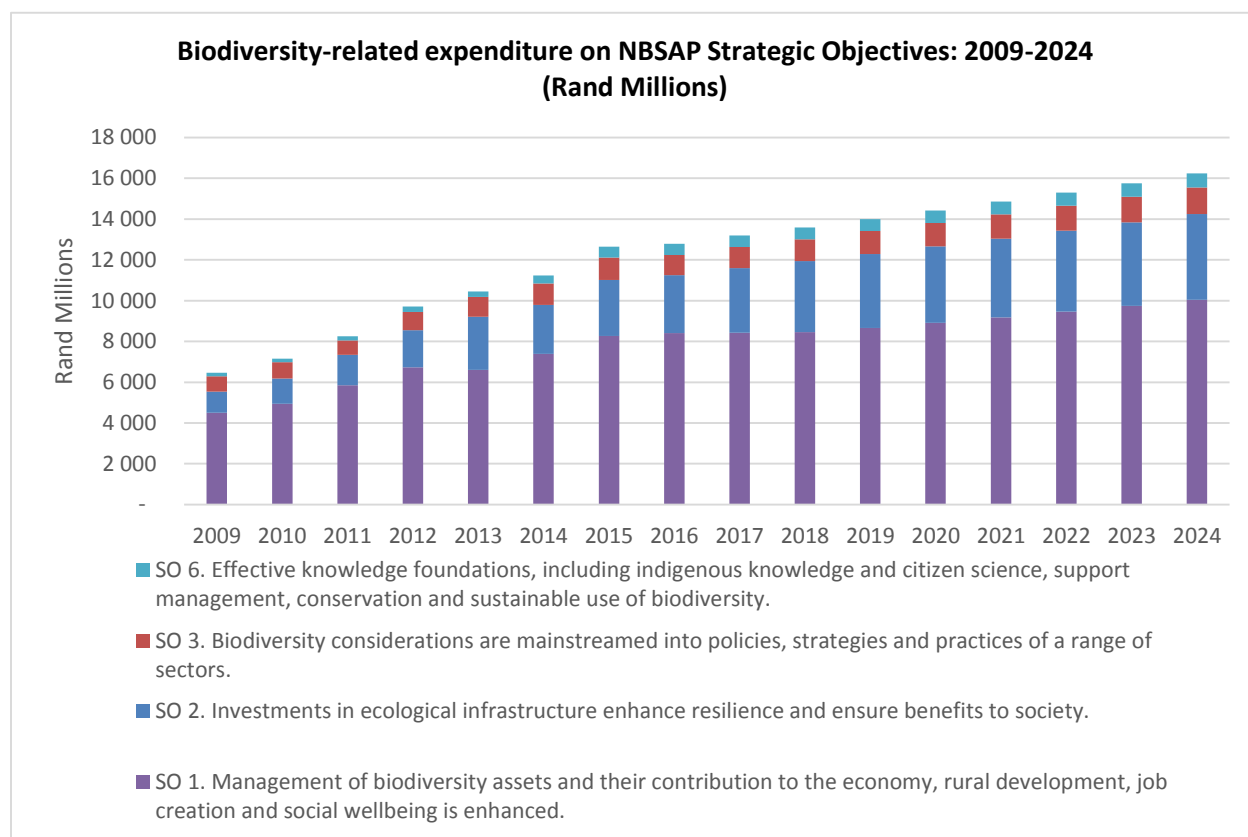


Figure 4. Total biodiversity expenditure on NBSAP Strategic Objectives, 2009 to 2024

Source: National Treasury, various years; StatsSA, various years. Annual reports of NGOs, various years.

4.2.5 Expenditure on the BIOFIN taxonomy categories

In turn, each biodiversity expenditure item was tagged with the relevant BIOFIN taxonomy category. The figure below illustrates that expenditure over the 2009 to 2024 is concentrated (more than 80% of the total for this period) among the categories of Conservation Areas (with the expenditure by SANParks dominating), and Ecosystem Management and Restoration (with expenditure by DEA programmes dominating). As referred to above, it needs to be acknowledged that closer disaggregation of the ENRE, EPRE and financial statements would facilitate a more accurate apportionment of BIOFIN taxonomy categories.

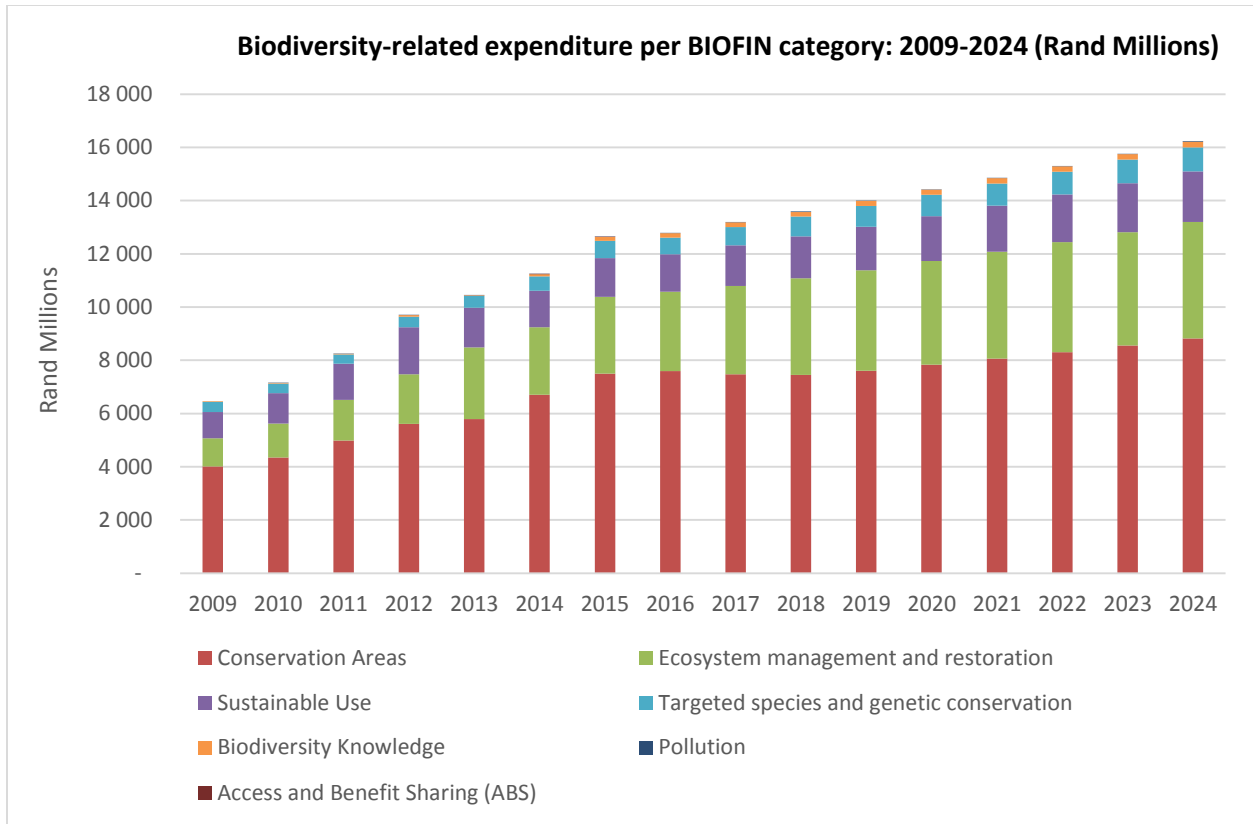


Figure 5. Total biodiversity expenditure per BIOFIN category for the 2009 to 2024 period

Source: National Treasury, various years; StatsSA, various years. Annual reports of entities, various years.

4.3 Consolidated biodiversity-generated revenue

This section assesses the trends in consolidated revenue for biodiversity expenditure in the public and private sector in South Africa. While funding of biodiversity through government grants is discussed within each actor in Section 4.1, this section focuses on the broad trends in government grants and other revenue streams such as ODA. This section differs from Section 4.2 in that it focuses on projected revenue and not expenditure.

Funding of biodiversity within the public sector

The Government of South Africa through the National Revenue Fund (itself funded largely by domestic corporate and individual taxation) is the single biggest funder as well as implementer of biodiversity-related activities through a) national departments and their entities (notably SANParks) and b) fiscal transfers to provincial governments and their departments responsible (which in turn transfers funds to their conservation agencies). In other words, Government's funding of biodiversity (as but one sub-sector among many) is not ring-fenced in the National Revenue Fund or Provincial Revenue Funds. Funding of biodiversity is an outcome of the official appropriation of funding from the National and Provincial Revenue Funds for departments responsible for biodiversity and conservation management agencies responsible for conservation, as part of the annual prescribed budget process.

