STATE OF CONSERVATION REPORT

FOR

ISIMANGALISO WETLAND PARK (N 914)



## PREPARED IN COMPLIANCE WITH PARAGRAPH 169 OF THE OPERATIONAL GUIDELINES

### BY THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF ENVIRONMENT, FORESTRY AND FISHERIES

**DECEMBER 2024** 

## **IDENTIFICATION OF THE PROPERTY**

Name of property:	iSimangaliso Wetland Park.		
Identification Number:	(N 914).		
State Party and Province:	Republic of South Africa, KwaZulu-Natal Province.		
Criteria:	(vii), (ix) and (x)		

#### 1. Executive Summary of the report

The State of Conservation (SoC) report provide an update on progress of conservation efforts, community engagement, and sustainable development within iSimangaliso Wetland Park in line with Decision 45 of the COM 7B.9.

The iSimangaliso Wetland Park Authority, in partnership with Ezemvelo KZN Wildlife, has implemented proactive measures, capacity-building initiatives, and awareness programs that have significantly reduced deforestation in the Mgobozeleni Swamp Forest. Additionally, high rainfall since 2023 has aided natural forest recovery by reducing the need for direct human intervention. Monitoring of the swamp forest recovery continues.

The State Party, in partnership with the private sector, has supported local communities through the iSimangaliso Wetland Park Authority SMME programme, which offered support to community led enterprises. Enhancements to the Sodwana Bay Craft Market have provided an improved platform for local entrepreneurs. Altogether, approximately 5,000 job opportunities have been created for community members through these initiatives. The State Party is continuing with engagements with local communities, including those of Kwa Mbila and Nibela.

To mitigate water stress in the Lake Sibaya ecosystem, the State Party has maintained a moratorium on forestry licenses and implemented hydrological monitoring, leading to increased water levels supported by recent rainfall. Studies integrating community input and hydrological modelling indicate that reducing forestry activities could further support water recovery in the lake. Ongoing collaborations with the South African Environmental Observation Network (SAEON) and EFTEON have contributed to long-term water resource management plans for the area.

The Integrated Management Plan (IMP) for 2022-2031 prioritizes stakeholder collaboration, emphasizing empowerment and socio-economic benefits for local communities. Through a regular consultation process, the State Party ensures that conservation efforts are inclusive, with continuous support for land claimants and local communities. Sustainable tourism development within designated zones is expected to improve financial sustainability for the park and provide significant benefits to previously disadvantaged communities.

The iSimangaliso Wetland Park Authority is implementing the recommendations by the Panel of Experts to protect the estuarine system's ecological health and maintain the Outstanding Universal Value (OUV) of the Park. A Basic Assessment Report (BAR) for dredging and vegetation clearing

within the Msunduzi River and Beach Channel was completed in 2024 after public consultations. Plans to develop 20 sustainable tourism nodes within the park align with the iSimangaliso Wetland Park Integrated Management Plan (2022-2031). These developments, consisting of both greenfield and brownfield sites, will comply with national impact assessment legislation and the Guidance and Toolkit for Impact Assessments in a World Heritage context.

The State Party remains committed to the protection and sustainable development of iSimangaliso Wetland Park, balancing ecological conservation with community empowerment and responsible tourism.

#### 2. Response to the Decision of the World Heritage Committee

**Decision 45 of the COM 7B.9** of the World Heritage Committee requested the State Party to submit to the World Heritage Centre, by 1 December 2024, an updated report on the following:

#### The World Heritage Committee,

- 2.1. Having examined Document WHC/23/45.COM/7B.Add,
- 2.2. <u>Recalling</u> Decision 44 COM 7B.176 adopted at its extended 44th session (Fuzhou/online, 2021),
- 2.3. <u>Notes</u> the report that the further clearing and burning of swamp forest for subsistence agriculture within the property has been halted, and the State Party support to communities through alternative means and <u>requests</u> the State Party to continue the dialogue with communities to resolve the issue and to report on the progress of implementing the rehabilitation plan;

In the State of Conservation Report submitted to the World Heritage Committee in 2022, the State Party of South Africa informed the World Heritage Committee of a drastic reduction in the swamp forest destruction in part due to the capacitation, awareness and pro-active measures put in place by the iSimangaliso Wetland Park Authority and its partner Ezemvelo KZN Wildlife. The reduction in swamp forest destruction was further aided by increasingly high rainfall events since 2023 in the northern section of the park (Figure 1). The swamp forest recovery progress has been monitored through annual Google images which displays changes in the Mgobozeleni Swamp Forest (the Estuarine Functional Zone).



