

South African Water Caucus & ELRC publication

Saving Moholoholo



**By December Ndhlovu,
Dr Alex Mashile & Patricia Mdluli**



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Introduction

“It is already noticeable how springs, streams and rivulets, which flowed quite strongly [on Mariepskop] about ten to fifteen years ago, have slowly become weaker” (van der Schijff and Schoonraad, 1971)



Who are we and why this story is important to us



December Ndhlovu

I'm December Ndhlovu. I grew up in a remote village called Masana in Bushbuckridge, Mpumalanga, South Africa. We moved to Masana when I was 6 years old. I started my Primary school education there. Just below our home was a river that we grew up bathing in, catching fish and hunting birds after school. During that time (around 1980's) there was enough water to bath, wash our

clothing and water our gardens. I still remember we used to get clay for making toys from the same valley where our parents used to plant Madumbes (a small tuber). That soon changed a few years down the line. The river became dry and the wetlands, where Madumbes were planted, also became dry. As a direct response to this water crisis in the village we moved to the bigger Nwaritsane river which flowed in-between a large scale gum tree plantation. We used to sit under

those trees after taking a bath in the Nwaritsane River. I remember clearly that we used to marvel at the ever-green plantations and enjoyed their cool shade during hot summer days...well this is something I will live to regret.

In 2004 I was invited to an environmental meeting in White River, hosted by EarthLink where they spoke about the impacts of large scale industrial timber plantations on water downstream flow, wetlands and the grassland. Philip Owen of GeaSphere presented on the impacts of plantations in Mariepskop, Bushbuckridge. That was a turning point because I could see the link between the water shortages in my village and the existence of the massive gum trees. I got involved with GeaSphere, an environmental organisation, which advocates against further expansion of the large scale industrial timber plantations. In that workshop I learned that a gum tree uses at least 25 litres of water a day.

I have witnessed first hand the dwindling of our local rivers in and around my community, the vanishing of medicinal plants that were once in abundance, the drying up of wells and wetlands, and grasslands being swallowed by the ever-thirsty invasive alien exotic species of eucalyptus. Moreover after learning about the impacts of gum tree plantations on the ecosystem and the environment I realised it is really important to know and understand the impacts of large scale monoculture plantations on our environment. Therefore this Change Project is very important. We hope more people will understand the impacts of large scale plantations so that they can make a decision from an informed position.

Patricia Mduli

I am Patricia Mduli. I was born in Bushbuckridge in Shatale township. I attended school at Narishe Primary school. We used to swim in the Ngwarele River and catch fish there with a net. Now it is difficult to catch fish in the river and to swim in it because of the droughts and the lack of water.

When I grew up I started doing the practice of the traditional healers. First it was difficult for me to do this practice because there were a lot of things I saw during that time. I had bad dreams. If I walked next to the river I would see different things in the water that would make me afraid but I still did the practice. Even now I still engage in the practice because now I enjoy it since I've been through the healing process.

I want to see an improvement at Mariepskop and I want to see the traditional healers (Ngaka) being happy because they are crying about the shortage of medicinal plants to make medicines. I am also crying for the shortage of medicinal plants. The reason there are no more medicinal plants is that the river and the soil is dry. The river is also drying up which means we have lost sacred pools and sacred places by the rivers. I wanted to understand where the water had gone. I did not know about the plantations and how much water they use before this study. I met December at a meeting of traditional healers, and he told all of us that the plantations are taking our water. I went to speak to him because I wanted to know more. That is when he told me about the change project and I was very interested.

Alexander Makadikwe Mashile

I am Alexander Makadikwe Mashile, a prospective chief of the Chueu Tribe and resident in Mariepskop / Moholoholo area. I am involved with land claims in the area. After hearing about the possibility of doing research from Mr Joseph December Ndhlovu, from the Mpumalanga Water Caucus (MPWC) I did not hesitate to take up the offer and opportunity of being part of the research case study about plantations, water and ecosystem services in Mariepskop / Moholoholo, Mpumalanga.

This case study prompted me to join in the investigation and hence the social change project. This case study made me further want to learn more about the history of Mariepskop / Moholoholo, which led me to know that the Mapulana tribe treasures the mountain and see it as their refuge. This is where they killed the Swazi warriors by rolling boulders down the cliffs. The battle of Moholoholo happened in the year 1864 under Chief Maripe Mashile. That is why the mountain was called Moholoholo.

Personally, this story is very important as it broadens my scope and gives me a better understanding of my place in Mapulaneng and the tribe Mapulana. I left Mapulaneng many years ago at a tender age of eight years and only came back home to stay here again in the year 2005, after a period of fifty three years. Ever since I left Mapulaneng I would come back during school holidays to pay a visit to my grandparents. I was really disorientated when I returned and my joining the change project team gave me an opportunity of

reviving my understanding of my own place and the history of my clan. In the change project, I learnt that plantations are not forests. What an education for me it was. That was something I did not know because when I looked at the green plantations I would never have thought about the negative side effects of these plantations. The plantations looked green and beautiful through the years. Some people would call them a “Green Desert,” and I wouldn’t understand why that was the case, but now, I see and understand why that is so. I was also happy to be part of the Government’s National Water Resource Strategy (NWRS2), which also inspired me to take keen interest in the Mpumalanga Water Caucus a different ball game from what I used to play for the thirty two years as an educator.

Our change project



What is our case study about?

This case study seeks to understand the impacts of large scale plantations on water downstream flow, ecosystems services and land claims in Mariepskop, Bushbuckridge.

What is our research question?

Our research question had to change from its initial form when we started the research. We also remember that this research may lead to other research.

Our initial research focus was:

Plantations, water and ecosystem services: the case of communities' access to water being limited by the high water usage of large scale plantations in Moholoholo/ Mariepskop – Mpumalanga

Our new question became:

What is the impact of large scale plantations on water downstream flow, ecosystems services and land claims in Mariepskop /Moholoholo –Mpumalanga?

It was important for our case study to accommodate the communities that are impacted by the large scale plantations. The communities are the Chueu Tribal Authority with the Chueu Community Development Trust; and the Setlhare Traditional Council – with the Setlhare Communal Property Association and Traditional Health Practitioners.

How we did our research

The study used various methods that include field visits to communities, interviews with people, documents and minutes from Inkomati Usuthu Catchment Management Agency (IUCMA) and collected data from NGO's (AWARD, GeaSphere).

We spoke to individuals like Dave Rushworth, Prof Willem Ferguson, Dikeledi Chilwane, Mr Komani (both traditional healers) and Mr Mashego (he works for the water board in the Bushbuckridge Municipality) and engaged with research such as 'The Water Dialogues' that have done some studies on water and sanitation.

