WORKING FOR WETLANDS

20 Years of Wetland Restoration in South Africa

environment, forestry & fisheries

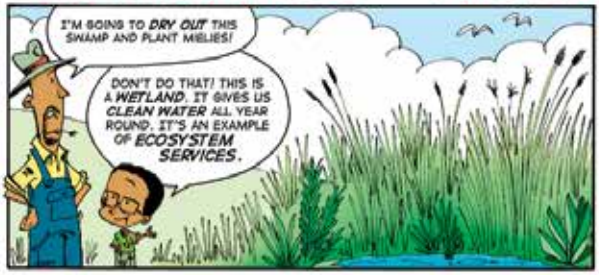
Department:
Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

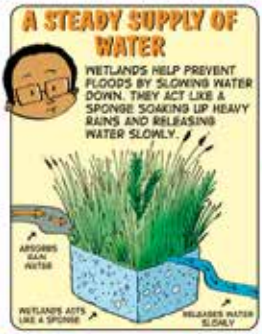
2030 NDP

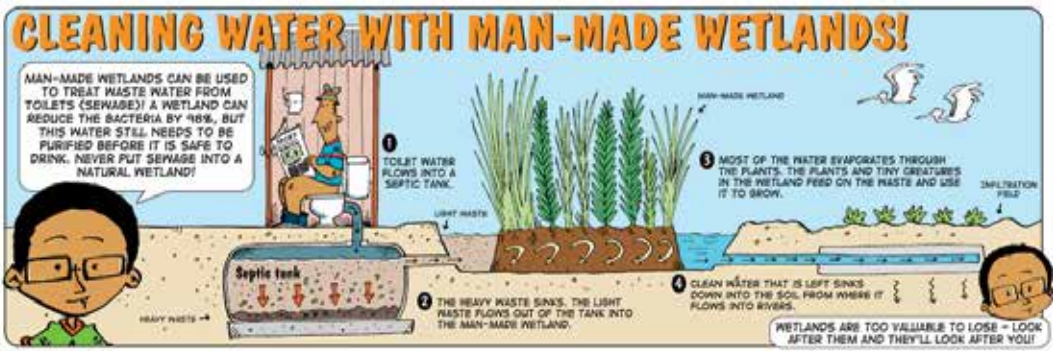
Working for Wetlands

Ramsar Convention on Wetlands

ECOSYSTEM SERVICES
WETLANDS - WORKING FOR YOU!







WHAT IS A WETLAND?

A wetland is defined in the National Water Act (Act 36 of 1998) as the land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil.

STATUS OF WETLANDS IN SOUTH AFRICA

Wetlands make up only 2.4% of the country's area, but 48% of wetland ecosystem types are critically endangered. South Africa has lost approximately 50% of the original wetland area.

Approximately 300 000 wetlands remain, making up only 2.4% of South Africa's area. Of the 791 wetland ecosystem types in South Africa, 48% are critically endangered, 12% are endangered, 5% are vulnerable, and 35% are least threatened, making wetlands the most threatened ecosystems of all in South Africa. Over 70% of South Africa's wetland ecosystem types have no protection and only 11% are well-protected.

RAMSAR SITES IN SOUTH AFRICA

- Barberspan, North West.
- Blesbokspruit, Gauteng.
- Kleinmond Estuarine, Western Cape.
- Dassen Island Nature Reserve, Western Cape.
- De Hoop Vlei, Western Cape.
- De Mond, Western Cape.
- Dyer Island Nature Reserve, Western Cape.
- False Bay Nature Reserve, Western Cape.
- Kgaswane Mountain Reserve, North West.
- Kosi Bay, KwaZulu-Natal.
- Lake Sibaya, KwaZulu-Natal.
- Langebaan, Western Cape.
- Makuleke, Limpopo.
- Natal Drakensberg Park, KwaZulu-Natal.
- Verlorenvlei, Western Cape.
- Ndumo Game Reserve, KwaZulu-Natal.
- Ntsikeni Nature Reserve, KwaZulu-Natal.
- Nylsvley Nature Reserve, Northern Province.
- Orange River Mouth, Northern Cape.
- Prince Edward Islands, Western Cape.
- Seekoeivlei Nature Reserve, Free State.
- St. Lucia, KwaZulu-Natal.
- Turtle Beaches/Coral Reefs of Tongaland, KwaZulu-Natal.
- uMgeni Vlei Nature Reserve, KwaZulu-Natal.
- Verloren Valei Nature Reserve, Mpumalanga.
- Wilderness Lakes, Western Cape.