The ENRE and EPRE provide details on sources of revenue of national and provincial governments and their entities. Since Provincial Revenue Funds are close to totally funded through the annual division of nationally collected revenue, it is useful to understand how the National Revenue Fund is funded. The table below provides the latest revised revenue figures for the Government of South Africa.

Table 51: Government of South Africa's revenue for FY 2015/16

| Revenue items (Rand Billions) | FY 2015/2016 | % of consolidated revenue |
|--|---------------|---------------------------|
| Tax revenue | 1069.7 | 87.5% |
| <i>of which:</i> | | |
| Personal income tax | 392 | 32.0% |
| Corporate income tax | 189 | 15.5% |
| Value-added tax (VAT) | 278.1 | 22.7% |
| Taxes on international trade and transactions | 46.5 | 3.8% |
| Non-tax revenue | 55.8 | 4.6% |
| Less: SACU payments | -51 | -4.2% |
| Main budget revenue | 1074.5 | 87.9% |
| Provinces, social security funds and public entities | 148.5 | 12.1% |
| Consolidated budget revenue | 1223.1 | 100.0% |
| <i>Consolidated revenue as percentage of GDP</i> | | |
| Tax revenue | 26.3% | |
| Main budget revenue | 27.7% | |

Source: National Treasury, 2016: iv.

The table above highlights the Government of South Africa’s reliance on personal income tax (about a third of total consolidated revenue) and value-added tax (VAT) (about a quarter of total consolidated revenue). Depending on the business cycle, corporate income tax revenue is typically half of personal income tax revenue.

It is also useful to understand the broad funding streams of conservation agencies, which were highlighted as the major spenders on biodiversity. While the ENRE details funding streams of SANParks, the EPRE details provincial departmental allocations to conservation management authorities, both historical and future medium-term estimates. The tables below sketch a picture of the trend in allocations to these national and provincial agencies. Transfers to the iSimangaliso Wetland Park Authority and SANBI are excluded in these tables due to the particular nature of these conservation agencies. DEA is for all accounts and purposes the only government funder of SANParks.

Given the tight fiscal framework due to sluggish economic growth and public expenditure cost-cutting across the board, it is understandable that most allocations grow slower from 2016 than in the preceding period. From 2017 to 2019, allocations are in the low growth digits, in general within the inflation targeting band of 3% and 6%. This in effect relates to basically zero real growth given the forecasted inflation for the 2017 to 2019 period, which often mean that recurrent expenditure towards compensation of employees and goods and services is maintained, with marginal investments in future infrastructure. In cost-cutting environments, it is always a general concern that maintenance of assets is cut long before other line items are cut.

Two issues need to be noted. The drastic decline in transfers from key DEA programmes to SANParks over the medium-term begs the question whether any increases are to be expected from 2020 and onwards. Therefore, the 3% increment was not applied in this instance. This does not effect the growth in projected expenditure by SANParks from 2020, which remains at 3% per annum, mainly because of its diversity in revenue sources, in particular own revenue. On the other hand, the gradual increases in transfers to the provincial conservation management agencies from 2018 to 2019 provide the scope for the application of the 3% increment. Of a great concern is the substantial cuts in allocations to Ezemvelo KZN Wildlife, the biggest provincial agency by budget size, from 2016 to 2017, and the low trajectory from thereon. This situation begs the question whether this management authority would have adequate medium-term funding to deliver on its mandate.

Table 52: Fiscal transfers national and provincial conservation management agencies from 2009 to 2016

| Rand Millions (R' 000 000s) | | Audited outcomes | | | | | | | Revised estimate | Grand Total |
|--|---|------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------|--------------|
| Transferring department (alphabetical order) | Conservation agencies | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | |
| DEA | South African National Parks (SANParks) | 512 | 369 | 189 | 221 | 318 | 543 | 590 | 546 | 3288 |
| | Year-on-year increase | | -27.9% | -48.8% | 16.9% | 43.9% | 70.8% | 8.7% | -7.5% | |
| EC: Department of Economic Development, Environmental Affairs and Tourism | Eastern Cape Parks and Tourism Agency (ECPTA) | 105 | 102 | 126 | 143 | 190 | 196 | 207 | 193 | 1262 |
| | Year-on-year increase | | -2.9% | 23.5% | 13.5% | 32.9% | 3.2% | 5.6% | -6.8% | |
| KZN: Department of Economic Development, Tourism and Environmental Affairs | Ezemvelo KZN Wildlife | 340 | 397 | 431 | 491 | 549 | 588 | 703 | 718 | 4217 |
| | Year-on-year increase | | 16.8% | 8.6% | 13.9% | 11.8% | 7.1% | 19.6% | 2.1% | |
| LP: Department of Economic Development, Environment and Tourism | Limpopo Tourism Agency (LTA) | 60 | 61 | 68 | 80 | 69 | 138 | 168 | 156 | 800 |
| | Year-on-year increase | | 1.7% | 11.5% | 17.6% | -13.8% | 100.0% | 21.7% | -7.1% | |
| MP: Department of Agriculture, Rural Development, Land and Environmental Affairs | Mpumalanga Tourism and Parks Agency | 192 | 211 | 240 | 260 | 274 | 304 | 310 | 309 | 2100 |
| | Year-on-year increase | | 9.9% | 13.7% | 8.3% | 5.4% | 10.9% | 2.0% | -0.3% | |
| NW: Department of Rural, Environment and Agricultural Development | North West Parks and Tourism Board | 112 | 119 | 127 | 135 | 79 | 111 | 97 | 96 | 876 |
| | Year-on-year increase | | 6.3% | 6.7% | 6.3% | -41.5% | 40.5% | -12.6% | -1.0% | |
| WC: Department of Environmental Affairs and Development Planning | Western Cape Nature Conservation Board (CapeNature) | 94 | 133 | 160 | 192 | 208 | 221 | 246 | 252 | 1506 |
| | Year-on-year increase | | 41.5% | 20.3% | 20.0% | 8.3% | 6.3% | 11.3% | 2.4% | |
| Grand Total | | 1415 | 1392 | 1341 | 1522 | 1687 | 2101 | 2321 | 2270 | 14049 |
| Grand Total year-on-year increase | | | -2% | -4% | 13% | 11% | 25% | 10% | -2% | |

Source: National Treasury, various years; Annual Reports of selected entities.

Table 53: Fiscal transfers to national and provincial conservation management agencies from 2017 to 2024

| Rand Millions (R' 000 000s) | | Medium-term estimates | | | 3% increment applied (lowest target of inflation-targeting regime) | | | | | Grand Total |
|--|---|-----------------------|-------------|-------------|--|-------------|-------------|-------------|-------------|-------------|
| Transferring department (alphabetical order) | Conservation agencies | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | |
| DEA | South African National Parks (SANParks) | 636 | 493 | 406 | 406 | 406 | 406 | 406 | 406 | 3565 |
| | Year-on-year increase | 16.5% | -22.5% | -17.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |
| EC: Department of Economic Development, Environmental Affairs and Tourism | Eastern Cape Parks and Tourism Agency (ECPTA) | 196 | 199 | 211 | 217 | 224 | 231 | 237 | 245 | 1760 |
| | Year-on-year increase | 1.6% | 1.5% | 6.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | |
| KZN: Department of Economic Development, Tourism and Environmental Affairs | Ezemvelo KZN Wildlife | 604 | 624 | 661 | 681 | 701 | 722 | 744 | 766 | 5504 |
| | Year-on-year increase | -15.9% | 3.3% | 5.9% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | |
| LP: Department of Economic Development, Environment and Tourism | Limpopo Tourism Agency (LTA) | 97 | 102 | 107 | 110 | 114 | 117 | 120 | 124 | 891 |
| | Year-on-year increase | -37.8% | 5.2% | 4.9% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | |
| MP: Department of Agriculture, Rural Development, Land and Environmental Affairs | Mpumalanga Tourism and Parks Agency | 345 | 376 | 398 | 410 | 422 | 435 | 448 | 461 | 3295 |
| | Year-on-year increase | 11.7% | 9.0% | 5.9% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | |
| NW: Department of Rural, Environment and Agricultural Development | North West Parks and Tourism Board | 101 | 106 | 112 | 115 | 119 | 122 | 126 | 130 | 931 |
| | Year-on-year increase | 5.2% | 5.0% | 5.7% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | |
| WC: Department of Environmental Affairs and Development Planning | Western Cape Nature Conservation Board (CapeNature) | 261 | 270 | 285 | 294 | 302 | 311 | 321 | 330 | 2374 |
| | Year-on-year increase | 3.6% | 3.4% | 5.6% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | |
| Grand Total | | 2240 | 2240 | 2170 | 2180 | 2233 | 2288 | 2344 | 2403 | 2463 |
| Grand Total year-on-year increase | | -1% | -1% | -3% | 0% | 2% | 2% | 2% | 2% | 2% |

Source: National Treasury, various years; Annual Reports of selected entities.

