



Report No: PAD4055

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
PROJECT APPRAISAL DOCUMENT  
ON A  
PROPOSED RESULTS-BASED GLOBAL ENVIRONMENT FACILITY FINANCED GRANT (NGI)

IN THE AMOUNT OF US\$13.76 MILLION

TO THE

SOUTH AFRICAN NATIONAL PARKS AND  
THE EASTERN CAPE PARKS AND TOURISM AGENCY

FOR A

WILDLIFE CONSERVATION BOND OPERATION

AUGUST 16, 2021

Environment, Natural Resources & The Blue Economy Global Practice  
Eastern and Southern Africa Region

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## CURRENCY EQUIVALENTS

(Exchange Rate Effective {June 30, 2021})

Currency Unit =	South African rand (ZAR)
ZAR 0.0698 =	US\$1
	US\$

FISCAL YEAR  
January 1 - December 31

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## ABBREVIATIONS AND ACRONYMS

AENP	Addo Elephant National Park
AGSA	Auditor General of South Africa
AfRSG	African Rhino Specialist Group
APA	Alternate Procurement Arrangements
BAS	Business Accounting Software
BRREP	Black Rhino Range Expansion Project
CAs	Conservation Areas
CAGR	Compound Annual Growth Rate
CBD	Convention on Biological Diversity
CERC	Contingent Emergency Response Component
CFO	Chief Financial Officer
CMR	Capture Mark Resighting
CPA	Community Property Association
CPF	Country Partnership Framework
CPS	Country Partnership Strategy
DFFEE	Department of Forestry, Fisheries, and the Environment
DT	Department of Tourism
ECPTA	Eastern Cape Parks and Tourism Agency
EFA	Economic and financial analysis
EMI	Environmental Management Inspectorate
EPIP	Environmental Protection and Infrastructure Program
ESF	Environmental and Social Framework
GDP	Gross Development Product
GEF	Global Environment Facility
GRS	Grievance Redress Service
GWP	Global Wildlife Program
FI	Financial Intermediaries
FPIC	Free and Prior Informed Consent
GFRNR	Great Fish River Nature Reserve
GoSA	Government of South Africa
IBRD	International Bank for Reconstruction and Development
IC	Investment Committee
ICCWC	International Consortium on Combating Wildlife Crime
IFAC	International Federation of Accountants
IFM	Independent Fund Manager
IPF	Investment Project Financing
IUCN	International Union for Conservation of Nature
IWT	Illegal Wildlife Trafficking
METT	Management Effectiveness Tracking Tool
MPA	Multiphase Programmatic Approach
NBES	National Biodiversity Economy Strategy
NBSAP	National Biodiversity Strategies and Action Plan
NDP	National Development Plan
NDT	National Department of Tourism
NGI	Non-grant instrument

NGO	Non-Governmental Organization
NPAES	National Protected Areas Expansion Strategy
NPV	Net-Present Value
NRM	Natural Resource Management
NT	National Treasury
PAs	Protected Areas
PBCs	Performance-Based Conditions
PDO	Project Development Objective
PIM	Project Implementation Manual
PMU	Project Management Unit
PRAMS	Procurement Risk Assessment Management System
RIIP	Rhino Impact Investment Project
ROMS	Rhino Outcomes Management System
SACU	Southern African Customs Union
SANBI	South African National Biodiversity Institute
SANParks	South African National Parks
SCD	Strategic Country Diagnostic
SCM	Supply Chain Management
SDG	Sustainable Development Goal
SEP	Stakeholder Engagement Plan
SOP	Series of Projects
STEP	Systematic Tracking of Exchanges in Procurement
TOC	Theory of Change
WFA	Wilderness Foundation Africa
WTTC	World Travel and Tourism Council
ZAR	South African Rand
ZSL	Zoological Society of London

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## DATASHEET

### BASIC INFORMATION

Country(ies)	Project Name	
South Africa	Wildlife Conservation Bond Operation	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P174097	Investment Project Financing	Substantial
GEF Focal Area		
Biodiversity		

### Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
07-Sep-2021	30-Sep-2026

Bank/IFC Collaboration

No

### Proposed Development Objective(s)

To increase black rhino populations in target protected areas in South Africa.



## Components

Component Name	Cost (US\$, millions)
Improved Rhino Conservation Management	8.00
National/Regional Enabling Conditions to coordinate share security and research opportunities	0.50
Project management and monitoring	0.50

## Organizations

Borrower:	The Eastern Cape Parks and Tourism Agency (ECPTA) South African National Parks (SANParks)
Implementing Agency:	South African National Parks (SANParks) The Eastern Cape Parks and Tourism Agency (ECPTA)

## PROJECT FINANCING DATA (US\$, Millions)

### SUMMARY

Total Project Cost	13.76
Total Financing	13.76
of which IBRD/IDA	0.00
Financing Gap	0.00

### DETAILS

#### Private Sector Investors/Shareholders

Equity	Amount	Debt	Amount
Non-Government Contributions	13.76		
Trust Funds	13.76		
<b>Total</b>	<b>13.76</b>		<b>0.00</b>

## INSTITUTIONAL DATA

### Practice Area (Lead)

### Contributing Practice Areas



Environment, Natural Resources & the Blue Economy

Finance, Competitiveness and Innovation

### SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Moderate
2. Macroeconomic	● Substantial
3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Substantial
5. Institutional Capacity for Implementation and Sustainability	● Moderate
6. Fiduciary	● Moderate
7. Environment and Social	● Substantial
8. Stakeholders	● Moderate
9. Other	● Moderate
10. Overall	● Substantial

### COMPLIANCE

#### Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

**Environmental and Social Standards Relevance Given its Context at the Time of Appraisal**

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Not Currently Relevant
Financial Intermediaries	Not Currently Relevant

**NOTE:** For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

**Legal Covenants****Sections and Description**

No withdrawal shall be made for payments: (a) prior to the Signature Date; and (b) under Category (1) until and unless the Verification Reports have been submitted to the Bank and the Issuer, in a manner satisfactory to the Bank and the Issuer, showing that the CAGR of the rhino population in the Targeted Protected Areas has increased on an annualized basis over the Project implementation period as determined on the Closing Date; after which payments are to be made in accordance with the formula set out in Section III.B.1(b) of this Schedule 2 of the Agreement.

**Conditions**



## I. STRATEGIC CONTEXT

1. The Wildlife Conservation Bond (WCB) operation is designed to test a new model of conservation finance through the creation of an outcome-driven structured bond that channels funds from bond investors to conservation outcomes – in this case an increase in black rhino populations in target protected areas in South Africa. The longer-term objective of testing this bond structure is to create a new investment asset class that can widen the investor base, and thus reduce the global financing gap for biodiversity conservation. The key innovations to be tested with this operation include: (a) creation of a new impact investment for investors looking for a market return to fund biodiversity conservation; (b) use of Global Environment Facility (GEF) funds to only pay for successful conservation outcomes; (c) deployment of advanced monitoring and verification tools to support transfer of risks of unsuccessful conservation outcomes away from traditional donors to the capital markets that are better equipped to absorb such risks. The **results based GEF financed** non-grant instrument (NGI) makes the product more attractive to traditional donors through the de-risking the achievement of conservation results. The GEF financing will only be triggered at the end of the operation upon the successful achievement of agreed targets, as further described below. This funding is an additional source of financing that South Africa would normally not have access to and aims to deliver environmental and social benefits, including jobs in a sector that has been significantly impacted by Coronavirus disease 2019 (COVID-19). Bondholders finance conservation activities: GEF finances Conservation Success Payment to investors if the targets are met. Bondholders provide parallel co-financing. The WCB Transaction includes a dual tranche offering that aims to generate: (i) approximately US\$40 million equivalent South African Rand (ZAR) denominated, development impact bond (i.e., coupons fund project; GEF NGI funds Conservation Success Payment); and (ii) approximately US\$110 million conservation themed International Bank for Reconstruction and Development (IBRD) bond.

### A. Country Context

2. **South Africa is one of the most biodiverse countries in the world, and its biodiversity contributes significantly to the national economy, local livelihoods, and climate change resilience.** With a varied geography ranging from plains and savannas to deserts and high mountains, South Africa's ecosystems support over 95,000 species, and its rich biodiversity contributes to an estimated 418,000 jobs directly using or protecting biodiversity.<sup>1</sup> The total contribution of travel and tourism to South Africa's gross domestic product (GDP) in 2020 was about four percent (down from seven percent in 2019),<sup>2</sup> a significant portion of which is directly linked to natural assets, particularly protected areas (PAs),<sup>3</sup> and abundant wildlife. Biodiversity also contributes to the livelihoods of the poorest, by providing a range of goods – such as food, biomass fuel, and medicine – and services, such as water. South Africa's ecological infrastructure<sup>4</sup> also

<sup>1</sup> Estimated number of jobs directly using or protecting biodiversity according to SANBI, National Biodiversity Assessment 2018: the Status of South Africa's ecosystems and biodiversity – Synthesis Report.

<sup>2</sup> World Travel and Tourism Council, 2021; Travel & Tourism Economic Impact 2021: Global Economic Impact & Trends 2021. June 2021. <https://wttc.org/Portals/0/Documents/Reports/2021/Globalpercent20Economicpercent20Impactpercent20andpercent20Trendspercent202021.pdf?ver=2021-07-01-114957-177>.

<sup>3</sup> National Parks under South African National Parks (SANParks), including the Addo Elephant Park and Kruger National Park (residents of whose buffer zones this project will benefit) have seen visitor numbers rising from 5.2 million in 2014 to over 7 million in 2018, making nature-based tourism a major economic driver and providing a wide range of value chain development opportunities in support of rural development.

<sup>4</sup> Ecological infrastructure refers to naturally functioning ecosystems that deliver valuable services to people, such as water and climate regulation, soil formation and disaster risk reduction – including healthy mountain catchments, rivers, wetlands, coastal dunes, and nodes and corridors of natural habitat, forming a network of interconnected structural elements in the landscape.



increases resilience to climate shocks, by reducing the impact of extreme weather events, such as drought and floods. Conservation-related industries have higher economic potential than regular agricultural activities, such as stock farming.<sup>5</sup> It is estimated that income from ecotourism could exceed that derived from pastoralism by as much as four-fold in the Eastern Cape.<sup>6</sup>

3. **South Africa's political transition into a democracy in the mid-1990s is considered one of the most remarkable in the past century, but the country's economic transformation remains incomplete and hinges on the ability to facilitate inclusive job creation.** With a Gini coefficient of 0.63 (as of 2020), South Africa has one of the highest inequality levels in the world. Globally it has one of the worst unemployment rates<sup>7</sup> at 29 percent. Only 42 percent of adult South Africans are working, compared to the 61 percent average for middle-income countries. Youth unemployment exceeds 50 percent. Poverty fell from 33.8 percent in 1996 to 16.9 percent by 2008, but further progress has slowed in recent years due to domestic structural challenges and weak global growth since the 2008 global financial crisis. In 2019, the country's poverty rate stood at 19.4 percent. The economy grew on average 2.79 percent from 1994 to 2018.<sup>8</sup> However, overall growth has slowed and is declining: 1.3 percent in 2017, 0.8 percent in 2018, and 0.7 percent in 2019.<sup>9</sup> The economy contracted by 7 percent in 2020<sup>10</sup>. GDP per capita growth has been stagnant or low since 2014. The Government of South Africa (GoSA) is aware of the challenges that need to be overcome to accelerate progress and build a more inclusive society. It has developed a 2030 National Development Plan (NDP), outlining a vision and priorities, and the strategic goals of eliminating poverty and reducing inequality by 2030.
4. **The NDP 2030 demonstrates a strong commitment to environmental and biodiversity protection as a vehicle to address South Africa's most crucial development challenge—accelerating growth while reducing inequality.** In support of the NDP, the National Biodiversity Strategy and Action Plan (NBSAP) 2015-2025 promotes the development of a biodiversity economy, defined as “the businesses and economic activities that either directly depend on biodiversity for their core business or that contribute to conservation of biodiversity through their activities”, including the bioprospecting and wildlife sub-sectors.<sup>11</sup> The biodiversity economy is recognized as a crucial engine for inclusive rural economic development that supports the three goals of the NDP: increase employment, decrease inequality, and reduce poverty.
5. **The biodiversity economy is central to South Africa's tourism industry, but more could be done to make it sustainable and inclusive.** Within the NDP, tourism is identified as a highly labor-intensive industry that stimulates the development of small businesses and generates foreign direct investment, as well as significant export earnings. Still, the rate of transformation in the tourism industry is slow, with few black entrants in the market.<sup>12</sup> The National Tourism Sector Strategy 2017 includes a strategy for People Development, with

<sup>5</sup> Organisation for Economic Co-operation and Development Environmental Performance Reviews: South Africa 2013

<sup>6</sup> Kayser, Sobrevila and Ledec, (2011). World Bank GEF Report. [https://www.thegef.org/sites/default/files/publications/AENP-web\\_0.pdf](https://www.thegef.org/sites/default/files/publications/AENP-web_0.pdf)

<sup>7</sup> The Economist Pocket World in Figures 2019. South Africa's official unemployment rate stood at 29.1 percent in the third and fourth quarters of 2019

<sup>8</sup> World Bank – SA Country Profile, [www.databank.worldbank.org](http://www.databank.worldbank.org).

<sup>9</sup> Africa Development Bank Group.

<sup>10</sup> [http://macropovertyoutlook.worldbank.org/mpo\\_files/mpo/mpo-sm21-zaf-scope.pdf](http://macropovertyoutlook.worldbank.org/mpo_files/mpo/mpo-sm21-zaf-scope.pdf)

<sup>11</sup> Bioprospecting is research on, or development or application of, indigenous biological/genetic resources for commercial or industrial exploitation. The Bioprospecting sector is being facilitated by the Bio Products Advancement Network South Africa (BioPANZA), a collaborative initiative between DFFE, the Department of Science and Technology and the Department of Trade and Industry, mandated to harness existing initiatives and new opportunities in bioprospecting and address the innovation chasm that exists between early product development and commercialization. The wildlife subsector includes live sales of indigenous wildlife; sale of game meat and products, and safari hunting. Department of Environment Affairs, National Biodiversity Economy Strategy, 2016

<sup>12</sup> Department of Tourism, 2017. National Tourism Sector Strategy, p. 36.



programs to attract and support more black entrepreneurs.

6. **The COVID-19 pandemic is causing major disruption in businesses and will severely impact South Africa's economy in the near term.** As of August 10, 2021, there are 203,662,139 confirmed cases globally and 4,308,383 million deaths. South Africa has 2,540,222 COVID-19 cases and 75,012 deaths.<sup>13</sup> The global economic shock that the COVID-19 pandemic delivered and the steep recessions that many countries are experiencing will leave lasting scars for many countries. Before the COVID-19 pandemic, South Africa was already in a recession and its debt rating had been lowered by credit agencies. Due to the COVID-19 pandemic, the economy contracted by 7 percent in 2020, after five consecutive years of negative per capita growth. The impact of COVID-19 on growth operates through two channels. *First*, through the external channel impacting both demand and supply through trade, tourism, remittances, a weakening exchange rate, and an anticipated decline of Southern African Customs Union (SACU) revenues. *Second*, domestic policy channels such as lockdowns, social distancing, travel restrictions and health-related measures that are affecting both domestic demand and supply through loss of income, job losses and company closures. In response, GoSA announced an economic stabilization package of more than US\$27 billion (~10 percent of GDP) in August 2020. Foreign investors are buying South African (SA) bonds in search of higher yields compared to the low or negative yields offered by the United States and European countries. The National Treasury's bond auction in mid-June 2020 saw foreign investors buy South African Rand R4 billion in local bonds<sup>14</sup>. As the COVID-19 situation in SA is still unfolding, the long-term impacts on rhino population growth are unclear, as growth is dependent on the number of rhino calves born and rhino mortality (both natural and due to poaching). Fewer tourists and staff to support the industry mean fewer eyes and ears to serve as a force multiplier in the parks.
7. The Government of South Africa's bold and swift decision in March 2020 to impose a nation-wide lockdown helped not only to mitigate the health impacts of COVID-19, but also brought travel and tourism activities to a stand-still. For context, in 2019, travel and tourism represented seven percent of total GDP (ZAR 354.9 billion) and 9.1 percent of total employment (1.5 million jobs)<sup>15</sup>. International visitors accounted for 8.6 percent of total exports (ZAR 129.9 billion). National Parks were closed for the nearly five months of national lockdown, which brought visitors and revenues to a halt and had devastating impacts. The sector's income could decrease by 75 percent in 2020, with 438,000 jobs and ZAR 80.2 billion in foreign receipts at risk<sup>16</sup>. In an April 2020 survey<sup>17</sup> of the entire tourism industry in South Africa, 83 percent of respondents reported that revenues in March 2020 were down more than 50 percent compared to March 2019, and 34 percent reported that revenues were 100 percent lower. In that same survey, 58 percent of firms were unable to service their debts and 54 percent of firms were unable to cover their fixed costs in March 2020. The drop in nature-based tourism limits the number of eyes and ears on the ground (i.e., a force multiplier) to help monitor illegal activity. The Addo Elephant National Park (AENP), which is one of the top three revenue generating sites in the South African Parks (SanParks) system, has experienced a significant drop in the number of tourists in 2020 compared to 2019 due to COVID-19. AENP re-opened for accommodation in August 2020 and has experienced higher occupancies in September and October, although the lack of international conservation fees from international tourists translates to a cumulative drop in revenues of nearly 74 percent from June-

<sup>13</sup> <https://coronavirus.jhu.edu/map.html>. Accessed on August 10, 2021.

<sup>14</sup> <https://www.businessinsider.co.za/foreigners-buy-sa-bonds-2020-6>. Accessed on September 30, 2020.

<sup>15</sup> <https://wttc.org/Research/Economic-Impact/moduleId/704/itemId/204/controller/DownloadRequest/action/QuickDownload>. Accessed on September 30, 2020.

<sup>16</sup> <https://www.businessinsider.co.za/when-will-foreign-tourism-local-leisure-travel-be-allowed-2020-7>. Accessed on September 30, 2020.

<sup>17</sup> Government of South Africa Department of Tourism, Tourism Business Council of South Africa, and IFC, April 2020. *Tourism Industry Survey of South Africa: COVID-19, Impact, Mitigation and the Future*.



October 2020 when compared to the same time period in 2019.