ECOSYSTEM THREATS HARBOURING THE FUTURE OF OUR WETLANDS

Above: Mining, pollution and excess nutrients.

Above: Wetland soil erosion.

Above: Flood attenuation on the country's national roads.

Above: Wetland pollution threatens water quality.

Above: Invasive alien plants.

Above: Wetland pollution from drainage pollutants.

CELEBRATING 20 YEARS OF WETLANDS RESTORATION IN SOUTH AFRICA

The restoration of wetlands began in 2000 in an effort to protect, promote their wise-use and rehabilitate them. Since 2004, the Department of Environment, Forestry and Fisheries (DEFF) has invested over R1.3 billion in the rehabilitation of over 1 500 wetlands across the country. This has also resulted in the generation of 37 000 jobs through the Extended Public Works Programme (EPWP).

The protection and promotion of wise-use of our wetlands has been achieved through:

- Compliance and enforcement support;
- Advocacy, education, and,
- Extension support.

While the restoration and rehabilitation has been achieved through:

- Erosion control – with "hard" and "soft" interventions;
- Bio-engineering;
- Invasive alien plants clearing;
- Revegetation;
- Floating wetlands; and,
- Constructed wetlands (emerging).

WETLANDS: WHY SHOULD I CARE?

People often equate wetlands with wasteland, a place to be drained, filled in, burnt off or re-purposed. In fact, scientific studies show that 64% of the world's wetlands have disappeared since the 1900s.

Wetlands ensure fresh water for all

Less than 3% of the world's water is fresh, and most of that is frozen. Yet every human requires 20-50 litres of water a day for basic drinking, cooking and cleaning. Wetlands provide our water needs and help replenish the groundwater aquifers that are an important source of fresh water for humanity.

Wetlands guarantee our food supply

Human beings consume 19kg of fish each year on average. Most commercial fish depend on coastal wetlands for part of their life cycle. Rice, grown in wetland paddies, is the staple diet of nearly three billion people, and accounts for 20% of the world's nutritional intake.

Wetlands purify and filter harmful waste from water

Some of the pollutants from pesticides, industry and mining, including heavy metals and toxins are absorbed by wetland sediments, plants and marine life. Almost two billion people in Asia and 380 million Europeans depend on groundwater aquifers for their water supply.

Wetlands create sustainable products and livelihoods

Sustainably managed wetlands provide a range of resources for people's livelihoods, including timber for building, vegetable oil, medicinal plants, stems and leaves for weaving and fodder for animals. The Working for Wetlands Programme has through the EPWP, improved the livelihoods of young South African men and women.

PROTECTION, SUSTAINABLE USE AND REHABILITATION OF WETLANDS

Working for Wetlands is a joint initiative of the Departments of Environment, Forestry and Fisheries (DEFF), Department of Human Settlements, Water and Sanitation (DHWS) previously known as Water Affairs (DWA) and Agriculture, Forestry and Fisheries (DAFF). This illustration of cooperative governance and partnerships comes to life through projects that focus on the protection, promotion of sustainable use and rehabilitation of wetlands in a manner that maximises employment creation, supports small businesses and transfers relevant and marketable skills to participants. Wetlands are our natural assets and natural infrastructure able to provide a range of products, functions and services, free of charge, but not free of care.

Despite being high-value ecosystems, wetlands make up only a small fraction of the country's landscape. Once considered valueless wastelands that needed to be converted to other uses in order to improve their usefulness to people, many governments around the world, including South Africa, were still providing farmers with incentives to convert their wetlands for agriculture as recently as the 1970s.

Estuarine and inland wetlands are under higher levels of threat than ecosystems in other realms. In addition, because these ecosystem types are relatively small, they are considered to be at greater risk of collapse than large, widespread types. Approximately 99% of estuarine area and 88% of wetland area is threatened. Across the realms, estuaries and inland wetlands are also the least protected ecosystem types, with less than 2% of their extent in the Well-Protected category.

A pivotal response by the government to this state of affairs was the establishment in 2000 of a national wetland rehabilitation programme, known as Working for Wetlands. The decision to create such a programme came about through the convergence of several driving forces. It drew on objectives in environmental, biodiversity, water and agricultural policies, and capitalised on the growing recognition that wetland degradation is not necessarily permanent, and that it is possible to reinstate at least some ecosystem services through rehabilitation.