Figure 1: Map showing the extreme rainfall events in daily scale for the northern region of the iSimangaliso Wetland Park.

The natural water inundation in the swamp forest has reduced the need for direct human intervention (Implementation of the Rehabilitation Plan), allowing the Estuarine Functional Zone to support the natural re-establishment of swamp forest vegetation.



Figure 2: Areas affected by clearing at Mgobozeleni Estuarine Functional Zone (EFZ). .



Figure 3: Google Earth time series plots of vegetation cover recovery rate per hectare (Table 1) over a four-year period in the Mgobozeleni swamp forest area for Site 1 - Site 5.

Table 1: The Mgobozeleni swamp forest has shown a consistent vegetation recovery rate per hectare over a four-year period, with a noticeable increase in vegetation cover each year (see Figure 3 above) and return of swamp forest vegetation, indicating steady ecological recovery.

YEAR	Site 1 (ha)	Site 2 (ha)	Site 3 (ha)	Site 4 (ha)	Site 5 (ha)
2020	15.90	22.04	45.7	18.82	5.16
2021	8.0	14.6	38.2	4.65	2.12
2022	1.16	2.57	2.86	1.83	1.39
2023	0.19	2.1	0.78	1.10	0.35
2024	0.0	0.20	0.46	0.0	0.10

In partnership with the private sector, the State Party supported communities through the SMME programme, led by the iSimangaliso Management Authority. This assistance included capacity-building opportunities, capital support, and enterprise mentoring for the communities.

Additionally, the Sodwana Bay Craft Market was upgraded, enhancing opportunities for local communities by creating a conducive environment for crafters and business people from the local community to trade. Through various programmes coordinated by the authority, a total of 5,000 job opportunities were created for local communities.

In line with the World Heritage Properties Stakeholder Engagement Strategy, dialogue with communities, specifically those under the Kwa Mbila Traditional Council, continued throughout the reporting period to address and resolve ongoing issues.



Figure 4-5: SMMEs supported in the Sodwana Bay Area (adjacent to Mgobozeleni)



Figure 6-7: Sodwana Bay Market showing the prior (pre) (2022) structure to the new (2023) structure



Figure 8-9: Learners from the neighbouring school during the environmental education programme

2.4. <u>Also notes</u> the response by the State Party on the reports of alleged human rights violations against the Nibela Community, which remain under investigation, and <u>requests</u> the State Party to continue its dialogue with the communities living around the property in order to resolve outstanding issues, including to jointly identify solutions that conserve the property and address legitimate livelihood concerns;

Dialogue with the Nibela Community continued through a series of meetings arranged by the iSimangaliso Wetland Park Authority and attended by community members, the South African Police Services, Nibela Community Policing Forum and the Nibela Traditional Council. Key issues raised by the community include the poaching of wildlife and illegal gillnet fishing, along with significant challenges such as high unemployment and entrenched poverty.

The State Party, through the iSimangaliso Wetland Park Authority is implementing various programmes aimed at empowering the community of Nibela. So far, ten Small, Medium and Micro Enterprises (SMMEs) from the Nibela Community have participated in the Expanded Public Works Programme, primarily focusing on alien vegetation removal within the iSimangaliso Wetland Park. Additionally, two local fishing cooperatives are receiving support to establish Small Scale Fishing Cooperatives through the Global Environment Facility (GEF) Small Grants Programme.<sup>1</sup> The cooperatives received grants to purchase equipment, including boats, and training to enhance their income-generating skills to promote sustainable livelihoods.

As a result of engagement with the community, the Nibela Traditional Council has identified land for the establishment of a Community Conservation Area. The project forms part of the GEF 7 projects in iSimangaliso Wetland Park and will strengthen the relationship with the community and contribute to the 30x30 Kunming-Montreal Global Biodiversity Framework (GBF) target.<sup>2</sup> The approach taken by the State Party aligns with Target 3 of the GBF which advocates for conservation of areas of importance for biodiversity and ecosystem functions and services whist recognizing and respecting the rights of indigenous peoples and local communities, including their traditional territories. The State Party continues to seek funding sources to further support the Nibela Community.

https://isimangaliso.com/index.php?option=com\_zoo&task=item&item\_id=2548&Itemid=1294

https://isimangaliso.com/index.php?ltemid=1457

## 2.5. <u>Also requests</u> the State Party to report on the provisions in the new Integrated Management Plan (IMP) for stakeholders, including communities, to be involved in the management of the property;

The World Heritage Convention Act,1999 (Act No.49 of 1999) requires the Management Authority to prepare and implement an Integrated Management Plan (IMP) for the World Heritage property under its control. The iSimangaliso Wetland Park IMP is a ten-year plan (2022-2031), which ensures the integration of conservation, tourism development, and local economic development and empowerment of the historically disadvantaged communities living inside and adjacent to the property.