## B. Sectoral and Institutional Context

8. **Illegally traded natural resources contribute significantly to the loss of biodiversity and threaten sustainable and inclusive development.** The World Bank estimates that the annual cost of illegal logging, fishing and wildlife trade is a staggering US\$1-2 trillion globally. Illegal activities erode countries' natural capital and undermine their ability to achieve many of the Sustainable Development Goals (SDGs). This is especially the case in low-income countries, where livelihoods disproportionately depend on natural capital. In these countries, the World Bank calculates that governments forego an estimated US\$7-12 billion in potential fiscal revenues per year.
9. **South Africa has a robust policy, institutional and regulatory framework for the conservation, management, and sustainable use of biodiversity.** South Africa's Constitution (Act 108 of 1996), Biodiversity Act (Act 10 of 2004) and Protected Areas Act (Act 57 of 2003) provide the main legal framework for the management, protection, and conservation of biodiversity. South Africa's National Biodiversity Strategy and Action Plan (NBSAP) 2015-2025 aims to conserve, manage and sustainably use biodiversity to ensure equitable benefits to the people of South Africa, including as strategic objectives: the enhanced management of biodiversity assets; investments to enhance resilience of the ecological infrastructure; the adoption of practices that sustain the long-term benefits of biodiversity; and developing effective knowledge foundations to support the management, conservation and sustainable use of biodiversity. There are various well-established government departments and institutions with mandates that link to the conservation and management of biodiversity and natural resources. The lead agency for the implementation of the NBSAP is the Department of Forestry, Fisheries, and the Environment (DFFE). SANParks was established through the Protected Areas Act as a conservation authority mandated to conserve, protect, control, and manage a system of national parks and other defined protected areas and their biodiversity. In addition, provincial departments of environmental affairs and provincial conservation authorities exist for each of South Africa's nine provinces. The Eastern Cape Parks and Tourism Agency (ECPTA) is responsible for provincial protected areas in the Eastern Cape Province.
10. **Progress has been made in growing and diversifying the sources of finance for biodiversity management and conservation, but limited financial resources remain one the sector's main challenges.** In many cases, biodiversity management and conservation are funded through a layering of multiple funding sources. The NBSAP establishes the appropriate allocation of resources for effective management of biodiversity, especially in priority areas, as a key activity, highlighting the need to create incentives that encourage private sector investment. Funding for biodiversity has been mainly channeled through government expenditure and contributions from international grants. However, public-private partnerships and cooperative efforts relevant to biodiversity and ecosystem management involving the state, private companies, non-governmental organizations (NGOs) have grown in the country.<sup>18</sup>
11. **Rhino poaching pressures have been extremely high since 2008, particularly in South Africa.** The black rhino was the most numerous of the world's five rhino species, and at one stage could have numbered around 850,000. By 1960, an estimated 100,000 remained, and as poaching intensified and pressure on their habitat

<sup>18</sup> South Africa's National Biodiversity Strategy and Action Plan 2015-2025.



increased, their numbers declined to just 5,495<sup>19</sup> at the end of 2017. Black rhinos are listed as Critically Endangered on the International Union for Conservation of Nature (IUCN) Red List, meaning they are extremely vulnerable to extinction in the wild. The biggest drivers of this decline remain reduction in habitat and poaching. Habitat loss is exacerbated by the increasing costs of rhino security, as many landowners cannot afford to conserve rhinos on their land. South Africa's rhinos have been intensively targeted; rhino poaching in the country increased by 9,000percent between 2007 and 2014, with the number of rhinos poached growing from 13<sup>20</sup> in 2007 to 1,215<sup>21</sup> in 2014. In 2019, 594<sup>22</sup> rhinos were reported poached in South Africa. Efforts to decrease poaching include improved capability to react to poaching incidents, the deployment of new technology, improved information collection and sharing amongst law enforcement authorities, better regional and national cooperation, and more meaningful involvement of private sector, NGOs, and donors<sup>23</sup>. However, there is significant concern that the numbers of poached rhinos are declining each year because rhino populations in South Africa have declined in total numbers to 15,625 white rhino and 2,046 black rhinos<sup>24</sup>, based on data up to the end of 2017. For instance, the 2019 SANParks Annual Reports indicate a significant drop in rhino populations in the key biodiversity site of Kruger National Park. Populations in the Kruger National Park have plummeted to an estimated 3,529 white rhinos and 268 black rhinos, which represents a population reduction of 67percent for white rhinos (from 10,621 in 2011) and 35percent for black rhinos (from 415 in 2013<sup>25</sup>). In the first six months of 2020, rhino poaching decreased by almost 53 percent, with 166 animals killed for their horns across the country<sup>26</sup>. On February 1, 2021, Environment, Forestry, and Fisheries Minister Barbara Creecy announced that South Africa saw a marked decline in rhino poaching during 2020, with the killing of rhino declining by 33 percent (a total of 394)<sup>27</sup>.

- 12. Traditional rhino conservation financing faces challenges associated with short-funding cycles, which limits long-term planning and the ability to adapt.** Traditional conservation funding limits the ability of protected area managers to focus on long-term planning and leverage their knowledge and experience to respond adaptively to changes in-the-field conditions. In addition, the traditional model is focused on outputs rather than outcomes, where current funders have mixed success based on under- or non-performance of implementers, as flows are typically for defined, short-term programmes. Current implementation models are inefficient with large overhead costs to implement conservation projects. This traditional model of financing conservation has also typically relied on government and philanthropic dollars, where funding is drastically inadequate.
- 13. Instruments that can crowd in additional private capital to finance conservation are urgently required.** A 2020 World Bank report 'Mobilizing Private Finance for Nature' highlights the critical role the financial sector can play in addressing the global biodiversity crisis, and that governments and regulators hold the key to harnessing the power of the financial sector to mobilize private finance at scale to protect nature. A landmark

<sup>19</sup> CITES COP18. AfrSG Report. [https://www.researchgate.net/publication/331988665\\_CoP18\\_Doc\\_831\\_Annex\\_2\\_African\\_and\\_Asian\\_Rhinoceroses\\_Status\\_Conservation\\_and\\_Trade\\_A\\_report\\_from\\_the\\_IUCN\\_Species\\_Survival\\_Commission\\_IUCN\\_SSC\\_African\\_and\\_Asian\\_Rhino\\_Specialist\\_Groups\\_and\\_TRAFFIC\\_to\\_link/5c99e945299bf1116947deb1/download](https://www.researchgate.net/publication/331988665_CoP18_Doc_831_Annex_2_African_and_Asian_Rhinoceroses_Status_Conservation_and_Trade_A_report_from_the_IUCN_Species_Survival_Commission_IUCN_SSC_African_and_Asian_Rhino_Specialist_Groups_and_TRAFFIC_to_link/5c99e945299bf1116947deb1/download)

<sup>20</sup> <https://www.traffic.org/news/south-africa-annual-rhino-poaching-toll-falls-for-second-year-running-but-the-crisis-continues/>

<sup>21</sup> [https://www.environment.gov.za/mediarelease/molewa\\_waragainstpoaching2015](https://www.environment.gov.za/mediarelease/molewa_waragainstpoaching2015)

<sup>22</sup> [https://www.environment.gov.za/mediarelease/reportbackon2019\\_rhinopoachingstatistics](https://www.environment.gov.za/mediarelease/reportbackon2019_rhinopoachingstatistics)

<sup>23</sup> <https://www.timeslive.co.za/news/south-africa/2020-02-03-rhino-poaching-declined-again-in-2019-says-environment-minister/>

<sup>24</sup> [https://www.researchgate.net/publication/331988665\\_CoP18\\_Doc\\_831\\_Annex\\_2\\_African\\_and\\_Asian\\_Rhinoceroses\\_Status\\_Conservation\\_and\\_Trade\\_A\\_report\\_from\\_the\\_IUCN\\_Species\\_Survival\\_Commission\\_IUCN\\_SSC\\_African\\_and\\_Asian\\_Rhino\\_Specialist\\_Groups\\_and\\_TRAFFIC\\_to\\_link/5c99e945299bf1116947deb1/download](https://www.researchgate.net/publication/331988665_CoP18_Doc_831_Annex_2_African_and_Asian_Rhinoceroses_Status_Conservation_and_Trade_A_report_from_the_IUCN_Species_Survival_Commission_IUCN_SSC_African_and_Asian_Rhino_Specialist_Groups_and_TRAFFIC_to_link/5c99e945299bf1116947deb1/download)

<sup>25</sup> <https://africageographic.com/stories/kruger-rhino-populations-plummet-latest-official-stats/>. Accessed on February 2, 2021.

<sup>26</sup> <https://www.gov.za/speeches/environment-forestry-and-fisheries-rhino-poaching-decreases-more-half-first-half-2020-31>. Accessed on October 4, 2020.

<sup>27</sup> [https://www.environment.gov.za/mediarelease/rhinopoaching\\_sa](https://www.environment.gov.za/mediarelease/rhinopoaching_sa). Accessed on February 2, 2021.



report by the Paulson Institute found that as of 2019, spending on biodiversity conservation was between US\$124 and US\$143 billion per year, against a total estimated biodiversity protection need of between US\$722 and US\$967 billion per year. This leaves a current biodiversity financing gap of between US\$598 billion and US\$824 billion per year. Private financing for biodiversity remains niche. ‘Conservation’ represented only three percent of the investment portfolio of impact investors, compared to 14 percent for climate in 2018.<sup>28</sup>

14. The Wildlife Conservation Bond to be developed by the project proposes a new model for conservation funding. It will help change the business as usual of conservation financing and catalyse a new frontier in innovative finance by attracting new risk investment into the conservation field and setting up an outcomes-driven framework to proactively secure and grow the black rhino populations in South Africa. The launch event for the Paulson Institute report highlighted the WCB Transaction as a type of financial mechanism that offers promise and should be scaled up. The scale of the bond issuance will allow for institutional investors to participate in a sector that is not historically considered. This framework can be replicated for other rhino sites within South Africa and beyond<sup>29</sup>, and to other species and protected areas. Current biodiversity conservation expenditures are insufficient<sup>30</sup>, and there is an urgent need for the private sector to increase its biodiversity conservation contributions, including for wildlife conservation. This is also the case for funding to combat poaching and illegal wildlife trade, which the World Bank estimated to be US\$2.35 billion<sup>31</sup> during 2010-2018. Institutional investors represent a potential new source of funding, as it represents over US\$100 trillion in assets globally,<sup>32</sup> and this investment segment already contributes to environmental sustainability with US\$579 billion in global climate finance between 2017-2018.<sup>33</sup> The WCB Transaction will help generate awareness amongst this investor segment and fill a knowledge gap on a structured debt instrument linked to conservation outcomes. This instrument and the lessons that will be learned from project implementation will help promote increased institutional investments for biodiversity conservation.

#### C. Relevance to Higher Level Objectives

15. **The project will directly contribute to SDG15 “Life on land”** by mobilizing and increasing financial resources for biodiversity and ecosystem conservation (SDG 15.A) and enhancing global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities (SDG 15.B). The project will also contribute to the following goals: protection of important habitats for carbon sequestration (SDG13 Climate Action) and supporting a major tourism industry and a thriving commercial agricultural industry (SDG8 Decent Work and Economic Growth), which creates jobs in the local region (SDG1 No Poverty) and feeds people (SDG 2 Zero Hunger). The community engagement elements will also highlight gender equality (SDG5). The project will additionally support SDG17, Partnership for the goals.

16. **The project contributes to the World Bank Group’s (WBG’s) twin goals of ending extreme poverty and**

<sup>28</sup> [https://thegiin.org/assets/2018\\_GIIN\\_Annual\\_Impact\\_Investor\\_Survey\\_webfile.pdf](https://thegiin.org/assets/2018_GIIN_Annual_Impact_Investor_Survey_webfile.pdf).

<sup>29</sup> The Rhino Impact Investment (RII) has already screened three sites in Kenya for investment readiness.

<sup>30</sup> In 2012, estimates of global expenditures for biodiversity conservation were around US\$52 billion per year. The High-Level Panel on Global Assessment of Resources for Implementing the CBD Strategic Plan for 2011-2020, estimated that the global investment required amounts to between US\$130 and US\$440 billion annually.

<sup>31</sup> The Global Wildlife Program analyzed 24 international donors (see Table 1), which collectively committed over US US\$2.35 billion to combat IWT in Africa and Asia from 2010–2018.

<sup>32</sup> OECD. 2019. Pensions at a Glance.

<sup>33</sup> Climate Policy Initiative. 2019. Global Landscape of Climate Finance 2019.



**building shared prosperity in a sustainable manner. It is well aligned with the 2018 WBG Systematic Country Diagnostic (SCD) for South Africa and the WBG Country Partnership Framework (CPF) for the Republic of South Africa for the Period FY 22-26 (Report No. 154318-ZA).** The WBG's twin goals are in line with the priorities set out in South Africa's National Development Plan (NDP), which aims to eliminate poverty and reduce inequality by 2030. The SCD highlights the need to increase the resilience of vulnerable natural resources, such as South Africa's biodiverse flora and fauna. This project forms a part of CPF *Objective 1.2: Greater climate change resilience and environmentally sustainable investments in selected sectors* by supporting GoSA in its efforts to increase investments and actions towards building sustainable and climate resilience landscapes. Resilient landscapes, in turn, protect the country's biodiversity wealth, which contributes to a sustainable economy.

17. The project will also contribute to addressing the priorities of the World Bank's Africa Climate Business Plan<sup>34</sup>, now in its fourth year of implementation. In particular, the project will contribute to "Scaled-up and transformational investments in key sectors and areas", which places a strong emphasis on support for climate resilient landscape management. It will also support implementation of the World Bank Action Plan on Climate Change Adaptation and Resilience<sup>35</sup> in priority areas.<sup>36</sup> The project also contributes to the Tourism Sector Development Plan (2015/16 – 2019/20) which focuses on unlocking the binding constraints in the sector.<sup>37</sup> It also supports the **WBG's** Gender Strategy (FY16-23), which seeks to empower women through four objectives: improving human endowments, removing constraints for more and better jobs, removing barriers to women's ownership and control of assets, and enhancing women's voice and agency and engaging men and boys.
18. **The project contributes to the World Bank's Mobilizing Finance for Development approach.** The project supports the World Bank's efforts to leverage private sector solutions<sup>38</sup> and financing to provide value for money and boost development prospects, reserving scarce public financing for those areas where no private funding is available. As highlighted by the Minister of Forestry, Fisheries , and Environment (DFFE) in the DFFE Budget and Annual Performance Plan 2020/21 speech<sup>39</sup>, South Africa is keen to tap into dedicated international "green funds" and green bonds to promote long term economic competitiveness and climate resilience. The project supports DFFE's Ministerial Task Team on resource mobilization for conservation as part of COVID-19 responses, by considering innovative approaches to sustainable funding for the conservation sector, both for the immediate response and over the longer term.
19. **The project responds to the objectives of the GEF Biodiversity Focal Area.** The project supports the GEF-7 biodiversity focal area objectives of mainstreaming biodiversity across sectors as well and landscapes and seascapes and addressing direct drivers to protect habitats and species and improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate. It is aligned with the

<sup>34</sup> World Bank. 2018. *Accelerating Climate-Resilient and Low-Carbon Development: The Africa Climate Business Plan*. May 2018.

<sup>35</sup> World Bank. 2019. *The World Bank Group Action Plan on Climate Change Adaptation and Resilience*. January 2019.

<sup>36</sup> The Action Plan prioritizes the mainstreaming of climate action through programmatic operations. Among the high potential areas identified, are support for (a) integrated landscape management approaches, (b) "triple-win" approaches such as climate-smart agriculture and afforestation that seek to capture benefits from development, emissions reduction, and enhanced resilience, and (c) nature-based solutions (also referred to as ecosystem-based adaptation approaches) that reduce risks, protect environmental services and generate income-generation co-benefits.

<sup>37</sup> The five priority areas identified in the TDSP are: (a) marketing and promotion, (b) human resource development, (c) product development, (d) natural and cultural resource conservation, and (e) tourism management and regulation. Specifically, the project directly contributes to conservation of natural tourist attractions in the targeted PAs.

<sup>38</sup> Whilst meeting the highest environmental, social, and fiscal responsibility standards.

<sup>39</sup> [https://www.environment.gov.za/speech/crecy\\_202021budgetvoteplenary\\_revisedbudgetannualperformanceplan](https://www.environment.gov.za/speech/crecy_202021budgetvoteplenary_revisedbudgetannualperformanceplan).



World Bank-led GEF-funded Global Wildlife Program (GWP)<sup>40</sup> and the Program's theory of change which is focused on delivering global biodiversity conservation and improved livelihoods. This project focuses on rhino conservation and crime prevention, and increased benefit-sharing with local communities. Further, it supports corporate biodiversity efforts and partnership initiatives, including the International Consortium on Combating Wildlife Crime (ICCWC). The project also directly contributes to the GEF-7 South Africa project *Catalyzing Financing and Capacity for the Biodiversity Economy around Protected Areas* (P170213), which strives to leverage financial resources and improve capacity to implement the Biodiversity Economy and increase benefits to local communities from selected Protected Area landscapes.

## II. PROJECT DESCRIPTION

### A. Project Development Objective

20. The objective of the project is to increase black rhino populations in target protected areas in South Africa.

#### PDO Level Indicators

21. The key expected result of the project is the Percent increase of black rhino population in target sites (Compound annual growth rate (CAGR)).

### B. Project Components

22. The operation uses an innovative financing model to tap private finance for conservation of the black rhino in two parks of South Africa. The operation aims to catalyse the world's first WCB Transaction that links the coupon payments of an institutional SDG-related bond issuance to conservation performance. This innovative transaction enables private/institutional bond investors to participate in a market which generally consists of bilateral, multilateral, and philanthropic donors. The operation's total cost is financed by two different sources: (a) an amount of US\$9 million to pay for conservation activities financed by coupon payments foregone by bond investors (WCB ZAR Tranche); and (b) a results-based GEF-financed Non-Grant Instrument (NGI) of US\$13.76 million<sup>41</sup> to pay bond investors a conservation success payment, if rhino growth is achieved. **Bondholders finance conservation activities: GEF finances Conservation Success Payment to investors if targets are met. Bondholders provide parallel co-financing.** The WCB ZAR Tranche will fully finance conservation activities and the GEF will finance the conservation success payments. The GEF financing will only be triggered at the end of the operation upon the successful achievement of agreed targets, as further described below.

23. **The WCB ZAR Tranche will use coupon payments (foregone by bond investors) to finance conservation activities at two priority sites for rhino conservation: Addo Elephant National Park (AENP) and Great Fish River Nature Reserve (GFRNR)** (see Annex 3 for the project area map). This parallel co-financing from the foregone bond coupons will help AENP and GFRNR enhance management of the protected areas to secure and increase black rhino populations. It will also generate additional direct benefits for local communities in terms of jobs and indirect benefits related to improved security and induced benefits across value chain

<sup>40</sup> The GWP is US\$232 million GEF-funded program that serves to coordinate and share lessons across projects aiming to reduce illegal wildlife trade. It includes national projects in 29-countries.

<sup>41</sup> Total GEF NGI project size is US\$15 million. This includes US\$13.76 million that may be used for the Conservation Success Payment and US\$1.24 million for GEF implementing agency fees.



investments. If rhino population growth targets are achieved, bond investors will receive a Conservation Success Payment. If conservation targets are achieved by the end of the project, the Conservation Success Payment could potentially provide a higher return on investment than the coupon payments investors would have received from a traditional IBRD bond. This payment will be made by using up to US\$13.76 million funding from GEF's NGI window.

24. The project builds on existing conservation efforts at the two priority sites, as well as a two-year product development phase<sup>42</sup> that included an extensive assessment and stakeholder engagement. The WCB Transaction product development phase was carried out under the US\$4.5 million Rhino Impact Investment Project (RIIP) funded by the Global Environment Facility (GEF), The Royal Foundation, the UK DEFRA IWT Challenge Fund, and the Zoological Society of London (ZSL). This work was implemented under the leadership of ZSL with technical support from Conservation Alpha, Conservation Capital, Credit Suisse, DLA Piper and the International Union for Conservation of Nature (IUCN) Species Survival Commission's African Rhino Specialist Group (AfRSG). The product development phase selected AENP and GFRNR for the WCB Transaction from a list of 134 sites, based on the sites' ecological, managerial, and financial capacity to achieve rhino outcomes. As part of the preparation of the WCB project, the WCB Transaction concept and key operational elements were developed. The WCB Transaction concept preparation efforts build on prior GEF projects at AENP and other donor funded projects at GFRNR<sup>43</sup>.
25. The WCB Transaction (ZAR Tranche) transfers some of the risk of underwriting rhino conservation to private bond investors through a World Bank (Aaa/AAA/AAA (Moody's/S&P/Fitch) issued bond. WCB ZAR Tranche investors elect to forgo the proceeds from their fixed coupons, which will be used (parallel co-financing) to fund the enhanced rhino conservation activities at the two target sites. If the rhino growth outcomes are achieved in year five, the investor will receive a Conservation Success Payment (using GEF's NGI funding). The foregone coupon payments will be directed to the two project sites to implement conservation activities that seek to maximize net rhino growth rates over five years. The project (detailed in Annex 1) follows World Bank policies and procedures for Investment Project Financing (IPF), and will be applicable to SanParks and ECPTA, as well as to project partners<sup>44</sup>. SanParks and ECPTA will enter into two grant agreements (for NGI funds) with the World Bank: (a) one with the World Bank Treasury in its capacity as the WCB Transaction issuer, for purposes of extending, and regulating the use of, the WCB ZAR Tranche; and (b) one with World Bank Operations in its capacity as GEF Implementing Agency, for purposes of extending, and regulating the use of, the Conservation Success Payments.