We also attended various events and conferences such as the World Forestry Forum, the Forum of forums (Catchment management forums) meeting and the

South Africa Water Caucus (SAWC) BGM, Mpumalanga Water Caucus meetings, the Botswana Customary Law training, launch of the Mpumalanga environmental youth network, AWARD civil society indabas and the Freedom of Expression National indaba. At all these events and indabas we have been representing this case by raising the issues of the Moholoholo/ Mariepskop plantations and building solidarity with other movements who have similar concerns. We have also been involved in river mapping through the Eco- Village Design Education and Asset-based Community-led development workshops all of which have added to our skills and been a platform for our case. We also attended community dialogues with the Mupho foundation around reviving indigenous knowledge which is also a key issue in our case study.

Our Change Project within the context of a social learning approach

The 'Changing Practice' course is designed to support local water activists to improve local natural resource management practices. It is a short course supported by Water Research Commission (WRC) and accredited through Rhodes University. The main aim of this collaboration is to support and strengthen

the ability of civil society organisations and water activists to monitor issues from NWRS2 by fully participating and been able to make decisions from an informed view.

The activities of the Social Learning started around July 2014 with the identification of participants to attend the course and the meeting of the participants to identify their change project. We did this by taking photos for the pre-course assignment and consulting with communities about the idea of the change project.

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Context of our change project

“The journey up this mountain...its a unique steep-ascending route, the exhilarating feeling is like being on another planet.”



December and Patricia have lived in Bushbuckridge all their lives. December has lived in Masana since he was six years old and Patricia has lived in Shatale all her life. Dr Mashile’s family has lived in this

area for many years. When Dr Mashile was eight years old he moved away from Bushbuckridge to stay with his Uncle who was a teacher in Lydenburg (now called Mashishing). He became a teacher himself

and then a Principal. When he retired he moved back to Bushbuckridge.

Bushbuckridge lies below the world famous Drakensberg mountain range which stretches from Hoedspruit in the north-easterly part of Bushbuckridge to Graskop. Mariepskop or Moholoholo, as the mountain is known locally, is a high rainfall area and is where most of our rivers come from.

Bushbuckridge has two sub-catchments, the Sabie and Sand. This study relates to both the catchments and in particular the Sand in the north eastern part of Bushbuckridge, which is the most stressed of the two catchments and is heavily planted with ever-green, ever-thirsty, alien trees of eucalyptus (saligna), which are also known as gum trees. The Sabie River catchment is the more pristine of the two sub-catchments.

The Sand river catchment which stretches from Hoedspruit to central Bushbuckridge has tributary rivers like Motlasedi (Klaserie), Morwele, Swafing, Nwahrele, Mabolayakgomo, Mahlombe and Ga-Josefa. These rivers still exist but are very stressed. The Sabie river catchment is from Injaka Dam to Hazyview and the rivers within this catchment are: Nwaritsane, Nwaritsi, Phasha-Phasha, Mtich, Sehlaresemadi and Sunlight. These rivers are still running although they fade as they go further into the outskirts.

This beautiful mountain is spoiled by the over-establishment of large scale monoculture industrial timber plantations (ITPs) which have strong root-systems measured over fifty (50) meters deep, consuming at least 25 liters of water a day per tree, thus causing extreme downstream flow reduction in our rivers. ITPs use more water than our indigenous habitation (van der Schijff and Schoonraad, 1971) and in the process

Today the most part of Mariepskop is suffocating from the encroachment of the invasive monoculture industrial plantations (van der Schijff and Schoonraad, 1971).

destroy the environment and the ecosystems.

In 2009 December Ndhlovu and Eben Cilliers did a study about the impact of large scale gum tree plantations on the rural communities in Bushbuckridge. During that study we discovered that small scale farmers in Croquet Lawn, which is on the outskirts of Thulamahashe and the immediate areas, could not plant anything because of the water shortages and they were without water during winter. We also found out that the reduced water downstream flow impacts on the traditional health practitioners (THP's) medicinal plants which grow inside the water, on the wetlands and grasslands in general.

Beauty of Moholoholo



Surely the Moholoholo/Mariepskop Mountain is by far the most beautiful landscape in Mpumalanga. The snow-white mist that could be easily mistaken to be cotton wool sprinkled over the mountain, gently propelled by the mountain breeze. Sometimes the mist would look like a giant white sheet blown from side to side.

Mariepskop Mountain is where you get the tourist attractions like the Three Rondavels, God's Window, natural pot holes and many other natural wonders.

The large grey-stoned savannah covering the summit of the Moholoholo Mountain is devastatingly beautiful and the ever blowing fresh wind makes it a world on its own. The snow-white mist moving over those massive stones is like watching a movie. The feeling and the atmosphere is simply out of this world. It's awesome...! Like Mr Freddy Kachote, a Zimbabwean working for Mupo Foundation said after reaching the summit of Moholoholo: "the journey up this mountain...its a unique steep-ascending route, the exhilarating feeling is like being on another planet."

December has made four trips to the summit of Moholoholo Mountain and on each occasion he's stunned by new discoveries. The most memorable visit thus far for him was his third visit with the Mupo team, Freddy Katchote, Mashudu Takalani, and discovering ice cold water ponds amongst the rocks. Patricia has been up the mountain many times and has seen the stones at the top that look like they have been designed as animals. The other mountains look like small houses. She was struck by the old houses, that used to be an army base under apartheid, that are left on the top of the mountain uninhabited.

Dr Mashile says he is an old guy that has grown up in a Christian household. When he started looking at Moholoholo and the history of Chueu tribe he sees similarities to when the Israelites crossed the Red sea to get away from the Egyptians. He asks himself what made the tribe think about going up the mountain? They went there to find refuge from their enemies but the mountains are all misty. How did they know up there that there were no more enemies coming up the mountain?

The history of Moholoholo



History of the people

“The name of the mountain is derived from the Bantu chief Maripi who, with his tribe, found sanctuary from raiding Swazi warriors on this high mountain known by the local people as Moholoholo, “the great one.” The flat summit formed a natural fortress of great strength which they were able to defend by rolling boulders down the cliffs. Although the Swazis attacked the fortress on numerous occasions, they did

so without success. The bones of their dead are still to be seen as mementoes of a tough siege and bitter defence.” (Bulpin, 1965).

In 1894 the Swazis attacked the Sothos in Mariepskop but were defeated and many of the Swazis died in that war. In 1929 the first forced removals began and the second removals were in 1969, to make way for the plantations.

Year	1864-1865	1929-1961	1983-1985	1986-1987	1996-1997	2005	2014-2016
Event	Battle of Moholoholo	Forceful removals	Tribal Clashes	School Uprising	Provincial border dispute	Bushbuckridge is incorporated into Mpumalanga	Moholoholo Change Project

Communities were first forcefully removed from their ancestral land by the Apartheid government to make way for the establishment of the Industrial Timber Plantations

Timeline

1864 – 1865

This is the period of war between the Swazis and the Sothos, “the Battle of Moholoholo”. This war was fought right in the Moholoholo Mountain and it was won by the Sothos assisted by the Balobedu.

1929 – 1961: First Forced removals

Communities were first forcefully removed from their ancestral land by the Apartheid government to make way for the establishment of the Industrial Timber Plantations (ITP’s). Communities were moved from the forest to the foot of the mountain.