Chapter 4 of the IMP (Management Goal 3) specifically compel the Management Authority to promote the empowerment of the historical disadvantaged communities living inside and adjacent to the property.

The provisions in IMP for stakeholders' involvement in the management of the property includes:

- The IMP must integrate all the activities by all various stakeholders. ISimangaliso must collaborate with relevant stakeholders like Ezemvelo KZN Wildlife, Landowners, Concessionaires, Traditional/Tribal Authorities, including People and Park structures, in the implementation of the IMP.
- The Management Authority must establish and maintain co-operative relationship with the relevant organs of state and all stakeholders.
- The Management Authority must participate in various municipal planning forums, Integrated Development Planning (IDP)s and Spatial Development Forums (IDF)s.
- Key Actions in Strategic Driver 3: Empowerment and Transformation.
- IMP 2022-2031 Transformation Strategy by the State Party is a regular consultation programme with communities, affected stakeholders, and land claimants under the arrangements of the Co-Management Agreements.
- State Party must maintain relationships and implement effective consultation processes with communities living inside and adjacent to the property, including land claimants.
- State Party must implement a programme of communication, consultation and awareness programmes with communities living in and around the property.
- State Party must conduct information dissemination and conservation awareness programmes with communities living in and around the property, and land claimants.

- State Party must develop Local Area Plans with beneficiary communities providing a framework for the development of each locality.
- State Party must provide support to Land Claimants in the settlement of land claims and the implementation of settlement agreements.
- State Party must participate in activities that will support the settlement of outstanding land claims on the property by the Regional Land Claims Commission.
- State Party must implement land claims settlement and co-management agreements in partnership with the Land Claims Trust.

The State Party therefore confirms that all the above provisions are taken from the new Integrated Management Plan 2022-2031 as reported. The iSimangaliso Authority reports to the focal point of the State Party on a bi-annual basis on the implementation of the Integrated Management Plan.

2.6. <u>Reiterating its concern</u> on the continued water stress in the Lake Sibaya ecosystem, <u>further requests</u> the State Party to maintain a moratorium on issuing licences for commercial forestry, to address unauthorised commercial forestry plantations identified as a key source of water use stress within the watershed of Lake Sibaya, and to report on the hydrological and ecological conditions of Lake Sibaya system;

The State Party is pleased to inform the committee that the moratorium on issuing of licences for commercial forestry in the W70 and W32 catchments as imposed by the Stream Flow Reduction Activities and License Assessment Advisory Committee (SFRA - LAAC) chaired by the Department of Water and Sanitation, is still in place.

The State Party continues to monitor the water levels of Lake Sibaya. Recent photos taken in March and June 2024 have shown that the water levels are slowly increasing around the lake (Figure 10). Albeit slow, progress in increase water levels and the hydrology of the system is closely monitored.

There has been some improvement in average water levels in Lake Sibaya due to prevailing rains. Recently, research has shown this is the result of a combination of below average rainfall and no new plantations of Eucalyptus plantations (Janse van Rensburg et al 2024). The main basin of Lake Sibaya started overflowing into the southern basin between late February and March 2023, and is still rising in height in August 2024 (Figure 11).

South African Department of Water and Sanitation (DWS) (2022) used rainfall data from 1920 to 2020 and noted a significant dry period after 2000, with rainfall well below average. Data shows that low rainfall after 2000 caused natural lake level drops, with afforestation and abstraction further reducing levels by about 1m. Despite afforestation and abstraction, lake levels rose from 1970 to 2000 due to wet conditions but remained 1m below naturalised levels. After 2000, lake levels dropped due to dry conditions and human activities. A reduction in surface water inflow by nearly 50% since 1995 is attributed to low rainfall, afforestation, and reduced groundwater baseflow. The lake's water balance shows a reduction of inflows by only 1 Mm<sup>3</sup>/a due to its deep penetration into the aquifer.