## Financing structure

### ***WCB Transaction***

<sup>42</sup> WCB Transaction product development phase was completed from 2016-2020 and included US\$4.5 million grant amounts. The project included the following components: (i) gap analyses of priority rhino sites conducted, shortlist of priority rhino sites identified for inclusion in the live investment and RII investment performance metrics tested and demonstrated in Tsavo West, Kenya; (ii) bring 5-10 rhino sites up to Investment readiness and prepare sites to deliver against the RII; and (iii) Investment Blueprints developed, financial structure built, management, legal, and governance structure developed.

<sup>43</sup> The Implementation Completion Report Review (*ICRR13655 for P064438*) of the World Bank's Greater Addo Elephant National Park GEF-funded Project (US\$5.5 million), implemented from 2004 to 2010, found the projects outcomes were satisfactorily achieved. This GEF project was implemented mostly before the rhino poaching crisis hit SA in 2008. The project did not focus specifically on rhino conservation, rather had economic and community development, social ecology, and land incorporation development plans.

<sup>44</sup> The foregone bond coupon payments are parallel co-financing and have a separate agreement that defines funding terms and conditions. The disbursement function for the coupon payments are de-linked from the GEF-NGI funds. GEF NGI funds will not go to the South African partners, rather the GEF NGI funds will only be used to pay investors (through a paying agent) with a Conservation Success Payment if conservation targets are achieved.



26. The WCB Transaction includes a dual tranche offering that aims to generate: (a) approximately US\$40 million equivalent ZAR denominated, development impact bond (i.e., coupons fund project, GEF NGI funds Conservation Success Payment); and (b) approximately US\$110 million conservation theme IBRD bond (target bond size has no direct link to the project or to GEF NGI). The WCB is expected to be issued following project approval by the World Bank Board of Executive Directors. This dual tranche structure offering will be issued as a single transaction and increase awareness among two different groups of investors: ZAR investors (including wealthy individual investors from South Africa) that take on the WCB Project risks and US dollar Environmental, Social and Governance (ESG) institutional investors, primarily in the United States and Europe. The World Bank Treasury will issue an approximately US\$40 million equivalent IBRD bond managed by an investment bank and the World Bank will use the proceeds to finance sustainable development projects and programs in IBRD's member countries. The bond holders agree upfront to forego all bond coupon payments. There is no sovereign guarantee. The agreement and consent of the bond holders will be detailed in the bond product offering documentation. The bondholders will agree to provide funds to the project (i.e., forego coupon payments determined at the time of bond issuance, when rates are locked in) that will be directly transferred to the two South African Partner Sites. The net-present value (NPV) of future coupon payments is approximately ~US\$9 million in estimated coupon payments, subject to market conditions. As per bond holders' instructions, the World Bank Treasury will pay a stream of ZAR cashflow on the issue date of the bonds and every six months thereafter, 2025 (a total of ten total instalments). In other words, the World Bank Treasury will transfer the ZAR cashflows to ECPТА and SanParks<sup>45</sup> to finance the agreed conservation activities. The funds will be ringfenced through a dedicated project account, which will finance the agreed conservation activities in AENP and GFRNR. The funding which the project will provide is significantly more than what the current budget at the parks to manage rhinos and will help the park agencies implement a comprehensive strategy and activities under a work program that will help enhance the rhino population and habitat management, range availability, containment and counter-poaching, and enabling conditions.
27. The approximately US\$110 million conservation themed IBRD bond will help raise awareness of biodiversity conservation in the United States of America (USA)/ the European Union (EU), as it will be marketed to AAA rated institutional investors in the USA/ the EU. Although this bond is not directly tied to the South Africa project, the bonds would be issued under the same program and have the same maturity date, but have different terms, currencies, and International Securities Identification Numbers. This US\$ dollar denominated transaction was done to meet a GEF requirement for the bond size, and that is therefore included in the Project Appraisal Document (PAD).
28. This dual tranche structure offering will be issued as a single transaction and increase awareness among two different groups of investors (South Africa Rand investors that take on the WCB Project risks on a Conservation Success Payment and the US dollar ESG institutional investors). Raising awareness and interest amongst ESG institutional investors is key to finance biodiversity conservation that is typically financed by governments, Official Development Assistance, or by philanthropic resources. Without the GEF NGI funds as the outcome

<sup>45</sup> Payments are made to SanParks and ECPТА to finance conservation activities. If the World Bank determines, in its sole discretion, that a significant violation of environmental and social standards; corruption and fraud, or negligence in connection with the [project] has occurred or is continuing that could cause material harm (physical, financial, reputational or otherwise), the World Bank shall have the right to suspend all coupon interest payments on the bond until the next coupon Interest Payment Date which falls after the date on which the World Bank determines, in its sole discretion, the Suspension Event has been cured to its satisfaction (the "Post Suspension Interest Payment Date"). On the Post Suspension Interest Payment Date, all previously suspended interest amounts (the "Suspended Interest Amounts") shall be paid together with the interest amount for the relevant Interest Period; provided however that no interest shall accrue on any Suspended Interest Amount. If, six months prior to the Maturity Date, a Suspension Event has not been cured to the satisfaction of the World Bank, the Suspended Interest Amounts shall be paid to the Noteholders as a special interest payment.



payer to incentivize the investors to buy the bond and forego their coupons, this transaction is not viable. The goal is to tap into a new market beyond philanthropic resources, that can provide funds as non-reimbursable grants. The WCB US dollar Tranche will help bring the first fixed income conservation financial instrument to market and generate awareness amongst the US/EU AAA investment base and fill a knowledge gap of structured debt instruments that can be linked to conservation outcomes. This innovative product could be a catalyst for upcoming World Bank-wide efforts related to the forthcoming World Bank Biodiversity Strategy and Framework, and other strategic initiatives to be launched at the next Convention on Biological Diversity (CBD) Conference of the Parties (COP) in Kunming, China that will likely occur in early 2022. This innovative project offers potential for greater replicability and a framework to scale private investment to wildlife conservation and broader sustainable development challenges.

29. As explained in paragraph 24, there will be two agreements: (a) World Bank GEF Grant Agreement (GEF GA) with SanParks and ECPTA; and (b) World Bank Treasury agreement with SanParks and ECPTA (Treasury GA). The GEF GA ties payment of GEF NGI funds for the Conservation Success Payment, subject to the achievement of a combined net rhino growth verified in year 5 across both parks (CAGR). The Treasury GA between the World Bank Treasury and SanParks and ECPTA which is included in the GEF GA (Schedule 3) outlines the terms and conditions of the foregone coupon payments (parallel co-financing) that will be used to finance the conservation activities. Coupon payments to the PAs may be stopped, if there is significant non-compliance on legal, Environmental and Social Framework (ESF) or other fiduciary issues. The Treasury GA with the protected area authorities will set out the specific conditions and procedures. The two sites will spend the funds provided through the foregone coupon payments, as detailed in their respective Theory of Change (TOC) and the budgeted workplans for each site. The TOC aligns project interventions with project development objectives, and is based on project activities focused on management, range availability, containment and attrition, and rhino population management.

#### ***Conservation Success Payment***

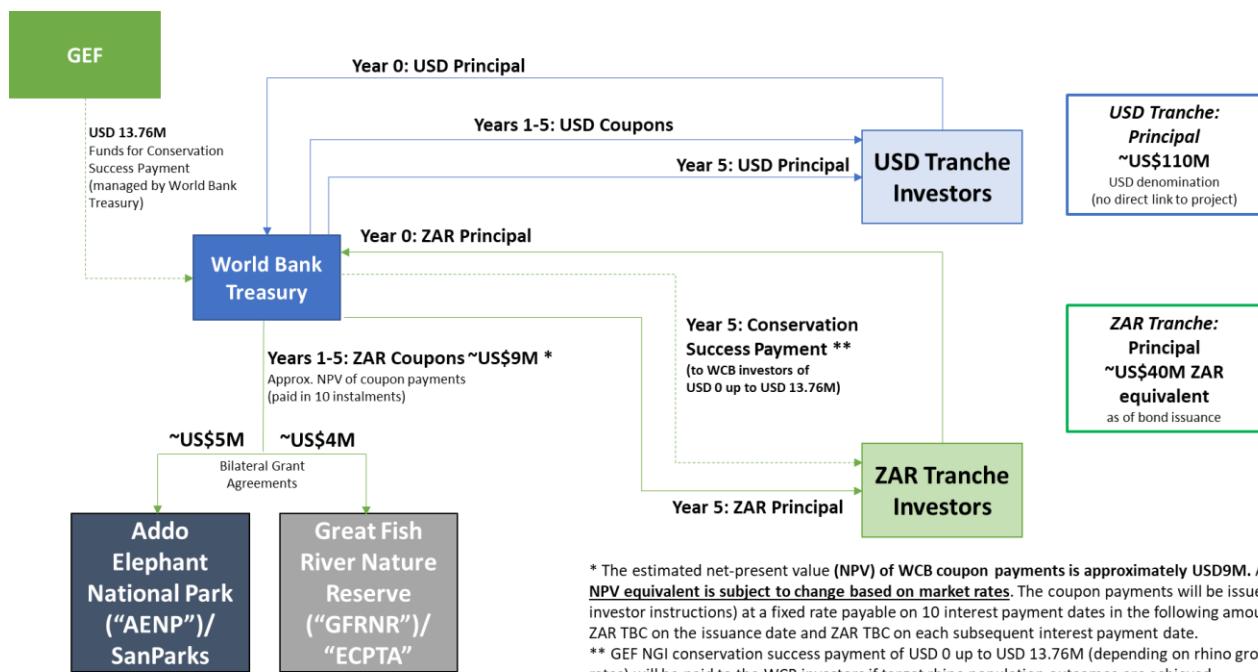
30. The black rhino growth rate at each site will be assessed over the five-year project implementation period and will be independently verified at the baseline, mid-term, and completion. At the end of the five-year term, the IBRD Bond (ZAR Tranche) will be redeemed at par and bond investors will receive their principal, independent of the rhino growth rate achieved. Bond investors may also receive a Conservation Success Payment at maturity (paid for by World Bank Treasury using GEF NGI funds) based on the project's conservation success (independently verified rhino growth rate).
31. The Conservation Success Payment for the WCB ZAR Tranche will be directly proportional to the growth in the rhino population, to be capped on the upside at approximately 6.1 percent per annum (reflecting a 4 percent annual growth target in the rhino population). The potential upside is dependent on the coupon attached to the IBRD bond issuance. This transaction will try to tap into private investor base, rather than philanthropic groups that already provide grants and donations to conservation projects. The financial product will therefore need to offer an attractive risk return profile for investors to buy the product and agree to forego their semi-annual coupons for a potentially higher pay-out at maturity. If conservation performance targets are met, IBRD will make the Conservation Success Payment (using GEF NGI funds) to bond investors. In the event of zero growth rate or decline in the rhino population, no Conservation Success Payment will be made to the bond holders. IBRD will use its balance sheet to pay the principal payment to bond investors.
32. The WCB Transaction Conservation Success Payment targets were created based on scenario planning. The



“without WCB Project scenario” estimates an average annual rhino population decline of 3.7 percent. Conservation Success Payments (using GEF NGI funds) will only be made if the independently verified average annual growth rate of the rhino population is between zero and four percent. Based on the notional issuance of approximately US\$40 million equivalent, the GEF NGI funding will cover Conservation Success Payments of the project up to a four percent rhino growth rate (6.5 percent is the estimated upper growth rate, if the WCB Project is successfully implemented). The WCB Transaction will help raise awareness of biodiversity conservation in the South African and in the US/EU markets. ZAR Tranche investors will forego their annual bond coupon payments for a potentially larger pay-out in five years (if conservation targets are met). The ZAR Tranche includes a principal protected investment and the GEF NGI of up to US\$13.76 million to pay investors a risk-adjusted return on investment that is linked to rhino growth. The risk of achieving conservation results is transferred from the outcome payer to the market (i.e., ZAR Tranche investors). The ZAR Tranche will be marketed to South African Nationals (high net worth individuals and international investors looking for higher yields) while the US dollar Tranche will be marketed to AAA institutional investors in the US/the EU.

33. The Rhino Outcomes Management System (ROMS,) will be used to provide evidence of rhino growth performance and will be used throughout the project lifecycle. The ROMS and overall rhino growth monitoring and evaluation, and verification methodologies were developed and validated during the RIIP and will be applied for the project and used to track and report on progress. In year 5, after independent verification of net rhino population growth, IBRD will use GEF NGI funds to make a single success payment to bond holders. GEF NGI funds will be deployed as a Conservation Success Payment (i.e., outcome payment) to bond holders as part of bond redemption. If rhino growth is not achieved, the GEF NGI funds would be returned to the GEF (i.e., referred to by the GEF as a repayment). It will only be repaid to the GEF if the success threshold of estimated four percent rhino growth is not reached at the close of the five-year project. If repayment is required, the payment will vary between zero and US\$13.76 million, based on the rhino growth rate.

**Figure 1. Wildlife Conservation Bond Dual Tranche and GEF Financing Structure**





34. Launch of the WCB Transaction is targeted by the World Bank Treasury for the second half of 2021, upon completion of project activities and successful structuring of the transaction and internal approvals by all parties. Indicative terms and timeline are subject to change.

### **Project components**

35. **Components 1-3 will be exclusively funded through the foregone coupon payments and will fund conservation activities that may trigger the Conservation Success Payment. The GEF funds will exclusively finance the Conservation Success Payment.** Each source (i.e., foregone coupon payments and GEF NGI) will finance different expenditures under the operation. While the foregone coupon payments will finance conservation activities, the GEF NGI will finance Conservation Success Payments (i.e., parallel co-financing). The SA executing agencies will use an evidence-based and adaptive management approach that uses data-supported interventions to dynamically respond to changes in performance risks (e.g., a surge in poaching incursions). The project will invest in site-based conservation management (Component 1), national/regional enabling conditions (Component 2), and project management support (Component 3) to effectively and efficiently execute project activities, including the ESF. SanParks and ECPTA will work with local communities to optimise social and gender inclusion and benefit sharing for a more positive future supported by better conservation. As approximately half of the Great Fish River Nature Reserve (GFRNR) is co-owned and co-managed with local communities, the local community will benefit directly and indirectly from project investments.

#### **Component 1: Improved Rhino Conservation Management (US\$8 million, fully funded by foregone coupon payments)**

##### **Component 1a: Improving rhino conservation and natural resource management in the Addo Elephant National Park (US\$4.5 million, fully funded by foregone coupon payments)**

36. This will be achieved through, *inter alia*: (i) expanding the rhino hold into a fourth section including translocation of rhinos to the new section from existing rhino sections; (ii) increasing distribution of water in two sections through the construction of additional boreholes and the creation of waterpoints, and securing the supply of water in a third section (with the requisite elephant exclusion fencing); (iii) fencing a new section, upgrading rhino bomas<sup>46</sup> and rhino capture and facilitating translocation of rhinos into such new section; (iv) supporting infrastructure security interventions, including: (A) building an operations control room to collate information and inform intelligence-led law enforcement; (B) enhancing access control and upgrading fences, including building gate houses, perimeter fences, accommodations and providing vehicles; (C) improving communications and monitoring aerial support, including hiring monitoring staff, providing vehicles, sensor and aerial monitoring equipment, and carrying out associated training, and (D) improving capability to react to poaching incidents, information collection and technology use, including providing training on human rights and environmental management inspections, carrying out counter-poaching awareness campaigns, hiring staff and providing vehicles; and (v) carrying out community engagement interventions to support the carrying out of Project activities, including carrying out need assessments and hiring developing community staffing.

<sup>46</sup> A boma is an enclosure for an animal or animals, used for wildlife introduction to settle and habituate an animal to its new home and as a holding facility.



37. AENP, which is managed by SANParks, has five of South Africa's seven biomes and the highest flora diversity of any national park in Africa. It has diverse mammalian fauna, over 400 bird species and over 13 endemic species of herpetofauna. It provides sanctuary for pollinators which serve 25 percent of SA's citrus industry. AENP is a sanctuary for other species that are highly valued in the illegal wildlife trade, including elephants, white rhinos, medicinal plants, and cycad species. It plays an important role in protecting water catchment areas, with the associated flood attenuation and water filtering benefits, in a poor region with limited investment in engineering infrastructure. AENP benefits the local communities by supporting economic development through providing jobs and a law enforcement structure and preserves the rich social and cultural history. The various dense thicket vegetations within AENP play an important role in carbon sequestration, and store up to 4200 tonnes of above ground Carbon per km<sup>2</sup>. AENP has a strong track record of black rhino conservation and is a major conservation success story given the large-scale expansion of the Park over the past 30 years, including through funding support from the GEF. Activities under this sub-component will include:

- A. **Rhino Population Management.** AENP has three sections that currently hold rhino and will expand into a fourth section during WCB Project implementation. This includes translocation of rhinos to the new section to reduce densities in existing areas and ensure high rhino growth rates throughout the five-year investment period.
- B. **Habitat Management.** Access to water is limited in AENP, both in terms of physical water points and due to competition with elephants. AENP will increase the distribution of water in two sections through additional boreholes and secure the supply of water in a third section. Selected water points will have elephant exclusion fences, reducing elephant browse pressures across the reserve by only allowing elephants to drink at certain waterholes.
- C. **Range Availability.** The new section inside the park will be fenced to the required specifications to contain rhinos with the infrastructure established for an Anti-Poaching Unit. There is a need for an upgrade to the rhino holding bomas and some rhino capture and transport equipment to facilitate the translocation of rhinos into this new section.
- D. **Containment and Counter-Poaching.** Given the predicted increase in poaching in the Eastern Cape and the current law enforcement capacity at AENP, substantial security infrastructure interventions are needed, including recruitment, equipping, and training of security staff. An operations control room will be built to collate information and inform intelligence-led law enforcement. Access control will be enhanced, fences upgraded, and communications and aerial support improved. Training and capacity building will be conducted to improve capability to react to poaching incidents, information collection and technology use. In addition, security staff will receive mandatory annual human rights training and will hold an Environmental Management Inspectorate (EMI) certificate, which provides the necessary knowledge and mandate to enforce the law. The additional project budget will allow for increased monitoring and tracking of rhinos, which will also help with carcass detection.
- E. **Community.** The sites will work with target communities to engage them in project activities through the established community forum. The WCB Project sites target a biodiversity economy node identified by the Government of South Africa. Community engagement will include benefits to staff currently employed on a permanent basis and project staff on the following programs: Working for water, Working on Fire, Working on ecosystems, and Environmental monitors. SANParks will also employ temporary staff that works on an *ad hoc* basis and for maintenance functions. Through the project SANParks will appoint staff to work as rangers, monitors, gate guards, and joint operations center staff, as well as a project manager.



There will also be employment opportunities during the construction phase of new infrastructure, as well as for maintaining current infrastructure.