1961 – 1969: Second Forced removals

As the communities were recovering from the shock of being forcefully removed from their land, they were stunned by being further removed for the second time, further away from their ancestral land into villages which are now known as Salique.

1983 – 1985: Tribal clashes

There were tribal clashes between Sothos and Shangaan. These clashes had lots of fatalities as a result of the conflicts between the two main tribes in Bushbuckridge. The reasons for these clashes are varied. Most believe nowadays that these conflicts were instigated by the apartheid government to destabilise the area by raising conflict around where different tribal groups should live and have schools. Up until this point the Sothos and Shangaan had lived in peace for many years with many inter-marriages and in our experience it is unlikely that this conflict would have become so extreme without some form of political instigation. December and Patricia still express disbelief that the conflict became so extreme over such simple and minor issues.

1986 – 1987: Schools uprising



Schools in and around Bushbuckridge were closed as they protested against apartheid. A lot of people died from this uprising, especially business people and traditional health practitioners. The apartheid government targeted traditional health practitioners as people would go to traditional health practitioners for help. This led to an instigation from *impimpis* (apartheid government informers) who would then accuse traditional health practitioners as being ‘witches’ and they would then be killed. We still remember the fear of that time. December, who was very active in the struggles, left for the Cape for a time as he did not know if he would be the next on the list. December’s family lost contact with him and thought he was dead but when they contacted a traditional health practitioner they were told he still lived. December only returned when Mandela was released from prison. Patricia stayed in Bushbuckridge and talks of how her whole family was afraid.

1990s in and around Bushbuckridge

In 1994, when the Transvaal Province was dismantled and divided into four Provinces, the area from Bushbuckridge to Hazyview was included in Limpopo Province. The decision was based on the fact that most of the Bushbuckridge area

“We were the first people to burn Mandela’s T-shirt to make our unhappiness known.”

had been part of three separate *bantustans* — Gazankulu, Lebowa and KaNgwane — but the bigger sector fell within Gazankulu, which was incorporated into Limpopo. The citizens of Bushbuckridge became embroiled in a dispute with the government, demanding inclusion of the area in Mpumalanga Province. They were concerned that should the area be included into Limpopo, they would be marginalised and suffer poor service delivery since Polokwane, the Capital city of Limpopo Province, is more than 300km away, whereas Nelspruit, the capital of Mpumalanga is 58km away. “We were the first people to burn Mandela’s T-shirt to make our unhappiness known.” December remembers. For more than two years the government refused to allow Bushbuckridge to fall under Mpumalanga, leading to violent protests and resistance from the community. A decision was taken at Cabinet level in 1998 to transfer the area to Mpumalanga

2014 to date

In 2014 the Bushbuckridge community got a chance to participate in their local water resources management through the social learning program, ‘Changing Practice’, which is accredited by Rhodes University, supported by the Water Research Commission (WRC) and managed by the Environmental Monitoring Group. This program offers water activists a chance to do action research about issues affecting their environment. It is part of NWRS2 citizen monitoring efforts to ensure proper meaningful contribution to the local water management challenges. The project ends in 2016. This booklet documents the work we did.

History of the land claims

This story was narrated by the late Rev. S.J. Mashile, Mr Matsikitsane Mashile and Royal Family members in 2006.

Mariepskop / Moholoholo was settled by the Pulana tribe. It is where they fought the Battle of Moholoholo with the Swazis warriors in the year 1864.

History tells that since then, that is, after the battle, the tribe split into two groups: Maripe and Chishi. Some people accused the Chishi of running away for shelter whilst they faced the war with Maripe, and therefore decided to pay allegiance to Maripe.

Chishi, the group that favoured Rev. S.J Mashile, moved down the mountain to a place they called Maripeleng, now Salique. Because of the split, we thus find the Chishi group, presently being the Chueu tribe and the Maripe group, being the Setlhare tribe. The Setlhare are known as Chiloane instead of Mashile and the Chueu remained Mashile staying at Maripeleng /Salique.

In 1910, when Chishi's son, Radia died, the two groups were still at each other's throats. That was just when they needed one another the most because the Whites

were on them and needed their place for industrial plantations. In 1929, they were forcefully moved far toward the East at a place near the Kruger National Park called Khokhobela. It was called Khokhobela because the land was so bushy that people would feel like they were crawling through the bush. Khokhobela means 'to crawl'. The Chueu tribe were again forcefully moved to Brooklyn/ Maotole in 1969 under the leadership of Rev. Makata Hosea Mashile of the Evangelical Lutheran Church of South Africa (ELCSA).

The formation of the Setlhare Community Property Association by the Mpumalanga Regional Land Claim Commission was done without thorough consultation with the Chueu Family causing the two communities to further drift away from each other. The plantations and the Land Claims Commission failed to cement the Mashile groups as one to this day.

The bigger group of the Mashile tribe is paying allegiance to the Setlhare chief and has opted for Communal Property Association (CPA).

The Rev. H.M.Mashile tried hard to bring these communities together. He built a church where he was conducting his religious services and used it as a school



The hatred was so big that even though he erected that building the only group that took advantage of the building was the Radia /Chueu community.

hoping that by doing this the two groups will come together as one. The hatred was so big that even though he erected that building the only group that took advantage of the building was the Radia /Chueu community.

Above is a photo of the church which was built by him as a way of cementing the Mashile communities and uniting them as their “Motla le lesedi”.

Chief Setlhare himself was finally baptised in the Lutheran church before he passed on.

Relevant Policies



Exit strategy

In 2001 during Kader Asmal's tenure as the Minister of the then Ministry of Water and Forestry, a decision was taken at a parliamentary level to strategically clear some gum trees in the Mariepskop area (Moholoholo) to free up some water for the rural communities that were evidently impacted upon during the non-rainy season. In the outskirts like in Rolle, Xanthia and Croquet Lawn, people do not

have access to water in winter because the streams are dry.

The fact that a decision was taken at a parliamentary level to strategically clear some plantations in the Mariepskop Mountain to free up some water for the rural communities on the outskirts of Bushbuckridge is what necessitated this Change Project, because the decision was never implemented. Therefore the shortage of water downstream flow in the

rivers during the dry season leads to a shortage in traditional medicines and the destruction of the ecosystems and environment in general.

Environment and South African law

The South African Constitution is one of the best in the world, and it enshrines the right to water. We also have all the relevant vital legislated policy on sustainable environmental management like the NEMA (National Environmental Management Act), NWA (National Water Act), Alien Plants Act, and the NWRS2 (National Water Resources Strategy 2). Section 41 of the Constitution supports inter-governmental relations which seek to encourage good working relationships within the different spheres of the government. So the relationship between stakeholders and between government departments is of critical importance.

National Water Resource Strategy 2 (NWRS2)

NWRS 2 offers a chance for the communities to be directly involved with issues relating to, and affecting their environment and ecosystems. The NWRS2 encourages citizen monitoring by the people of that area. The NWRS2 provides

opportunities for water activists to be “hands on” with local water management issues. There is a clause in the NWRS2 that talks to proper environmental conservation and that invasive species need to be removed. It also talks to governance issues and the involvement of civil society.