The DEA-commissioned *Sustainable Financing Framework for Management Authorities of State Managed Protected Areas* appraised various operational modalities and funding options for protected areas, a key biodiversity management concern. Public sector funding arrangements for protected areas point to mixed degrees of dependence of management authorities on intergovernmental transfers from national government, internally-generated revenue such as tourism-related fees, ODA and other donations. Own (internal) revenue generating mechanisms such as conservation levies and gate fees have typically been predictable contributors to revenue. The potential deepening and broadening of this revenue base is debatable considering social policy objectives such as affordability and public access to state natural

resources. SANParks is relatively independent, with about 50% of total revenue generated by its own activities, for example park entrance and accommodation fees.

The comparative revenue per Protected Areas managed by the conservation agencies are provided below (alphabetically below SANParks), based on comparisons in the above-mentioned DEA-commissioned report (Government of South Africa, 2015b). The hectares of protected areas managed by each agency stems from the online Registry of Protected Areas, while the own income and grants/donations amounts are from the BER analysis. Many of these conservation agencies are managing areas that are not declared.

A main deduction from the figures is the reliance of agencies in the Eastern Cape, Limpopo, Mpumalanga and Western Cape on fiscal transfers as a form of revenue. Due to the size of the Protected Areas that SANParks is responsible for, it features last on the list of total income per Protected Areas. This table is an important input for decision-makers to consider equity in public expenditure on conservation in South Africa.

Table 54: Conservation agencies income per Protected Area hectare (FY 2014/15)

| National / Province | Conservation agencies | Protected area managed (ha) (2016) | FY 2014/15 Own income (exchange) (R' millions) | FY 2014/15 Grants / donations (non-exchange) (R' millions) | Own income per hectare (Rs) | Grants/donations per hectare (Rs) | Total income per Protected Area hectare (Rs) |
|---------------------|---|------------------------------------|--|--|-----------------------------|-----------------------------------|--|
| National | South African National Parks (SANParks) | 3,975,509 | 1,414 | 1,354 | 356 | 341 | 696 |
| EC | Eastern Cape Parks and Tourism Agency (ECPTA) | 137,863 | 11 | 207 | 77 | 1,503 | 1,581 |
| KZN | Ezemvelo KZN Wildlife | 589,886 | 251 | 670 | 426 | 1,135 | 1,562 |
| LP | Limpopo Tourism Agency (LTA) | 192,686 | - | 185 | - | 958 | 958 |
| MP | Mpumalanga Tourism and Parks Agency | 218,071 | 20 | 311 | 93 | 1,426 | 1,519 |
| NW | North West Parks and Tourism Board | 99,714 | 97 | 167 | 969 | 1,679 | 2,649 |
| WC | Western Cape Nature Conservation Board (CapeNature) | 355,629 | 31 | 267 | 88 | 752 | 840 |

Note: Area managed by conservation agency is sum of state managed, declared protected areas, excluding marine protected areas.

Source: * Online Registry of Protected Areas of South Africa, 2016 figures (<http://egis.environment.gov.za/sapad.aspx?m=64>); **National Treasury, various years.

Provincial governments are not obliged to prioritise spending from their unconditional provincial equitable share grants on the environment and specifically biodiversity. A dependency of management authorities upon single line funding from national and provincial treasuries has been observed; this needs to be altered by the diversification of income streams (*ibid*: p7). Management authorities are under pressure to capitalise more on existing revenue streams and source alternative funding mechanisms.

Funding of biodiversity within the private / non-governmental sector

NGOs that spend on biodiversity in South Africa are funded largely by donor funding and to significantly smaller degree by their own internally-generated revenue. It needs to be noted that the amounts in most cases reflect total revenue received by NGOs, i.e. not necessarily apportioned to their biodiversity expenditure. However, since all of the expenditure of NGOs reviewed was on biodiversity, all of their revenues were considered to be biodiversity-related. The exception was the Peace Parks Foundation who spends a portion of its budget outside of South Africa. The figures below illustrate the proportional weights of revenue per source for these NGOs, including the total absolute amounts received for the period under review. The two figures provide the same global figures, but different categorisations for the sake of richer analyses.

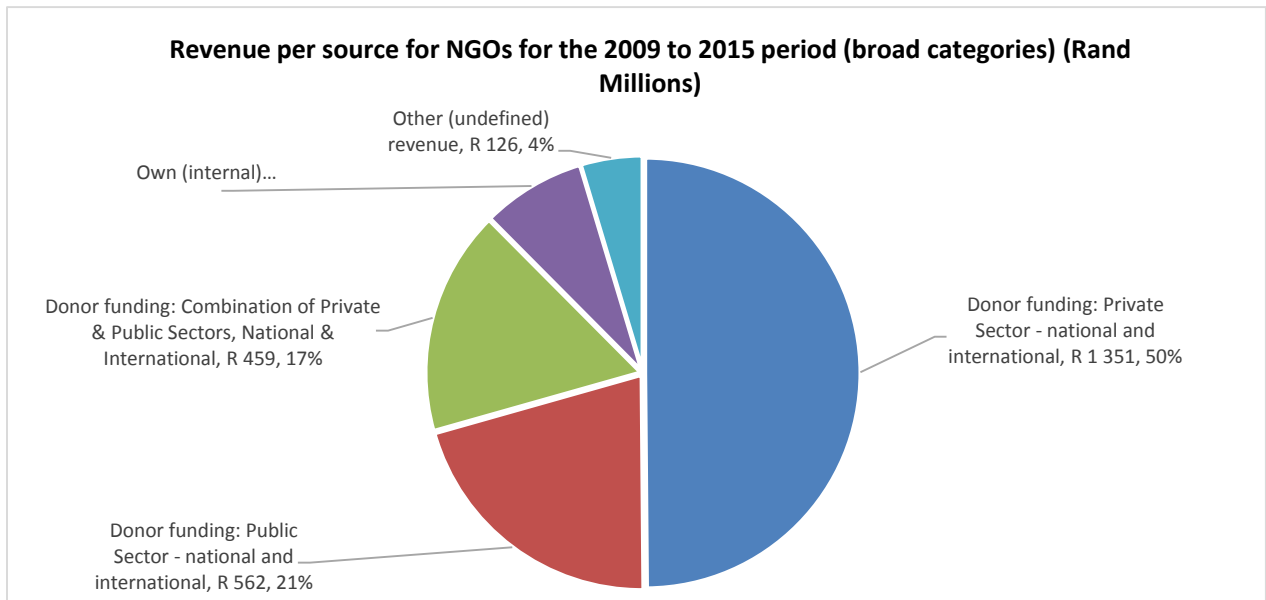


Figure 6. Revenue per source for NGOs for the 2009 to 2015 period (broad categories)

Source: Annual Reports of NGOs, various years.

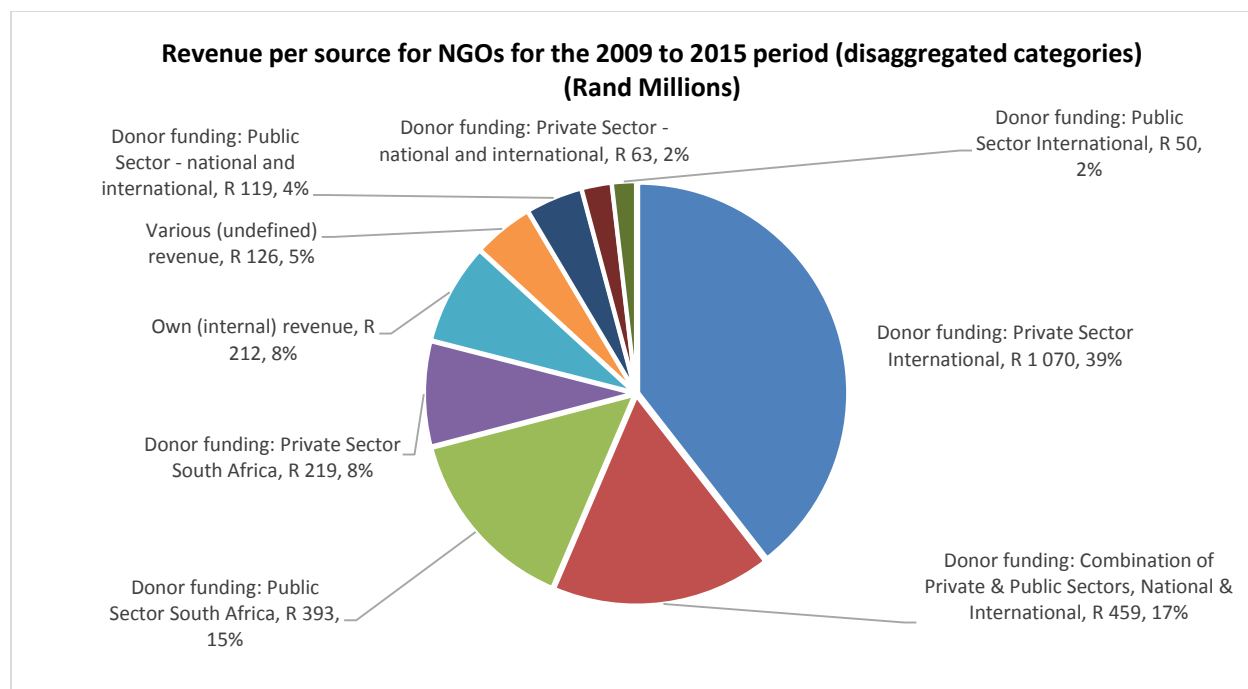


Figure 7. Revenue per source for NGOs for the 2009 to 2015 period (disaggregated categories)

Source: Annual Reports of NGOs, various years.