A foundation was provided for the creation of the programme, in the form of another pioneering government initiative - the Working for Water (WfW) programme. Since 1995, the Working for Water programme had been engaged in removing thirsty invasive alien plants that posed a threat to the country's water security, agricultural productivity and biodiversity. The non-governmental Mondi Wetland Project recognised that the labour-intensive model pioneered by Working for Water would be equally suited to the activities involved in rehabilitating wetlands, and lobbied government to begin experimenting in this direction.

Perhaps the most significant factor enabling the emergence of Working

for Wetlands was the availability of government funds earmarked for employment creation and poverty reduction, through the EPWP. This government wide initiative was set up to draw significant numbers of unemployed people into the productive sector of the economy, gaining skills while they work and increasing their capacity to earn income elsewhere. The ability to turn wetland rehabilitation into a labour-intensive process unlocked a considerable amount of financial resources and political support that was previously inconceivable to cash-strapped government departments responsible for biodiversity conservation and natural resource management.

Thus, Working for Wetlands pursues its mandate of wise use and wetland rehabilitation in a manner that maximises employment creation, supports small emerging businesses, and transfers skills to its beneficiaries. In line with EPWP norms, the programme targets those groups most excluded from the mainstream economy, with particular emphasis on women, youth and people with disabilities.

Above: Approximately 99% of estuarine area and 88% of wetland area in the country are threatened.

OBJECTIVES

Working for Wetlands' scope of work is based on key interlinked concepts that ensure effective and sustainable wetland rehabilitation:

- Wetland Protection, Wise Use & Rehabilitation;
- Skills and Capacity Development;
- Co-operative Governance & Partnerships;
- Knowledge Sharing and;
- Communication, Education & Public Awareness.

Combining environmental and social outcomes, Working for Wetlands weaves together the wise use of wetlands with employment creation and poverty alleviation. Using the rehabilitation of wetlands as a vehicle to achieve these outcomes, the programme follows an approach that centres on cooperative government and partnership creation with landowners, communities, civil society and the private sector.

LEGISLATIVE FRAMEWORK CONCERNING WETLANDS

The South African government policy on wetlands recognises that, in order to be truly effective, strategies for wetland conservation need to include a combination of proactive measures for maintaining healthy wetlands, together with actions to reverse past degradation. This latter aspect forms the core business of the government-led wetlands programme. Section 24 of the Constitution of South Africa states that, 'Everyone has the right to an environment that is not harmful to their health or well-being, and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation, promote conservation, and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development'.

- The 1984 Conservation of Agricultural Resources Act became the first substantial legal instrument for protecting wetlands and remains in force to this day.
- Principles such as the 'duty of care', enshrined in section 28 of the National Environmental Management Act, require that landowners must take reasonable measures to prevent, minimise and rectify environmental degradation on their properties. Working for Wetlands offers technical expertise to landowners and collaborates with local partners to set rehabilitation objectives with the intention of improving the integrity and functioning of ecosystems. Rehabilitation measures address both the causes and effects of degradation.
- The National Environmental Management Act 107 of 1998 (NEMA), the National Water Act 36 of 1998 (NWA) and the environmental provisions of the Mineral and Petroleum Resources Development Act 28 of 2002 (MPRDA) are meant to ensure that urban and commercial developments do not significantly affect or alter the natural state and function of wetlands.

The 1984 Conservation of Agricultural Resources Act is the first and longest running legal instrument protecting wetlands.

PROJECTS

1. Wetland Rehabilitation

The benefits of wetlands rehabilitation include:

- Improved livelihoods,
- Protection of agricultural resources,
- Enhanced biodiversity,
- Cleaner water,
- Reduced impacts from flooding, and
- Sustained base-flows in rivers.

The 2018 National Biodiversity Assessment reported that rivers, wetlands and their catchment areas are crucial ecological infrastructure for water security, often complementing built infrastructure, but the benefits of some of these ecosystems are currently compromised by their poor ecological condition. Water security can be improved through integrated management of natural resources in Strategic Water Source Areas (SWSAs) and other key catchments. SWSAs make up only 10% of South Africa's land area but deliver 50% of all surface water, supporting half of South Africa's population and nearly two-thirds of its economy. Only 12% of the extent of SWSAs falls within protected areas. The consequences of wetland loss include:

- Diminished water security,
- Desertification,
- Reduced food security,
- Reduction in biodiversity,
- Lost livelihoods, and
- Increased vulnerability to natural disasters, especially floods and droughts.

