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South African National Biodiversity Institute

SANBI Living Catchments **NEWSLETTER**

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Living Catchments Project overview

The Living Catchments Project is a collaborative project that is being implemented and led by the South African National Biodiversity Institute (SANBI) in partnership with the Water Research Commission through funding from the Department of Science and Innovation. The project was developed in response to the Water Research, Development and Innovation Roadmap (Water RDI Roadmap), which is a national planning intervention by the WRC, DSI, and the Department of Water Affairs (DWS), aimed at addressing water scarcity in South Africa over a ten-year period between 2015 and 2025. The project responds specifically to the RDI Roadmap's Supply Cluster 3: Improve adequacy and performance of supply infrastructure.

The project is being implemented in four unique catchments across South Africa: the uMzimvubu, Thukela, Berg–Breede and the Olifants catchments. The intention of the project is to create more resilient, better resourced and more relational communities with the ultimate vision to strengthen an enabling environment for catchment governance and the integration of built and ecological infrastructure in support of water security, economic development and livelihood improvement. The project also intends to strengthen an enabling environment for water governance at the nexus of landscapes and water supply in South Africa. The project is centred on co-learning and co-creation, through communities of practice, to enable collaboration, grow the practice of transformative social learning, and strengthening the practice of policy engagement and how biodiversity is mainstreamed into the water sector.

For further information on the Living Catchments Project, please contact the Project Leader, Mahlodi Tau, at SANBI: m.tau@sanbi.org.za

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Living Lands

Creating third spaces for research and practice in the Breede River Catchment

By Pienaar du Plessis

One of the objectives of the Living Catchments Project is the creation of a catchment-scale research agenda. We see this as an inherently co-creative endeavour that requires the buy-in and participation of many actors in the landscape. Such an agenda is not a static document that records a set of research questions, but is rather a learning space within which to continuously engage with the question: what does research look like that is rooted in a landscape? This space (sometimes referred to as a "third space", a neutral space outside of the bounds of work and home that offers opportunities for engagement) is built over time, relies on trust, and is thus inherently a long-term endeavour.

One way that this co-creative process has been engaged in was through a recent collaboration with the African Climate and Development Initiative (University of Cape Town), and the Centre for Sustainability Transitions (Stellenbosch University). In 2021 they engaged in a series of workshops with researchers and practitioners on how to use transdisciplinary research as a way to move towards more equitable and resilient landscapes within the Berg and Breede catchment.

Through these engagements the need for a third space was one of the outcomes that came from both the research and practitioner workshops. On the 11th of May 2022, the very first Breede Knowledge Exchange and Learning Day was hosted at Waverley Hills in Wolseley, in collaboration with Living Lands as part of the work of the Living Catchments Project.

Thirty participants came together across research and practice to conceptualise what a shared research agenda could look like. Much of the activities were focused on getting to know one another, building a shared context, and surfacing some of the needs of the landscape. The Garden Route Interface Network, an existing platform in the Garden Route, also shared insights and lessons learned from their own catchment.

This first engagement was a great opportunity for the group to collectively reflect on the role that research plays and can play in the landscape. A strong sense emerged that there is a need for a space for continued engagement, as well as a way to better share knowledge between organisations. It was also clear that moving towards a well-defined outcome would take more time than a single workshop. Engagements will continue on an individual

Participants reflect on a collective vision for their landscapes.

Participants getting to know each other and their work through 'speed dating'.

basis, and a second collective engagement is planned for the end of the year.

For the full workshop report, as well as outputs from the initial online engagements of 2021, please have a look at the project website https://sites.google.com/view/berg-breede/home. If you are a researcher or practitioner in the Breede catchment who wishes to participate in future engagements, please contact Pienaar du Plessis at pienaar@livinglands.co.za

Olifants Living Catchment Project

Stakeholder workshop to collaboratively compile biophysical data for climate change adaptation modelling in the Kruger to Canyons Biosphere Region

By Itumeleng Selebalo

On the 3rd of July 2022 catchment conveners the Kruger to Canyons Biosphere Region (K2C) hosted a team of scientists working under the UNESCO Be Resilient South Africa project for the second Climate Risk Informed Decision Analysis (CRIDA) engagement. K2C is one of four Biosphere Reserves selected as a pilot project towards climate change adaptation. The CRIDA process promotes a bottom-up, participatory approach to ensure inclusive solutions that aims to bridge the gap between climate science and the global circulation model information on the one hand, and the concrete ecosystem-based adaptation actions required on the local level on the other hand. This workshop follows the first CRIDA workshop held in 2021.