**Component 1b: Securing rhino populations - Great Fish River Nature Reserve (US\$3.5 million, fully funded by foregone coupon payments).**

38. This sub-component will secure rhino populations in Great Fish River Nature Reserve (GFRNR) through, *inter alia*: (i) carrying out relocation activities to remove rhinos from one area to another to maintain a density which supports higher growth rates; (ii) improving water management, including securing water points in parts of the reserve and removing some existing dams in high-risk poaching areas, and supporting the maintenance of roads, fences, infrastructure and vehicles; (iii) improving capability to react to poaching incidents, information collection and technology use, including, providing training on human rights and environmental management inspections, carrying out counter-poaching awareness campaigns and providing vehicles; (iv) restructuring security staff organization through the appointment of a security manager, including recruiting and training security staff; (v) supporting infrastructure security interventions, including: (A) building an operations control room and a communications network; (B) enhancing access control and upgrading fences; (vi) improving communications and monitoring aerial support, including hiring monitoring staff, providing vehicles, sensor and aerial monitoring equipment and carrying out associated training; and (vii) carrying out community engagement interventions to support the carrying out of Project activities including carrying out need assessments and hiring developing community staffing.
39. The GFRNR is a regional park managed by the ECPTA by statute. Half of GFRNR is owned by the local community, with a revenue sharing scheme for tourism and game sales. It has the potential to catalyse economic development in the surrounding areas and provide direct jobs and opportunities. Prior to the proclamation, the area was farmland and had experienced substantial degradation and biodiversity loss. ECPTA have been actively addressing these issues through restoration programmes of flora and fauna. The GFRNR serves as a sanctuary for many pollinators, which support the agricultural industry and local subsistence farmers. Activities under this sub-component will include:
- A. **Rhino Population Management.** Ongoing activities in the GFRNR to remove rhinos to other areas to maintain a density which supports high growth rates will be continued. Rhinos will be moved in collaboration with the WWF-Black Rhino Range Expansion Project (BRREP) to establish new black rhino populations across Southern Africa, an important strategy to spread extinction risk. To retain high growth rates at GFRNR, the density will need to be managed by removing 15 percent of the rhino population every third year.
  - B. **Habitat Management.** Improved water management in the GFRNR will be supported by creating secure water points in parts of the reserve and by removing some existing dams (created under the previous livestock farming era) in high-risk poaching areas. This sub-component will also help fund a maintenance team to support the maintenance of roads, fences, infrastructure, and vehicles on the reserve.
  - C. **Containment and Counter-Poaching.** Security interventions will include restructuring the security staff under a newly appointed security manager; recruitment, equipment, and training of new security personnel; upgrading fences; establishment of an operations room and a communications network; and upgrading access control and aerial support. Training and capacity building will be conducted to improve the capability to react to poaching incidents, information collection and technology use. Security staff will receive mandatory annual human rights training and will hold an EMI certificate, which provides the necessary knowledge and mandate to enforce the law.



- D. **Community.** The sites will work with target communities to engage them in project activities through the established community forum. The reserve's neighboring communities, local municipalities, traditional leadership, and private landowners are all represented on the Park Forum, which meets regularly. This forum is used effectively to communicate with the neighboring communities and to keep them informed of new developments and projects like the Wildlife Conservation Bond. The community will benefit from the project, as staff will be hired, including rangers, monitors, administrative staff, and other roles that will be employed from the communities.
- E. Interventions under range availability are not included in this component as there are no suitable options for range expansion in the GFRNR.

**Component 2: National/Regional Enabling Conditions to coordinate share security and research opportunities (US\$0.5 million, fully funded by foregone coupon payments)**

- 40. Component 2 will support the creation of national and regional enabling conditions to help catalyze security and research efforts at AENP and GFRNR through, *inter alia*: (a) strengthening linkages at the national level with other relevant conservation projects; (b) integrating workplans and budgets of both AENP and GFRNR; (iii) hiring of a law enforcement advisor to oversee the institutionalization of changes to law enforcement operations at both AENP and GFRNR, including providing technical expertise on suitable technologies to improve detection of poaching incursions; (iv) sharing and systematization of lessons learned and building collaboration between AENP and GFRNR and with other donor-funded efforts; and (v) carrying out research and knowledge management activities relating to achieving rhino growth rates under an adaptive management framework.
- 41. This component will create national/regional enabling conditions to help catalyse security and research efforts that will benefit both sites. It will fund national engagement to help strengthen linkages and knowledge management activities with other relevant projects (including the 2 GEF-7 South Africa – GWP projects) and engage where feasible in relevant knowledge and learning efforts organized by the GWP and ICCWC. For example, knowledge management and coordination efforts may include activities related to contributions to enforcement coordination; data exchange; learning from relevant projects, national/regional/international initiatives, evaluations, and best practices; sharing of lessons learned and testing of technologies. In addition, given the geographic proximity of the two South African sites, there are several interventions that will serve to benefit both sites through integrating the workplan and budget. Given the significant investment that the South African government is making to enhance rhino conservation, protection, and management across the value chain, this component will fund participation in rhino/wildlife node activities and will incorporate applicable best practices from other sites and sector partners.
- 42. Knowledge management activities will include sharing lessons learned from the two project sites and node, between other rhino sites at national level, and internationally through the GWP and other relevant platforms for replication and scale-up. Focus will be on the experience of site-based solutions and the use of innovative conservation tools and systems to support the implementation of project activities. Learning events will be considered on an ongoing basis to support real-time training needs, as well as to promote knowledge sharing and exchange of good practices. Efforts to capture lessons from rhino conservation and execution of a bond-financed activity will be implemented and shared with other national partners and international stakeholders in a sensitized manner. Lessons learned will highlight the benefits from participation in a project financed through non-traditional financing, rhino conservation, and other topics that will be prioritized during project implementation. In addition, it will contribute to national and regional learning events. This component will



also support knowledge sharing through capacity-building workshops for key stakeholders to improve awareness and knowledge relevant to rhino conservation and broader thematic issues, which will also feed into global knowledge exchange events (i.e., through links with GWP projects and program events). Knowledge exchanges will allow stakeholders to exchange: (a) good practices on topics such as wildlife conservation, nature-based tourism, and illegal wildlife trade; (b) lessons learned and systematization of knowledge on Project issues; and (c) information from rhino conservation practices to produce knowledge products for broader dissemination, including in local languages.

43. Implementation of the national/regional enabling conditions will be implemented by Wilderness Foundation Africa (WFA). This component will include the provision of an experienced Senior Law Enforcement Advisor to work with both sites, as they implement and institutionalize the significant changes to law enforcement operations at site to support the civilian staff that will hold an EMI certificate. This Advisor role will phase out over the course of the five-years once suitable capacity has been developed at both agencies. The Senior Advisor will provide technical expertise on rhino law enforcement, including the deployment of suitable technologies, and help facilitate the uptake of technologies at both sites to improve detection of poaching incursions. This component will also include support for research activities to improve the body of knowledge and further optimize chances of achieving the rhino growth rates under an adaptive management framework.
44. This component will build on the organizational and financial due diligence conducted at each partner site during the project preparation phase (Investment Readiness conducted from 2018-2020) to assess the enabling environment (Table 1) and to understand whether there were any major associated risks to investment. The enabling conditions categories will be continually assessed during the WCB Project to resolve risks that may arise.

**Table 1: Enabling Conditions Categories and Risk Areas**

Categories	Risk Areas
1. Land	A. Property rights
	B. Land ownership
	C. Local community and local government
2. Governance	A. Governance
3. Management	A. Leadership team
	B. Third party management
	C. On-the-ground leadership team
4. Operations	A. Asset management
	B. Insurance
	C. Litigation
	D. Risk management register
	E. PR management
5. Finance	A. Site financial management and controls
	B. Balance sheet
	C. Financial sustainability
6. Policy and procedures	A. Procurement
	B. Implementation partner
	C. Compliance
	D. Employment

*Table 1: The Categories of Enabling Conditions that are analyzed for WCB Transaction investment.*

**Component 3: Project management and monitoring (US\$0.5 million fully funded by foregone coupon payments)**

45. This component will support project management activities, including through: (a) carrying out Project monitoring and evaluation, verification, reporting and fiduciary management aspects, including carrying out procurement, financial management, environmental and social, social inclusion, and gender Project activities, hiring Project staff and supporting Project activities inspections and travels; and (b) implementing rhino outcomes management systems to submit approved data and evidence gathered by the Recipients for independent verification to guide the Conservation Success Payments and to inform management decision making.
46. This component will support project management activities to ensure cost-efficient, timely, and quality delivery of project activities and results, including monitoring and evaluation, verification, and project reporting. This includes support for fiduciary management aspects, including procurement and financial management, the World Bank's ESF, and monitoring and evaluation. It will support the monitoring and evaluation (M&E) system to report to the GEF, according to its monitoring policies and guidelines on the expected project's results (disaggregating by gender, where appropriate), and inform the Conservation Success Payment. The documentation produced under the RIIP set the methodology, models, and baseline/target for the project. This includes information on the rhino management and performance analysis data system (ROMS) designed during the RIIP, the Jolly-Seber model used to estimate the abundance of rhino for each independent verification observation date, and the independent review and approval of the model completed in the RIIP preparation phase. If the number of rhinos in the "alive and in study area state (State 2 of 7)" is estimated each year, the population abundance and net rhino growth rate can be understood. ROMS is fitted to the data and an estimate CAGR is generated from the difference between the rhino population at the end of the project compared to the baseline (Year 5 and Year 0). Component 3 activities will be carried out by staff assigned by SanParks and the ECPTA to carry out these functions. Strategic communications will be an essential part of this project, given the numerous stakeholders involved that include local communities, national partners, and international investors and conservationists. A robust communications plan and strategy is already being discussed to support bond issuance efforts and support internal and external dissemination of project activities. The strategic communications plan will include the following considerations: objectives and strategic goals, audiences, key messages, channels (including website, social media, virtual and in-person events), activities, products, and tools (blogs, newsletters, press releases, events calendar, feature stories, communications protocol, regular check-ins with key stakeholders, and videos), timeline/workplan, evaluation and metrics.
47. The project design includes targeted interventions for generating better jobs at both sites. The number of direct beneficiaries disaggregated by gender is a key indicator that will be monitored and reported on. This will provide detail on permanent and temporary employment at both sites and direct community benefits, disaggregated by gender. Gender-specific interventions will be developed in close consultation with the communities.

**Monitoring and Evaluation**

48. Project management support will include maintaining monitoring mechanisms to report on and meet independent verification standards. These include:



- A. Sites must be able to provide a population estimate within confidence intervals.
  - B. Sites must provide evidence of each observed rhino at Project launch and once per annum during the investment phase.
  - C. The baseline number of rhinos in each site must be audited by the independent verifier and adjudged to be accurate within a confidence interval.
49. The ROMS will be used by the site to submit approved data and evidence files to the World Bank for independent verification and to inform the Conservation Success Payment. ROMS was developed under the RIIP and includes a multi-state model to produce an abundance estimation of rhino populations. This model underwent a peer-review process, following review and sign-off from the Scientific Officer of the IUCN SSC African Rhino Specialist Group as well as other technical experts. ROMS also provides an audit trail on all data.
50. **Third Party Verification.** A third party impact verification will be conducted on the calculation of the rhino bond growth rate to: (a) verify the audit trail of evidence for each individual rhino within the two site populations and that the data in ROMS is accurate; (b) review that the model has accurately reported the abundance of rhinos at the beginning and end of the period, and the number of translocations in and out of the sites; and (iii) review that the model has accurately reported the rhino growth rate in the period.
51. The site level monitoring is a continuous process, while the independent verification observation data for abundance estimation is a single calendar year. The rhino estimate will be reported annually (at years 0, 1, 2, 3, 4, and 5). For each independent verification observation date, sites must provide at least one piece of date-stamped photo evidence, with an associated GPS location. A Jolly-Seber model<sup>47</sup> will be used to estimate the abundance of rhino for each independent verification observation date. These figures will be independently verified at T0 and T5. The Independent Verifier will interrogate the evidence files for each observed rhino.
52. **Use of Funds.** Proceeds from the WCB Transaction will stay with the World Bank Treasury and will be used to finance sustainable development projects and programs in IBRD's member countries. The foregone coupon payments of the WCB Transaction (ZAR Tranche) will be deposited in the account of the two SA agencies in dedicated project accounts and will be used for all project conservation activities. Assurance of use of the foregone coupon payments will include validation of (but not limited to): (a) compliance of the allocation of funds with the planned Theory of Change (TOC); (b) review of the policy and adherence to the policy, which ensures that there is no contamination of Project funds; (c) adherence to the framework, the policies, systems and processes, for tracking allocated bond coupon proceeds; (d) adherence to the framework for tracking unallocated bond proceeds; and (e) review of the financial structures, including temporary instruments for holding unallocated cash.

#### **Conservation Success Payment (US\$13.76 million, fully funded by GEF NGI funds)**

53. The GEF NGI funds (up to US\$13.76 million) will be used to pay bondholders a Conservation Success Payment as part of bond redemption. GEF resources will be held by the World Bank until year 5 of the project and will only be paid out (in a single Conservation Success Payment up to the total GEF funding of US\$13.76 million) if there is verified growth in the rhino population. In the case of negative or zero growth, GEF funds will be returned to the GEF. Unused GEF resources (expected if the compounded annual growth rate of the rhino population over the five-year period is less than four percent) would be returned to the GEF. The Conservation Success Payment is a disbursement category in the GEF Grant Agreement, with the disbursement condition

<sup>47</sup> An independent review and approval of the model was completed in the RIIP preparation phase.



reflecting rhino conservation.

### C. Project Beneficiaries

54. **At the site level**, the primary beneficiary of the WCB Project is SanParks and EPTCA and their staff, as well as the communities living around the AENP and GFRNR. The government agencies will benefit from funding of their rhino conservation strategies, which will also support management effectiveness, tourism promotion, and broader biodiversity economy node efforts in the region. The project will also benefit the regional and global community through the protection of globally significant biodiversity and natural habitats from improved management of 153,141 hectares.
55. **At the national level**, DFFE will benefit directly, while the SA National Treasury will indirectly benefit from participation in an innovative financial mechanism for conservation and help to pilot an impact investment. The overall economy is expected to benefit from the increase in new business opportunities tied to the biodiversity economy and enhanced resilience to climate change in rural areas.<sup>48</sup>

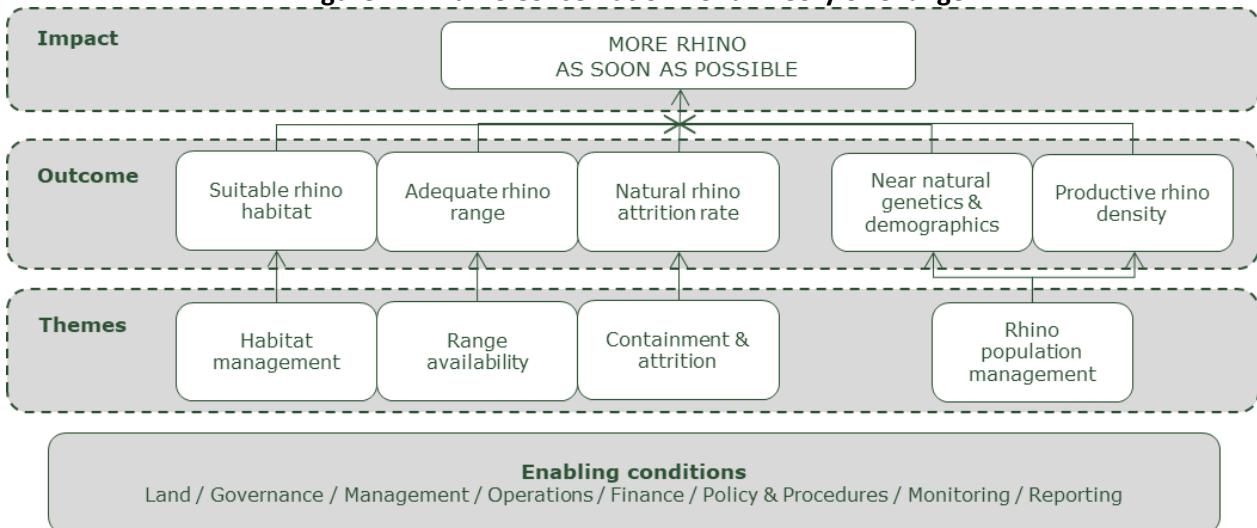
### D. Results Chain

56. The **WCB Project's ToC** is shown in the diagram below.

The ToC's assumptions include:

- By improving habitat management, range availability, containment and population management, the agency's ability to support a growing rhino population is enhanced.
- By increasing conservation-compatible economic opportunities, the illegal pressure and encroachment on PAs is reduced.
- Communities see tangible benefits of project interventions and increase commitment for long-term conservation initiatives that support sustainable rural development.

**Figure 2. Wildlife Conservation Bond Theory of Change**



<sup>48</sup> See section VII for the Results Framework where direct beneficiary targets are disaggregated.



## E. Rationale for Bank Involvement and Role of Partners

57. The World Bank has been in dialogue with the stakeholders involved in the project since 2017. Various options for potential World Bank participation in the Rhino Bond were explored, including having the World Bank serve as an outcome payer. The World Bank also considered the potential for integrating a bond financed component as part of a larger project (grant or loan), which could support the development of this financial instrument at a larger scale. Ultimately, The World Bank responded to a request from the GoSA to serve as the GEF Implementation Agency for a project proposal for the GEF private sector funding window (that supports non-grant investments), where GEF would serve as the “outcome payer” and the World Bank Treasury would structure and issue a bond that could generate the conservation funds for the project and the risks of achieving conservation outcomes were passed on to investors. This structure allowed the World Bank to process this project as an IPF and use a traditional grant agreement (for NGI funds) with the South African agencies. World Bank processing a single project as a typical GEF grant (for NGI funds) was considered the most appropriate option for the GEF funding and to link it to the parallel financing provided by the bond investors. This structure allows for the disbursement function for the foregone coupon payments to be delinked from the GEF-NGI funds. The World Bank Treasury initially envisioned issuing a US dollar denominated bond, but determined that with World Bank efforts to address the COVID-19 economic impacts and the drop in interest rates, a smaller Rand denominated bond would provide more funding for the project than a significantly larger US dollar denominated bond.
58. The World Bank adds value to the project based on its experience in developing innovative financial instruments for development and experience in implementing results for performance operations. This innovative project will help test the use of financial instruments to help plug the financing gap for biodiversity conservation and help inform larger investment strategies under consideration for the protection of tropical forests and other natural resources of global significance. In addition, this project will provide lessons that will be disseminated through the GEF-funded GWP. The World Bank is the lead agency for the GWP, which works in 32 countries to support governments to enhance protected area management, including anti-poaching and anti-trafficking investments. The World Bank’s active role in the International Consortium on Combating Wildlife Crime (ICCWC) also provides a unique place to leverage resources from leading international partners (International Criminal Police Organization (INTERPOL), The United Nations Office on Drugs and Crime (UNODC), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and the World Customs Organization (WCO)) to link to governance, enforcement, and customs initiatives.
59. Performance linked bonds and debt for nature instruments have been gaining increasing attention in recent months (e.g., the instruments are mentioned in the ‘Little Book of Investing in Nature’ and UNECA’s paper on ‘Financing a Sustainable Recovery’, both of which were issued in July 2021). This fits within the overall discussion of the post COVID-19 stimulus packages and to leverage private financing to tackle the interlocking climate, nature, and debt crisis. Investors are increasingly expressing interest in complementing ‘use of proceeds’ bonds with ‘performance-linked’ instruments, where impacts can be more directly attributed and measured. The structuring of the WCB operation is also of interest to investors. Deployment of instruments that combine concessional finance with some contribution from the private sector is a major theme in the dialogue for conservation financing. There is increased interest in the proposed structure of the bond with investors foregoing the interest payment, combined with GEF ‘paying’ for performance. The role of organizations such as the World Bank in setting credible, robust key performance indicators for these instruments can help raise credibility for these instruments and support the development of the market.