Alien Plant Act

The most problematic thing with gum trees is that they are invasive which means they spread easily.

Legislation has been passed in South Africa to eradicate invasive alien plant species which is known as the National Environmental Management: Biodiversity Act 10 of 2004. Invasive plant species have invaded and taken over 10 million hectares of land in South Africa. This is the size of KwaZulu-Natal. These invasive plants use 7% of the water resources in South Africa, which is probably more than the water consumed by South African households (Timber Watch).

There is a Working for Water (WfW) project that eradicates alien trees. The high altitude team is working in Mariepskop but to date we have not been able to find out how the invasive gum trees are being attended to. It seems that they are

focusing on other invasive species and not the gum trees which seem to be seen as plantations and so not invasive. Even the gum trees that are growing in the river beds are not being removed. Even if they are we have observed alien plantation (gum trees) being left out. We think it would be beneficial for the WfW project to also eradicate invasive plantations in the Moholoholo Mountain.

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Building networks

During the Change project we met a lot of people to try and get an understanding of the context and also to see whether we could bring people on board to help us with our case study question



People and organisations who contributed to this research

There are many role-players in this Change Project with different influences like the

Inkomati -Usuthu Catchment Management Agency (IUCMA), Bushbuckridge Local Municipality, Department of Agriculture, Forestry and Fisheries (DAFF) and Department of Water and Sanitation

(DWS). The cooperation between the stakeholders is critical for the execution of such decisions as the Exit Strategy. During the Change project we met a lot of people to try and get an understanding of the context and also to see whether we could bring people on board to help us with our case study question and our action plan. We found it easy to engage with some people, whereas others were more difficult. We decided, as a group, that it is important to understand these relationships better so we can start try to build the ones that are not so good and strengthen the ones that are already strong. We asked ourselves the following questions about each relationship:

- Why is the relationship like this?
- How do we want the relationship to be?
- How can we strengthen it?

Below are some of the people and organisations that we have engaged with that have helped us to build this Change Project.

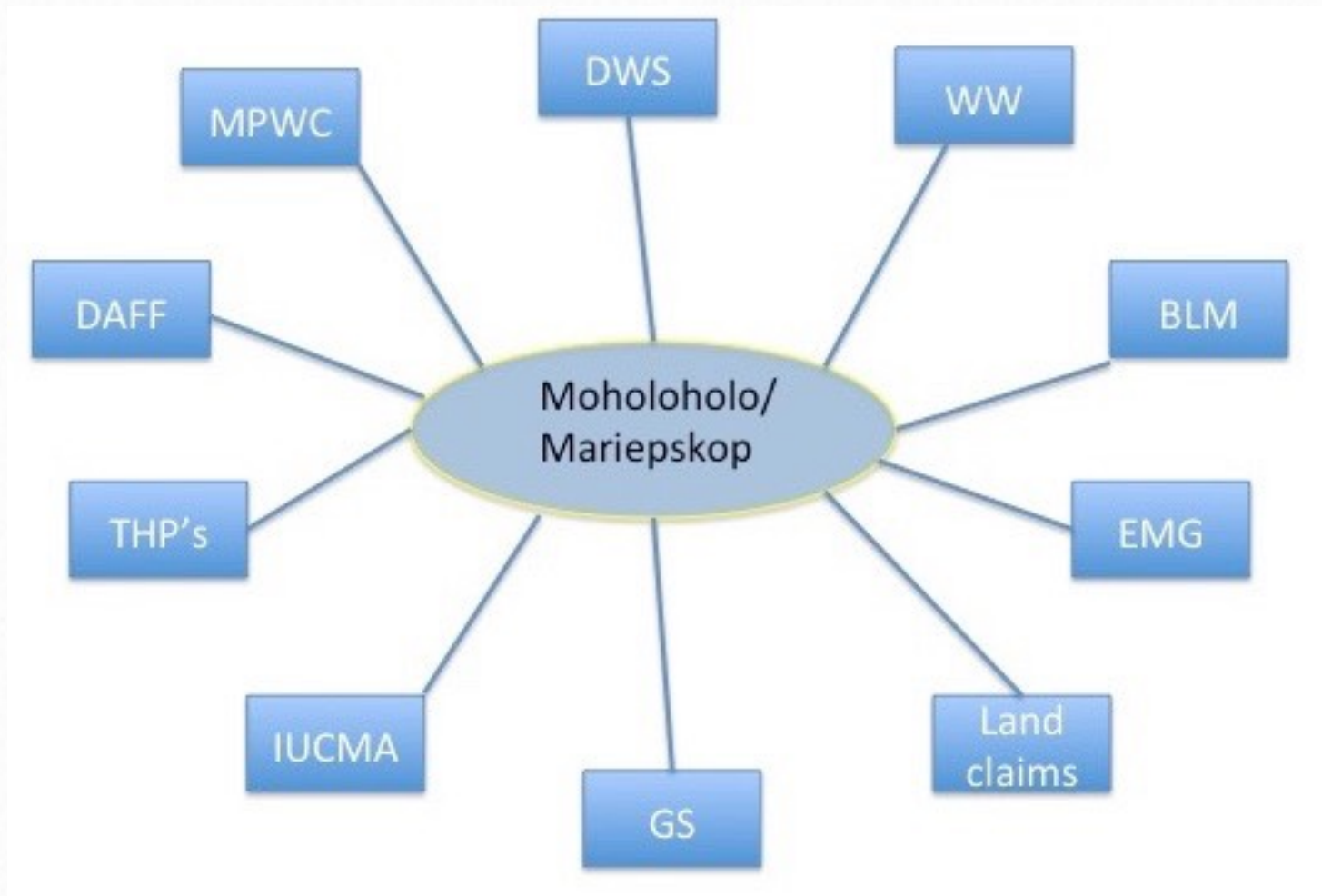
The organisations are:

- AWARD (Association of Water and Rural Development) whose research we read,

- The Water Dialogues (which was a multi-organisation research project), whose research we follow around water and sanitation
- EMG (Environmental Monitoring Group) who is supporting this Change Project,
- GeaSphere an organisation that has been researching the effects of plantations for a long time,
- The IUCMA which has been very supportive of our work
- Department of Water and Sanitation who should have implemented the exit strategy
- The Plantation industry
- The Department of Agriculture, Forestry and Fisheries.

The people include:

- The research team: Dr Victor Munnik, Jane Burt and Jessica Wilson
- Mr Derick Du Toit & Dr Sharon Pollard from AWARD
- David Rushmore who has worked in Mariepskop for a very long time, and operates an environmental education programme for high school students.



We decided, as a group, that it is important to understand these relationships better so we can start try to build the ones that are not so good and strengthen the ones that are already strong.