Above: Wetlands and their catchment areas like the Mutale tributary are crucial ecological infrastructure for water security.

With climate change predicted to change rainfall patterns, wetlands will play a more important role than ever before in mitigating the impacts of floods and droughts. All rehabilitation interventions therefore, aim to improve the condition and functioning of wetland ecosystems, and address both causes and effects of degradation.

The typical rehabilitation process activities include:

- Building concrete, earthen or gabion structures to arrest erosion, trap sediment and re-wet drained wetland areas;
- Plugging artificial drainage channels;
- Addressing other causes of degradation, such as poor agricultural practices and invasive alien plants;
- Plant propagation, re-vegetation and bio-engineering;
- Building boardwalks, bird hides and interpretive signboards to enhance the recreational, tourism and educational value of rehabilitated wetlands;
- Concluding contractual agreements with landowners to secure the rehabilitation work, prevent further degradation of wetlands and influence land use practices; and
- Providing community members with part-time employment and training to monitor completed rehabilitation once the work is completed.

2. Training and Enterprise Development

Working for Wetlands, in partnership with the Department of Public Works, provides training and business support to Small, Medium & Micro Enterprises (SMMEs) utilised in its work. Contractors are also registered with CIDB. Since its inception, the Programme has been providing accredited and non-accredited training to its participants focusing on occupation-specific and other marketable technical, business and life skills. In 2011, the Department of Higher Education and Training called for a move away from single unit standards and non-accredited training.

3. Capacity Building

Working for Wetlands is a people-intensive programme. Besides imparting vocational skills, life skills provided to project workers include literacy, primary health, personal finance and HIV/AIDS awareness. Education and awareness projects influence the programme's diverse stakeholders through activities ranging from field visits with decision makers to the distribution of resource material.

4. Research and Planning

Working for Wetlands previously housed the National Wetlands Inventory (NWI) project which aims to map the location, extent and condition of South Africa's wetlands. The NWI data was used and improve on the National Freshwater Ecosystem Priority Areas (NFEPA) project. The project identified a national network of freshwater conservation areas and explored institutional mechanisms for their conservation. NFEPA takes forward the implementation of the Cross-Sector Policy Objectives for the conservation of Inland aquatic ecosystems.

5. Wise Use

Working for Wetlands has learned many valuable lessons during the course of rehabilitating hundreds of wetlands. One of the most significant of these is that good stewardship, in the form of ownership of and engagement with the rehabilitation process by landowners and wetland users, is a vital ingredient for successful and sustainable rehabilitation. As a result, the programme has over the years been investigating more holistic approaches to improving the sustainability of rehabilitation work, while still allowing rehabilitated wetlands to be used to generate benefits for people. In tackling this challenge, the programme partnered with the Wildlife and Environment Society of Southern Africa (WESSA), previously home of the Mondi Wetlands Programme, which has decades of accumulated experience in working at ground level.

Another non-governmental organisation, the Association for Water & Rural Development (AWARD), which has extensive experience in testing approaches to community-based natural resource management, was also roped in. The first "Wise Use" pilot project launched by these partners focused on the existing Working for Wetlands rehabilitation project in communally-owned land in the Mutale River catchment in Limpopo. AWARD noted that accelerated degradation is often typical in areas where surrounding communities depend heavily on wetlands for grazing, food crop production and thatching material. There was, therefore, a need to focus on the causes of degradation and not just on the symptoms, such as soil erosion. In seeking to understand and support the delicate balance between use and protection, wise use focusses on local - level custodianship and stewardship in communities.

Above: The Department's Working for Wetlands programme collaborated with a number of NGOs on the rehabilitation of wetlands such as the Mutale River catchment in Limpopo.

PROJECT PROFILE: KGASWANE MOUNTAIN RESERVE

The Kgaswane Mountain Reserve's primary ecological management objective is to deliver continuous and sustainable flow of good quality water. It hosts various wetland types amongst other peatland and mires with sphagnum moss (a special plant). Peatlands host a third of terrestrial carbon and 10% of global fresh water. Sphagnum moss only occur in a few places in South Africa. The main problem that the wetland encounters is erosion and sedimentation (likely from old farming practices such as over grazing and too much burning of the veld, as well as some road infrastructure). The Department of Environmental Affairs' role is to provide rehabilitation works, training and research. The DEFF has made the following interventions:

- Training and capacity building,
- Rehabilitation Planning,
- Research support, and
- Rehabilitation measures (types: silt fences, weirs and chutes).