Simulations by the Department of Water and Sanitation (2022) concluded that even under natural conditions, the lake would drop to 16 MAMSL (meters above mean sea level) during severe droughts. Afforestation and abstraction are not the sole causes of low lake levels, and removing afforestation alone would not maintain levels above 17 MAMSL. Reducing afforestation by 50% and stopping lake abstraction, transferring water use to groundwater, could keep levels within 0.4m of natural conditions, dropping to 15.5 MAMSL during drought. Complete removal of afforestation and the reduction in the direct lake abstraction is needed to maintain levels at 16 MAMSL.



Figure 10: Photographs showing the water levels in the southwestern section of Lake Sibaya. The top images, taken in March 2024, display low water levels. The bottom images, taken in June 2024, show a significant increase in lake water levels.



Figure 11: The water levels recording for Lake Sibaya from June 2000 to June 2024.

# 2.7. <u>Welcomes</u> the State Party's plan to establish a buffer zone to the property in an effort to reduce water stress on Lake Sibaya and <u>recommends</u> that the consultation process consider the overall land use planning affecting the property's integrity;

The engagements undertaken bi-monthly with the South African Environmental Observation Network (SAEON) and the Expanded Freshwater, Terrestrial Environmental Observation Network (EFTEON) are providing a platform where the work that has been undertaking to determine an ecological reserve for the water resources in northern KwaZulu Natal and the monitoring of water levels and the mentioning of mitigation strategies will be utilized to feed into the work that has been initiated to develop the iSimangaliso Wetland Park World Heritage Site buffer zone.

In addition, as part of a three-year Water Research Commission project (Project No. C2020/2021-0043), a MODFLOW groundwater model integrated South African Environmental Observation Network's (SAEON) monitoring data and coupled it with the ACRU Agrohydrological surface water model to assess the impact of historical and future land-use and land cover (LULC) changes under different climate scenarios for Lake Sibaya.

For Lake Sibaya, a key advancement was incorporating dynamic historical LULC data and spatiotemporal climate variability using corrected climate products. Future LULC scenarios were developed with community input and simulated in the hydrological models. Scenarios included replacing commercial timber plantations with alternatives, maintaining the status quo, and eliminating forestry. The analysis revealed that without plantation forestry, lake levels would have been higher, avoiding the drought threshold (Figure 12).



Figure 12: Comparison of past to present and future lake level trends for the "no forestry" LULC scenario relative to the "status quo" LULC, under CMIP6 bias correct wet and ERA5 + 10% wet future climate storylines.

The study used three future climate storylines: Dry\_LER (worst-case), Wet\_LER (slightly wetter), and Wet\_FER (best-case). Under Dry\_LER with no forestry, the 2020 water crisis would be delayed until 2040. Under Wet\_LER, it would be delayed until 2050, with recovery to 19.0 m MAMSL by 2050 under Wet\_FER. Results highlighted the significant impact of future climate, with extreme events needed for recovery for Lake Sibaya.

The study for Lake Sibaya found that all scenarios under FEL climate showed declining lake levels but replacing 50% of forestry with dryland crops or marula had a more favourable impact (Figure 13). Under Wet\_FER, all scenarios indicated recovery, with the status quo and bush encroachment being the least favourable.



Figure 13: Comparison of 50% increase in bush encroachment (thicket) future scenario against status quo using for C6Wet, C6Dry and ERA5Wet future climate storylines.

2.8. <u>Also notes</u> the conclusion and recommendations of the report of the independent Panel of experts, tasked to review the impact of the January 2021 artificial breaching of the mouth of the St. Lucia Estuary and to develop guidelines for future management of the estuary so as to safeguard the property's Outstanding Universal Value (OUV), and <u>urges</u> the State Party to ensure that any intervention in the St. Lucia Estuary would be aligned with the Panel recommendations and subject to relevant Environmental Impact Assessments conducted in conformity with the Guidance and Toolkit for Impact Assessments in a World Heritage context, and <u>further requests</u> the State Party to revisit the recommendations of the GEF-funded study;

The independent panel of experts, appointed to review iSimangaliso Wetland Park's decision to breach the mouth of Lake St Lucia, submitted its final report with recommendations to the Minister on 28 March 2022. In their review, the panel considered several significant studies, including the GEF 5 studies on the St Lucia estuary. These studies offered key recommendations to address ecological challenges and enhance the estuary's health, which were subsequently incorporated into the panel's final assessment. The Panel's recommendations address directly the issues contained in the Terms of Reference of the Panel as well as several contextual issues which were seen as critical to creating an enabling environment for the successful

implementation of the Panel's recommendations. All the activities are aligned with the Panel's recommendations and the relevant Environmental Impact Assessment will be undertaken in conformity with the World Heritage Site context.