- Winners Mashego who provided useful information on the area.
- Leonard & Max, the German volunteers at Geasphere
- Ms Mokone from Black House Wives
- Traditional healing practitioners who one of our team, Patricia, has been interviewing and working with.
- Mr Prince, a community leader and,
- Dr Mashile, a member of the Change project team a Chief in the area and one of the community land claimants.

Who influences the issues?

Below is a description of what relationships are currently like in relation to Moholoholo and the issue of the plantations. This includes the issues relating to the land claim.

Government departments and catchment management structures are critical stakeholders in this case study as they have the most influence to implement the exit strategy. These include:

IUCMA: Their mandate is to make sure that the natural resources are well managed for future generations so their involvement in ensuring the implementation of the exit strategy would be very critical since they have direct interests in the river resources systems.

Currently the relationship between the Change Project team and the IUCMA is growing. The CMFs that are hosted by the IUCMA's now support the rehabilitation of the Mariepskop river catchments systems. The IUCMA has also committed to support the Mumpulalanga Water Caucus during river cleaning activities.

Catchment Management Forums in the Sabie and Sand: The primary objective of the forums is to assist the Catchment

Management Agency with the management of local water resources. The forum is mainly made up of small scale farmers, water users associations and individuals that have an interest in water issues. The current relationship is really improving as the IUCMA started to recognise the impacts of large scale commercial timber plantations on the water resources which they initially declined to entertain in this forum. Fortunately the stakeholders started to understand the impacts of large plantations on the environment. We believe that this was because of our long term involvement in the CMFs and the insistence of December who kept raising the issue time and time again. He was told many times that the CMF platform was not a platform for raising the issue of the plantations but December kept arguing that the plantations directly impact on water flow and therefore it is a catchment management issue and should be addressed by the CMF. Stakeholders and the manager of the forum even nicknamed him 'Kader Asmal ' and 'Mariepskop'.

Both the Sabie and the Sand CMFs were graced by the presence of the chair of the IUCMA governing board, Ms Thoko Patience Nyakane-Makula, which was a first since December's participation in

these forums since 2013. During the Sand CMF meeting in Thulamahashe in early 2016, she reiterated IUCMA's commitment to the Integrated Water Management approach which includes considering the effects of the plantations. Most importantly she knows about the Mariepskop exit strategy and she believes that this could make a major impact in the rehabilitation of water downstream flow activity in both the catchments. This was an important moment for us as we have been championing the concern of the mis-managed plantations for many years. Up until now we have been told that CMFs are not the place to raise these issues. This has now changed.

Department of Agriculture, Forestry and Fisheries: This department's involvement is critical because of their primary objective of sustainable agriculture for now and the future generation. Currently the relationship with the Change Project participants is not good but it is improving. When we went up the Moholoholo mountain we met a DAFF employee and he expressed an interest in working with us. He also allowed us up the mountain for free because we are social learners. But since this meeting he has excluded us from all meetings so there is still a blockage in working together. This

department has a tendency of referring everything to DWS unnecessarily.

Department of Water and Sanitation:

Their role is to make sure that there is proper management of our water resources for us and the future generation. The relationship between the Change Project participants and the Department is improving because they now acknowledge the exit strategy document and have promised to keep us informed of the latest development. This happened during a meeting which was called for between DWS National (which included regional departments from around the country) and the South African Water Caucus. The aim of this meeting was to build a relationship between DWS and civil society. We presented our change project at this meeting and the result was a commitment by DWS staff to involve us in any activity around the exit strategy and to keep us informed.

Nonetheless we believe DWS should play a more active role and take a lead in making sure that decisions that relate to water downstream improvement be implemented. In our opinion departments like the DWS, DAFF, Dept of Agriculture, Rural Development and Land Administration (DARDLA) and the

Bushbuckridge Local Municipality should all work together towards mitigating the environmental impacts in Bushbuckridge.

Other organisations are:

SANDF (South African National Defence Force). The abandoned Mariepskop village at the top of Moholoholo belongs to the South African Air Force, and as such we need to have good working relationship with them. Dr Mashile was mandated to make sure that there is good relationship with the SANDF/SAAF. On the 14th Nov 2015 he reports, “I went to Pretoria to make a presentation to the SAAF Head Office about the abundant Mariepskop village. I was able to do the presentation to the Deputy Chief Air Force, Major General: G.Malinga who replied by requesting me to write a letter to the SAAF Mariepskop – Hoedspruit.

The letter was written and sent to Hoedspruit by registered mail on the 17th Nov 2015. We are still waiting for a written response from the SAAF. We have at least made an attempt for a good working relationship. We want the relationship to be good so that together we may come up with a compromise when working out a strategy of preserving the facility at

Mariepskop SAAF village which is now abandoned.

Geasphere: This is the Changing Practice social learning team’s anchor organisation which means it supports the team and monitors the progress of the Change Project. Philip Owen of Geasphere has been a our guide and answered many of our questions relating to plantations. He also involves us in all meetings including the Environmental Youth Network.

Mpumalanga Regional Land Claims Commission (MRLCC). This is the commission responsible for the land claims in Mariepskop and it favours the CPA. The current state of the relationship is not yet good. The team tried several times, without success, to engage with the commission but failed. Our appointments seem to be overlooked and we got no response from them as expected. We think that the Commission does not want to take responsibility for what happened during their consultative meetings which were biased and one-sided. We are keen and willing to meet with this stakeholder because we need a clear explanation of what actually happened between the two communities that are estranged from each other. We want a good working relationship with them. We shall keep on

asking them to give us a hearing. It is our right to be listened to and given information. This action is part of our Mariepskop/ Moholoholo action plan.

TRUST: The Chueu Tribal Authority, The Chueu Community Development Trust
The claim was lodged on the 29/12/1998 by Rev E.P. Mokoena, an uncle in the Royal Family, and has earned the claim KRP 9756. The current relationship with this stakeholder is good mostly due to Dr Marshile's supportive and helpful role.

Communal Property Association, being the Setlhare Communal Property Association, favoured by the MRLCC. This stakeholder is still to be visited for an interview. Fortunately Dr Mashile was invited by the chairperson to brief them about what the social learning change project is all about. The presentation was done on Sunday afternoon the 7th January 2016. We all want this stakeholder to be cooperative with the social learning team and also to be involved with the other stakeholders for better cooperation. The best way of strengthening the relationship with this stakeholder is by having constant consultative and feedback meetings. Unfortunately they were initially reluctant to meet with the Trust because of the negative influence they got from the

Regional Land Claim Commission about the Chueu Community Development Trust.

CLAIMANTS: Land claimants in Mariepskop / Moholoholo being the two communities, Chueu Tribal Authority, Chueu Community Development Trust and the Setlhare Communal Property Association. The current relationship of the two communities as claimants is strained because of the negative influence from the MRLCC. The Setlhare CPA and the Trust did not see eye to eye. They are bitter about each other. The only way of resolving their dispute will be for the MRLCC has come back to bring them together and also recognise the Chueu as the Indigenous People of Mariepskop/ Moholoholo. The two communities should jointly be made to be the stewards of the land. We really want the relationship to be good and for them to cooperate.