The first engagement was dedicated to stakeholder analysis and to determine potential climate risks that will affect this region based on the perspectives of the attending stakeholders from the landscape. The second CRIDA workshop was dedicated to the provision of data and scientific resources that will support the development of hydrological models, ecological models, climate stress testing and adaptation management models for the key catchments within K2C. The main stakeholders in the workshop represented organisations such as Conservation South Africa (CSA), University of Cincinnati, SANParks, Alliance for Global Water Adaptation (AGWA), the Institute for Developmental Learning and Environmental Sustainability (IDLES), Deltares, and Inkomati-Usuthu Catchment Management Agency (IUCMA). The process enabled the stakeholders to identify data gaps in the region and to put forward available data resources that will aid achieving the scientific analysis for the landscape.

The following day the UNESCO team participated in a catchment orientation field trip which started at the Blyde Dam pipeline operation site, which is the first strainer point for water allocation to the agricultural areas in the lower Blyde catchment. The team then visited the Ba-Dinkwanya-ne water smart project site in Phiring where they explored

Participants reflect on a collective vision for their landscapes.

CRIDA team in Phiring.

the agroecological practices implemented in the demonstration gardens and small-scale farms in the village.

This process paves the way to fill data gaps and create a base understanding of the state of water resources in the catchment and how they may potentially be affected by climate changes. Therefore, the scientific analysis and modelling done through the CRIDA process enables implementors and decision makers in the landscape to work towards establishing effective interventions to improve water security and to achieve climate risk adaptation in the region.

CRIDA team.

Living Catchments Indaba 2022: Our water: Working together to achieve water security

By Itumeleng Selebalo

The Olifant catchment conveners, the Kruger to Canyons Biosphere Region (K2C), will be hosting the Living Catchments Indaba scheduled for the 31st of October 2022 to the 4th of November 2022. The Indaba will be held in support of the Living Catchments Project which aims to enhance research, development, and innovation for socio-economic impact through engaged communities of practice in key catchments associated with strategic water source areas.

One of the objectives of the Indaba is to further an understanding of the people, dynamics, processes, and culture of the catchment as they relate to water security. The theme of this year's Indaba is "Our water: Working together to achieve water security" translated into Sepedi and Tsonga it is "Ku tirha swin'we ku hlayisa mati" and "Ho bereka mmogo bakeng sa polokego a meetsi" respectively. The theme aims to showcase the collaboration between different organisations in the K2C landscape to secure water security.

The K2C Biosphere encompasses several important river catchments. The catchments form part of the greater Olifants and

Klaserie Waterfall. Photo courtesy of Romy Antrobus Wuth.

Inkomati-Usuthu Water Management Areas. In addition, these catchments also form part of the Mpumalanga Drakensberg Strategic Water Source Areas (SWSAs) for both surface and groundwater. SWSAs, known as "water towers" or "water factories", supply a disproportionately large amount of water to adjacent lowland areas. These areas make up 10% of South Africa's land area, yet they provide 50% of the country's water.

The K2C, together with partners (CSA, AWARD, IDLES, Hoedspruit HUB and SANParks Biodiversity Social Programme) are looking forward to sharing the work they are implementing on the ground and challenges they face to achieve effective catchment management, water conservation and the protection of water-related infrastructure to ensure water security for future generations.

uMzimvubu Catchment

Earth Day 2022

By Mxolisi Ngongoma

People around the world celebrated one of the most popular environmental days, Earth Day on 22nd April 2022. Earth Day is an annual event to demonstrate support for environmental protection. First held in 1970, it now includes a wide range of events coordinated globally by EarthDay.org involving 1 billion people in more than 193 countries. The official theme for 2022 was "Invest in Our Planet".

Lower uMzimvubu Eco-Champs participated in celebrating Earth Day by collecting plastics on the streets for pollution control (waste management) and recycling, as well as visiting and planting at Gobodweni nursery. Other community members took care of their indigenous plants in their gardens and in the wild. And others assembled in a local community hall to honour the day by raising awareness of the need to protect Earth's natural resources for future generations. These are some of the efforts by Sustaining the Wild Coast which is supervised by Mr. Zukulu to build capacity for Earth stewardship in Mpondoland.

This is what the Eco-Champs had to say about their understanding of Earth Day:

Kholeka 'Connie' Vatsha: *"This day is a reminder that I should at all time try to preserve nature so that it could easily continue providing us with its services. It is my duty to do awareness about things that should be done and things that should not be done to keep our environment and the ecosystem in balance, healthy and productive".*

Lungelo Mthwa: *"Earth Day means that we are connected to the nature, so we need to take care of it every day. This says we should not litter, but we need to recycle the plastics in order to protect marine life. Planting more indigenous trees is another option to help, keep the planet safe. For us to make it every day an Earth Day, we need to make awareness every day, not on special days like we do in South Africa. This also means we have to do away with chemical use but let us rather use agro- ecology type of farming".*

Asiphe Mngambi: "*This is the day we celebrate and appreciate Earth. It is set to remind us about the roles we need to play in ensuring that the environment is well taken care of. It means we should continue to coexist with nature in harmony so that it can also be good to us because we need healthy Earth for survival. We can make everyday Earth Day by living eco-friendly lifestyle, making use of environmentally sustainable use of natural resources for our benefit (both present and future generation)".*

Kholeka 'Connie' Vatsha an Eco-champ of uMzimvubu catchment.