Donor funding from the private sector, both international and domestic, is the key source of revenue, making up 50% of total revenue received for the period. The international segment of this source presents a hedge in times of severe currency depreciation and inflation shocks in the domestic economy. The second largest source (21% of total revenue) is donor funding from the international and domestic public sector. Again, the international segment provides a currency hedge. The third largest source (17% of total revenue) is donor funding that has not been disaggregated to any specific donor funding category – a common limitation in the private sector financials. Once this can be disaggregated by NGOs themselves, the picture would look arguably different, except for own (internal) revenue, which would retain its weighting at 8% of total revenue for the period.

International funding of biodiversity in the public and private sectors

ODA was identified as an important revenue source for financing biodiversity management in South Africa. ODA for all purposes (including ODA for biodiversity) averages between 1% and 1.5% of the Government of South Africa’s total budget. Net ODA received by South Africa from 2009 to 2014 averaged \$1.15 billion (2009: \$1.07 billion, 2014: \$1.07 billion) (OECD, 2016). ODA to South Africa is mostly destined for health, education, water provision and governance reforms.

Within ODA, funding for biodiversity is much less significant – this will be illustrated later in this report. It is challenging to track the funding of biodiversity through ODA, partly because a substantial degree of this support is not channelled through the on-budget system via the designated Reconstruction and Development Programme (RDP) Fund, but directly to implementing agencies, be they government or non-government (National Treasury, 2013). National Treasury states that “technical assistance is a significant

proportion of foreign aid, and a number of donors do not allow South African spending agencies to assume responsibility for the financial management of ODA” (National Treasury, 2013: 8).

National Treasury itself points to the fact that the budget system is geared towards budgeting for and reporting on voted funds, not ODA. It notes that government departments and entities in general are not adequately reporting on utilisation of ODA funding. The prognosis is that this applies to ODA funding for the Government of South Africa’s biodiversity activities. The following box explains how ODA is treated in terms of the RDP Fund. It is followed by an explanation of how biodiversity-related official development funding is identified within the development funding statistics of the OECD.

Box 2: Treatment of foreign grants to the RDP Fund

“Before 1999/00, foreign grants were paid to the National Revenue Fund and expenditure was included in departmental appropriations. Since 1999/00, no foreign grants for RDP-related purposes have been included in national appropriations. All international technical assistance and other RDP-related grants are paid to the RDP Fund account, which is separated from government accounts. Departments incur expenditure on RDP-related projects through direct requisitions from this account. However, disbursements of foreign grants and technical assistance are included in the consolidated national and provincial expenditure estimates... and in the consolidated government expenditure...”

Source: National Treasury, 2016: 200.

Box 3: Identifying international biodiversity-related donor funding to South Africa

"The Rio Conventions were established in 1992 on Climate Change, Biological Diversity and Desertification. Developed country Parties committed to assist developing countries in the implementation of these Conventions. A scoring system of three values is used, in which development co-operation commitments are "tagged" as targeting the environment or the Rio Conventions as the "principal" objective or a "significant" objective, or as not targeting the objective. The Rio markers are applicable to Official Development Assistance (ODA) and recently also to other official flows (OOF) (non-concessional developmental flows, excluding export credits) starting from 2010."

"Five statistical policy markers exist to monitor external development finance for environmental purposes within the OECD/DAC, these are:

- a) The "Environment" marker (introduced in 1992)
- b) Four Rio markers covering:
 - Biodiversity (introduced in 1998)
 - Climate Change Adaptation (introduced in 2010)
 - Climate Change Mitigation (introduced in 1998)
 - Desertification (introduced in 1998)."

Source: OECD, <http://www.oecd.org/dac/environment-development/rioconventions.htm>

"Since 1998 the OECD's Development Assistance Committee (DAC) has monitored aid targeting the objectives of the Rio Conventions through its Creditor Reporting System (CRS) using the "Rio markers". Every aid activity reported to the CRS should be screened and marked as either (i) targeting the Conventions as a 'principal objective' or a 'significant objective', or (ii) not targeting the objective. There are four Rio markers, covering: biodiversity, desertification, climate change mitigation, and climate change adaptation. The adaptation marker was introduced in 2010."

"Markers indicate donors' policy objectives in relation to each aid activity. Activities marked as having a "principal" biodiversity objective would not have been funded but for that objective; activities marked "significant" have other prime objectives but have been formulated or adjusted to help meet biodiversity concerns. The biodiversity marker allows an approximate quantification of aid flows that target biodiversity objectives. In marker data presentations the figures for principal and significant objectives are shown separately and the sum referred to as the "estimate" or "upper bound" of biodiversity-related aid."

"Definition and Criteria for Eligibility: Biodiversity-related aid is defined as activities that promote at least one of the three objectives of the Convention: the conservation of biodiversity, sustainable use of its components (ecosystems, species or genetic resources), or fair and equitable sharing of the benefits of the utilisation of genetic resources. An activity can be marked with the biodiversity Rio marker if it contributes to:

- a) protection of or enhancing ecosystems, species or genetic resources through in-situ or ex-situ conservation, or remedying existing environmental damage; or

- b) integration of biodiversity and ecosystem services concerns within recipient countries' development objectives and economic decision making, through institution building, capacity development, strengthening the regulatory and policy framework, or research; or
 c) developing countries' efforts to meet their obligations under the Convention."

Source: OECD, https://www.oecd.org/dac/stats/documentupload/Biodiversity-related%20aid%20Flyer%20-%20December%202013_FINAL.pdf

While it is noted that funding for biodiversity may originate from both ODA and OOF, it was assumed at inception that the more commercial nature OOF means that such funding is typically not biodiversity-related. In addition, official reports of the OECD on biodiversity-related aid only refers to ODA⁵. For these reasons, biodiversity-related aid is equated with biodiversity-related ODA to South Africa. The table provides the annual ODA for biodiversity (both 'principal' and 'significant') committed to South Africa and compared to the total ODA committed to South Africa.

Table 55: ODA to South Africa: Total ODA vs ODA tagged as biodiversity-related, 2008-2014

| ODA tagged as biodiversity | US Dollar, Millions, Current Prices | | | | | | | | Grand Total |
|---|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|-------------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015* | |
| Tagged as 'Principal' | 5.0 | 0.4 | 3.0 | 3.0 | 21.2 | 15.2 | 7.7 | n/a | 55 |
| Tagged as 'Significant' | 7.5 | 17.1 | 11.0 | 11.1 | 11.3 | 9.1 | 4.3 | n/a | 71 |
| Total ODA tagged as biodiversity | 12.5 | 17.4 | 14.0 | 14.0 | 32.5 | 24.3 | 12.0 | n/a | 127 |
| Year-on-year increase | | 40% | -20% | 1% | 132% | -25% | -51% | | |
| Total ODA to South Africa | US Dollar, Millions, Current Prices | | | | | | | | Grand Total |
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015* | |
| Total ODA to South Africa | 1,125 | 1,075 | 1,027 | 1,395 | 1,067 | 1,296 | 1,070 | n/a | 8,055 |
| Year-on-year increase | | -4.5% | -4.5% | 35.9% | -23.6% | 21.5% | -17.4% | n/a | |
| Biodiversity ODA as % of total ODA to South Africa | 1% | 2% | 1% | 1% | 3% | 2% | 1% | n/a | |
| Biodiversity ODA as % of total biodiversity expenditure in South Africa** | | 2.28% | 1.43% | 1.24% | 2.75% | 2.24% | 1.16% | n/a | |

* 2015 data to be published by OECD at end of 2016.
 ** Based on average annual ZAR/USD rates.