## F. Lessons Learned and Reflected in the Project Design

60. **The proposed project integrates lessons learned by the World Bank Treasury in structuring and issuing innovative development products in the market.** A key consideration for structured bond investors is the need to have decision making based on objective measures, rather than subjective judgement. This project has therefore streamlined processes and procedures to establish an efficient mechanism to channel funds directly to project activities, and support decision-making by project site staff that have a mandate for conservation to achieve outcomes.
61. **The project design integrates lessons learned and experiences from South Africa, southern Africa, and other regions.** The proposed project will build on lessons learned from the GEF-financed “Development, Empowerment and Conservation in the Greater St Lucia Wetland Park and Surrounding Region Project (P086528)”, which was completed in 2017. Important lessons from this project include the need to make sufficient project resources available for tangible benefits to community members that affect their daily lives, in addition to investments in wider processes such as the restoration of the coastal ecosystem and functioning through the iSimangaliso project. Linking this project to the GEF-7 “South Africa Biodiversity Economy and Illegal Wildlife Trade” project will strengthen the links and benefits to community members.
62. **Lessons can also be drawn from the World Bank’s portfolio of biodiversity conservation projects in Africa, which currently comprises about fifty projects in GEF and other financing for US\$360 million.** The “Mozambique Conservation Areas for Biodiversity and Development” (Mozbio) project aims to strengthen the protection of conservation areas (CAs) and improve the lives of communities in and around CAs. The first phase of MozBio (2015-2019) demonstrated the power of the biodiversity economy – income derived from tourism and wildlife utilization in targeted CAs and returned to communities by 2018 amounted to over US\$3 million, with 1,549 tourism jobs created and biodiversity fund disbursement of over US\$1 million. One of the most valuable lessons has been that while supporting many CAs is important to assist with conservation, it hampers the possibility of transforming them and enhancing their financial sustainability. Lessons have also been learned from the “Sustainable Management of Critical Wetland Ecosystems” project in Gabon, which has focused on enhancing the conservation of biodiversity in parks, buffer zones, and forested wetlands. The project has expanded the knowledge and expertise of conservation-related entities, providing useful models for capacity building. Income-generating activities have also reduced illegal fishing and poaching and have promoted eco-responsible behavior in adjacent communities.

## III. IMPLEMENTATION ARRANGEMENTS

### A. Institutional and Implementation Arrangements

63. **Implementation of the parallel co-financed project activities funded by the WCB ZAR Tranche and GEF NGI will be led by SANParks and ECPTA.** The successful implementation of conservation activities will trigger the disbursement of the Conservation Success Payment. SanParks and ECPTA are autonomous agencies which are governed by an independent Board of Directors. The World Bank Treasury will transfer the foregone bond coupon semi-annual payments to the project-specific bank accounts at SanParks for AENP and at ECPTA for GFRNR. Implementation of the activities in the two project sites will be undertaken by the management and staff of AENP and GFRNR. All conservation activities to be fully financed by foregone coupon payment are



consistent with the agreed management plans of the area and contribute to the overall PDO of the project, as well as contributing to the overall objectives of the protected areas. There is an agreed five-year implementation plan and budget, as well as annual workplans that will be reviewed by the World Bank each year during implementation. The implementation arrangements rely on the existing strong management and technical capacity at both parks, which includes financial, procurement and environmental and social safeguard capacity. Project implementation will be executed using existing dedicated park staff and will not require a separate Project Implementation Unit (PIU). Key staff funded by the project (including security manager, monitoring staff and technical support, and staff that will carry out ESF functions) will have the relevant skills to address issues and part of their jobs will include engagement across the two sites and participation in provincial and national forums where new security developments and management options are shared and discussed. This collaboration across geographies and sectors is promoted by allowing for the dissemination of lessons learned and coordination on project activities. The project activities are aligned to and contribute to national efforts to address rhino poaching and wildlife crime across the country that are outlined in the Integrated Strategic Management of Rhinoceros and the principles set out in the draft National Integrated Strategy to Combat Wildlife Trafficking (NISCT). The project resources are a significant infusion for the project sites and are greater than the current funds dedicated to rhino conservation at both sites. This project is part of a national effort to enhance rhino conservation and will provide lessons learned and collaboration opportunities, which can provide benefits beyond the two parks. Increase in the management capacity for these protected areas should help South Africa enhance its capabilities in the Eastern Cape Region and beyond. Coordination and collaboration with other sites through activities that support enhanced regional and national enabling conditions and dissemination of lessons learned can help to positively impact other parks in South Africa. In addition, replication of this funding model may provide additional revenue opportunities for other parks in South Africa to replicate and apply for their conservation areas.

64. The WCB project is using the parallel co-financing modality from the WCB foregone coupon payments. The WCB bondholders indicate their parallel co-financed funds be implemented by the SanParks and ECPTA following IPF rules. The parallel co-financed funds will be spent as detailed in the TOC and the budgeted workplan for each site. The World Bank Treasury agreement with SanParks and ECPTA will outline the terms and conditions of the foregone coupon payments available for the sites to support implementation of their approved strategies and workplans. The project partners SanParks and ECPTA are responsible for delivering on the desired project results and will engage technical service providers to bring in expert services and tools as needed. World Bank supervision will be conducted on the implementation of the activities by the protected area authorities.

## B. Results Monitoring, Evaluation, and Verification Arrangements

65. The Results Framework will guide day-to-day M&E and verification analysis and reporting of the core GEF indicators at midterm and at completion. SanParks and ECPTA, with assistance from the M&E Technical Service Provider, have overall responsibility for consolidating and reporting on data and information provided by their respective M&E teams and for ensuring that site reports are produced on time and to the necessary quality. Submission of the Rhino monitoring data will be through the ROMS to provide an audit trail on each piece of evidence of rhino growth. Project performance and results will be reported on a semi-annual basis to the World Bank, consistent with the GEF Grant Agreement, and on an annual basis to the GEF. The results of the independent verifier terminal verification, facilitated by the World Bank, will also be made available to the GEF and the WCB Transaction investors (ZAR Tranche).



### C. Sustainability

66. The Wildlife Conservation Bond Operation was developed with sustainability, replicability, and scalability at the forefront. Sustainability for the sites is a core element of the ToC to ensure that at the end of the five-year investment term, there is capacity and funding in place to continue to improve the management of the protected areas and further increase the rhino populations. The next step for the Wildlife Conservation Bond Operation is to scale to other rhino sites, other species, other landscapes, and other geographies. The experience in developing the site-based ToC and “investment ready” considerations can help future efforts save time and money to participate in future transactions. There are three priority rhino sites in Kenya that are currently finalizing their Investment Readiness status, which would enable fast scaling of the Wildlife Conservation Bond Operation. There are further opportunities to apply the work of the Wildlife Conservation Bond Operation to other species and landscapes, lending itself particularly well to any context where a core outcome can be identified. During WCB project implementation, lessons learned, and exchange of information will help to share insights from the project preparation and implementation phases. The capturing of experiences and lessons will be considered for replication and scalability of the project and the innovative financial instrument. In collaboration with the GWP and ICCWC, the project will have the opportunity to exchange experiences in regional and international workshops and south-south exchanges. In addition, the two sites participating in the project will continue to participate in and share information with the national and regional coordination mechanisms already in place, and through the IUCN SSC African Rhino Specialist Group. Due to the significant financing gap for biodiversity conservation, and the innovative nature of this instrument towards helping to fill this gap, efforts will be made to highlight this project experience both in environmental conservation conferences and publications, as well as in traditional financing and impact investment gatherings and media. The replicability and scaling of the project can be considered in South Africa to support its ambitious biodiversity conservation and financing agenda.

## IV. PROJECT APPRAISAL SUMMARY

### A. Technical, Economic and Financial Analysis

67. **It is expected that without the project, the benefits would be considerably less than the potential benefits derived from improved wildlife management** delivered through the project. The current situation of rhino management in South Africa is at a critical stage and the cost of inaction can be significant in the medium and longer term. Costs and losses would be incurred due to increased pressure on already overexploited rhino habitats, ecosystem services and biodiversity. Project activities will lead to measurable socio-economic benefits that will accrue to protected area authorities and communities in target areas through improved wildlife conservation, jobs, and investment attraction over the medium to longer term. GEF NGI funding will leverage public and private financial resources, including from institutional investors in the WCB Transaction (ZAR Tranche) to enhance South Africa’s capacity to implement the Biodiversity Economy and increase the benefits local communities derive from selected PA landscapes. The Project will help create jobs in the wildlife economy and ecotourism sectors and increase the benefits local communities derive from PAs. This project addresses key barriers to unlock the full potential of the South African wildlife economy: (a) inadequate governance at the local level to enable communities to fully participate in decision making, secure land tenure, and co-manage natural resources; (b) weak institutional capacity and limited investment mechanisms to



support public-private-community partnerships to increase the benefits that local communities derive from biodiversity conservation; and (c) lack of systematic financial and technical support. Project benefits are aligned with priority measures of South Africa's National Biodiversity Economy Strategy. Project activities are expected to generate several benefit streams. Based on the data available and projects interventions, this economic and financial analysis (EFA) is built on the revenue estimated from the growth in rhino population and the tourism benefits they are associated with. Other project benefits, including from increased coordination and improved sustainability of biodiversity management and governance of wildlife habitats and enhanced wildlife and ecosystem services that deliver more intangible environmental and social benefits, were not assessed as part of this analysis. Benefits expected from the issuance of an innovative fixed income structured product are also not included, although it is expected that it will serve as a catalyst to increase funding for biodiversity conservation and increase funding streams for conservation. The increased management effectiveness of the two target protected areas and the tourism value from preservation and growth of the black rhino population is the primary source of benefit calculations. The benefit stream to support broader ecosystem services that are part of the national wildlife economy activities was also not included in the analysis. These additional environmental and social benefits were excluded from the benefit calculations as they are generally 'non-market' benefits and are more difficult to value without targeted surveys and additional data collection and consensus.

68. Component 1 investments will bring 153,141 hectares of land under improved management through habitat management, range availability, rhino population management, containment, and other related efforts. Project investments will also support community engagement. Component 2 will enhance national and regional enabling conditions to coordinate shared security and research opportunities. This will also facilitate exchange of lessons learned and good practices. Component 3 relates to project management and monitoring, which is intended to facilitate the completion of activities under Components 1 and 2. The conservation success payment is made to the WCB Transaction investors (ZAR Tranche). The project will contribute to a change in the perception of conservation benefits by strengthening the management of PAs and promoting opportunities for enhanced PA management and new livelihood opportunities. These efforts will help unlock investments in the tourism and game sectors, and small business development in these PA landscapes. The project will help conserve natural habitats and wildlife of global value, allowing these natural assets to realize their economic potential for social development.
69. **The project will increase capacity and mobilize investments in these two protected areas, which in turn should support community stewardship and livelihoods.** Overall, enhanced conservation management is expected to deliver net positive benefits. The WCB Project is projected to be profitable, generating a Net Present Value (NPV) of US\$37 million (at a six percent discount rate) and an Internal Rate of Return (IRR) of 47 percent, with a Benefit/Cost (B/C) ratio of 3.3 (on a total budget of US\$17.83 million in project funds from the WCB Project and government mobilized investments). These calculations are based on a 2015 European Union-funded study (The Costs of Illegal Wildlife Trade: Elephant and Rhino. A study in the framework of the EFFACE research project), which mostly derives the economic value of rhinos from tourism benefits only for South Africa and not for the entire region. The lower bound estimates from this study were used to estimate project benefits. These calculations exclude the more qualitative environmental benefits that were not priced for the analysis, including ecosystem services that if quantified could significantly increase project benefits. In addition, the calculations did not include valuation estimates of the extinction of the rhino in South Africa, which were estimated by the EU study to account for 20 percent of wildlife tourism income. A sensitivity analysis shows that the project's results remain robust under various scenarios. The economic analysis



considers a time horizon of ten years to account for the long-term benefits of the project. The analysis assumes that project costs are invested over the course of the first five years of the project. Further, it uses a baseline discount rate of six percent, as suggested by the World Bank, and assumes an annual maintenance cost of one percent (approximately US\$1 million) of the investments. This project was highlighted by a recent World Bank report on “Mobilizing Private Finance for Nature” as the type of financial innovation that can help plug a total estimated biodiversity financing gap of between US\$598 billion and US\$824 billion per year. These calculations also do not consider the innovative nature of this project, which provides a model for future conservation focused impact investments that can channel institutional investor funds to projects.

70. Project investments will play a catalytic role in conserving rhinos in these two protected areas and in supporting local communities, that can lead to multiplier effects that provide greater local and regional economic benefits. GFRNR is co-managed by the Likhayalethu Communal Property Association, which owns approximately 50 percent of the reserve. Therefore, benefits derived by the protected area will directly benefit the local community. Increased flow of knowledge, data, and investment information will provide further benefits that are equally difficult to quantify. These investments will support GoSA in its ambitious plan to transform the wildlife sector to increase the involvement of local communities in the biodiversity economy. The project will also produce non-quantifiable local and national benefits from the strengthened capacity to manage rhinos in protected areas. As the project aims to bring in private sector participants to invest in conservation and derive a premium return on their investment if target rhino growth is achieved, it is expected to generate positive rates of return. This project is expected to pave the way for future financial innovation that brings in private institutional investors to fund conservation and transfer the risk of achieving conservation results from traditional donors that generally provide grants to investors who are accustomed to investing in risk based financial market instruments. This innovation should both increase funding available for biodiversity conservation and shift the focus to payment for results. This project not only mobilizes additional financing from private investors but is also expected to have a positive impact on small businesses in the area. The justification for GEF funding is clear, as wildlife is a global common good. The use of public resources is therefore justified to reduce over-exploitation, strengthen monitoring, and control, and ensure enforcement and compliance with regulations. Additional details on the economic and financial analysis are included in Annex 2.

## B. Fiduciary

### (i) Financial Management (FM)

71. A financial management assessment was carried out in accordance with the World Bank’s Operational Policy and Financial Management guidelines to determine whether SanParks and ECPTA have acceptable financial management arrangements, which will ensure: (a) that the project funds are used only for the intended purposes in an efficient and economical way; (b) the preparation of accurate, reliable and timely periodic financial reports; and (c) the safeguarding of assets. The assessment determined that the operation’s financial management has an overall risk-rating of “**Substantial**” due to the proposed funds flow arrangements (i.e., parallel co-financing). The operation is using an untested, innovative fundraising approach to channel funds to the project by issuing the first species conservation bond, which will tap into institutional investors. This risk will be revised once bond has been successfully issued and during project implementation.
72. Activities funded by the foregone coupon payments will use the existing FM arrangements for SANParks and ECPTA in accordance with the SA Government Public Finance Management Act (PFMA) to record and report



on the use of funds. The Chief Financial Officers (CFO) of these entities will have the ultimate responsibility for the FM function, and the existing computerized Great Plains accounting system (for SANParks) and Sage Evolution financial system (for ECPTA) will be used.

73. **Budgeting.** Budget preparation for activities funded by the foregone coupon payments will be the responsibility of the CFO, with the support of the project manager and the allocated accountant(s). The approved budget will be uploaded in the Great Plains accounting system (SANParks) and the Sage Evolution financial system (ECPTA); any proposed changes will be approved through the requisite governance structures. GEF NGI funds will be used for the Conservation Success Payment according to the payment schedule defined in the WCB Transaction ZAR Tranche Term Sheet.
74. **Accounting.** Project FM activities will be reflected in the Great Plains accounting system (SANParks) and the Sage Evolution financial system (ECPTA), which will produce the necessary reports required to manage and monitor the financial operations. The two systems are also flexible to create specific project accounts for recording and reporting on project expenditures.
75. **Staffing, Internal Control and Internal Audit.** The project will use SanParks and ECPTA's internal control framework to ensure that project funds are utilized for the purposes intended. A review of this framework indicated that it is adequate to manage the project. The project will be included in the annual internal audit plans of the two entities, which use the risk-based model.
76. **Financial Reporting.** Each entity will produce the required Interim Financial Reports (IFRs) for project activities on a quarterly basis. These reports would comprise: (a) sources and uses of funds; (b) uses of funds by project components and activities; (c) Activity Statements of the dedicated accounts; and (d) statements of contracts.
77. All World Bank IPF policies/procedures apply to the GEF NGI funds, as described in the GEF grant (NGI) agreement. The foregone bond coupon payments are parallel co-financing and have a separate agreement that defines the funding terms and conditions. The disbursement function for coupon payments are de-linked from the GEF-NGI funds.
78. **Disbursement arrangements.** The disbursement method for the GEF NGI funds is direct payment and is tied to the achievement of a single result, net rhino growth verified in Year 5. GEF NGI funds will only be used to pay investors (through a paying agent) as a Conservation Success Payment if the conservation targets are achieved.
79. **Auditing.** The project's financial statements will be audited annually in accordance with International Standards on Auditing, as promulgated by the International Federation of Accountants (IFAC). The audit report will be submitted to the World Bank within six months after the financial year-end and will disclose information on activities financed by the grant (NGI). The audit report will be accompanied by the management letter.

**Table 4: Audit requirement**

<b>Audit Report</b>	<b>Due Date</b>
Project's Financial Statements	Within six months after the end of each fiscal year (30 September each year)



80. **Supervision Plan.** FM supervision will be carried out by the Financial Management Specialist (FMS) once a year.

**(ii) Procurement**

81. Procurement for the project activities funded by the foregone coupon payments will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers for Goods, Works, Non-Consulting and Consulting Services, dated July 1, 2016 (revised in November 2017, August 2018, November 2020). The Project will be subject to the World Bank's Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and July 1, 2016. The Project will use the Systematic Tracking of Exchanges in Procurement (STEP) system to plan, record and track procurement transactions.
82. Project activities will be implemented by SANParks and ECPTA in accordance with the applicable national procurement policies that meet the World Bank core procurement policy objectives of value for money, economy, efficiency, effectiveness, integrity, transparency and fairness and accountability. SanParks and ECPTA will request a waiver from the Office of the Chief Procurement Officer at NT to enable the project to adhere to the World Bank Procurement Regulations as stipulated in the Financing Agreement.
83. The two entities have been assessed using the World Banks Procurement Risk Assessment Management System (PRAMS) to determine project risks; risk mitigation measures, responsibilities, timing, and monitoring process; and procurement performance monitoring during implementation.
84. *Procurement Regulatory Framework and Management Capability.* Both entities have well documented policies and procedures that are publicly available. They produce procurement plans at the time of preparing the budget and submit these to NT. Both entities have Supply Chain Management (SCM) Departments staffed to meet their current workloads. ECPTA will in addition set up a Special Project Unit, comprising a procurement officer, a projects administrator, and a finance officer.
85. *Integrity and Oversight.* Both entities have internal auditors and are also subjected to an annual external audit conducted by the Auditor General of South Africa (AGSA). A review of select management letters for SanParks indicates some adverse findings related to SCM, with a commitment of management to resolve them. In 2018/19, ECPTA received its fourth successive clean audit with no adverse SCM findings. Procurement complaints are dealt with by escalation, with redress to various external independent agencies and the courts.
86. *Procurement Process and Market Readiness.* Well established and acceptable documentation is in place to guide the procurement process at both entities. Procurement opportunities, evaluation outcomes and contract awards are published in local print media, entity websites, including the Government gazette, and the e-tenders portal. Procurement falling under the threshold will be carried out using National Procurement Procedures, subject to the provisions of Section V paragraph 5.3 of the Procurement Regulations. All procurements under NPP will, in addition, require compliance to the World Bank Anti-Corruption Guidelines. Market assessment shows an abundance of vendors (800,000 plus registered in the Central Supplier Database) in the consultant market and the market for the small value goods and minor civil works required under the project.
87. *Procurement Complexity.* Goods to be procured include motor vehicles, motorcycles, trailers; tools and



equipment for workshops; building materials; fencing materials; park monitoring equipment, including radios, laptops, and cameras; and aircraft spares. Works will include the hiring of earth moving equipment; borehole drilling; water reticulation and pump installation; gabion installation; minor civil and building works; construction and maintenance of park roads. Non-consulting services will include animal translocation services, and aerial monitoring and aviation services. A review of procurement plans and documentation from the entities show past capability to manage such procurements and acceptable documentation is in place.