On the recommendations for the Lake St Lucia estuarine system received from the independent panel of experts appointed by the Minister on 28 March 2022, specific attention was directed to addressing issues within the St Lucia estuarine system. These recommendations included investigating the Msunduzi River and Beach Channel within iSimangaliso Wetland Park due to back flooding affecting the surrounding community. In response, the State Party undertook a Basic Assessment Process to evaluate the situation. A Basic Assessment Report (BAR) was distributed to interested and affected parties (including the World Heritage Committee) on February 16, 2024, inviting public participation and comments within a 30-day period as part of the Public Participation Process (PPP). During this period, significant input was received which necessitated a second round of public participation. Consequently, the revised amended BAR underwent another 30-day public participation process from May 27, 2024, to June 28, 2024. The final BAR was submitted to the competent authority on July 15, 2024, for environmental authorization concerning the proposed clearing of vegetation and dredging of the Msunduzi River and Beach Channel within iSimangaliso Wetland Park.

2.9. <u>Further noting</u> that the proposal to develop 20 tourism related projects within the property, which would be subject to relevant Environmental Impact Assessments conducted in conformity with the Guidance and Toolkit for Impact Assessments in a World Heritage context, <u>requests moreover</u> the State Party to assess the cumulative impacts of these tourism developments on the property's OUV including its conditions of integrity, provide evidence that justifies the compatibility of the developments with the overall sustainable tourism strategy for the property;

It is in terms of the above paragraph that State Party is informing the World Heritage Committee, of the iSimangaliso Authority's intention to develop about 20 nodes within the property. The development nodes are shown in Figure 14, of these some are green fields development nodes (3, 4, 7, 10, 12, 14, 15, 16, 19 St Lucia River site) and majority are brown fields development nodes (1, 2, 5, 6, 8, 9, 11, 12, 13, 17, 18, 19 Siyabonga Restaurant, 20). The green fields development nodes multiple inpact assessment legislation and the Guidance and Toolkit for Impact Assessments in a World Heritage context. In line with these legislation and Guidance and Toolkit, a cumulative impact assessment will be

conducted within the property to ensure thorough adherence. The identified development nodes are in line with the iSimangaliso Wetland Park Integrated Management Plan (2022-2031) and associated zonation plan, the development nodes will not adversely affect the property's Outstanding Universal Value (OUV) over which the Park was listed. The development nodes (both existing and proposed) are located within the Controlled – Terrestrial Zones and the Restricted Terrestrial Zones both of which allow for the development of tourism accommodation facilities subject to the Development Node Framework.

The identified developments seek to improve the property's financial sustainability and improvement of previously disadvantage communities through sustainable tourism.



Figure 14. Showing the locations of the identified development envelops

2. 10. <u>Further welcomes</u> the State Party's commitment to ensure that adequate national level impact assessment for any extractive industry development proposal is conducted in conformity with the Guidance and Toolkit for Impact Assessments in a World Heritage context, and <u>furthermore requests</u> the State Party to keep the World Heritage Committee informed of any developments in line with Paragraph 172 of the Operational Guidelines; The State Party is committed to complying with Paragraph 172 of the Operational Guidelines.

- 2.11. <u>Finally requests</u> the State Party to submit to the World Heritage Centre, by 1 December 2024, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 47th session.
- 3. Other current conservation issues identified by the State Party which may have an impact on the property's Outstanding Universal Value

None

4. In conformity with Paragraph 172 of the Operational Guidelines, describe any potential major restorations, alterations and/or new construction(s) intended within the property, the buffer zone(s) and/or corridors or other areas, where such developments may affect the Outstanding Universal Value of the property, including authenticity and integrity.

None

5. Public access to the state of conservation report

The State Party has no objection against the uploading of the State of Conservation report on the World Heritage Centre's State of Conservation Information System, thereby providing public access towards the report.

6. Signature of the Authority

Dr Tsepang Makholela

Deputy Director-General (Acting)– Biodiversity and Conservation: Department of Environment, Forestry and Fisheries

Date: 29/11/2024