The purpose is to trap sediment, arrest erosion and rewet the wetland. The interventions are working especially in trapping sediment and erosion control. Through this rehabilitation of the wetland, Working for Wetlands has built academic relationships with tertiary students. WfW employs two specialists with an interest in academic research and student development.

"The relationship at Kgaswane is not only to support the Agricultural Research Council and related students in their Water Research Commission project but also to measure the success of our interventions in order to determine our success, learn from our mistakes and apply lessons learned in our planning and implementation nationally," said Dr Grundling, who is a specialist within DEFF.

Kgaswane Mountain Reserve is a nature reserve of 5 300 hectares consisting of veld and mountains run by the North West Parks and Tourism Board and is located in Rustenburg on the northern slopes of the Magaliesberg.

Above: Doctors Farai Tererai (left) and Piet-Louis Grundling (middle) are specialists employed by the department. They are seen here at Kgaswane Wetland assisting researchers.

WETLAND PROGRAMME PARTICIPANT TESTIMONIAL

Above: Kgaswane Mountain Reserve Researcher, Ms Lufuno Nemakhavhani.

Ms Lufuno Nemakhavhani is an Environmental Consultant who holds a Masters Degree in Environmental Management from the University of Free State.

How has working with DEFF's Working for Wetlands assisted you in your field of study?
The Working for Wetlands Programme has implemented some rehabilitation structures on site and made it easier for me to work on structures and have information easily accessible.

What are you hoping to find or prove from your research?
I am hoping to find out if the wetland rehabilitation structures that have been put in place at the Kgaswane Mountain Reserve are functional and serving their purpose.

What made you interested in Wetlands?
I work with wetlands in my current job and have grown interest in learning more about them and how to conserve them.

Why do you think wetlands are important?
They are important because they provide ecological services to us and they store up water which is important in South Africa which is largely a water scarce country.

Would you recommend your field of study to the youth out there?
Yes, because it is a field that is crucial in our country and we need more researchers to help protect our wetlands.

What does your research on wetlands entail?
It is the assessment of wetland rehabilitation interventions using hydrology, geomorphology and vegetation in Kgaswane Mountain Reserve.

PROJECT PROFILE: PIETERSIELIESKLOOF WETLAND REHABILITATION

The Agulhas Plain is as an area of high biological diversity. An impressive number of more than 1 750 plant species are found on the Plain and many of these plants only occur there.

The Agulhas Plain supports one of the largest areas of lowland fynbos and renosterveld habitats in the world. A remarkably rich invertebrate fauna is found in the area. The whole of the Agulhas Plain is considered an Important Bird Area (IBA) and comprises three IBAs namely the Overstrand, Overberg Wheatbelt and De Hoop Nature Reserve. Sixteen species of frogs have been recorded in and around the Agulhas Plain, of which three are threatened. These are Amietrophrynus pantherinus (the endangered Western Leopard Toad), Microbatrachella capensis (the critically endangered Micro Frog) and Xenopus gilli (the endangered Cape platanna). Agulhas is home to at least ten indigenous fish species, of which seven are marine and the remainder freshwater.

A number of sub-catchments in the Agulhas area have been identified as Freshwater Ecosystem Priority Area fish sanctuaries, Fish Support Areas (FSAs) or catchments important for fish migration. Working for Wetlands rehabilitated the degraded Pietersieliesklоof wetland system on the Agulhas Plain using an innovative rehabilitation technique for peat soils. The Pietersieliesklоof wetland system is a tributary of the Nuwejaars River, joining with the Nuwejaars River to the east of Jan Swartskraal, and to the west of Kastaiingkloof. The system is located in quaternary G50B, and the Southern Folded Mountains aquatic ecoregion within the Overberg District Municipality, Western Cape.

Above: This is what the Pietersieliesklоof wetland system looked like after it was rehabilitated by the Working for Wetlands team.

The Pietersielieskloof tributary rises as numerous branched mountain streams on the Bredasdorp Mountains.

The mountain streams flow into typically unchannelled valley-bottom wetlands as they flow out of the mountains onto flatter ground. These wetlands contain deep peat stores over which wetland vegetation grows, primarily palmiet (Prionium serratum), restios, sedges (such as Juncus lomatophyllus), leucadendrons, Psoralea pinnata, Pennisetum macrourum and Berzelia species. Sanctuary is provided for Sandelia capensis (Cape kurper), Pseudobarbus species (redfins), and Galaxias species (galaxiid).