88. A Project Procurement Strategy for Development has been developed and confirms that both SanParks and ECPTA have sufficient procurement capability. Both entities are currently executing procurements of sufficient volume with 2020/21 annual procurements of ZAR1.2b (US\$80 million) for SANParks and ZAR 150 million (US\$10 million) for ECPTA. For the type and value of goods, works, non-consulting services and consulting services to be procured, a thriving domestic market exists; some 800,000 plus firms are registered on the Central Supplier Database. Goods, works, non-consulting services and consulting services to be procured are not complex and are within the capacity of the entities. The key procurement risks and mitigation actions are highlighted in Table 8 below. As all the procurement packages are for less than US\$5 million for goods and US\$20 million for works, approaching the national market would be the best fit for purpose approach, using Open National when using the Request for Bids selection method and Open Limited when using the Request for Quotation selection method. There will be one consulting assignment of US\$75,000 and the shortlist will be drawn from capable national firms.

89. **Procurement risk is rated Moderate.**

**Table 5: Procurement Risks and Mitigations**

Item	Risk	Mitigation	By who	Date
	Procurements agreed to follow NPP do not contain World Bank AC GLs	Include all planned NPP procurements in procurement plan and require that Internal Audit and various internal oversight authorities ensure relevant procurement documentation contains World Bank Anti-Corruption GLs	SANPARKS/ECPTA	By project effectiveness
	Project financed activities generate additional work load that SCM Departments are unable to cope	ECPTA to create Special Project Unit and hire 3 additional staff.	SANPARKS/ECPTA	By project effectiveness
	Delay in SanParks/ECPTA obtaining waiver from OCPO	Early submission of request by SANPARKS/ECPTA (i.e. at project effectiveness)	SANPARKS/ECPTA	By project effectiveness



### C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

### D. Environmental and Social

90. The proposed WCB Project is expected to generate significant environmental and social benefits resulting from its focus on conservation and enhanced management of the ecosystems in AENP and GFRNR. It will also have positive impacts on the black rhino population by addressing major challenges for financing their conservation. It is expected to have a positive socio-economic impact because it will enhance the management and sustainability of the protected areas and support increased tourism promotion of a greater rhino population. The local communities will benefit from this increased investment: for GFRNR, the local communities are co-owners, and the communities around AENP will benefit from direct jobs and value chain indirect and induced impacts. The enhanced management activities include minor civil works such as installation of boreholes, construction of fences, etc., which are relatively low to moderate risk with site-specific, localized, and short-term impacts. Such risks could be associated with inadequate siting of infrastructure, inadequate waste management, insufficient measures for safety and security of the community and workers, unsupervised or untrained poaching control and risks associated with rhino translocation.
91. On the social side, Project activities include the incorporation of social inclusion and job creation; they are expected to increase household income and improve broader social outcomes in the project areas. However, the use of security personnel is a primary social risk of project, as it will support security interventions to address poaching and law enforcement. Although support to security personnel and law enforcement is intended to target and reduce criminal poaching, use of security personnel has potential to result in violent altercations with suspected poachers. Additionally, minor civil works are likely to result in limited labor influx and potential for Sexual Exploitation and Abuse/ Harassment (SEA/H). The communities living alongside these protected areas are fully engaged in their management and conservation through the existing Park Forum and the Community Property Forum.
92. The WCB project has prepared an Environmental and Social Management Framework (ESMF), which was disclosed on the World Bank website and at SANParks and ECPTA websites on April 2021, which identifies the potential risks and impacts, and also identifies the mitigation measures to ensure that activities are being undertaken in an environmentally sound and socially acceptable manner. The ESMF provides guidelines and templates for the implementation of sub-projects, including an assessment of risks and the development of site-specific Environmental and Social Management Plans (ESMPs). Implementation arrangements required for monitoring and supervision, and good practice requirements for occupational health and safety, chance finds, and labor management have also been defined in the ESMF.
93. The Stakeholder Engagement Plan (SEP) was developed in accordance with World Bank requirements and



builds on the existing procedures under the People and Parks program. The SEP was disclosed on the World Bank website and at SANParks and ECPTA websites on April 2021. Specific stakeholder and/or communication plans for consultation and citizens engagement will be developed during implementation. In order to have an effective stakeholders' engagement plan, SANParks and ECPTA, and, if necessary, the Wilderness Foundation Africa (WFA) a partner agency supporting this project, will retain the services of qualified personnel to be responsible for the day to day implementation of project activities, including monitoring and evaluation, verification, and progress reporting.

94. During project preparation, several consultations were conducted with key stakeholders, including government agencies, and affected and interested parties in the two PA locations. These longstanding and comprehensive consultations will extend into the project implementation phase, and efforts will be made to provide for the inclusion of any stakeholders or groups and their concerns or interests that may have been left out; the SEP will be updated accordingly. To improve citizen engagement, the project will establish an accessible GRM, as outlined in the SEP. Currently, the PAs are primarily receiving comments and feedback through the Park Forum. Therefore, there already is an understanding amongst interested and affected parties and ability to submit grievances and receive feedback. All pertinent contact points will be shared with the Park Forum, and other communication between communities and Pas, to ensure awareness raising as well as procedures for case handling.
95. **Grievance Redress Mechanism (GRM).** The project will provide stakeholders with an accessible and inclusive GRM to raise issues and grievances, that will allow both EPTCA and SANParks to receive, respond to, and facilitate resolution of concerns and manage grievances as outlined in the SEP. The Parks agency will ensure that all stakeholder consultations are accessible and inclusive (in format and location), and appropriate for the local context. The GRM therefore, will address concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all segments of the complainant persons. Generally, the GRM will ensure that: (a) the public within the project areas is aware of rights to access and shall have access to the mechanism free of administrative and legal charges; and (b) concerns arising from project activity in all phases are addressed effectively. Grievances may be submitted in person, by email, written letter, SMS, and in a suggestion/complaint box placed at main protected area offices. All pertinent contact points will be shared during Park Fora and other communication between communities and protected areas to ensure knowledge of access as well as procedures for case handing. Registration of issues will be handled by each protected areas People & Parks staff and referred within existing structures as necessary to provide a timely respond and resolve issues. The protected area will provide a written response of the resolution to complainants/person who raised an issue.
96. At project effectiveness, each protected area will establish a grievance redress committee to ensure the functionality of the GRM. The grievance redress committee will serve to receive and address issues that may rise during the project. The grievance redress committee will review any comments and feedback registered and status of resolution on a monthly basis. Status of the grievance mechanism will be a standing item on the grievance redress committee's agenda. Should an appeal be filed by a complainant the grievance redress committee will review and determine a response. The People and Parks staff will maintain logs and refer issues for assessment or investigation to maintain timely verification and resolution to issues. In addition to the grievance mechanism itself, the Project will develop a communications plan to inform the stakeholders about the existence of the GRM and instructions of operation. The GRM will be monitored for its functionality and



reported on regularly. In consultations with stakeholders, the project will ensure that grievance redress mechanisms are accessible, appropriate, and acceptable. The SEP includes aspects of stakeholder-targeted communication channels, facilitators, multipliers, and timelines. The project will continue with the regular Park Forum as part of stakeholder consultations.

97. **Citizen Engagement.** The sites will work with the target communities to engage them in project activities through the established Parks Forum and the Community Property Association. Community engagement will include benefits to staff currently employed on a permanent basis and project staff on the following programs: Working for water, Working on Fire, Working on ecosystems and Environmental monitors. SANParks will also employ temporary staff that works on an *ad hoc* basis and for maintenance functions. Through the project, SANParks will appoint staff to work as rangers, monitors, gate guards, joint operations center staff and a project manager. There will also be employment opportunities during the construction phase of the new infrastructure, as well as for maintaining the current infrastructure.
98. **Gender.** During project preparation, an analysis of the gender gap and issues in the protected areas was undertaken. In South Africa women are less likely than men to participate in the labor force and, when they do, they tend to earn lower wages. A range of constraints explains this situation, including women's concentration in lower-paid jobs and sectors. Jobs in the South African conservation sector, such as rangers, trackers, members of anti-poaching units, protected area management and tourism, were traditionally held overwhelmingly by white males. Deliberate gender equity investment is particularly important in the Eastern Cape, where there is a higher outmigration of males than females; the Eastern Cape has the highest proportion of female headed households in South Africa, combined with high levels of unemployment and poverty. However, significant efforts have been made in the past 20 years to address inequities through deliberate programs and investment to improve representation in conservation jobs. This reflects both national efforts, including the South African Equity Act (1998) and institutional efforts in conservation organizations to address past inequities. SANParks and ECPTA are both equal opportunity employers who formally recognize the benefits of diversity and the need to eliminate discrimination. They therefore have in place affirmative actions, which include ambitious programs, targets, and related investments in place to address equity, including gender, which may be implemented in an incremental manner.
99. SANParks' equity targets include increasing female and historically disadvantaged individuals' representation, as well as persons living with disabilities, in management positions. The aim is to improve historically disadvantaged individuals' representation to 70 percent of management positions; women in management posts to 50 percent; and staff complement of people with disabilities to 2 percent. AENP employs 222 staff, of which 31 percent are female percent.
100. ECPTA requires equitable representation of Historically Disadvantaged Individuals, including women and people with disabilities, and reports on status quarterly. ECPTA employs an Employment Equity Official who oversees the implementation of the Affirmative Action Program. GFRNR currently employs 62 staff of which 34 percent are female, but has achieved gender parity at management level.
101. Within Conservation Services, which covers the increased staffing funded under the Project's Component 1 to enhance the rhino population, there are higher levels of gender inequities. In GFRNR, 69 percent of current staff are male, while AENP 84 percent are male. The Project will therefore contribute to ongoing efforts by increasing gender equity in Conservation Services in the two PAs through targeted outreach and



recruiting programs, in collaboration with the two Park Forums and the local Community Property Associations (CPAs). Through these efforts, the Project actions aims to: promote and increase women's advancement in conservation jobs; contribute to increasing women's incomes and share of benefits from investment; and promote the empowerment of women in conservation.

102. **GBV/SEA/Sexual Harassment (SH).** Gender-based violence (GBV) is widespread in South Africa and inflicts significant economic as well as human costs. While national estimates of GBV do not exist, regional estimates are available, as well as national estimates for intimate partner violence (IPV), the most common type of GBV in South Africa. Gender norms and unequal power relations between women and men underlie the high rates of GBV seen in South Africa. One study (UCT, 2016) identifies the following factors associated with the victimization of women: the economic dependency of a woman on a male partner; the extent of control of the relationship by the man; and the man's personal norms related to inequitable gender relationships (UCT, 2016). These can all be viewed as issues that have unequal gender relations and the social norms that drive them. Specific risks of GBV/SEA/Sexual Harassment and mitigation measures will be addressed in subsequent ESMPs, and measures will be put in place to mitigate and manage any risks of incidents and training and awareness raising on GBV/SEA/Sexual Harassment issues and prevention, as well as a referral pathway for survivors. Additionally, bid documents and contractor's codes of conduct will incorporate GBV/SEA/Sexual Harassment prevention measures. The project GRM will be developed by project implementation and will be tailored to receive sexual exploitation and abuse/sexual harassment related complaints and will provide a referral pathway for survivors.
103. **Security risks.** Security risks are associated with project activities to support the recruitment, equipping, and training of security personnel to support law enforcement activities for anti-poaching. The project prepared a Security Risk Assessment (SRA) as an annex to the ESMF to assess the security context of the project and security risks related to project activities. The security personnel supported by the project are anticipated to be direct workers of both EPTCA and SANParks, which are government entities. Although the personnel are expected to be armed, no proceeds of the project will be used to support the procurement of firearms. The deployment of security personnel will follow World Bank ESF requirements, including prior to deploying military or security personnel. The project shall take measures to ensure that security personnel are: (a) screened to confirm that they have not engaged in past unlawful or abusive behavior, including excessive use of force; and (b) adequately instructed and trained, on a regular basis, on the use of force and appropriate behavior and conduct. During preparation, SANParks and EPTCA adopted the Voluntary Principles on Security and Human Rights as the relevant good international industry practice to meet World Bank ESF requirements. The security risk assessment will be reassessed during implementation and an appropriate plan will be prepared.

## V. GRIEVANCE REDRESS SERVICES

104. Communities and individuals who believe that they are adversely affected by a World Bank supported project may submit complaints to existing project-level grievance redress mechanisms or the World Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address project-related concerns. Project affected communities and individuals may submit their complaint to the World Bank's independent Inspection Panel which determines whether harm occurred, or could occur, because of World Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management



has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org).

## VI. KEY RISKS

105. **The overall risk to achieving the objectives of this project is substantial.** Key risks of note are macroeconomic, technical design of project, and social, which are each assessed to be substantial. Macroeconomic risk is considered substantial in the wake of the national response to the COVID-19 pandemic. South Africa's macroeconomic health was weak prior to the onset of the pandemic and the country's sovereign risk rating was downgraded to junk status at the end of March 2020. The economic downturn that has followed a nation-wide lockdown as part of the country's response to the virus puts the country's macroeconomic health in greater jeopardy. An extended economic downturn and a reduction in the number of visitors to protected areas may impact national government budgets allocated to conservation and limit the multiplier effect that tourists and operators have in protected areas. Technical design issues are tied to testing a new rhino conservation monitoring system that can be relied on by institutional investors. Rhino conservation approaches have been successful in South Africa for years, and the activities in the ToC have been successfully implemented, including at these sites, for years. Social risk is also high for project activities, because of potential issues around species targeted for poaching, which involve complex rhino poaching and trafficking syndicates. While the likelihood of injury due to poaching as a direct result of this project is small, there is always the potential for human-wildlife conflict due to the nature of the work program.

106. **Macroeconomic risk** is considered substantial and is exacerbated by the national response to COVID-19. South Africa's macroeconomic health was weak prior to the onset of the pandemic and the country's sovereign risk rating was downgraded to junk status at the end of March 2020. The economic downturn that has followed a nation-wide lockdown as part of the country's response to the virus puts the country's macroeconomic health in greater jeopardy. While it is still uncertain how these economic repercussions will impact the national budget for protected areas, biodiversity, and conservation, it is expected that there will be reduced fiscal space for expenditure in these areas. Likewise, South Africa's lockdown and closure of national and provincial borders has had a devastating impact on nature-based tourism, revenues from which form a significant part of the budgets of national park agencies. Therefore, while funds from this project certainly will not make up for these expected shortfalls, they do come at a critical time for the country when biodiversity-driven businesses face difficult decisions about remaining in business. To mitigate this risk, the WCB structure includes use of swaps with an approved counterparty to provide funding according to a pre-determined schedule and help mitigate potential fluctuations in funds provided to the protected areas due to changes in the macroeconomic conditions.

107. **Technical design risk** is associated with innovative features of the bond element of the project. This risk is related to the FM risk and will be revised once bond has been successfully issued and during project implementation. Substantial risk is based in funds flow (from the World Bank) and project design. To mitigate this risk, the World Bank has worked closely with project sites, an investment bank, a calculation agent, and a third-party verifier to reduce complexity in funds flow and created streamlined legal, investment, and contractual agreements with each project partner to reduce technical design risks. Risk will be further revised



during implementation.

108. **E&S risks** are rated Substantial, because of the potential for human-wildlife conflict due to the nature of the work program. Social risks will be mitigated through the implementation of the project's environmental and social documents, that include a robust safeguards and consultative framework and a security management plan. Close World Bank support during implementation, synchronization across project components, and recruitment of additional personnel will mitigate the risks related to E&S.
109. **Fundraising risks.** A bond issuance of ZAR 670 million (US\$40 million equivalent) is large for a bond that is innovative and complex. There is a risk that not enough bond investors will be willing to forego the coupon payments, given the current volatile market environment. Although there is considerable interest from bond investors and outcome payers in taking part in the bond, the risk of failing to launch the WCB Transaction is considered a medium risk at this point. In addition, the foregone coupon amounts a ZAR 670 million (US\$40 million equivalent) bond can generate is entirely market dependent and will influence how much financing can be raised to fund project activities. In addition, there is limited currency risk as the forward exchange rates indicate that the US dollar will appreciate compared to the SA Rand, and as a relatively small portion of the activities will include US dollar expenses for vehicles, communications equipment, and other related project costs<sup>49</sup>. With principal protected (in SA Rand terms) through the WCB Transaction structure (ZAR Tranche), the bond investors' downside risk is protected despite the potential for the Conservation Success Payment to not be fully realized. The World Bank has assessed risk measures around this topic, such as extending the launch dates and reducing the scope of project activities. The World Bank has worked closely with the project sites to update cost tables and finalize project activities to reflect the changing conditions. An internal timeline has been developed to trigger these actions when needed. The World Bank has identified core project activities that will be funded by the WCB Transaction (ZAR Tranche) and additional investments that could supplement these efforts that can be implemented by future complementary efforts funded by other donors. **Funding from the WCB operation represents a significant increase in the budget available for rhino conservation at the two protected areas.** The protected area authorities confirmed that project funding would be sufficient to meet project objectives and address issues of governance and the risk of corruption. Additional funding from revenue operations and expanded fundraising efforts will still be required to provide a diversified funding stream over the long-term.
110. **Implementation risks.** There is a risk that the ToC for project activities will not be implemented as agreed with each of the partner sites or that there will be issues which do not allow implementation. These risks have been reduced through due diligence assessments of the partners, and an extensive Investment Readiness phase of the RIIP working period to test and develop agency capacity. They are further mitigated by oversight from the World Bank. The ToC for both partner sites has significant focus on developing law enforcement capacity to limit poaching risk; investment in engaging local communities through a participatory approach further reduces this risk. In addition, investments are being made in two sites, which can act to diversify portfolio risks to some degree. As with any other development project, challenges may arise, and the World Bank will use available procedures and recourse to address them during implementation. Performance is not guaranteed and language on project risks will be included in the bond prospectus to detail risks to investors.

<sup>49</sup> Currency downside is considered low to medium risk and in the range of 20-25 percent. The USD is expected to strengthen against the SA Rand which may negatively impact project costs for expenses that are US\$ denominated. As of September 15, 2020 ZAR FX, Spot rate was 16.42 and four year forward 19.41.



111. **Fiduciary risks.** The project agreements (both the GEF grant agreement and the World Bank Treasury agreement) contain appropriate risk mitigation measures for the risks identified by the FM and Procurement capacity and risk assessments. The main risk relates to the use of a new financial instrument to generate funds for the project. This risk will be reduced once the WCB has been successfully issued by the World Bank Treasury. The project sites are committed to ensure that the World Bank regulations are adhered to and will incorporate the World Bank's Anti-Corruption Guidelines in the procurement and contract documents.
112. **Communications risks.** The large number of stakeholders involved in the project, including private investors that will contribute to the conservation activities, and the sensitive nature of rhino conservation, increase communications risks related to the project. A communications strategy will be developed and implemented to mitigate risks and convey the positive aspects of the project. The communications strategy will highlight the innovative nature of this project and dissemination efforts will seek to reach different audiences. The use of multiple communications channels, tools, and activities will be considered to support both in-person and virtual activities to communicate project highlights.
113. **Climate change risks.** Climate change is not considered to be a significant risk to project activities. While the project sites are at risk of experiencing climatic weather events (such as drought, flooding, and irregular rainfall), project activities to improve habitat management will enhance the sites' resilience to climate change. South Africa is estimated to be among those with the highest resilience to climate change in Africa, due to its relative wealth and high adaptive capacity. In addition, the country's ecological makeup already is one of its best defenses against climatic shocks; steps taken to safeguard the country's biodiversity shore up this natural defense. Indeed, a core objective of the country's Nationally Determined Contribution (NDC) and National Climate Change Adaptation Strategy (NCCAS) is to build climate resilience and adaptive capacity to respond to climate change risk and vulnerability. By investing in economic activity that depends on healthy, in-tact biodiverse landscapes, and by engaging communities in the management of biodiversity, this project is expected to have a positive impact on the adaptive capacity and the resilience of communities living near the project sites and conserve the natural capacity and resilience of the landscape.