Source: OECD, 2016; https://www.nedbank.co.za/content/dam/nedbank/site-assets/AboutUs/Economics_Unit/Forecast_and_data/Daily_Rates/Annual_Average_Exchange_Rates.pdf

The OECD figures depict the annual value reflected in the year the ODA was approved. An upward trend in biodiversity-related ODA to South Africa is due to considerably higher inflows in 2012 and 2013 than other years. The trend from 2012 to 2014 is however negative, with 2014 witnessing the lowest absolute amount for the period. The sustaining of past levels of biodiversity-related ODA funding begs the need for increased awareness and reporting on the spending of such funds. Of the \$12 million committed to

⁵ See for example OECD's "DAC Statistics - Biodiversity-related Aid" at: http://www.oecd.org/dac/stats/documentupload/Biodiversity-related%20aid%20Flyer%20-%20December%202013_FINAL.pdf

biodiversity in South Africa in 2014 by donor countries, only \$7.7 million has the ‘principal’ rating. Improved monitoring and evaluation of the spending of these funds would paint picture on how the funds targeting specific projects.

Biodiversity-related ODA to South Africa includes funding through GEF. On its website⁶, the DEA recognizes GEF as “the largest independent financial organization in the environment sector that provides assistance or grants to both government and non-government entities for the implementation of projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, and persistent organic pollutants.” International donor funding is committed for 5 year cycles. The current cycle is ‘GEF 6’: 2014 to 2018. The following GEF tranches have been committed to South Africa for biodiversity-related projects:

Table 56: Global Environmental Facility tranches towards ‘Biodiversity’ projects in South Africa.

| GEF Tranche | Period | USD millions | Year-on-year growth | Average per year USD millions |
|-------------|-----------|--------------|---------------------|-------------------------------|
| GEF 1 | 1995-1998 | 12.41 | | 3.10 |
| GEF 2 | 1999-2002 | 8.50 | -31.5% | 2.13 |
| GEF 3 | 2003-2006 | 22.31 | 162.5% | 5.58 |
| GEF 4 | 2006-2010 | 22.50 | 0.9% | 4.50 |
| GEF 5 | 2010-2014 | 21.68 | -3.6% | 4.34 |
| GEF 6 | 2014-2018 | 22.78 | 5.1% | 4.56 |

Sources: GEF Evaluation Office, 2008; GEF, 2016; Secretariat of CBD, s.n.

Box 4: Alignment of projects with DEA and broad government objectives

“GEF has emphasized that projects must be consistent with government priorities and programmes (Climate Change, Biodiversity and other Focal areas); projects must benefit the global environment, linking local, national and global environment challenges and promoting sustainable livelihoods; they must also address one or more of the GEF Focal areas, improving the global environment or advance the prospect of reducing risks to it; it must be consistent with the GEF Operational Strategy and it must show that there will be global environment benefits; project proposal must give an indication that there is co-funding; it must have developed with the assistance of one of the GEF’s approved Implementing Agencies; it must not be on a study or research; it must involve the public in the project design and implementation thereof and finally the proposals must seek GEF financing for the agreed-on incremental costs in measures to achieve global environmental benefits.

The department emphasizes that projects must be aligned with DEA and broad government objectives in the Climate Change and Biodiversity and other relevant focal areas; it must demonstrate that there will be national environmental benefits; it must involve the public in project design and implementation; it must benefit and improve the livelihoods of South Africans; if possible, it should contribute to the creation of ‘green jobs’; it must also demonstrate long-term sustainability and lastly after the completion of the whole process, skills transfer and technical capacity should have been achieved.”

⁶ <https://www.environment.gov.za/projectsprogrammes/donorfunded/aboutgef>

Source: DEA, <https://www.environment.gov.za/projectsprogrammes/donorfunded/aboutgef>

The following biodiversity-related projects have been funded under the GEF 5 cycle (2010 to 2014) according to the above-mentioned DEA website:

- Wild Coast Project, towards conservation of nature and access to facilities on the Wild Coast;
- National Grasslands Biodiversity Programme, towards mainstreaming the conservation of the grassland biome in balance with production;
- Conservation and management of pollinators, towards sustainable agriculture; and
- Conservation in iSimangaliso Wetland Park.

Donor funding received by each government department and entity, such as through GEF, is detailed in the department's and entity's annual financial statements, as opposed to the ENRE and EPRE, which only report on appropriated funds originating from the National Revenue Fund. Expenditure on such donor funding, alongside expenditure on voted funds, are reflected in total general government consolidated expenditure.

Departments' and entity's financials statements typically provide the amounts received per donor and spent per project: these invariably differ, since some funds are received close to the end of a given financial year and not spent in that year. The balances of donor funds received and yet to be spent are also typically provided in financial statements.

A review of the financials of government key finance actors identified international donor funding. National departments typically list ODA received in a separate annex called "Aid assistance received." These amounts are included in the departments' total revenue. While DEA, DAFF, DWS and DRDLR all receive such assistance, only DEA and DWS received assistance that could be identified as biodiversity-related, albeit in insignificantly small amounts. For example, in its 2015 annual report, DEA reported on the expenditure of biodiversity-related funding received from Germany for supporting Access and Benefit Sharing Policies (ABS) policies (R1.47 million) and funding from the United National Environmental Programme (UNEP) on combating wildlife crime that targets the rhinoceros (R2.22 million). On the other hand, DEA reported in its 2015 annual report on the transfer of R16 million in 2015 to GEF as 'International membership fee.' DAFF spent R373,000 in 2015, received from Biodiversity International, an international research institute, for the conservation and use of crop wild relatives.

SANParks and conservation agencies also report on the receipt and expenditure of donor funding and donations. The exact sources of It is generally not clear from annual reports due to the lack of disaggregation and identification of individual donors. Donor funding and donations as a source of revenue are insignificant, i.e. less than 1% of total revenue. The GEF as a funding source is mentioned only in the reports of CapeNature and ECPT. The amounts are insignificant.

SANBI received significant GEF funding for the period under review, for example a portion of the USD 8.3 million funding provided by GEF for the Grasslands Programme and a portion of the USD 12 million funding for the CAPE Biodiversity Conservation and Sustainable Development project. It is not clear from SANBI's annual reports exactly how much was received and spent in terms of this funding. SANBI routinely reports in the notes to its annual financial statements under 'Other grants, sponsorships and donations' on the amounts received from individual entities and individuals, grouped under the headings 'government', 'foreign', 'corporate', 'individuals and organisations', and 'trusts.' It is not clear which donor supported which project. SANBI's 2015 annual report notes that it will receive a portion of USD 8.2 million over the

next five years for the project on ‘Mainstreaming Biodiversity into Land Use Regulation and Management at the Municipal Scale.’

iSimangaliso Wetland Park Authority notes in its 2015 annual report the receipt of GEF funding, totalling more than R40 million since inception in 2010, for among other things ‘hydrological studies’ and ‘capacity-building of local communities.’ The funding was administrated by the World Bank.

From the tables above, it is noted that GEF 5 (2010-2014) committed \$21.68 million to biodiversity projects in South Africa, an average of \$4.336 million per year. In terms of ODA statistics for the 2010 to 2014 period, the average biodiversity ODA ‘principal’-tagged is \$10 million per year and ‘significant’-tagged is \$9.335 million per year. GEF funding for biodiversity is clearly an important aspect and deserves to be better tracked, disaggregated and accounted for in the consolidated government statistics.

5. Findings and recommendations

Key findings

The latest revised estimates for government (FY 2015/16) report revenue of R1,223.1 billion, consisting of, among other things: R392 billion from personal income taxes, R278 billion from value-added taxes and R189 billion from corporate taxes. Government's consolidated total expenditure (for all spheres, all departments and all government entities) for the same period was R 1,380.9 billion.

The Government of South Africa, through the National Revenue Fund, is the single biggest funder as well as implementer of biodiversity-related activities. Historic total biodiversity expenditure by the Government of South Africa (all departments and their entities) totalled R59.94 billion from 2009 to 2015. The percentage of total consolidated government expenditure directed towards biodiversity conservation-related activities was approximately 0.93% per year between 2009 and 2015. National government departments and their entities spent R36,1 billion, or 60%, on biodiversity from 2009 to 2015, compared to provincial government departments and entities (R19,7 billion, or 33%) and local government (R4,1 billion, or 7%).

National Department of Environmental Affairs (DEA): DEA is the single biggest key finance actor, alone accounting for an average of 33% of total public sector biodiversity expenditure from 2009 – 2015. Total expenditure on biodiversity related activities in 2015 amounted to R3,2 billion. DEA ensures that other actors such as the South African National Parks (SANParks) and the South African National Biodiversity Institute (SANBI) are partially funded for their activities in biodiversity conservation and management through fiscal transfers. SANParks spent a total of R12,9 billion on biodiversity from 2009 to 2015, 21% of total public spend on biodiversity during this time, with R2,8 spent in 2015. SANBI spent a total of R3 billion on biodiversity from 2009 to 2015, 5% of total public spend on biodiversity during this time, with R622 million spent in 2015.