Fish found in the Pietersielieskloof wetland was identified as the critically endangered and this includes the endemic red-finned minnow. This substantially increases the risk factors and rewards of the rehabilitation of these wetlands.

The unchannelled valley-bottom wetlands form part of the broad Nuwejaars wetland complex. The Nuwejaars and many other wetlands in the Agulhas National Park have been identified as priority wetlands within the Agulhas Plain as palmiet wetlands are only found in South Africa.

A combination of inapt catchment land use and wetland degradation by invasive alien plants, anthropogenic draining and road crossings has led to erosion and the subsequent rapid loss of peat from the Pietersielieskloof system over the past 12 years.

Significant erosion occurred in 2006, and since then, many of the eroded areas have been invaded by alien vegetation. The wetlands have almost entirely lost their unchannelled valley-bottom characteristics. Head-cut erosion caused the wetland to drain and prevent the migration of fish. The Working for Wetlands project arrested erosion by building various structures, such as chute-drop inlets, to restore the wetland and regain ecosystem functions such as water and carbon storage, base flow maintenance and biodiversity conservation. Wetland rehabilitation is often constrained by poorly developed methodologies and associated high costs.

Above: A chute-drop was constructed from geo-cells and concrete to prevent further erosion of the Pietersielieskloof wetland system.

This project presented a balance between innovation and cost optimisation. Traditionally, huge and costly concrete or gabion structures with large construction footprints are used to address massive erosion gullies. Such big structural interventions take long to construct and cause soil disturbance which provide alien invasive plants an opportunity to invade the area.

This project applied the highly innovative softer and low-cost intervention of chute-drop inlets to address big erosion head-cuts, with great success. Unique methodologies were applied from planning and implementation, to monitoring and evaluation.

Large interventions such as weirs are known for fragmenting freshwater habitats, but this intervention maintained continuity.

In light of limited resources for wetland rehabilitation and conservation, it is envisaged that the experiences from this project may be applied elsewhere in the country in order to expand the Working for Wetlands rehabilitation footprint.

This project made a valuable contribution to the environment and community alike. With an investment of about R2, 8 million, it contributed to the protection of the endemic Palmiet peatland system and its associated rich biodiversity; made a significant contribution to the future survival of the red-finned minnow; base flow maintenance was restored to the benefit of the local communities towards Elim as well as farmers by protecting local water storage; sustained water security contributes to ecotourism in the Agulhas National Park; and climate change effects are mitigated with the restoration of the carbon storage capacity.

About 44 people from the Elim and related communities were employed and provided with training during the 7 898 person days of this project. The return on investment in terms of improved water security to the people and the land, and contributing to the prevention of local extinction of the red-finned minnow is priceless.

PROJECT PROFILE: KLEINSPAN WETLAND

The Kleinspan Wetland, which is about 481 ha, is located in the Mkuze River floodplain within the 6 086 000 ha Mkuze River catchment area with its headwaters in the Drakensberg escarpment near the town of Vryheid. The Kleinspan wetland is part of the larger Mkuze river floodplain which is a highly dynamic complex of pans, floodplains, as well as both channelled and unchannelled valley bottom wetlands. The wetland is located within the iSimangaliso Wetland Park world heritage site. Although conservation is the focus of the iSimangaliso Wetland Park, livestock grazing is still permitted inside the Park, as well as harvesting of reeds. Economic activity in the catchment is diverse and includes rain fed subsistence farming, irrigation, afforestation and eco-tourism. The wetland has been extensively modified for agricultural purposes. These agricultural practices

degraded the wetland as it was drained and fragmented with berms preventing flooding of a large part of the wetland surface. A berm is a mounded hill of dirt constructed for directing the flow of water across a landscape. In addition, the migration of the Mkuze River channel may cause incision in the Msunduze stream which flows through Kleinspan, further isolating the wetland from floods.

Objectives set to rehabilitate the Kleinspan wetland include to:

- Breach the earthen partitioning berms to reinstate the natural flow of floodwaters across the wetland surface.
- Plug drains and infill excavated areas to prevent desiccation.
- Prevent concentration of flow in existing furrows once berms are removed.
- Deactivate incision within the Mkuze/ Msunduze stream.
- Promote overbank flow from the Mkuze/ Msunduze stream into Kleinspan wetland.