**VII. RESULTS FRAMEWORK AND MONITORING****Results Framework****COUNTRY:** South Africa**Wildlife Conservation Bond Operation****Project Development Objectives(s)**

To increase black rhino populations in target protected areas in South Africa.

**Project Development Objective Indicators**

Indicator Name	PBC	Baseline	End Target
<b>To increase black rhino population in target sites</b>			
Percent increase of black rhino population in target sites (CAGR) (Number)		-3.70	4.00

**Intermediate Results Indicators by Components**

Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
<b>Improved Rhino Conservation Management</b>				
Area under improved management (Hectare(Ha))		0.00	76,570.00	153,141.00
Great Fish River Nature Reserve (Hectare(Ha))		0.00	21,438.00	42,877.00
Addo Elephant National Park (Hectare(Ha))		0.00	55,132.00	110,264.00



Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
<b>Improved Rhino Conservation Management</b>				
Beneficiaries of project interventions (Number)		629.00	1,467.00	2,306.00
Gender Equity in Conservation Services (female/%) (Percentage)		22.00	24.00	27.00
Great Fish River Nature Reserve (Percentage)		31.00	33.00	36.00
Addo Elephant National Park (Percentage)		16.00	18.00	21.00
Rhino mortality rate (3-year average < 4%) (Percentage)		4.00	4.00	4.00
Great Fish River Nature Reserve (Percentage)		4.00	4.00	4.00
Addo Elephant National Park (Percentage)		4.00	4.00	4.00
Number of rangers per square kilometer (Text)		0,029 ranger / square km	0,039 ranger / square km	0,059 ranger / square km
Great Fish River Nature Reserve (Text)		0,029 ranger / square km	0,039 ranger / square km	0,059 ranger / square km
Addo Elephant National Park (Text)		0,029 ranger / square km	0,039 ranger / square km	0,059 ranger / square km

**Monitoring & Evaluation Plan: PDO Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Percent increase of black rhino population in target sites (CAGR)	This indicator measures the percentage increase in black rhino population at target sites. The black rhino growth population target is	Annually	The Protected Area (PA) site level monitoring is	Sites use a combination of foot patrols, camera trapping and aerial monitoring to provide photo evidence of the	Site managers will provide a population estimate with confidence intervals and evidence of each



	4% annual increase based on the national target for black rhino growth. The indicators are collected by each site and reported separately. Calculation is a weighted average of each site's target. The baseline of (3.7%) is the expected decline in rhino population with status quo.		a continuous process, while the independent verification observation date for abundance estimation is a single calendar year. The rhino estimate will be reported annually (at years 0, 1, 2, 3, 4, 5). For each independent verification observation date, PA sites must provide at least one piece of date-stamped photo evidence with an associated	rhino population. Each site will provide at least one piece of date-stamped evidence per observed rhino per year for the independent verification process. The data (including the evidence) is loaded onto the Rhino Outcomes Management System, a bespoke database and front end build on AWS architecture, which provides an audit trail of data, and simultaneously allows site management to automate common management queries to rapidly inform decision making and improve rhino biological performance. Site M&E team will collect data on rhino count. Both rhino sites will provide at least one piece of date stamped evidence per observed individual rhino per	observed rhino at launch of the WCB and once per annum during the investment phase. The baseline number of rhinos in each site will be audited and adjudged to be accurate within a confidence interval by a third-party independent verifier.
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			<p>GPS location. This data will be independently verified at T0 and T5. The Independent Verifier will interrogate the evidence files for each observed rhino. The Rhino Outcomes Management System (Rhino-OMS) will be used to provide evidence of black rhino growth performance and used throughout the project lifecycle. The Rhino OMS model is fitted to the</p> <p>year. An estimate of the abundance of the black rhino population will be provided using the statistical approach called Capture Mark Resighting (CMR), which allows for the estimation of known unseen and unknown unseen animals in a population, based on their sighting histories (detection probability). A Jolly-Seber model will be used to estimate abundance of rhino for each independent verification observation date. The model provides a posterior distribution of abundance estimate based on the model which uses 7,500 iterations to create the distribution. We then use the abundance estimate at T0 and T5 to calculate the compound annual</p>	
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			<p>data and an estimate of Compound Annual Growth Rate (CAGR) is generated from the difference between Y5 and Y0. Site managers will provide at least one piece of date stamped evidence per observed individual rhino per year to ensure a narrow range of values and high confidence in the results. An estimate is a range of values with an associated likelihood</p>	<p>growth rate with an understanding of confidence. This approach accounts for the volatility in growth in individual years stemming from rhino conception and gestation periods not aligning perfectly with accounting periods.</p>	
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			Independent verification of black rhino growth rate at completion vs. baseline.		
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**Monitoring & Evaluation Plan: Intermediate Results Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Area under improved management	SanParks and EPTCA site staff will undertake various actions to improve the management of target protected areas (PAs): including habitat management, range availability (AENP), rhino population management, containment and counter-poaching, monitoring, community engagement, and enabling conditions. Improvements to the management of PAs will be assessed using the Management Effectiveness Tracking Tool (METT). The	Years 0, 3, and 5	Management effectiveness tracking tool (METT) survey. Baseline METT scores for AENP is 67 and GFRNR is 77. Targets at the end of year 5 are AENP 73 and GFRNR 80, respectively.	METT survey to be undertaken by Protected Areas (PA) staff of SanParks (of DEFF) and EPTCA for each PA. The METT survey template is included in the METT handbook, and will be finalized by the PAs. The PAs staff will coordinate with directors of the different Protected Areas and other relevant stakeholders to complete the survey, and will be responsible	SanParks, EPTCA M&E staff.



	METT is commonly used to assess the management of PAs through assessing different dimensions of management including legal and regulatory framework, law enforcement capacity, planning, management plans, budget and resources, and staff capacity. The METT comprises 42 indicators, from which a maximum score of 99 is derived. This indicator measures the PAs in hectares, for which management has been improved. PA management is considered to be improved when there is an increase compared to a PA's baseline METT score, and the score is above X. The score of X was determined by assigning the lowest value to the METT indicators which represent minimum efforts in PAs management. The total area of PAs whose management has been improved will be measured through this indicator.		for data analysis and reporting. The first METT survey will be conducted at the start of the project to determine the baseline, and subsequent surveys undertaken annually.	
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Great Fish River Nature Reserve	Same as indicator.				
Addo Elephant National Park	Same as indicator.				
Beneficiaries of project interventions	<p>The baseline number of beneficiaries compromise of the staff currently employed on a permanent basis. Other beneficiaries currently include project staff on the following programs: Working for water, Working on Fire, Working on ecosystems and Environmental monitors (All funded by Department of Environment, Fisheries and Forestry but implemented by SANParks). SANParks further employs temporary staff that works on an ad hoc basis. The Department of Tourism also fund 2 teams that fulfil maintenance functions. Through the project SANParks will appoint staff as per budget in the following categories: Rangers, Monitors, Gate guards, JOC staff and a project manager. Furthermore there will be</p> <p>Years 1 – 5</p>	Human capital payroll, Data from service providers	Collect and report data from human resources payroll and service providers.	SANParks and ECPTA staff and project managers	



	employment opportunities during construction phase of new infrastructure as well as maintaining current infrastructure.				
Gender Equity in Conservation Services (female/%)	This indicator will capture increases in female representation within the conservation services staff of both parks.	Annual	Human resources reports with breakdown of data on female staff with the roles under conservation services (to include Conservation Manager, Section Ranger, Field Rangers, Gate Guards, Intern and Scientific Support).	Collect human resource reports and calculate total female as percentage of total conservation services staff.	SanParks, EPTCA M&E staff.
Great Fish River Nature Reserve	Same as indicator.				
Addo Elephant National Park	Same as indicator.				
Rhino mortality rate (3-year average < 4%)	About half of AENP's 90 000 hectares of consists of dense thicket vegetation,	Annual (Years 1 – 5)	Rhino Outcomes Management	Sites use a combination of foot patrols, camera trapping and aerial	SanParks and ECPTA M&E and scientific services



	<p>making carcass detection extremely difficult. Historically it was difficult to confirm the deaths of undetected individuals, but through the RIB investment readiness phase two rhino monitors have been appointed. Ideally, increased knowledge about rhino home ranges and keeping track of undetected individuals will aid in easier detection of mortalities. Through savings, in the investment readiness phase, some spotted hyena has been GPS collared in Main Camp and has greatly assisted in the detection of carcasses (all species) and proves an effective tool. During the RIB investment phase, the addition of more rangers and accompanying area coverage, fixed-wing aerial coverage together with sustained monitoring would increase the detection of rhino mortalities. The park is also aiming to collar hyena in the</p>		System (Rhino-OMS)	<p>monitoring to provide photo evidence of the rhino population. Each site will provide at least one piece of date-stamped evidence per observed rhino per year for the independent verification process. The data (including the evidence) is loaded onto the Rhino Outcomes Management System (Rhino-OMS), a bespoke database and front end build on AWS architecture, which provides an audit trail of data, and simultaneously allows site management to automate common management queries to rapidly inform decision making and improve rhino biological performance. Site M&amp;E team will collect data on rhino count. Both rhino sites will provide at least one piece of</p>	staff.
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	other rhino sections to aid in carcass detection. Mortalities are logged in RhOMS, which allows for mortality rates to be calculated.			date stamped evidence per observed individual rhino per year.	
Great Fish River Nature Reserve	Same as indicator.				
Addo Elephant National Park	Same as indicator.				
Number of rangers per square kilometer	SANParks currently do employ rangers in the different sections of the park. For the benefit of the program only the sections that have rhino currently (Darlington, Nyathi, Main camp and Colchester) and those that will receive rhino during the course of the project (Kabouga) will be used. This would be calculated by the size of the area (section) and the number of rangers employed per section. This would be done for the baseline as well as during the project phase. Area coverage could be determined through the CMORE program	Annual (Years 1 – 5)	RhOMS data base. Complemented by the Command and Control Collaborator (Cmore), a software application eco system which includes a web-based application (portal) and associated mobile applications for use in the Command and Control domain.	M&E staff collects and reports data from ROMS database.	SanParks and ECPTA rhino monitor and scientific services.



Great Fish River Nature Reserve	Same as indicator.				
Addo Elephant National Park	Same as indicator.				

**Annex 1: Implementation Arrangements and Support Plan****COUNTRY: South Africa**  
**Wildlife Conservation Bond Operation**

1. The World Bank, as the GEF implementing agency, will supervise this Operation. All IPF policies and procedures including financial management, procurement, and ESF apply. The project activities funded by the foregone coupon payment and the GEF NGI funds (P174097 "Wildlife Conservation Bond Operation") will be implemented by Addo Elephant National Park and Great Fish River Nature Reserve. The overall Executing Agencies covered by this Project Appraisal Document, (P174097 "Wildlife Conservation Bond Operation") are SANParks and the provincial conservation authority ECPTA. They will implement the site-based project activities that will follow an agreed-upon theory of change and strategic plan which is tied to achievement of a single result - net rhino growth verified in year five.
2. Component 1 of the project is fully funded by the foregone coupon payment and is implemented at the protected area level in AENP and GFRNR, by two Executing Agencies – SANParks and the provincial conservation authority ECPTA. By statute, these government agencies manage the respective protected areas (SanParks - AENP; ECPTA - GFRNR) and are responsible for delivering the intermediate results for Component 1, (*Section VII. Results Framework*), the outputs and outcome. Component 2 of the project which is also fully funded by the foregone coupon payment will be implemented with support by a technical service provider (WFA).
3. Project activities funded by the foregone coupon payment will be carried out both by SANParks leadership and technical staff at AENP and by ECPTA, with the work connected through regional and national coordination and planning supported by an experienced Senior Law Enforcement Advisor to work with both sites as they implement and institutionalize the significant changes to law enforcement operations at site.
4. Funds flow for the project activities funded by the foregone coupon payment is indicated in the diagram below. World Bank Treasury will transfer funds (i.e., foregone bond coupon payments) on a semi-annual basis to project-specific dedicated bank accounts at Partner Sites (SanParks at AENP and EPTCA at GFRNR). These project partners will then use the funds to implement site-specific activities. The World Bank Treasury Agreement will outline the terms and conditions for the use of the foregone coupon payment which will support the implementation of conservation activities. The capacity of these entities to manage this foregone coupon payment funding has been confirmed through an assessment by the World Bank of their financial and procurement capacity. Following irrevocable instructions issued by the parks, the funds flow for the potential conservation success payment for the GEF NGI payment will be from the World Bank to the paying agent who will then pay the bond investors as shown in Figure 1.1.
5. The Project Implementation Manual (PIM) sets out financial and administrative policies and procedures for managers, staff, and consultants responsible for implementation of project activities funded by the foregone coupon payment. The PIM includes project management, institutional responsibilities, fiduciary procedures and responsibilities, M&E, environmental and social safeguards, and other specific reporting requirements.
6. Activities funded by the foregone coupon payments will use the existing FM arrangements for SANParks and ECPTA in accordance with the SA Government Public Finance Management Act (PFMA) to record and report



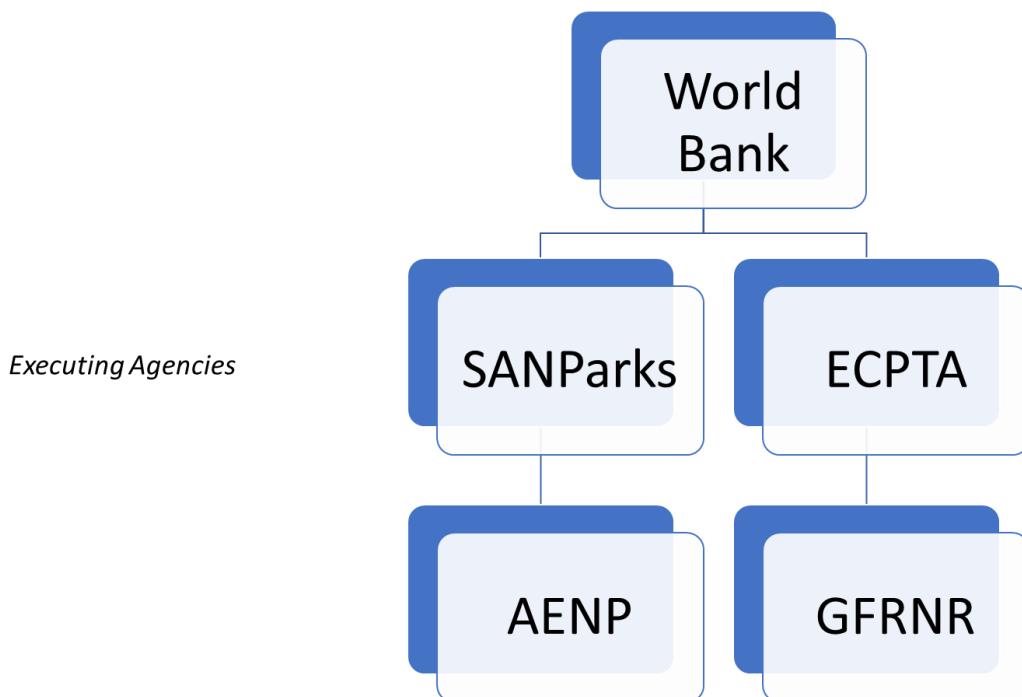
on the use of funds. The Chief Financial Officers (CFO) of these entities will have the ultimate responsibility for the FM function, and the existing computerized Great Plains accounting system (for SANParks) and Sage Evolution financial system (for ECPTA) will be used.

7. Budget preparation for activities funded by the foregone coupon payments will be the responsibility of the CFO, with the support of the project manager and the allocated accountant(s). The approved budget will be uploaded in the Great Plains accounting system (SANParks) and the Sage Evolution financial system (ECPTA); any proposed changes will be approved through the requisite governance structures. GEF NGI funds will be used for the Conservation Success Payment according to the payment schedule defined in the WCB Transaction ZAR Tranche Term Sheet.

8. All IPF policies/procedures apply to the GEF NGI funds, as described in the GEF grant (NGI) agreement. The foregone bond coupon payments are parallel co-financing and have a separate agreement that defines the funding terms and conditions. The disbursement function for coupon payments is de-linked from the GEF-NGI funds.

9. Disbursement arrangements. The disbursement method for the GEF NGI funds is direct payment and is tied to the achievement of a single result, net rhino growth verified in Year 5. GEF NGI funds will only be used to pay investors (through a paying agent) as a Conservation Success Payment if the conservation targets are achieved.

**Figure1.1. Wildlife Conservation Bond Operation Implementation Arrangements**





## Annex 2: Economic and Financial Analysis

COUNTRY: South Africa  
Wildlife Conservation Bond Operation

### 1. Introduction

1. Humans have wiped out 60 percent of animal populations since 1970 (Living Planet Report 2018) and specifically, mammal species collectively lost over 50 percent of their continental populations (Ceballos et al, 2018). This loss of wildlife threatens valuable ecosystem services and human well-being. The top three threats to wildlife are: habitat change (loss, degradation, and fragmentation), illegal wildlife trade and climate change (The GEF 7 Biodiversity Strategy). Criminal activities that affect the environment and natural resources contribute to the loss of biodiversity and pose a serious threat to sustainable and inclusive development. A 2019 World Bank report estimated that annual costs of illegal logging, fishing and wildlife trade are a staggering US\$1 to US\$2 trillion<sup>50</sup>. The value of illegal wildlife trade alone is estimated at US\$7-23 billion per year (UNEP-INTERPOL Rapid Response Assessment, 2016).

2. The success of conservation efforts depends upon the recognition that poverty can be a significant constraint on conservation, and at the same time conservation is an important component to the alleviation of long-term poverty. Protected areas (PAs) are the cornerstone of biodiversity conservation; they maintain key habitats, provide refugia, allow for species migration and movement, and ensure the maintenance of natural processes across the landscape. PAs can create economic benefits as tourist destinations and serve as an anchor for ‘biodiversity economy nodes’<sup>51</sup>. Benefits generated by PAs can include park entry fees, tourists spending in lodges and tourism related businesses, and other commercial, recreational, ecosystem services related benefits. In addition, there are indirect effects of visitor spending for businesses and households around PAs in nearby towns. For example, a June 2021 World Bank report, “Banking on Protected Areas: Promoting Sustainable Protected Area Tourism to Benefit Local Communities,” (partly supported by the GEF-funded Global Wildlife Program) estimated total economic returns of 7 to 27 kwachas on the GDP per kwacha of government spending on Zambia’s Lower Zambezi and South Luangwa National Parks. Despite the global environmental benefits delivered by PAs and increased income around some parks, poverty around many protected areas remain extremely high.