Spending on biodiversity management and conservation at the provincial level is done by provincial departments in all nine provinces, and provincial agencies falling under these departments in five of the nine provinces. Provincial funds for biodiversity are dependent on allocations from the Provincial Refund Funds, which are invariably made at the discretion of provincial governments. The KwaZulu-Natal province is the largest spender on biodiversity among provinces, with R11,5 billion spent from 2009 to 2015 (32% of all provincial spend on biodiversity), and R2 billion spent in 2015. This is followed by the Western Cape, spending 17% of the total provincial spend on biodiversity.

Tracking Official Development Assistance (ODA) in South Africa is challenging, as earlier studies have shown. A substantial amount of ODA is not channelled through the on-budget system via the designated Reconstruction and Development Programme (RDP) Fund in National Treasury, but rather channelled directly to public or private sector implementing agencies. These funds are more difficult to track.

The OECD reports that ODA for South Africa averages between 1% and 1.5% of government's total budget for the period 2008 to 2014. ODA tagged for biodiversity-related projects makes up 1.6% of all ODA for this period, reported as USD 12 million in 2014, and USD 127 for the period 2008 – 2014. Biodiversity-

related ODA specifically from the Global Environment Facility (GEF) amounted to USD 21.68 million for the 2010-2014 period (on average USD 4.34 million per year).

The Biodiversity Expenditure Review considered two sources of private sector expenditure, NGO expenditure and the expenditure related to the ongoing management of South Africa's private protected areas (PPAs). NGOs spending funds on biodiversity in South Africa receive their funds from a range of sources. Of the seven NGOs analysed, the largest source of funds came from international private sector sources (39%). Total biodiversity expenditure by NGOs operating in South Africa from 2009 to 2015 was estimated to be R1.78 billion.

It was estimated that expenditure on the management of existing private protected areas (making up around 30% of the land-based protected area network in South Africa) was around R4.1 billion from 2009 to 2015. This does not include cost of the land already secured through these PPAs, which represent a substantial cost saving for the state.

Based on an analysis of government financing trends and existing budgets, it is expected that there will be close to zero real growth in biodiversity expenditure by government departments and their entities in the medium-term (2017 to 2019). This points to the ability to sustain current biodiversity activities and the related current payments, and leaves little room for new large-scale projects, especially infrastructure-related projects. A deterioration in provincial allocations from 2017 onwards to EKZNW (allocation in 2016: R718 million; allocation in 2017: R604 million) raises concerns about the sustainability of funding to this relatively large and important conservation management agency. There are varying abilities of protected area management authorities to raise their own revenue. SANParks is exemplary with its diversified portfolio of sources of total revenue, its large proportion of own revenue collected (51,1% for FY 2014/2015). Of the provincial conservation agencies, the North West Tourism Board generated own revenue making up 37% of total revenue for the period under review, followed by Ezemvelo KZN Wildlife with 29%. The remaining conservation agencies all generated own revenue was under 13% of total revenue for this period. The lack of other agencies' ability to collect substantial site-based revenue is a concern in terms of managing the risk of future budget cuts in allocations.

Recommendations

Recommendation 1 – Setting for Public Biodiversity Finance Targets: To increase the number of biodiversity initiatives and their subsequent impact, the Government of South Africa would need to allocate more resources over the medium and long term to biodiversity. The downward prediction in the proportion of biodiversity expenditure relative to total government expenditure over the medium term is a concern. In striving to protect South Africa's unique and important biodiversity, public investment would at least need to be in line with investments that other sectors such. The allocation of more resources should ideally be fixed to a hard-fiscal rule, for example a target of 1% of total consolidated government expenditure over the medium-term, to ensure that all sectors are compliant and investigating innovative ways of ensuring sustainability.

Recommendation 2 – Improved Reporting on Biodiversity Financial Flows: A soft-fiscal rule could be the directive for all government departments and entities to report on their plans to invest in biodiversity-related initiatives and actual biodiversity expenditure to relevant authorities. This could be a standard indicator in the Estimates of National Expenditure (ENE), Budget Book (National Treasury). The linkages

between the National Development Plan (NDP), which is the 30-year developmental vision for SA, is enabled in five year terms through the Medium Term Strategic Framework (MTSF) and the allocated budgets to fund the MTSF activities are in the ENE. This strategic decision is a function of cooperation and consultations between all biodiversity key finance actors and National Treasury. Tracking of plans and expenditure on biodiversity at the municipal level should also be improved as many natural resource management decisions are made at this level. DEA and National Treasury should provide guidance or practice notes in this regard.

Recommendation 3 – Making the Improved Case for Increased Biodiversity Finance: The case for increased funding for protected area management authorities (be they departments or entities) needs to be researched and strengthened, to ensure increased sustainable funding for these authorities, according to their allocated mandate. This could include the integration of the benefits of ecosystem services into mainstream accounting systems (for example, the Environmental Economic Accounts Compendium) while investigating the economic and social co-benefits of biodiversity initiatives (for example, job creation and local economic development). The allocation of resources should be diversified and not just for operational expenditure, but capital expenditure that can generate income. The allocation of funding should be offset by the improved generation of own revenue by protected area management authorities. SANBI, in collaboration with DEA and National Treasury, could take the lead in such research.

Recommendation 4 – Improved Monitoring of ODA Flows for Biodiversity-related Initiatives: Biodiversity-related ODA should be better identified and tracked outside the official budget system, i.e. outside the auspices of the RDP Fund. Closer monitoring and evaluation would be beneficial to measure the benefits and impact of this type of funding and also pave the way for closer cooperation and coordination among all biodiversity actors in South Africa. Such a monitoring and evaluation system should also identify the areas that are being funded and determine the alignment with national biodiversity priorities. DEA, in consultation and collaboration with National Treasury, should be the owner of such a system.

Recommendation 5 – NGO and Government Collaboration for Biodiversity Initiatives: NGOs play an important role in the identification and spending of international and national funding. The engagement and possible collaboration of NGOs and government departments and entities could improve the effectiveness of biodiversity finance, allowing for common plans and initiatives to be implemented. NGOs should also be encouraged to report on the priority areas that have been identified for funding. DEA should take a lead role in this regard.

Recommendation 6 - Private protected areas should continue to be recognised and supported: Private protected areas make up around 30% of the land-based protected area network in South Africa. The management cost of this land is borne by the private sector, allowing for public sector savings. In addition, the protected of private and communal land saves the state the cost of purchasing land for protected area expansion. The continued recognition and increased support for private protected areas should be a priority for DEA, SANParks, and provincial conservation authorities and agencies.

Recommendation 7 – Developing a Biodiversity-Focused Budget Tagging System: It is recommended that in order to progressively achieve the NBSAP targets, a biodiversity-focused budget tagging system needs to be integrated into existing budgeting and accounting systems to ensure accurate apportionment of biodiversity expenditure within planning, budgeting and budget execution. One aspect of this is the need

for governmental ministries, departments and agencies to overtly link NBSAP targets with their programme budgets in their annual budget submissions and again in their expenditure accounts and reports. Such a budget tagging system would enable more frequent biodiversity expenditure reviews and more regular monitoring of expenditure on key NBSAP strategies and activities. The responsible parties could be DEA supported by National Treasury.

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Appendix 1: Biodiversity expenditure review stakeholder list

| BER stakeholder list, including data requirements and sources | | |
|---|---|--|
| Preliminary key finance actors (KFAs) | Data requirements | Source / Data provider / entry-point |
| PUBLIC SECTOR | | |
| National Treasury | Environment-related ODA received, from FY 2008/09, including projections. | GTAC. |
| Various | Primary and secondary data and reports related to the PFM system of GoSA, including independent diagnostic reports (e.g. PEFA), broad public expenditure reviews, fiscal frameworks, MTEF narrative reports, covering, from FY 2008/09. | Publicly available on various websites. |
| Local government (municipalities) | Aggregated, programme-based, environment-related revenue and expenditure estimates, from FY 2008/09 up to latest medium-term estimates from FY 2015/16 and outer years. | MTREF past aggregates publicly available on Treasury website. |
| | Local government environment-related investment plans (narratives), covering period from FY 2015/16 and beyond. | MTREF forward-looking capital expenditure aggregates publicly available on Treasury website. |
| Department of Agriculture, Forestry and Fisheries – DAFF | Past budgeted and actual expenditure, from FY 2008/09. Medium-term estimates: FY 2015/16 and outer years. | ENRE at: http://www.treasury.gov.za/documents/national%20budget/default.aspx |
| | Annual Reports from FY 2008/09 up to and including FY 2014/15. | Annual Reports at: www.gov.za |
| | Forward-looking Strategic Plans and APPs, from FY 2015/16 and outer years. | To be sourced ad hoc directly. Siphokazi Ndudane, Chief Director for resource management, SiphokaziN@daff.gov.za . A.R. (Renny) Madula, RennyM@daff.gov.za Johan Bester, JohanBe@daff.gov.za Ramakgwale (Klaas) Mampholo, klaasm@daff.gov.za |
| Department of Cooperative Governance - DCoG | Past budgeted and actual expenditure, from FY 2008/09. Medium-term estimates: FY 2015/16 and outer years. | ENRE at: http://www.treasury.gov.za/documents/national%20budget/default.aspx |
| | Annual Reports from FY 2008/09 up to and including FY 2014/15. | Annual Reports at: www.gov.za |