Lungelo Mthwa an Eco-champ of uMzimvubu catchment.

Asiphe Mngambi an Eco-champ of uMzimvubu catchment.

The exciting prospect of a Ramsar site in the Eastern Cape

By Dean Ricketts




A system under immense anthropogenic pressure.

The Ongeluksnek Wetland complex in Matatiele in the Eastern Cape is an extensive and incredible system consisting of beautiful meandering channels, alpine grassland seeps and oxbow lakes, amongst other wetland types. These give rise to an amazing array of aquatic and terrestrial bird species, a number of which are unusual, rare or endangered, such as the Arctic Tern, African Skimmer, the three different cranes species, the Denham's Bustard, the Yellow-billed Stork and the Southern Ground Hornbill, to name a few. The system, however, is under major strain as a result of uncontrolled grazing and burning, intense alien plant infestation and land-use changes, particularly cultivation, which negatively affects the functioning of the system.

For years, the system has been admired by local nature lovers and it was now felt it is time to explore the option of having this beautiful system designated as a Ramsar site, which will be the first in the Eastern Cape. The system ticks most of the boxes in terms of the Ramsar requirements. It is anticipated that there will be a positive influence to the protection of biodiversity and improvement in the resilience of the system to respond to climate change, thus meeting the objectives of a number of conservation-related strategies and action plans, such as the newly developed Eastern Cape Biodiversity Strategy and Action Plan (gazetted in 2019).

The initiative also has the potential to unlock a number of socio-economic benefits and opportunities and play a vital role in water security. The Eastern Cape Department of Economic Development, Environmental Affairs and Tourism; the World Wildlife Fund; Environmental and Rural Solutions; and other signatories of the uMzimvubu Catchment Partnership (UCP) have rallied together to make this happen, and it's now becoming a reality as the

UCP partners at the wetlands event: The senior manager of Biodiversity and Coastal Zone Management, Ms Phumla Mzazi/Geja from the Department of Economic Development, Environmental Affairs and Tourism engaging the team.

Mr Stanley Tshitwamulomoni of the Department of Forestry, Fisheries and the Environment, who is the director for Strategic Water Sources and Wetlands in the field.

vision is put together bit by bit. Several site visits have been conducted by the UCP and high-level dignitaries, with more in-depth biodiversity and aquatic assessments to follow.

The first phase of the initiative is to have the Ongeluksnek Nature Reserve, being one of the main feeders of the system, designated, followed by the greater Ongeluksnek wetland complex, as phase 2. The reserve forms a link between the Lake Letsi La Letsa Ramsar site in Lesotho and the Ongeluksnek wetland complex, which presents a great opportunity for the formation of a significant cross-boundary Ramsar corridor between the two systems, being located within the Maloti Drakensberg Transfrontier Park domain and the Maloti Centre of Endemism. It is recognised that strong collaboration, which is an essential ingredient for success, has assisted the initiative in making huge strides towards the end goal.

World Oceans Day 2022: Wild Coast youth send stern warning to Shell over their ocean

By Mxolisi Ngongoma

As World Oceans Day 2022 was celebrated across the globe, it was also marked at the Mtentu River estuary on the Mpondoland Wild Coast. Young people came out in numbers to take part in an event to resist the threat of yet another new form of development. The threat in question is Shell. As things stand, people of the Wild Coast are now faced with a serious risk to the marine biodiversity and human health and wellbeing. The Wild Coast is home to passionate environmentalists, local tour guides, hikers, small-scale farmers and communities who have a long history of living sustainably off the land and marine resources. For years they have fought against government-imposed development on their land and in so doing, tried to limit the impact of climate change. This day provided a good opportunity for local tour guides, residents and youth leaders to start an ocean awareness campaign.

In a passionate statement, Siyabonga Ndovela, a local tour guide pleaded,

> *"We cannot live without the ocean as it is our source of food and the primary life support system of the Earth. If Shell takes over and destroys our oceans, we will not survive. We do not need a distraction like Shell on the Wild Coast."*

The land of the Wild Coast has some of the most beautiful, unspoiled coastline in the world. It is blessed with fine weather during the winter months when the sardine run attracts a frenzy of activity from gannets, seals, dolphins and predatory fish as it moves slowly north along the coast. High vantage points along the clifftops and hilly coastline make great lookout points for dolphin and whale watching. Humpback and Southern Right whales migrate from the Antarctic to the shores of South Africa to calve and are often seen from the coast. With Shell in the picture, all of this will be gone if no action is taken to prevent this new imposed development.