3. Wildlife-based tourism contributed US\$120.1 billion to global GDP in 2018, directly providing 9.1 million jobs worldwide (WTTC 2019). Researchers have found that elephant conservation in savannah protected areas has net positive economic returns comparable to investments in sectors such as education and infrastructure and increased elephant conservation is a wise investment by governments in these regions (*Naidoo 2016*). In Namibia, the economic value of large wildlife on communal lands was high ranging from US\$111,000 for a black rhino, US\$22,000 for a “Big 5” species, and US\$2,100 for other wildlife species (*Naidoo 2011*). A case study of 365 tourism staff in six southern African countries found that these staff inject a total of US\$212,144 monthly into local economies where they live across (*Snyman 2017*)<sup>52</sup>. Wildlife tourism can provide communities living around protected areas with an incentive to

<sup>50</sup> World Bank Report: Illegal Logging, Fishing, and Wildlife Trade: The Costs and How to Combat It, October 2019.

<sup>51</sup> A node can be described as a geospatial platform that provide networks to enable market access, skills transfer, investment attraction and supply chain linkages through incorporating underdeveloped but biodiversity-rich communal lands, private lands and unproductive game farms/reserve, or well established Protected Areas that are not optimally utilized.

<sup>52</sup> Case study of 385 tourism staff in six southern African countries found that on average each staff member had seven dependents. The 16 ecotourism lodges assessed impacted 5,000 lives (equivalent to 14 people per tourism bed, at 100 percent occupancy). Tourism staff inject a total of USD212,144 monthly into local economies where they live across the six countries (approximately USD 13,259 per month per tourism camp or USD 603 per tourism bed per month).



conserve wildlife. Despite the benefits of tourism to protected areas, it is important to note the current impacts of COVID-19 on tourism globally which have been significant.<sup>53</sup> Governments, communities, and the private sector globally are currently taking emergency response and recovery measures to overcome liquidity and solvency challenges caused by the current health and economic crisis. The global economic shock that the COVID-19 pandemic has delivered and steep recessions many countries are experiencing will leave lasting scars for many countries. As previously referenced, South Africa's tourism sector and communities that rely on tourism for their livelihoods were impacted by lockdown measures and halt in tourism activities. A critical consideration for countries as economies reopen in a phased approach will be how to diversify income streams to ensure natural assets are conserved to not only support recovery efforts but also provide the foundation for its sustainable development.

4. There is also increasing recognition among practitioners and policy makers of the need to engage rural communities that live with wildlife as key partners in tackling illegal wildlife trade and alleviating pressure on PAs (IUCN 2016). Experiences in Kenya, including within the Northern Rangelands Trust (NRT) Conservancies saw a reduction in illegal killing of elephants from 113 elephants poached in 2012 to only 3 in 2019 (NRT 2019). Support from United States Agency for International Development (USAID), The Nature Conservancy, Danish International Development Agency (DANIDA), the EU, and many others have contributed to enhancing governance of community conservancies, strengthening security, peace, and livelihoods. For more countries and communities to unlock their wildlife economy, it is essential to address inadequate policies and concession laws, limited financial capital for tourism infrastructure, unplanned development, poor governance and limited opportunities for scaling up community-run enterprises that have resulted in weak wildlife economy development to date. Namibia, Kenya, and several other countries in Africa and beyond have shown that investments in and around protected areas can have important conservation and economic impacts.

## **2. Baseline scenario**

5. The baseline scenario for this project would deliver some short-term benefits, but considerably less than the potential benefits derived from improved wildlife management and supply chains delivered through the project. Net benefits would likely gradually erode as the current situation of wildlife management in South Africa is at a critical stage and the cost of inaction can be large in the medium and long term. Across South Africa, there were 1,028 rhinos poached in 2017 and 769 in 2018. Kruger National Park is the epicenter of the poaching crisis in Africa. Although South Africa has experienced significant gains in its fight to save wildlife, it still had over 365 rhinos poached in 2019 (down from 827 rhinos poached in 2014). Similarly, 71 elephants were poached in 2018 and the pressure on these globally significant natural resources remains high. Thus, the baseline scenario would incur costs and losses due to increased pressure on already overexploited wildlife habitats, ecosystem services and biodiversity. A key threat to the integrity of PAs is poverty, leading to overexploitation of natural resources, including wildlife crime through poaching and overfishing. The three provinces in which project target landscapes fall experienced the highest headcount of adult poverty – Limpopo (67,5 percent), Eastern Cape (67,3 percent) and KwaZulu-Natal (60,7 percent). The severity of poverty measures was larger for female-headed households compared to households headed by males. Women are also disadvantaged in relation to land ownership; between 2005 and 2010, only 36 percent of the beneficiaries of the land redistribution and tenure program were women. Weak access to credit, markets, training, and few formal employment opportunities lead some individuals to resort to poaching for household consumption, as well as encroachment on PAs for harvesting fuelwood or cultivating crops. In other cases, community members could be employed by illegal wildlife trafficking syndicates. The baseline scenario would therefore incur costs and losses due to the continued trend of overexploitation of wildlife and natural resources.

<sup>53</sup> The UNWTO estimates the loss of up to US\$1.2 trillion in export revenues from tourism, with 120 million jobs at risk.



### 3. GEF alternative

6. The project builds on completed and ongoing protected area management initiatives in South Africa and biodiversity economy investments. An important value added of the project is its innovative use of a fixed income structured financial product to channel funds for conservation. The funds raised by the bond will finance interventions under the WCB Project that lead to global biodiversity conservation benefits by supporting key ecological rehabilitation and socioeconomic activities in two target protected areas. With these activities, GEF funding would lead to global biodiversity conservation benefits by substantially reducing key threats to rhinos and the other biodiversity of global importance at the target landscapes. The project contributes to GEF biodiversity programming directions: (i) preventing the extinction of known threatened species (BD1.2a); and (ii) to mainstream biodiversity across sectors as well as landscapes and seascapes through Global wildlife Program for sustainable development (BD1.2b). In the absence of GEF support, these activities would not be undertaken.

7. This project addresses key barriers to unlock the full potential of the South African wildlife economy: (i) inadequate governance at the local level to enable communities to fully participate in decision making, secure land tenure, and co-manage natural resources; (ii) weak institutional capacity and limited investment mechanisms to support public-private-community partnerships to increase benefits local communities derive from biodiversity conservation; and (iii) lack of systematic financial and technical support. The project benefits are aligned with priority measures of South Africa's National Biodiversity Economy Strategy<sup>54</sup>. The project consists of three components closely interrelated: building biodiversity economy nodes for community stewardship and livelihoods (Component 1); Knowledge exchange across nodes and capturing learning on community stewardship and biodiversity economy (Component 2); and project management and monitoring (Component 3).

8. Component 1 investments will directly support enhanced conservation management of target protected areas and community engagement. A total of 153,141 hectares of land will be brought under improved management. This will be done through habitat management, range availability, rhino population management, containment, and other related efforts. Project investments will also support community engagement. Component 2 will enhance national and regional enabling conditions to coordinate shared security and research opportunities. This will also facilitate exchange of lessons learned and good practices. Component 3 relates to project management and monitoring, which is intended to facilitate completion of activities under Components 1 and 2. The GEF NGI funds support the conservation success payment made to the WCB Transaction investors (ZAR Tranche) which serves as a payment for performance of the conservation activities implemented in the other components. The project will increase capacity and increase investments in the biodiversity economy nodes which in turn should support community stewardship and livelihoods. Project investments will play a catalytic role in stimulating greater linkages for local small and micro-businesses that can lead to greater multiplier effects community share of local and regional economy. Increased flow of knowledge, data, and investment information will provide further benefits. As the project is expected to bring in private sector participants, it is expected to generate additional returns to the GEF investments.

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<sup>54</sup> South Africa's National Biodiversity Economy Strategy was set in 2018 and labeled 'Operation Phakisa: Biodiversity Economy'. It seeks to balance biodiversity and natural resources protection with sustainable use for economic development and equitable distribution of benefits. The National Biodiversity Economy Strategy sets out measures to develop the wildlife, biotrade and ecotourism sectors, aiming to create 162,000 jobs and generate USD3.19 billion (Using exchange rate of ZAR14.75 = USD 1) in revenue by 2030. The wildlife sector, already employing around 100,000 people across the value chain, is seen as key to this – increasing business and land ownership by previously disadvantaged individuals and boosting participation by communities.



#### **4. Analytical approach used to measure project benefits**

9. **Methodology and assumptions:** The methodology used is a cost-benefit analysis (CBA)<sup>55</sup>. The following steps were used for the financial analysis: (i) identification of benefits and costs generated/ incurred by the project; (ii) comparison of "With Project (WP)" and "Without Project (WOP)" scenarios in order to assess the net incremental benefits; and (iii) calculation of the financial and economic profitability indicators (such as the NPV and the IRR).

10. The project will produce local and national benefits from increased management effectiveness in the two protected areas. The project investments will strengthen the respective agency's ability to protect and grow rhino populations. Project activities will lead to investments in the local and national economy through direct and indirect employment, and measurable socio-economic benefits that will accrue to local communities and businesses in target areas through skills transfer, crowding in of investments, and supply chain linkages. An economic and financial analysis built on the CBA can be applied to the projected benefit stream that measures added value of increased rhino population which is one of the "Big 5" and key driver for nature-based tourism.

11. **Identification of benefits:** The Project activities are expected to generate several benefit streams. Based on the data available and projects interventions, this EFA is built on the revenue estimated for growth in rhino population and tourism benefits they are associated with. Other project benefits, including from increased coordination and improved sustainability of biodiversity management and governance of wildlife habitats and enhanced wildlife and ecosystem services that deliver more intangible environmental and social benefits were not assessed as part of this analysis. The benefits expected from the issuance of an innovative fixed income structured product are also not included, although it is expected it will serve as a catalyst to increase funding for biodiversity conservation and increase funding streams for conservation.

12. The increased management effectiveness of the two target protected areas and the tourism value from preservation and growth of the black rhino population is the primary source of benefit calculations. The benefit stream to support broader ecosystem services that are part of the national wildlife economy activities was also not included in the analysis. These additional environmental and social benefits were excluded from the benefit calculations as they are generally 'non-market' benefits and are more difficult to value without targeted surveys and additional data collection and consensus.

#### **5. Results**

13. Overall, enhanced conservation management delivered through the project is expected to deliver net positive benefits. **The WCB Project is a profitable project, generating a Net Present Value (NPV) of US\$37 million (at 6 percent discount rate) and an Internal Rate of Return (IRR) of 47 percent and the Benefit/Cost (B/C) ratio is 3.3** (on a total budget of US\$17.83 million in GEF funds and Government of South Africa co-financing). These calculations exclude the more qualitative environmental benefits that were not priced for the analysis. A sensitivity analysis shows that the project's results remain robust under various scenarios.

14. The economic analysis considers a time horizon of ten years, to account for the long-term benefits of the project. The analysis assumes that project costs are invested over the course of the first five years of the project.

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<sup>55</sup> This analysis follows the standard methodology recommended by the World Bank, as described in Gittinger (1982) and Belli et al. (2001), and is aligned to with the Cost benefit analysis for World Bank Projects guidelines ((IEG, 2010)



Further, it uses a baseline discount rate of 6 percent, as suggested by the World Bank<sup>56</sup>, and assumes an annual maintenance cost of 1 percent (approximately US\$178,337) of the investments. The maintenance costs are expected to increase by 5 percent annually due to inflation. The quantifiable project benefits rely on the target rhino growth rate expected for the project (5 percent), compared to the without project scenario (-3.7 percent) as described in the key assumptions listed in Table 9.

**Table 9: Data inputs for the economic analysis**

Activities	Current/without project scenario	With project scenario			
1. Change in rhino population in SA project sites	CAGR (-3.7percent)	CAGR (4 percent)			
2. Economic value of change in rhino population	Total number of Rhinos in Africa (White and Black Rhinos) Value of 1 percent reduction in rhino population 883,457,000 Source: <i>EFFACE D3.2c</i> (2015)* 1 rhino economic contribution over its lifetime Rhino Life Span 43 (weighted average for white/black rhinos) <b>Economic contribution per rhino per year</b> EUR to USD - converted to USD based on March 2, 2015 FX rates - 1.1183	23,600	EURO 236	US\$ 790,000,000	
				US\$3,743,462	<b>US\$87,732</b>
	<i>* Assumes lower bound estimates (mostly derived from tourism benefits for South Africa only and not the region)</i>				

15. The ex-ante economic analysis suggests that project-supported investments will generate substantial benefits for the protected areas and national economy. The economic analysis thus shows that if project implementation is effective and efficient, project-supported investments will bring substantial economic benefits to the beneficiaries.

16. Results are robust to adverse changes in the key parameters (see Table 10). Increasing project costs by 10 percent, reducing project benefits by 10 percent, and varying the default discount factor by 2 percentage points (i.e., 4 percent and 8 percent respectively) do not change the conclusions. Increasing project costs by 10 percent reduces IRR to 51 percent and decreasing project benefits by 10 percent reduces the IRR to 50 percent. These two scenarios are the most conservative compared to the scenario of increase in discount rate to 8 percent.

<sup>56</sup> World Bank, "Technical Note on Discounting Costs and Benefits in Economic Analysis of World." Bank Projects".

**Table 10: Sensitivity Analysis: changes in key parameters**

Sensitivity Analysis	NPV (million US\$)	IRR	B/C Ratio
Baseline (with a 6 percent discount rate)	37	47 percent	3.3
Scenario 1: Discount rate at 4 percent	43	47 percent	3.6
Scenario 2: Discount rate at 8 percent	31	47 percent	3.1
Scenario 3: Project costs increased by 10 percent	35	43 percent	3.0
Scenario 4: Project benefits decreased by 10 percent	32	42 percent	3.0
Scenario 5: Project benefits increased by 10 percent	42	52 percent	3.6

## 6. GEF-7 Biodiversity priorities and justification for public funding

17. The Project contributes to the GEF-7 biodiversity focal area strategic objectives (i) BD 1-1: Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors, and (ii) BD 2-7: Address direct drivers to protect habitats and species and improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate. Strengthening the capacity of the institutions responsible for the governance of the rhino in the protected areas and working with local communities and other stakeholders to grow the biodiversity economy is clearly a public function. Enhanced governance offers significant potential payoffs as it can reduce illegal wildlife trade and effectively establish and enforce conservation strategies. The project will help increase societal value given to wildlife resources and sustainable use of biodiversity of natural habitat from which societal and global benefits are derived.

18. GEF funding will leverage financial resources to enhance South Africa's capacity to implement the Biodiversity Economy and increase the benefits local communities gain from the two PA landscapes. The Project will help create direct and indirect jobs in the wildlife economy and ecotourism sectors and increase benefits local communities derive from the two PAs. The multi-stakeholder coordination platforms the project will use to support project activities will help three target local communities around globally significant PAs to: (i) facilitate and align public sector investments linked to biodiversity economy activities, and (ii) unlock further private sector investment. The project will also deliver global benefits as it will help conserve threatened natural habitats and wildlife and provide alternative livelihoods to counter the ongoing poaching and illegal wildlife trafficking. This situation is mainly due to unsustainable and illegal practices – all of which are largely driven by widespread rural poverty, lack of alternatives, and negative perceptions about PAs by local stakeholders. By strengthening management of the two PAs, the project will contribute to a change in perceptions on the benefits of conservation. The project will help conserve natural habitats and wildlife of global value, while allowing at the same time, these natural assets to realize their economic potential for social development.

19. Institutional investors have traditionally not participated in conservation sector funding. The justification for GEF funding is clear as the WCB Transaction structure will increase awareness among investors. Without the GEF NGI funding, the World Bank Treasury would not issue a conservation bond. The use of public resources is therefore justified to stimulate an innovative financial instrument that can help crowd in investment to the conservation sector, which in turn will reduce over-exploitation, strengthen monitoring and control, and ensure enforcement and



compliance with regulations. Therefore, use of public funding to address these market failures is justified from an efficiency standpoint if the activities to be supported are well designed and are cost-effective.

20. The incremental GEF funding will add value to national resources by helping to consolidate the conditions required for sustainable long-term biodiversity conservation and socio-economic delivery in the two protected areas. In relation to the activities that will be carried out by the two SA agencies in the business as usual scenario, the incremental value of the GEF project is summarized in the table below. This performance based financial product reflects the success of conservation versus baseline (-3.7 percent annual loss of black rhino's vs target of 4 percent annual growth). The difference between the cost of the baseline scenario (US\$9.2 million) and the cost of the alternative scenario (US\$22.76 million) is estimated to be US\$13.56 million which represents the incremental cost for achieving the global environment objectives (see Table 11).

**Table 11: Incremental Cost Matrix for WCB Operation (Foregone Coupon Payments + GEF NGI)<sup>57</sup>**

Project Components	Baseline	GEF Alternative + Foregone Coupon Payments	Incremental GEF + Foregone Coupon Payments (Alternative – Baseline)
1. Improved Rhino Conservation Management	<ul style="list-style-type: none"> <li>1. Habitat management</li> <li>2. Rhino population management</li> <li>3. Containment and counter-poaching</li> <li>4. Enabling conditions</li> </ul> US\$9.2 million	<ul style="list-style-type: none"> <li>○ Habitat management</li> <li>○ Range availability</li> <li>○ Rhino population management</li> <li>○ Containment and counter-poaching</li> <li>○ Monitoring</li> <li>○ Community engagement</li> <li>○ Enabling conditions</li> <li>○ Capacity building</li> </ul> <p><b>(bond foregone coupon payments)</b> US\$8.0 million</p>	<ul style="list-style-type: none"> <li>○ Range availability</li> <li>○ Monitoring</li> <li>○ Community engagement</li> <li>○ Capacity building</li> </ul> <p>(US\$1.2 million)</p>
2. National/Regional Enabling Conditions	<ul style="list-style-type: none"> <li>○ N/A</li> </ul> US\$0 million	<ul style="list-style-type: none"> <li>○ Enhanced coordination on shared security and research opportunities at National/Regional levels</li> </ul> <p><b>(bond foregone coupon payments)</b> US\$0.5 million</p>	<ul style="list-style-type: none"> <li>○ Enhanced coordination on shared security and research opportunities at National/Regional levels</li> </ul> <p>~ US\$0.5 million</p>
3. Project management and monitoring	<ul style="list-style-type: none"> <li>○ Support for SANParks and ECPTA</li> </ul> US\$0.0 million	<ul style="list-style-type: none"> <li>○ Support for SANParks and ECPTA</li> <li>○ Agency capacity strengthened for procurement, financial management, monitoring and evaluation and environmental and social safeguards</li> </ul> <p><b>(bond foregone coupon payments)</b> US\$0.5 million</p>	<ul style="list-style-type: none"> <li>○ Support to SANParks and ECPTA</li> <li>○ Agency capacity strengthened</li> </ul> <p>US\$0.5 million</p>
Conservation success payment	<ul style="list-style-type: none"> <li>○ N/A</li> </ul> US\$0.0 million	<ul style="list-style-type: none"> <li>○ Conservation success payment to WCB investors (GEF NGI funds)</li> </ul> US\$13.76 million	<ul style="list-style-type: none"> <li>○ Conservation success payment to WCB Transaction investors (ZAR Tranche)</li> </ul> <p>US\$13.76 million</p>
<b>Total</b>	<b>US\$9.2 million</b>	<b>US\$22.76 million</b>	<b>US\$13.56 million</b>

<sup>57</sup> Total project cost in the data sheet excludes the “Conservation Success Payment” which was included in the incremental cost matrix to clarify financing for the project. The total project costs are US\$9.0 million from the foregone coupon payments. For the purposes of the financial and economic analysis, which goes beyond co-financing it considers the additional “risk” premium to bondholders and therefore adds the US\$13.76 million to the calculations.



21. The GEF project will allow consolidation of the gains achieved to date by the SanParks and ECPTA and will provide a solid foundation for the long-term conservation of these Protected Areas. Overall, the GEF project will improve the level of protection afforded to the black rhinos found at these sites and other globally important biodiversity present within the project target areas while complementing the actions of the SA authorities to move towards sustainable development and poverty alleviation for vulnerable households living with degraded natural resources.



## Annex 3: Project Map