There was a very important meeting between the Chueu Trust and the Communal Property Association (CPA). It was the first time that we as the Mpumalanga Province Water Caucus (MPWC) met with claimants to hear directly from them whether they wanted the plantations. One of the claims government makes is that the reason why the decision taken under Kader Asmal to

remove the plantations has never carried out is because land claimants argue that the plantations create jobs and they do not want them removed. It was indeed a good thing to hear from the claimants that they did not want the plantations.

Komatiland is one company which we still owe a visit and is part of our Action Plan. We want to understand their involvement in the plantations at Mariepskop/ Moholoholo. We now have funding to build on this relationship. Our relationship is still not good because we have failed to reach them as we were not sure whether this Company might also have a stake in the plantation industry.

Bushbuckridge Local Municipality (BLM). This is the municipality under which Mariepskop/ Moholoholo is controlled. This stakeholder is within our Mariepskop /Moholoholo Action Plan and it will soon be one of the stakeholders to be visited soon for further intervention and involvement. We long tried to be in contact with the municipality but the officials failed us. We hope that our recent strategy of involving the Mayor will yield good results.

Traditional Health Practitioners (THP). This is a group of traditional people in the community who the use of medicinal

plants and herbs found in Mariepskop/ Moholoholo plantations, water and ecosystem services. They are a key stakeholder in our change project and Patricia meets with them regularly to update them. They are now regularly involved in river clean-ups.

Traditional Health Organisation (THO): This is a traditional health organisation under which the THP operates, and the two are working hand in glove, to promote the traditional health practice in the communities.

Clinics: These are the Health amenities provided by the Department of Health in the communities working hand in hand with the THPs to promote better health in the communities.

Working for Water (WfW). This is a group of people under DEA helping with the eradication of invasive plants in the plantations and the communities in general.

Association for water and rural development (AWARD) is an NGO that has done a lot of work in Bushbuckridge in particular the Mariepskop mountain range. They have specifically done a lot studies related

to water in Bushbuckridge so it is important to involve them.

The Mpumalanga Water Caucus: The MPWC is a loose network of organizations, institutions and individuals that have interest in water issues. The social learners attending the 'Changing Practice' report the progress of the Change Project regularly to the MPWC. We are all members of the MPWC. The MPWC has been following the Exit strategy with keen interest. It is a good relationship because we feedback our work to the caucus which can be used to strengthen other movements and create opportunities to learn from each other.

4

What we learned

“Our greatest learning is this change project is ‘us’ researching ‘us’ meaning that the best people to research a situation are the one’s affected by it and who live it”.



Natural Vegetation and Sacred Natural sites



December writes: “I have realised during my recent trips to the summit of the mountain that there is still some rich natural vegetation still existing in the last quarter of the mountain. From the foothills to the DAFF office it is just plantations and invasive plantations all the way.

Interestingly from the Army camp and residents, up to the top where the military radar and towers are, it still has the natural forest untouched. It is sad and discouraging to see such a massive

destruction of natural vegetation by the large scale over-thirsty alien industrial timber plantations (ITP’s).”

Medicinal plants are also being affected

The Mariepskop mountain range has a complex of trees, shrubs, bulbs and plants that are used by the traditional health practitioners (THP’s). Unfortunately the establishment of large scale ITP’s has

Mariepskop contains well over 2,000 plant species, greater than the whole of Kruger Park and far exceeding Table Mountain's plant diversity. There are over 1,400 floral species (Mariepskop-the Summit by Slowvelder, August 2010).

impacted badly on the survival of these plants. There is now need to preserve what is still available before we lose every plant to the plantations.

When December grew up there were lots of medicinal plants in and around Masana village. "We used to spot THP's along the Nwaritsane River extracting medicinal bulbs and shrubs. The types of medicinal plants that used to be easily available were: Gobo (found strictly in wetlands) which was used for treating bilharzia, Mhlonyana (found along the river) for treating flu, Magucu (found on grasslands) and used for cleansing rituals, Scima'mlilo (found on grasslands) and used for household fortification and Ndwendwendwe (found along river banks) used for purging to cleanse the chest. In short Bushbuckridge was regarded, during our upbringing, as the place with good traditional health practitioners and was very rich in medicinal plants.

All the above mentioned medicinal plants are no more available since wetlands, grasslands and water down stream flow are destroyed by the large scale industrial timber plantations (ITPs) that are established in the Mariepskop mountain range.

Destruction of natural sacred sites or natural spiritual pools

For Patricia, the sacred sites are particularly important. She says "it means a lot to me because it is where I communicate with the ancestors."

‘All the Earth and Life is sacred. Sacred natural sites or spiritual pools (place) are critical places (landscapes and landforms) within the ecosystems such as forests, mountains, rivers and the source of water. These places are ecologically, culturally and spiritually important and exist as a network embedded within a territory. Sacred sites are specific places within a territory that have special functions relating to culture and spiritual well-being. Sacred natural sites are places where the ancestors’ spirits of the community reside and they are akin to temples and churches where rituals and sacrifices are performed by the elders’. (Hussein, 2012).

How were the natural sacred sites lost?

Natural sacred sites all over the world are threatened with irreversible destruction from economic, social, political, religious and legal developments. In the Mariepskop mountain range, there have been a lot of sacred sites lost to the establishment of large scale gum tree plantations and tourism activities. We think the lack of legal recognition of sacred sites and the rights and responsibilities of their communities is also impacting badly on the survival of these natural sacred sites.

Now there is nowhere for us to communicate with our ancestors

Natural sacred sites and territories are the heartbeat of ecological, spiritual, and cultural practices and governance systems of indigenous and local communities. The loss of natural sacred sites has a direct impact on the lives and well-being of communities of present and future generations.

Patricia’s story: Livingness’ of the river/ sacred pool

Ngwarele and Mohlomobe and Swafing are the big rivers that are closest to my place. Ngwarele has many pools and sacred places. The sacred places are the places where the waterfall is. We do special rituals there. I even go under the water and communicate with my ancestors there. When I am there I can communicate with my ancestors more easily than other places. It is especially important during winter times, that is when the strongest of the ancestors is there. They tell me what I must do. If I have a patient at home, and I am failing to treat them, I go there and I ask the ancestors to give me an idea. They show me the medicinal plant I must use, they tell me where to go, and they tell me how to use it. I put my snuff



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on the ground and then I talk to them. Then when I go to treat my patient, I am able to heal them. I also go there to communicate with them when something bad is happening to someone in my family, if I have made a mistake, or other things, then I go to communicate and to ask for forgiveness. Now, sometimes there is no water falling at those sacred waterfalls. Then, there is nowhere for us to communicate with our ancestors.

There are many plantations on the bank of the Ngwarele river. It has got many many medicinal plants growing close to it. There is a wetland outside the river but nowadays there is no more wetland there.