A community leader and local guide, Sinegugu Zukulu, reminded everyone,

> *"Our ocean from Mzamba in the North to Port St Johns was declared as a Marine Protected Area in 2000 under the Marine Living Natural Resource Law. The beautiful and unique Mtentu and Msikaba River estuaries, which play such an important role in the marine ecosystem, are also part of the Mpondoland protected area."*

Eco-champs cleaning the beach.

Eco-champs with board signs to protect the beach.

Supporting this statement, Siyabonga Ndovela and community leader, Lindelani Gama, added,

> *"In this part we have areas that are closed-off to fishing, to allow the fish to breed freely. If Shell were to continue with its business, our efforts to protect these fishes would be in vain. The fish would still die because of oil and other harmful activities by Shell."*

Shell is planning to carry out a seismic survey in search of oil and gas deposits off the Wild Coast. The process will cause untold damage to the sensitive marine life on Wild Coast. Exploration companies use of seismic surveys is a primary tool to map the ocean floor to determine where oil and gas is located. The next step is drilling into the seabed to extract the resources.

Oceans Day at the Mtentu Wild Coast Beach.

Lungelo Mthwa, an environmental activist and Wild Coast tour guide condemns this activity.

> *"The Shell survey and exploration for oil and gas from the ocean floors can have a great negative impact on marine life. Many sea creatures are territorial and have families, so blasting the ocean will be disruptive. Some of the creatures rely on echolocation, communicating using sound which can travel for miles. With the seismic blasting they will be unable to connect. This will cause stress and disruption. During the survey sea animals may die. Blasting vessels and rigs from foreign waters may introduce new organisms which will be alien to our ocean."*

The Mpondoland Wild Coast is not only faced with the threat of Shell. It has been dealing with other issues such as mining and the N2 toll road. These imposed development activities are a major threat to biodiversity, ecotourism and community livelihoods. Sinegugu Zukulu explained,

> *"The Mtentu River bridge is a challenge as it causes erosion which sends soil downstream to the Mtentu estuary. This threatens to drive away hundreds and*

thousands of Kingfish, a migratory species that come to this place every year. This is the only estuary that accommodates these species of fish during the warm season."

There are other global challenges such as plastic pollution and the leakage of oil and gas. The whole world is also faced with the climate change crisis. Any further exploitation and use of fossil fuels will release more carbon dioxide into the air which causes extreme warm conditions. The 2022 Mpondoland World Oceans Day youth event at Mtentu concluded with other activities on the beach, including a plastic waste clean-up along the shore. The youth driven celebrations and awareness drive then continued with a visit to Mkhambathi Cascade Waterfall and Strandloper Waterfall.

Even when the sun sets and others sleep, we will continue the conservation walk

By Baphumelele Sonjica

Curiosity, the reason I found myself hiking on the edge of a mountain, soaked from the afternoon showers that paid us a visit.

A few weeks earlier, it was a mere suggestion that we, who live in and around the Amadiba region in Eastern Pondoland, go on a hike to explore the landscapes beyond our homesteads. The idea seemed juvenile at the time. Little did we, who sat around that table, know the importance and significance of that day. This idea would wake us up at the crack of dawn on Sunday the 5th of June 2022, World Environment Day, in order to prepare for one of the most punishing yet rewarding experiences of our lives.

It went way beyond what we had envisioned, especially when Sinegugu Zukulu, affectionately known as Madiba (Program Manager of the non-governmental organisation, Sustaining the Wild Coast, and a well-respected elder and community advocate) 'got wind' of our plans. The hike took on a life of its own, it was no longer just a walk in the wild, but an awareness experience. A hike that would open all of our eyes to what would happen to our magnificent coastline if we sat and did nothing.

The day finally arrived…

The hike began at a common meeting place, Vumani Store, a run-down 'spaza shop'. Chit-chat turned into comments on our expectations for the day and why we had chosen to be there. Madiba gathered us all around and spoke with beaming pride and a hint of urgency on why we were there and the importance of us being there on World Environment Day which is marked all around the world. The gathering of young people, and a well-respected community activist who oozes knowledge and stories about our birthplace and the environment we live in, was all we needed to 'trek on'. I had come to the right place eager to learn.

We made our way, stick in hands so we could steady ourselves if the need arose, to Mngqandeni Omkhulu KuNodongane. Here, we sat and listened to stories of yesteryear and how our ancestors, who lived in those sacred caves, had once survived.

A fellow hiker asked,

"How were people buried?"