The Mkuze River system (river, floodplain and pans) is an important supplier of freshwater to Lake St Lucia. Due to its environmental heterogeneity, the floodplain supports an abundance of both animal and plant life that local communities utilize for natural resources such as reeds, firewood, building material, medicinal plants, fish and other products that are vital to many households. The wetland is also being used as a source of water for livestock watering and irrigation of cultivated fields since the majority of the households in the area practice subsistence arable and cattle farming. This wetland provides an ideal area for livestock grazing, especially in winter when other areas are drier. The net result of the interventions in Kleinspan Wetland is that a large area of wetland is rehabilitated and secured from further degradation caused by streamflow modification. The Working for Wetlands intervention measures have enhanced the value of the system in terms of natural resources, cultural and tourism significance all vital for rural life in a water scarce country.

Above: The Kleinspan wetland located near the Mkue river floodplain has been extensively modified for agricultural purposes.

WETLAND PROGRAMME PARTICIPANT TESTIMONIAL

Above: Former Working on Wetlands KwaZulu-Natal Provincial Coordinator, Ms Mbali Goge.

Ms Mbali Goge, former Working for Wetlands KwaZulu-Natal Provincial Coordinator says she has found the Working for Wetlands experience very rewarding and feels proud to have been part of a programme that strived to help improve water security in rural communities.

"From an ecological perspective, when we fix wetlands, we are helping the environment increase its ability to store water in the soil by itself. And for communities that rely on the land either through fetching water from the rivers, irrigation or livestock grazing, we have actually made a difference by fixing their wetlands which can now provide water directly to the people.

"Wetlands have many benefits including holding water for longer. When wetlands are wetter, they provide other benefits. Communities are now able to harvest natural material to make mats and baskets. During the flooding season, people fish in the wetlands where they sometimes find pockets of fish. Wetlands have also helped communities improve grazing in the summer and winter seasons," she said.

Ms Goge also adds that the programme has helped employ many community members and has also opened doors for women in the area.

"From a financial perspective, the programme has enabled some of the communities to achieve quite a bit. With the income people are making from our projects, they are able to afford a better education and lifestyle for their children and so many have built houses since the project started," she said.

WETLAND PROGRAMME PARTICIPANT TESTIMONIAL

Above: Working for Wetlands beneficiaries, starting from left: Mmapula Mmatsoku, Tumi Mekgoe, Betty Bambo, Azwindini Muswede, Sister Mundoka, Pertunia Ratshitshi, Beauty Makula and Brenda Nemasetani.

Ms Cynthia Mashele from Giyani, Limpopo is a safety representative at the Colbyn wetland project. She has been doing work for Working for Wetlands since 2014.

How has Working for Wetlands changed your life?

This programme has helped me to put food on the table for my two children. I was unemployed for a long time before I joined this programme and it has completely changed my life. I would encourage other women to seek out such opportunities just like I did through my local municipality. I work with other women on this programme which means we are able to share ideas and support one another.

What are your future aspirations?

This programme has taught me that nothing is impossible. On a daily basis, we handle bricks, cement and concrete and we are mostly women. I dream of becoming a businesswoman in construction because Working for Wetlands has shown me that it is possible for a woman to lead in a previously male-dominated field.

Above: Working for Wetlands beneficiary, Ms Cynthia Mashele.

EMPLOYMENT OF PARTICIPANTS OF EPWP

The participants of the programmes should preferably be non-working individuals from the most vulnerable sections of disadvantaged communities. In order to spread the benefits as broadly as possible in the community, a maximum of one person per household should be employed, taking local circumstances into account. Programmes have set participation targets for employment with respect to single and female-headed households, women, youth, people with disabilities, households coping with HIV/AIDS, people who have never worked, and those in long-term unemployment.

The EPWP proposed targets are:

- 58% women,
- 65% youth from 18 to 35 years of age; and
- 2% disabled as well as
- 80% local people

SELECTION OF WORKERS

The local community, through all structures available, must be informed of and consulted about the establishment of any EPWP Project. Members of the community who are economically active and who form part of the targeted groups will be given an opportunity to apply for work. Preference must be given to the targeted groups in selecting workers. In addition, the following criteria are suggested to help target the poorest of the poor:

- People who come from households where the head of the household has less than a primary school education;
- People who come from the household where there is no income at all;
- People who come from households that have less than one full time person earning an income;
- People who come from households where subsistence agriculture is the source of income. Persons receiving a state pension or assistance from a social security system may not be disadvantaged from employment in the project. Persons under eighteen years of age may not be employed on EPWP.

Above: Working for Wetlands beneficiaries working on the Mutale River Catchment in Limpopo.