Mohlomobe River: this river also has a lot of sacred places, it has four sacred waterfalls, and different snakes (we work with snakes!). There are a lot of pools. At the pools, I take some

patients there to communicate with their ancestors. If I have a big problem I go to the pool, to cleanse myself or to cleanse my patients. Those pools are now completely gone. The pools disappeared in the 1980s, then in 2002 there were big rains, and the pools appeared again, and now today they are gone. We have to fetch water from the small rivers for doing cleansing rituals now, but we know that this water is not alive.

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Swafing River: It also has pools and sacred places like the previous two. We find many different medicines there that are different to what we find near the other rivers. Swafing comes from the Moholoholo Mountain, and now that river is very low and dry.

These are all sacred rivers, and if we don't have any water we cannot communicate with the ancestors. People are dying, the animals are dying. There is no clean water there in my community of Violet Bank; that is why people are dying. If we could communicate with our ancestors, these bad things would stop happening. Nowadays I can only go on top of the mountain (Moholoholo) to communicate with my ancestors. I also sometimes go into the small mountains and I fast (no water no food) so that I can find the power to communicate with them and try make this situation better. Now that the sacred places are gone I must find the power inside myself.

What is the response of the traditional health practitioners?

Surely, since the natural sacred sites are the "headquarters" of the ancestors it goes without saying that the destruction of these sites is certainly not good for the well-functioning of communities. The detachment of the traditional health practitioners with the sacred natural sites is causing severe

strains within the ancestral world. The detachment causes communication breakdowns within traditional health practitioners and their ancestors, which weakens the practice according to Dr Nkomane of Greenvalley, Bushbuckridge.

Patricia Mdluli held a workshop for the Traditional Health Practitioners. She reports on their reaction to her claims that the plantations are partly responsible for the degeneration of sacred sites and traditional medicine:

Reflections on meeting with Traditional Health Practitioners (THPs):

The traditional healers didn't know why they can't find the medicinal plants anymore, or why the pools or sacred places are no longer there. Then we had the workshop and Patricia told them that she has learnt things through the case study, to open her mind and see what is going on. She told them that together have done research and discovered that the plantations of gum trees have destroyed the rivers. They ask her 'why do you say that, where did you find this out?' and she told them she found it out from the booklets and from Geasphere. Some of them believed her, others didn't believe her. The others who are not believing her,

they are failing to think properly, it is especially the youth. The older people listened to her and they understand.

Patricia felt that she was welcomed at this meeting of THPs; she felt that people appreciated the workshop. On the 28th January 2016 in the evening at 7pm she called the chairperson of the traditional healers to say she wanted a meeting, and when she went the next morning there were many traditional healers waiting there to meet her. Normally they do not come to meetings, but that day they all came. They started to understand the importance of the meeting. She spoke at that meeting about the importance of looking after the rivers. She argued that "If we communicate with the DWS people to destroy the gumtrees, the water will come back to the river, and then the water will run clean. Now, there is a small amount of water and it is dirty."

The traditional healers have already started to clean the rivers, by picking up the litter and the nappies, and taking it to the rubbish bins. The nappies are polluting the river a lot.

In 2013 the traditional healers and Patricia volunteered for six months to clean the Ngwarele River.

Patricia reflects on the experience: “Now after the workshop I have got many people who want to help me to clean the river. I’ve got a good group of people who want to come to meetings with me about water, I have already called for a combined meeting with the Mupo Foundation (we had several meetings in 2015), and the healers from Inkomati, and a big group of healers from my side came to that meeting. We went to a big meeting in Komatipoort of all the healers of Mpumalanga. I also attended local meetings of the MPWC.”

Plantations and Land claims



The government has always said that the claimants to the Mariepskop area wanted the gum trees hence they could not implement the exit strategy. As we have reported there are currently two claimants the CPA and the Trust. The CPA is alleged to be keen to continue with the plantations and the Trust does not want them.

According to our reasoning, the plantation issue is highly depended upon the total agreement of the two communities. It is them – the two communities - to say ultimately, as the indigenous communities

of Mariepskop / Moholoholo, how they want their land to be like. This aim will be hard and at times impossible to be realised without their unity which the MRLCC failed to do. My (Dr Mashile's) involvement in this Social Learning, have brought me closer to the correct resolution of this matter. More people are now becoming aware of the loss they have incurred by not having had one directly involved with the issues as I am presently doing. (There is light at the end of the tunnel).

Ecosystem services and reduced stream-flow

Period	Rainfall, mm	Run-off, cubic metres
1935 - 1940	1729	143.07 million
1941 - 1945	1122	48.72 million
1946 - 1950	1332	38.43 million
1955 - 1960	2060	28.72 million
1961 - 1964	1308	16.58 million

Traditional indigenous and rural communities have been directly dependent on nature for their livelihood for many decades until they were forcefully removed from their ancestral communal land to make way for the destructive plantations. There are different types of benefits and of services that communities get from a forest like:

- Social and economic benefits (food, clothes, shelter)

- Spiritual and cultural services (sacred sites, spiritual well-being, air).

Medicinal plants and fresh running water is at its lowest in history according to Traditional Health Practitioners (THP's) and the Inkomati Usuthu Catchment Management Agency (IUCMA).

Bushbuckridge has been experiencing continued water challenges in the past decade. The rivers levels are at the lowest in history, especially in the Sand river catchment. The Klaserie (Motlasedi) river

which is within the Sand catchment is very stressed at the moment according to the IUCMA presentation at the Sand catchment management forum meeting on water quality status in the Sabie–Sand catchments.

The table on the previous page shows the fall in stream flow since 1935 to 1964. It shows that even a long time ago the plantations were already impacting on the rivers around Bushbuckridge. The graph shows constant decline of water down stream flow, irrespective of the rainfall levels.