| BER stakeholder list, including data requirements and sources | | |
|--|--|---|
| Preliminary key finance actors (KFAs) | Data requirements | Source / Data provider / entry-point |
| PUBLIC SECTOR | | |
| | Forward-looking Strategic Plans and APPs, from FY 2015/16 and outer years. | To be sourced ad hoc directly. |
| Department of Environmental - DEA Affairs | Past budgeted and actual expenditure, from FY 2008/09. Medium-term estimates: FY 2015/16 and outer years. | ENRE at: http://www.treasury.gov.za/documents/national%20budget/default.aspx |
| | Annual Reports from FY 2008/09 up to and including FY 2014/15. | Annual Reports at: www.gov.za |
| | Forward-looking Strategic Plans and APPs, from FY 2015/16 and outer years. | Not sourced – ENRE and Annual Reports sufficed. |
| Department of Mineral Resources - DMR | Past budgeted and actual expenditure, from FY 2008/09. Medium-term estimates: FY 2015/16 and outer years. | ENRE at: http://www.treasury.gov.za/documents/national%20budget/default.aspx |
| | Annual Reports from FY 2008/09 up to and including FY 2014/15. | Annual Reports at: www.gov.za |
| | Forward-looking Strategic Plans and APPs, from FY 2015/16 and outer years. | Not sourced – ENRE and Annual Reports sufficed. |
| Department of Energy - DoE | Past budgeted and actual expenditure, from FY 2008/09. Medium-term estimates: FY 2015/16 and outer years. | ENRE at: http://www.treasury.gov.za/documents/national%20budget/default.aspx |
| | Annual Reports from FY 2008/09 up to and including FY 2014/15. | Annual Reports at: www.gov.za |
| | Forward-looking Strategic Plans and APPs, from FY 2015/16 and outer years. | Not sourced – ENRE and Annual Reports sufficed. |
| Department of Rural Development and Land Reform - DRDLR | Past budgeted and actual expenditure, from FY 2008/09. Medium-term estimates: FY 2015/16 and outer years. | ENRE at: http://www.treasury.gov.za/documents/national%20budget/default.aspx |
| | Annual Reports from FY 2008/09 up to and including FY 2014/15. | Annual Reports at: www.gov.za |
| | Forward-looking Strategic Plans and APPs, from FY 2015/16 and outer years. | Not sourced – ENRE and Annual Reports sufficed. |
| Department of Transport - DoT | Past budgeted and actual expenditure, from FY 2008/09. Medium-term estimates: FY 2015/16 and outer years. | ENRE at: http://www.treasury.gov.za/documents/national%20budget/default.aspx |

| BER stakeholder list, including data requirements and sources | | |
|---|--|--|
| Preliminary key finance actors (KFAs) | Data requirements | Source / Data provider / entry-point |
| PUBLIC SECTOR | | |
| | Annual Reports from FY 2008/09 up to and including FY 2014/15. | Annual Reports at: www.gov.za |
| | Forward-looking Strategic Plans and APPs, from FY 2015/16 and outer years. | Not sourced – ENRE and Annual Reports sufficed. |
| Department of Water and Sanitation – DWS | Past budgeted and actual expenditure, from FY 2008/09. Medium-term estimates: FY 2015/16 and outer years. | ENRE at: http://www.treasury.gov.za/documents/national%20budget/default.aspx |
| | Annual Reports from FY 2008/09 up to and including FY 2014/15. | Annual Reports at: www.gov.za |
| | Forward-looking Strategic Plans and APPs, from FY 2015/16 and outer years. | Not sourced – ENRE and Annual Reports sufficed. |
| Eskom | Annual Reports from FY 2008/09 up to and including FY 2014/15. | www.eskom.co.za |
| | Forward-looking Strategic Plans, APPs, business/operational plans, from FY 2015/16 and outer years. | Not sourced – ENRE and Annual Reports sufficed. |
| SANPARKS | Annual Reports from FY 2008/09 up to and including FY 2014/15. | www.sanparks.org |
| | Forward-looking Strategic Plans, APPs, business/operational plans, from FY 2015/16 and outer years. | www.sanparks.org |
| iSimangaliso Wetland Park | Annual Reports from FY 2008/09 up to and including FY 2014/15. | http://isimangaliso.com |
| | Forward-looking Strategic Plans, APPs, business/operational plans, from FY 2015/16 and outer years. | http://isimangaliso.com |
| Transnet | Annual Reports from FY 2008/09 up to and including FY 2014/15. | http://www.transnet.net/InvestorRelations/TransnetRep.aspx |
| | Forward-looking Strategic Plans, APPs, business/operational plans, from FY 2015/16 and outer years. | Not sourced – ENRE and Annual Reports sufficed. |
| Provincial Departments responsible for | Past budgeted and actual expenditure, from FY 2008/09. Medium-term estimates: FY 2015/16 and outer years. | EPRE at: http://www.treasury.gov.za/documents/provincial%20budget/default.aspx |

| BER stakeholder list, including data requirements and sources | | |
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| Preliminary key finance actors (KFAs) | Data requirements | Source / Data provider / entry-point |
| PUBLIC SECTOR | | |
| environment: all 9 provinces | Annual Reports of all 9 provincial departments responsible for environment, from FY 2008/09. | Respective department websites. |
| | Strategic Plans and APPs, for all 9 provincial departments responsible for environment, from FY 2015/16 and outer years. | Not sourced – EPRE and Annual Reports sufficed. |
| Provincial conservation authorities: EC | Annual Reports from FY 2008/09 up to and including FY 2014/15. | EC Provincial Government: TBC |
| | Forward-looking Strategic Plans, APPs, business/operational plans, from FY 2015/16 and outer years. | EC Provincial Government: TBC |
| Provincial conservation authorities: KZN | Annual Reports from FY 2008/09 up to and including FY 2014/15. | KZN Provincial Government: TBC |
| | Forward-looking Strategic Plans, APPs, business/operational plans, from FY 2015/16 and outer years. | Not sourced – EPRE and Annual Reports sufficed. |
| Provincial conservation authorities: MP | Annual Reports from FY 2008/09 up to and including FY 2014/15. | MP Provincial Government: TBC |
| | Forward-looking Strategic Plans, APPs, business/operational plans, from FY 2015/16 and outer years. | Not sourced – EPRE and Annual Reports sufficed. |
| Provincial conservation authorities: NW | Annual Reports from FY 2008/09 up to and including FY 2014/15. | NW Provincial Government: TBC |
| | Forward-looking Strategic Plans, APPs, business/operational plans, from FY 2015/16 and outer years. | Not sourced – EPRE and Annual Reports sufficed. |
| Provincial conservation authorities: WC | Annual Reports from FY 2008/09 up to and including FY 2014/15. | www.capenature.co.za |
| | Forward-looking Strategic Plans, APPs, business/operational plans, from FY 2015/16 and outer years. | Not sourced – EPRE and Annual Reports sufficed. |
| STATSSA | Overview of Natural Capital Accounting in South Africa, including Wealth Accounting and the Valuation of Ecosystem Services (WAVES) and System of Environmental-Economic Accounting (SEEA) implementation, with a view of obtaining entry-points for identifying biodiversity-related expenditure. Provide economical statistics (household and firm data), consumption levels, goods and services flows and stocks (e.g. GDP), inflation, etc. | Mr. Robert Parry (also sits on BIOFIN National Steering Committee) |