WORLD WETLANDS DAY

02 Feb

CELEBRATING WETLANDS

Wetlands are areas such as swamps and marshes, where water saturates the soil, and conditions are favourable to plants which are adapted to anaerobic (low oxygen) soil conditions. Wetlands are important ecosystems as they provide a number of benefits, not only to the natural environment, but also to our livelihoods. In urban areas, wetlands improve water quality and serve as reservoirs, containing run-off from roads, drains, roofs and storm water drains. Wetlands also help to reduce and prevent urban flooding.

WORKING FOR WETLANDS

The Working for Wetlands programme of the Department of Environment, Forestry and Fisheries (DEFF) focuses on the rehabilitation, wise use and protection of wetlands in a manner that maximises employment creation, supports small businesses and transfers relevant and marketable skills to beneficiaries.

Through the Working for Wetlands programme, government invested more than R1.2 billion in the rehabilitation of 1 500 wetlands countrywide between 2004 and 2019. This has improved or secured the health of more than 70 000 hectares of wetland area, and provided 36 000 employment opportunities.

ON THE RIGHT : The DEFF's Dr Piet-Louis Grundling and Dr Farai Tererai working on the Kgaswane Mountain Reserve's Wetland which delivers continuous and sustainable flow of good quality water. It hosts various wetland types amongst other peatland and mires with sphagnum moss.

#WorldWetlandsDay

environment, forestry & fisheries

Department: Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

2030 NDP

Working for Wetlands

Ramsar Convention on Wetlands

NOTES

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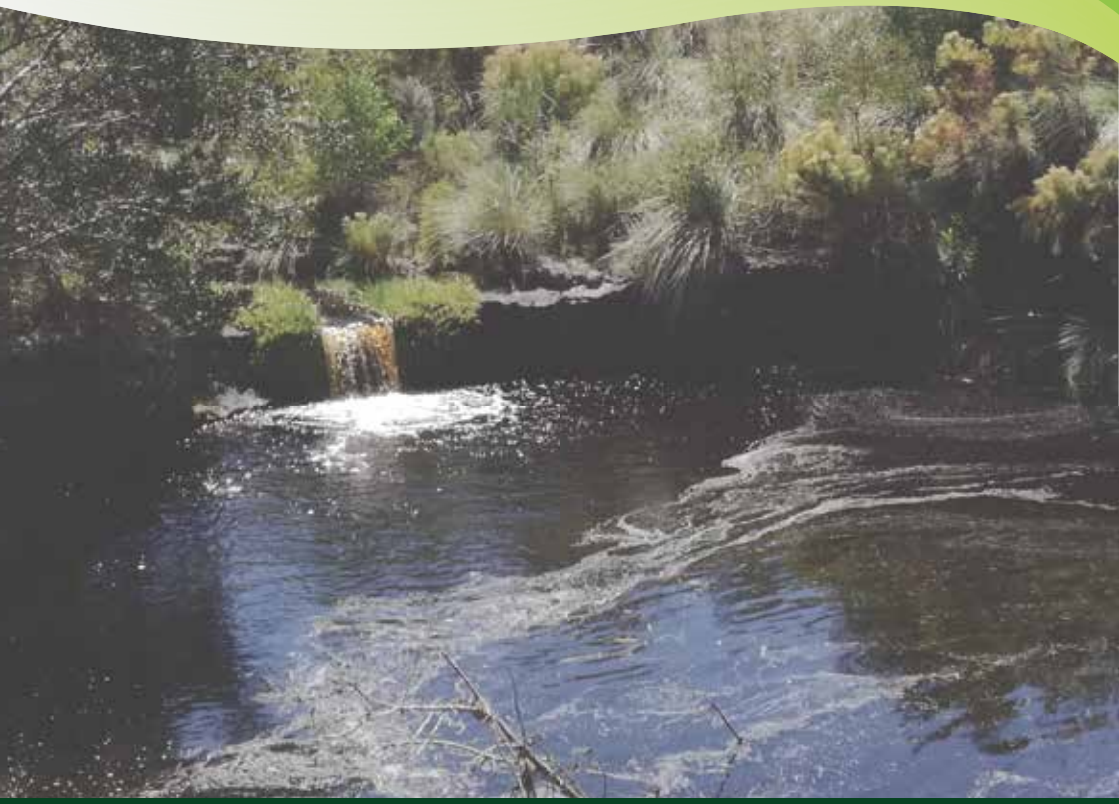

The Pietersielieskloof wetland system after it was rehabilitated.