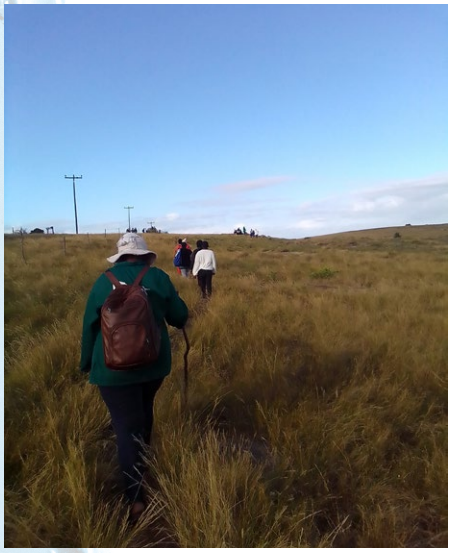
An important question which was followed by an even more interesting answer from Madiba.

"In those days human corpses were placed wherever there was an open crevice in a cave. Hence the word 'ukufihla' which is a term used in modern day IsiMpondo but stems from an ancient way of burying the dead, translated as 'to hide'."

A presentation was done by a few of our hikers who showed us pieces of artifacts that proved that our ancestors had lived in the very cave we were exploring. The artefacts were broken pieces of a clay pot that had been used for cooking, a piece of a rugged sharpened rock that had served as a knife and sea shells that showed that they ate what came from the ocean. The lessons from that cave rung loud, we live in a world where more is more, the ancients used what they needed with no reason to hoard and they left this world how they found it, intact.

We 'trekked on', making our way to the majestic Majuleni Waterfall. A disservice would be done to describe it as anything less than breath-taking. It was a wonder to witness with our very own eyes. We made our way through the massive rocks which stood guard at the entrance of the waterfall. These rocks make sure that this sacred space is rarely seen.

Madiba stood on a large rock and spoke with our gathering. We listened intently. He told us about a tree known as tree number 1. It stood so close to him that if he reached out he could touch it. He told us that tree number 1 is known as the Yellowwood Tree (Umkhoba). It is South Africa's National Tree. Yellowwood trees in South Africa are protected under the 1998 National Forests Act. They may not be cut, damaged, destroyed or disturbed without a licence granted by the Department of Forestry, Fisheries and the Environment.



The youth of Amadiba region in Eastern Pondoland go on a hike in commemoration of World Environment Day 2022.

Why did we come?

We came to learn about sacred plants and sacred spaces to the AmaMpondo people, my people. What we hold sacred is our land, the one thing that belongs to us. But this is under threat. It is under the threat of being taken away and bled dry by the hands of outsiders who hold no claim to even a grain of sand. In 2002, rare minerals were discovered on the Xolobeni coast. Mineral Sand Resources (MSR), a subsidiary of the Australian company, Mineral Commodities Ltd (MRC), applied to mine them. Over a lifetime of 22 years, the mine would extract 9 million tons of ilmenite, titanium-iron oxide, rutile, zircon and leucoxene. We came to see with our very eyes what we stand to lose if we don't stand up and fight against the mining plans. Plans that have been on every lip in this community for more than a decade. We stand to lose it all. That is why each young person who embarked on this ten-hour hike has taken on a new responsibility.

It was time to move on. I asked and answered deep inner questions of myself, time and time again as the day wore on and the mountains became harder to climb. The weather began to introduce itself to us, bringing a gentle drizzle which had us panicked because we were making our way onto the rocks of the Mtentu Gorge. The fear of slipping and falling soon caught up with even the fastest hikers who had led the pack. The tail-enders found ourselves walking beside the leaders who had reduced their pace for fear of slipping. The banks of the gorge were nobody's friend. Yet nothing deterred us, going back was not an option. It was now all about mind over matter and determination. Our bodies had long since tired and were moving for the sake of moving.

Lindelani Mbulawa, a fellow hiker and motivator was very knowledgeable about the fauna and flora of our surroundings and distracted us by pointing out the different types of plants and trees. When I asked him why this hike was important to him, he said,

"I'm hiking with young people who are hungry for knowledge on the importance of conservation and the environment. Going on this hike will make a difference because little by little this will grow. More young people will call on other young people to participate. Participation comes with learning together as we hike. This will help spread the word and take this mission back to the homesteads."

In-between all those slips and falls, we meandered our way out of the gorge on route to the Madadasi Route (trail). The walk was not easy, the mountain became steeper, the rocks were high, the grass was wet, the mud under our shoes felt like super glue once you set foot on it. Determined to finish, we pushed on to Madadasi Camp where we would end the day. The sun had set, but we continued. As weak, tired and stiff as I was, I knew what I came to learn was realised.