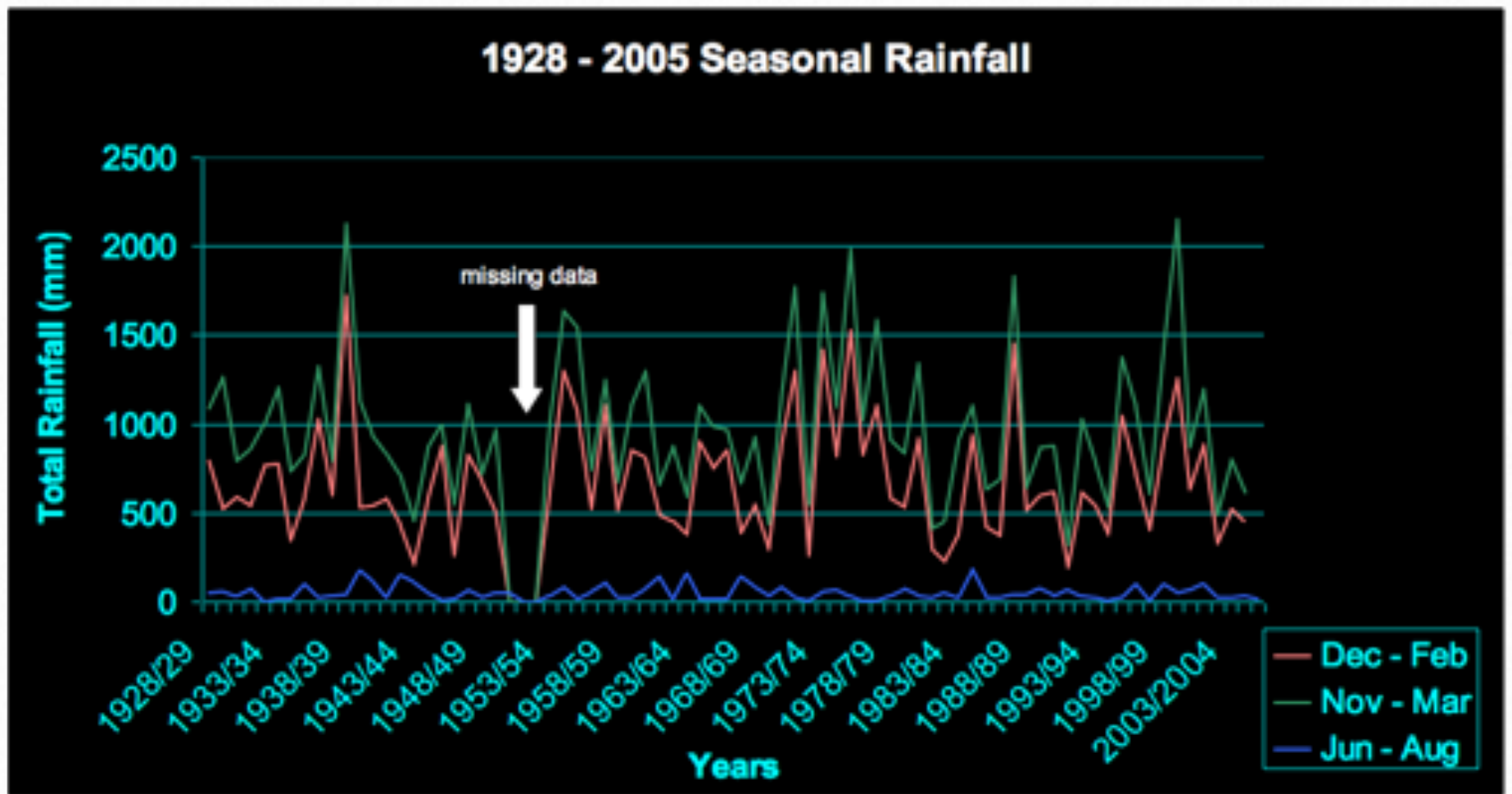
Although the graph relates to data recorded between 1935 and 1964, recorded over a period of almost thirty years it nonetheless forms a solid base for an argument that plantations are destroying rivers. And things have only worsened since then. According to the Inkomazi Usuthu Catchment Management Agency (IUCMA's) presentation during the Sabie-Sand Catchment Management Forums meetings, it is clear that the Sand river catchment (which is from the Moholoholo mountain) is the most stressed of the two river catchment in Bushbuckridge. Therefore one can conclude that the situation has just worsened over the fifty-years plus since

the data was recorded because of the following facts:

The Lowveld Exit Plan, taken at a parliamentary level in 2001, showed that the government was concerned about the plantations. This decision was never implemented and the government (DWS) used to say that they could not implement the decision because the claimants (CPA) want the plantations to continue. Fortunately the Mpumalanga Water Caucus networked with the other claimants, the Chueu Trust. They made their position clear that they do not want any of those invasive plantations.

Case Studies: there are numerous case studies conducted by different organisations and individuals like AWARD, Water Dialogues and Geosphere, Mr Dave Rushworth and Prof. Willem Ferguson that have shown conclusive evidence that the Sand river catchment is ailing. The fact that some of the studies were conducted after the Exit Strategy decision shows that the downstream flow reduction has been continuous.

According to the IUCMA the Sand is the most stressed of the two catchments and polluted with e-coli bacteria to alarmingly high level for human consumption as



illustrated in the presentation of (IUCMA water status) between 2014 and 2016. It would be interesting to have the most recent data relating the status of the same river today.

The reason we bring this up is because if there were no gum trees or if the gum trees were better looked after we would have a better water flow. This may mean that the issue of e-coli would not be such a huge issue as the polluted water would be more diluted and the river better able to cope with water pollution. Just like a healthy body that can flush out toxins, so a healthy river can deal with pollution better. This is not saying that water quality issues are not important but they are made worse by the low water flow.

5

Conclusion and key messages

“The scariest thing is to see the local rivers vanishing and wetlands drying up as result of these human activities.”



What is the impact of large scale plantations on water downstream flow, ecosystems services and land claims in Mariepskop /Moholoholo –Mpumalanga?

Large scale Industrial Timber Plantations are destructive to the environment because of their high water usage. ITP's and in particular, eucalyptus have a deep strong root system that can pierce through the water table and steal from the reserves hence reducing downstream water flow and destroying the wetlands, grasslands, medicinal plants and natural sacred sites.

The scariest thing is to see the local rivers vanishing and wetlands drying up as result of these human activities. Water downstream flow in most rivers is drastically reduced during the non-rainy season. This effects the rivers ability to deal with high levels of pollution as well as water not being available for human use.

Downstream reduction in rivers affects the wellness of waterfalls, wells, and availability of traditional medicinal plants

Tensions around land claims has exacerbated this issue as it is claimed no one can make a decision about what happens to this land until the land claims are sorted out. It is our belief that the government is using the unresolved land

claims issue to not take responsibility for the overgrown gum tree forests which means they are not complying with South African law. The land claims issue should not be the reason why gum trees that are growing in rivers and on river banks are not removed. Regardless of who owns the land the clearing of gum trees from river beds is law and needs to be implemented.

We have also learnt how important history is for understanding environmental issues and the links between social and environmental issues. As can be seen from our own personal stories and the history of this area we have not only suffered from being removed from our land but the very reason for this removal, the planting of gum trees, still effects us today in all aspects of our lives. The plantations are an apartheid legacy that has taken away our land and is threatening our way of life through the destruction of sacred pools and the disappearance of wetlands where sacred plants grow.

We also suffer the health risks of polluted water and in the winter seasons have no water at all. The land we grew up on is not the same land that we live on today. We are the living memory of how things were, the injustices we have lived through and



We are the living memory of how things were, the injustices we have lived through and the injustices we still live with today. The injustice to our rivers is an injustice to us and our land.

the injustices we still live with today. The injustice to our rivers is an injustice to ourselves and our land.

If we are to protect our traditional heritage and our access to ecosystem services in a time of increased threat by climate change then we need to address the issue of the mismanaged plantations as a matter of urgency. One tree is said to take more than 25 liters of water per day. That is one person's human right to water that is disappearing because of these large scale plantations.

Our greatest learning is this change project is 'us' researching 'us' meaning that the best people to research a situation are the one's affected by it and who live it.

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