| BER stakeholder list, including data requirements and sources | | |
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| Preliminary key finance actors (KFAs) | Data requirements | Source / Data provider / entry-point |
| PUBLIC SECTOR | | |
| SANBI | Annual Reports and strategies. Biodiversity-related datasets, research and policy analysis. Entry-points in the form of contacts and introductions to other public and private sector key finance actors. Where possible, private sector key finance actor financial and non-financial data. Overview of Natural Capital Accounting in South Africa. | Entry-point: Ms. Tracey Cumming, UNDP BIOFIN Project Leader. Entry-point: www.sanbi.org |
| International organisations operating in South Africa | Overview of ODA to GoSA and private sector (where applicable). Provide overview of previous/current research on BIOFIN/biodiversity-related programming and expenditures. To provide entry-points/contacts/introductions to relevant public and private sector stakeholders. | Representatives of governments and/or authorities on biodiversity: UNHABITAT, UNEP, IMF, World Bank. UNDP BIOFIN Project Leader |
| PRIVATE SECTOR | | |
| NGO: Endangered Wildlife Trust | Annual Financial Statements and Annual Reports. | Dr. Harriet Davies-Mostert Head of Conservation Endangered Wildlife Trust W + 27 11 372 3600 Ext 44 F + 27 11 608 4682 C + 27 82 507 9223 Email: harrietd@ewt.org.za Web: www.ewt.org.za Skype: wildharareharry Twitter: @harrietdm |
| NGO: Birdlife | Annual Financial Statements and Annual Reports. | Fanie du Plessis Finance & Operations Manager BLSA_RGBLogo_lowres RECROP Tel: +27 (0)11 789 1122 E-mail: accounts@birdlife.org.za Website: http://www.birdlife.org.za |
| NGO: Peace Parks Foundation | Annual Financial Statements and Annual Reports. | Kathy Bergs Senior Manager: Development PEACE PARKS FOUNDATION Tel: +27 (0)21 880 5100 Direct Tel: +27 (0)21 880 5147 Fax : +27 (0)21 880 1173 kbergs@ppf.org.za www.peaceparks.org |
| NGO: Wilderness Foundation | Annual Financial Statements and Annual Reports. | Christine Roets Operations Manager christine@wildernessfoundation.org www.wildernessfoundation.org |

| BER stakeholder list, including data requirements and sources | | |
|---|---|--|
| Preliminary key finance actors (KFAs) | Data requirements | Source / Data provider / entry-point |
| PUBLIC SECTOR | | |
| NGO: Wildlands Conservation Trust | Annual Financial Statements and Annual Reports. | Kevin McCann Deputy Director : Conservation SPACE Mobile: 083 447 0657 Tel: +27 33 343 6380 Email: KevinM@wildlands.co.za |
| NGO: Conservation South Africa | Annual Financial Statements and Annual Reports. | Sourced directly. |
| NGO :WWF | Annual Financial Statements and Annual Reports. | Website |
| NGO: Wildlife and Environment Society of South Africa | Annual Financial Statements and Annual Reports. | Sourced directly. |
| Private landowners involved in biodiversity | Aggregated budgeted and actual biodiversity-related expenditure or proxies thereof. | For example: AGRI-SA: Nic Opperman / nic@agrisa.gov.za . Thabi Nkosi /Senior economist /0126433400/0794017223 |
| Private landowners involved in biodiversity: STEWARDSHIP PROGRAMME | Aggregated budgeted and actual biodiversity-related expenditure or proxies thereof. | Entry-point: Ms. Tracey Cumming, BIOFIN Project Leader, DEA Entry-point: www.sanbi.org |

Appendix 2: Descriptions of biodiversity NGOs in South Africa

Wildlands Conservation Trust: All activities including overheads were deemed biodiversity-related and accounted for. The emphasis on restoring habitat such as planting indigenous trees is witnessed within the Trees for Life and Greening your Future programmes. Expenditure in the form of transfers to entities and households for special projects (R13 million in 2015) was included in the biodiversity expenditure calculations, since these parties are not key finance actors themselves and they are the final recipients. Wildlands' total revenue includes internally-generated revenue (such as from fund-raising activities) and from donor funding. Donor funding sources are: Government of South Africa (more than 80% in 2015), private sector donors in South Africa and abroad, and international public sector. In the event that a bottom-up summation of ODA is conducted, it needs to be borne in mind that there may be double-counting of revenue originating from the international public sector.

World Wildlife Fund (WWF): WWF was identified as a key finance actor due to its significant size of operations and protected land ownership in South Africa. WWF's stated aims are to secure the integrity of South Africa's ecological assets, ensure that ecosystem services underpin social and economic well-being and build climate resilience. Its goal is to "conserve the biodiversity assets (endangered wildlife, species, habitats and ecosystems) of South Africa." For the period under review, all expenditure is classified in WWF reports in terms of a) Conservation disbursements, b) Finance and Business support, or c) Marketing and Fundraising. Although some aspects of WWF's activities include countering climate change, the assessment was that by far the majority of WWF's activities contribute to biodiversity conservation. For this reason, all of expenditure were accounted for as biodiversity-related. Total expenditure grew on average more than 10% year on year (2009: R70 million; 2015: R133 million).

Due to the lack of disaggregation of WWF's Annual Financial Statements in terms of programmes/projects/activities, revenue and expenditure could not be delineated to lower levels. This was the case for most of the NGOs identified as key finance actors in South Africa. The Annual Financial Statements also do not distinguish between recurrent expenditure, capital expenditure and transfer payments to other entities.

For the period under review, WWF was funded by a) private and public sector donors (both monetary and in-kind), b) private individual bequests, and c) interest and dividends on investments held. Revenue is raised from a variety of areas, including events, auctions, campaigns, licensing deals, merchandise sales, public sector partnerships, earnings and in-kind donations.

Conservation South Africa (CSA): CSA supports green economic development and specifically sustainable agriculture through promoting use of natural (indigenous) vegetation, evidence-based research on conservation issues, and projects on building climate change resilience. CSA's total expenditure doubled from 2009 (R12 million) to 2015 (R24 million). Approximately half of its total revenue in 2015 of R24 million was a grant from its parent organisation, Conservation International, which is an international NGO. The other half of its revenue was from South African sources, mostly public sector, including DEA, SANBI and Development Bank of Southern Africa. In the event that a bottom-up summation of ODA is conducted, it needs to be borne in mind that there may be double-counting. CSA's Annual Financial Statements for the 2009 to 2015 period provide the absolute amounts for the broad categories of sources of revenue.

Peace Parks Foundation (PPF): PPF delivers projects in three major programmes: Community Development, Combatting Wildlife Crime, Veterinary Wildlife Programme. Projects in numerous transfrontier game and nature reserves straddling South Africa, Lesotho, Botswana, Zimbabwe, Mozambique, Zambia. For the purposes of the expenditure review, PPF provided its apportioned South Africa-related expenditure for the 2009 tot 2015 period, excluding amounts spent on projects outside of South Africa. PPF also provided the relative weightings of the revenue per source for the South Africa-related expenditure (international/ domestic, private/public). On average, more than 90% per year of its revenue is from the international private sector (individuals, trusts, foundations, firms, etc.). All of PPF’s South Africa-related expenditure is classified as biodiversity-related.

Endangered Wildlife Trust (EWT): EWT specialises in protecting threatened species (e.g. African Crane, Riverine Rabbit, birds of prey) and ecosystems (e.g. threatened grasslands and riverine eco-systems). All activities including overheads were deemed biodiversity-related and accounted for in the expenditure review. Total expenditure by 2015 was R37 million, up from R30 million in 2012. EWT ran closely balanced budgets and therefore revenue mirrored these figures. Financial data for the other years was not available at the time of writing. Annual Reports list its sponsors and supporters per Rand bracket; these include corporate and individual donors, with little evidence of government support.

Wilderness Foundation: The Foundation delivers the following activities: a) establishment, development and management of newly established protected areas, b) rhino anti-poaching and other wildlife-related crime, and c) youth training and development through exposure to nature and the eco-tourism and hospitality industries. By 2015, total expenditure amounted to R22 million, up from R13 million in 2009. All activities including overheads are deemed biodiversity-related and accounted for as biodiversity-related. The Foundation provided the sources of its revenue for the purposes of the expenditure review (international/ domestic, private/public).

BirdLife South Africa (BLSA): BLSA was identified as a key finance actor due to the key role it plays in raising awareness and protection of South African bird species, both terrestrial and seabirds. The data sources for the period under review included its annual financial statements from 2008 and its 2015 Annual Report.

Biodiversity-related expenditure occurred under: Policy and advocacy, Conservation: Terrestrial birds, Conservation: Seabirds, Avitourism, Important bird and biodiversity areas, and Publications. Expenditure on these biodiversity-related activities on average grew more than 10% year on year (2009: R10.5 million; 2015: R17.9 million). Expenditure on the conservation of seabirds grew the most (2009: R2 million; 2015: R5.8 million), while expenditure on Avitourism significantly decreased (2009: R4.1 million; 2015: R2 million). Eighty percent (80%) of its current (operational) expenditure was deemed to be biodiversity-related.

BLSA receive revenue applicable to funding biodiversity-related activities in four broad streams: domestic private sector, domestic public sector, international private sector, international public sector. Total revenue grew by more than 10% on average year-on-year.