I had entered into the conservation world only knowing that I shouldn't throw plastic anywhere and that I shouldn't use plastic straws. I realised that I was one of the young people that had been targeted for this hike. I had come to walk, to learn to be part of nature and to understand what I have and what I stand to lose. That all the medicine I need is a hike away. That the food I need to eat is just outside. Living in a modern world has made me ignorant.

This hike opened my eyes to what I had for so long and so easily chosen to ignore. I can no longer ignore it. I have no right. It's time to carry this walk on, to hold each-others hands and speak louder and bolder than we have before. When the sun sets, we know that when others choose to sleep, we will continue to walk this tiring but rewarding conservation walk.

"World Environment Day 2022, celebrated on 5 June, is part of United Nations Decade on Ecosystem Restoration, a global initiative to prevent, stop and repair damage to degraded ecosystems all over the world."

Upper Thukela Catchment

Stakeholders in the upper uThukela working together towards a shared vision of equitable and sustainable water resources management in the catchment

By Rebecka Henriksson and Brigid Letty

Warmly welcomed by Okhahlamba Local Municipality Manager, Nkosingiphile Malinga, on 14th of June 2022, almost 40 stakeholders who live, work or have an interest in the water resources in the upper uThukela catchment, met at the Okhahlamba Local Municipality in Bergville for a one-day Adaptive Planning Process (APP) workshop. This second multi-stakeholder engagement built on the first workshop of the Living Catchments Project in the upper uThukela in 2021, and included a structured process to collaborate towards creating a shared vision between a wide and diverse range of stakeholders. The participants consisted of 17 women and 22 men, representing the local communities, water committees, action groups, youth Eco Champs, representatives of the Amakhosi areas AmaZizi, AmaNgwane and AmaSwazi, as well as ward councillors, and representatives from Okhahlamba Local Municipality, WWF, Wildlands Trust, Department of Water and Sanitation, the South African Environmental Observation Network (SAEON), University of KwaZulu-Natal (UKZN), University of Free State, Rhodes University, the Farmers No-till Club and KZN Department of Agriculture and Rural Development.

The organising team (i.e. the upper uThukela Living Catchment project conveners, namely Institute of Natural Resources (INR), Mahlathini Development Foundation (MDF) and the Centre for Water Resources Research, UKZN) kicked off the workshop by describing its purpose and presenting overviews of current research projects in the catchment. Brigid Letty from INR presented an overview of activities and plans within the Living Catchment Project and researchers from UKZN (Rebecka Henriksson and Mdoda Ngwenya), SAEON (Sachin Doarsamy) and MDF (Michael Malinga) provided a progress report on the Water Research Commission funded project led by UKZN on *Co-learning and ecosystem services mapping for sustainable and equitable water resources management in the Cathedral Peak area*. Two Living Catchment Project bursary holders, MSc students Philisa Dunyana (Rhodes University), and Sphindile Dlamini (University of Free State), gave presentations about the progress of their studies addressing power dynamics of collaborative governance processes, and cooperation between stakeholders for improved water management, respectively.

The workshop then moved on to the Adaptive Planning Process (APP) – which allows stakeholders to understand that everyone has something to contribute, and that collaborative approaches are critical to addressing complex problems. The APP intends to be a learning space where "all voices are heard", where problems are examined from different angles to have a fuller picture of the causes and consequences, where a shared vision can be created, and where stakeholders can envision a role that they can each play in shifting this problem. Participants were divided into three mixed and diverse groups that were led by facilitators to explore, share and discuss current concerns, values for successful collaboration,

Local community member engaging in the conversations.

Living Catchments Project student, Sphindile Dlamini giving a presentation.

Local community members actively participating in the workshop.

Okhahlamba Local Municipality colleagues.

threats and challenges to the valuable characteristics of the catchment, and finally creating a shared vision. The visions from the three groups involved collaboration, co-management and stewardship of the environment and water resources, fair access of water for socio-economic growth, as well as knowledge, awareness and capacity building around sustainable management of resources – with a key point being a recognition of the role that local communities can play in addressing challenges. All plenary and group conversations were translated between isiZulu and English for fair engagement and inclusion.

For the purpose of emphasising the importance of building partnerships, Samir Randera-Rees from WWF presented information about their efforts to establish Strategic Water Source Partnerships, one of which is the partnership for the Northern Drakensberg, which will focus on the Upper Thukela. Through the initiative, WWF has also managed to unlock funds for some implementation work associated with climate resilient agriculture and control of alien invasive plants, as well as some funds for supporting stakeholder engagement. The workshop ended with a plan for the first steps towards collaboratively achieving the vision, including actions committed to by various groups of stakeholders to report on during the third multi-stakeholder engagement for the Living Catchments Project in the upper uThukela, in October 2022.

It was emphasised during the workshop that the meetings and workshop cannot alone solve the persisting water security challenges in the catchment, but that collaborating and building partnerships between wide and diverse stakeholders can shift the problem towards a more equitable, sustainable and desirable future.

SANBI

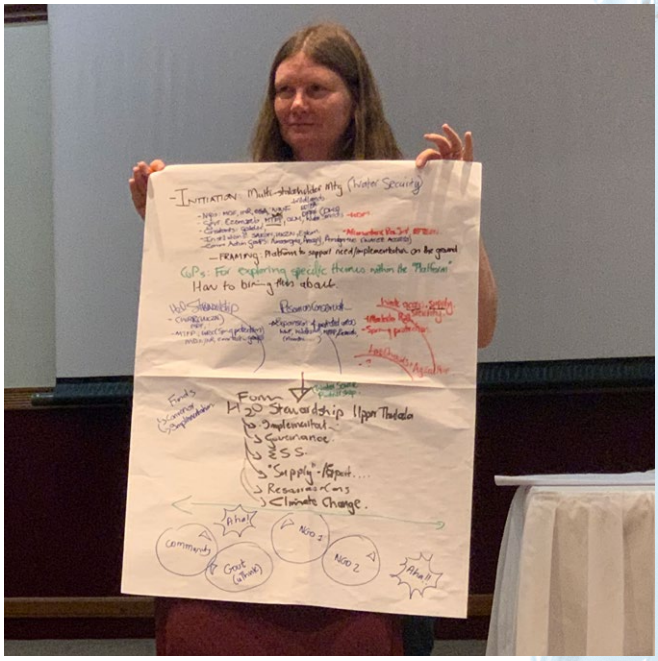
Catchment Conveners Forum

By Puseletso Nkadimeng and Namhla Mbona

The South African National Biodiversity Institute (SANBI) hosted a Catchment Conveners Forum which took place from the 6th – 8th April 2022 at Glenburn Lodge in Krugersdorp. SANBI was joined by their catchment conveners from the Living Catchments Project, including Kruger to Canyons Biosphere Region (K2C); Institute of Natural Resources (INR); Environmental Rural Solutions (ERS) and Living Lands. The main purpose of the forum was to bring all catchment conveners together in one space to focus on the research agenda at a catchment level. The platform was created for the catchment conveners to have a moment to share stories of their different catchments that have different research partners and strengths.

During the forum, exercises helped us to get to know each other and the work that we do and how we practice. This served as a reminder to us of who we are and why we do the work in these different landscapes. Conveners were given an opportunity to tell us a story of how they convene their work using an image that best describes their catchment. The ERS presented their catchment as a playground with different organisations coming together to "play" their different roles for the same goal. The INR presented their catchment as bubbles that are popping because most of the organisations in their catchment have been working in isolation, but they had an "aha" moment and realised they are working towards the same goal. The K2C presented their catchment as an amoeba in biology

Our catchment conveners telling their unique stories during the workshop. Itumeleng Selebalo from K2C and Zoleka Mkhize from SANBI.



Brigid Letty from INR.

because of their ability to change their shape in the roles that they play in their catchment. The Living Lands presented their catchment as a cell that is growing and evolving into what they are today as their catchment is still strengthening their establishment.

The Catchment Conveners Forum was a productive workshop and we learned so much from getting to know each other, and the different roles played. Synergies and tensions emerged from the conversations we had, and we got to learn that we are not alone in this journey. It is unfortunate that we got to meet in a later stage of the Living Catchment Project because it is ending next year in 2023. However, the forum showed that cross learning is becoming more visible across catchments. We are looking forward to witnessing more stories emerge from the catchments allowing each convenor to practice based on the needs of their catchments.

Tsoanelo Shata from ERS and Pienaar du Plessis from Living Lands.

SANBI contributes to the City Nature Challenge

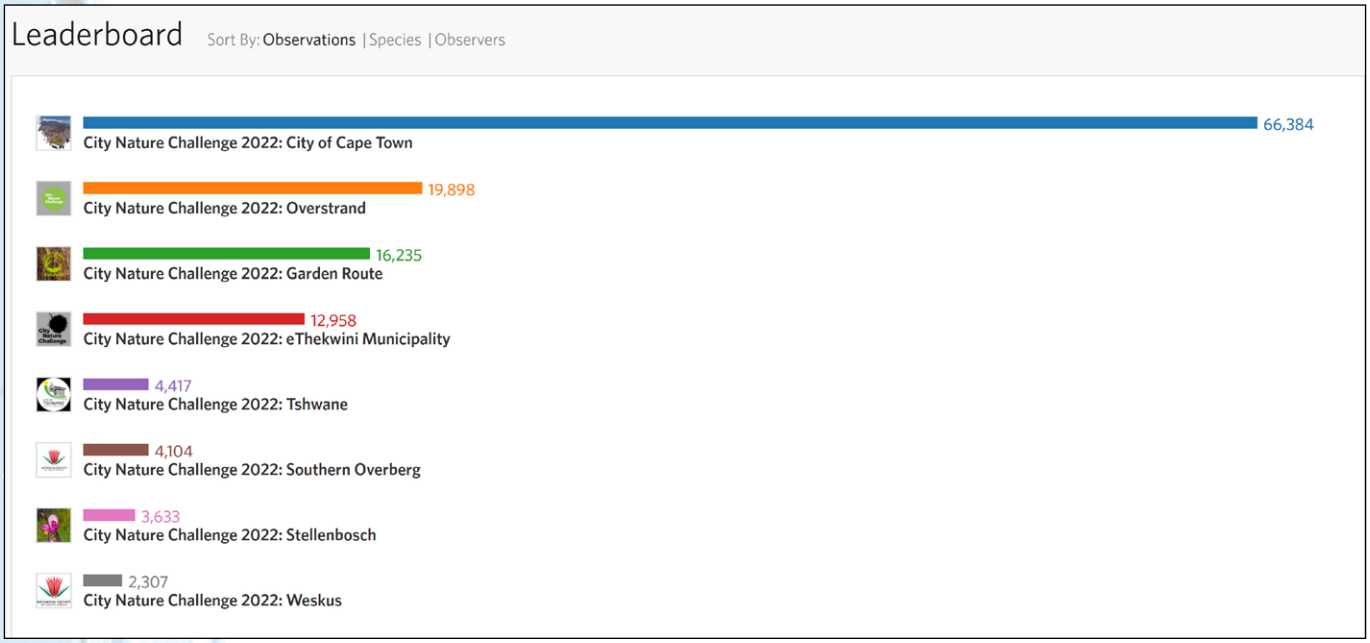
By Puseletso Nkadimeng and Namhla Mbona

The City Nature Challenge (CNC) is an international effort for people to find and document plants and animals in their cities. It is a BioBlitz-style competition where cities around the world are in a contest against each other to see who can make the most observations of biodiversity, who can find the most diverse species, and who can engage the most people.

A South African National Biodiversity Institute (SANBI) team participated in the City Nature Challenge from 29th April to 2nd May 2022 as part of the Tshwane region. We competed against the twenty southern African cities that had registered to participate for this year. This included several South African cities as well as cities from Botswana and Zimbabwe.

Prior to the CNC, we made a series of tutorials available on-line. People could join for free and learn how to use the iNaturalist app and participate in the challenge. With the help of the City of Tshwane there was a list of nature reserves

CREW Northern GP group at Kloofendal nature reserve.



The CNC Southern Africa leader board rankings.

which Tshwane residents could go to, for free, and participate in the challenge over the weekend. Our team visited the Rietvlei Nature Reserve and the Roodeplaat Nature Reserve. Through participating in the CNC , we hoped to create extensive community awareness of local biodiversity and increase further exploration of our local environments. We joined as citizen scientists to record as many species within a designated location and time as possible.

The second phase of the challenge is uploading and identifying the observations. The identification period for CNC observations took place from 3rd to 9th of May 2022. Each identification helps confirm or improve the community's opinion on the species that the observation represents as the observations need to be identified before being counted.

The results for the southern Africa region for the most observations, species and observers for the top five cities, from the highest ranking, was as follows: City of Cape

SANBI colleagues, Puseletso Nkadimeng and Vhonani Mulaudzi at the Rietvlei Nature Reserve.

Register and join the GSB 2022 on iNaturalist.

Town; Overstrand; Garden Route; eThekwini and City of Tshwane. The City of Tshwane region recorded 4 390 observations, 962 species and 120 observers.

The CNC was great exposure to gain knowledge on the local biodiversity that we have in the Tshwane region. It was the perfect opportunity to monitor changes in the cities biodiversity as we are gradually moving into a new season. This experience was holistic because it created awareness of the biodiversity and highlighted the ecology context of habitats. We would like to encourage the community and the youth to join in with Custodians of Rare and Endangered Wildflowers (CREW) members to increase civil society's capacity, develop new skills as they learn about the iNaturalist app, and provide information on the biodiversity that exists in our cities.

Join the Great Southern BioBlitz 2022

The 'Great Southern BioBlitz', or 'GSB' for short, is an international period of intense biological surveying in an attempt to record all the living species across the Southern Hemisphere in Spring. The purpose of this event is to highlight both the immense biodiversity spread across the Southern Hemisphere in the flourishing springtime, as well as to engage the greater public in science and nature learning. GSB22 will be held from 28th of October until the end of 31st of October 2022, incorporating different communities, areas and regions across the Southern Hemisphere.

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