OM 4.4.4

CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name: Wildlife and Environment Society of South Africa	
Project Title:	Midmar to Albert Falls Biosphere Reserve
Date of Report:	
Report Author and Contact	
Information	

CEPF Region: Maputaland – Pondoland - Albany

Strategic Direction: 3. Corridor-level ecosystem function

Grant Amount: \$69,995.00

Project Dates: July 2014 - October 2015

Definitions

Midmar to Albert Falls Biosphere Reserve –	The project name given to establish the first UNESCO
	Biosphere Reserve in KwaZulu-Natal.

Greater uMngeni Biosphere Reserve - The formally accepted proposed Biosphere Reserve name.

Greater uMngeni Biosphere Reserve Initiative - The proposed Biosphere Reserve project.

Acronyms

GuBRI -	Greater uMngeni Biosphere Reserve Initiative (note yet registered under UNESCO)
GuBR -	Greater uMngeni Biosphere Reserve
BR -	Biosphere Reserve

Implementation Partners for this Project (please explain the level of involvement for each partner): Table 1: Partners in project

Project Implementation Partner		Level of Involvement	
Local	Institution		
	DEDTEA	Has provided support to the identification and	
		development of economic opportunities for forest	
		community/ forestry sector.	
		Valuable input into how biosphere reserves can	
		contribute to municipal objectives.	
	EKZNW	Has provided support by sharing mapping and	
		spatial data, biodiversity information, advice and	
		strategic guidance without any costs.	
		Has shared ideas on how, through the GuBR,	
		information can be collected to improve their	
		biodiversity planning information (fine scaling of	
		their data sets).	

Comment [MG1]: Please can you include the full names for each organization.

uMngeni Municipality	Supports the Initiative and has encouraged that more areas within the municipality be added to the biosphere reserve. Provided input towards shaping the GuBRI as a critical partner. Will be represented on the steering committee.
uMkhambatini Municipality	Supports the Initiative and has encouraged that more areas within the municipailty be added within the biosphere reserve. Provided input towards shaping the GuBRI as a critical partner.
uMshwathi Municipality	Supports the Initiative and has encouraged that more areas within the municipality be added within the biosphere reserve. Provided input towards shaping the GuBRI as a critical partner.
uMgungundlovu District Municipality	Supports the Initiative and has encouraged that more areas within the municipality be added within the proposed BR area. Provided critical input towards shaping the GuBRI as a partner.
COGTA (Department of Cooperative governance and Traditional Affairs)	Has provided input into shaping of the Greater uMngeni Biosphere Reserve and sharing contacts of other key stakeholders for the GuBR. Also provided valuable references to I aid the ?process that may be applicable for the GuBR, namely land characterisation
NGO	
DUCT	Supports the BR Initiative and has been providing input towards shaping the Biosphere Reserve Initiative.
Groundtruth	Firm supporters of the Biosphere Reserve. Have been involved in supporting the water research conducted in the GuBR. The mini SASS and SASS5 assessment tools have been invaluable.
Wildlands	Has provided financial support for running Municipal Training Workshop through CEPF project.
WESSA	Initiated and supports the project. Has identified key stakeholders and key meetings to attend as grant recipients.
EWT	Supports the Biosphere Reserve Initiative and provided mapping and other information.
Midlands Meander	Supporter of the GuBRI. Will be a useful media partner in promoting the BR to tourists and their own 150 tourism members from the Midlands.
WESSA uMngeni Valley Nature	Hosted? meetings; engaged in development of
Reserve	concept note
 Drivets / Comparet	
Private / Corporate	

SAPPI Supports the Biosphere Reserve Initiative an provided mapping and other information Stihl Supports the Initiative as a global company; provided alien clearing equipment and mach in the area. Karkloof Safari Spa Private Game Supports initiative as key stakeholder.	
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Karkloof Safari Sna Private Game Supports initiative as key stakeholder	
Supports initiative as key stakenoider.	
Reserve Accommodated research on property (SASS	
assessment and water quality – Melissa and	Chris).
Engaged in development of concept note	
Garden Route Biosphere Reserve Presented concept to local municipal memb	ers
(Vernon Gibbs) during workshops	
Midlands Conservancies Full support for the Biosphere Reserve.	
(Dargle and Balgowan) Have shared information about the GuBRI w	ith
members	
Talbot & Talbot Supported water research by sponsoring sor	ne
free water sampling to assist a research proj	ect
that contributed to the valuation? of core	
conservation areas within the GuBRI	
Fountain Hill Estate Willing member of the Biosphere Reserve;	
agreeable to have their conservation area in	cluded
as part of the core.	
Emross (Environmental Consultant) Emross consulting company that developed	the
National Biosphere Reserve Strategy for the	
Department of Environmental Affairs. We w	orked
with them and obtained good insight into th	eir
research and the direction of the strategy.	ney
contributed valuable material to the authori	ty BR
training,	
Forums	
Upper uMngeni Catchment Forum Provided support and guidance to the GuBR	
KZN Wetland Forum Presentation	
National DEA Invited the GUBRI project team to present o	n the
Initiative in the National Man and Biosphere	
Reserve Committee and covered all costs of	
attending the function. National DEA has als	D
stated that it is willing to cover all the costs i	n
presenting the nomination to UNESCO.	
SA MAB Forum Provided guidance and support to the GuBR	
SANBI Supports the GuBRI and has been involved in	
Municipal Training Workshops held as a fund	ler.
International AgroSup Dijon University (France) The provision of an intern for a period of 5 n	
to conduct research related to the Biosphere	2
Reserve	
(other MAB reserves that we	
connected with on the continent)	
Jönköping University (Sweden) and Exploring a 'Twinning' Project between the C	GuBR
the Eastern Vättern Scarp Landscape and the Eastern Vättern Scarp Landscape	
Biosphere Reserve Biosphere Reserve	

	IUCN in Southern Africa expressed interest in seeing how they could play a more active role in supporting BR's in the sub-region.

Below is a table reflecting meetings that took place over the project period. The table does not include one-on-one meetings as well as a number of presentations to stakeholders.

Table 2: Stakeholder engagements

Type of consultations	Sector	No. of engagements
Stakeholder engagement meetings	Government departments and Local Government (municipalities)	5
Stakeholder engagement meetings	Conservancies (excludes presentations)	3
Stakeholder engagement meetings	NGOs (supplemented with forum meetings such as the KZN Wetlands Forum and the Upper uMngeni Catchment Management forum)	1
Stakeholder engagement meetings	Civil Society and Landowners (excludes presentations)	2

Conservation Impacts

Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.

The project relates to the CEPF investment strategy presented in the Ecosystem Profile with reference the specific strategic direction from the relevant ecosystem profile that the project will support:

3. Maintain and Restore ecosystem function and integrity in the highland grasslands and Pondoland corridors.

3.1 Develop and implement innovative projects that expand conservation management and benefit people in threatened catchment, freshwater and estuarine ecosystems.

The project initially sought to secure voluntary buy-in or support from landowners, conservancies, government and non-government institutions within the MPA Hotspot for the creation of a Biosphere Reserve encompassing areas within the uMngeni local municipality, with a particular focus on the uMngeni River and auxiliary water resources. This area was identified by CEPF as a Key Biodiversity Area and CEPF Priority. As the project progressed and interest was generated, additional municipal areas were included further down the catchment. These were uMkhambatini local municipality and the uMshwathi local municipality.

Through the process of a range of stakeholder engagements, a growing network of awareness around the threats to the area's' ecosystems and the resulting impact on human health and well-being was created. This sensitisation allowed for the presentation of the UNESCO MAB as a possible tool to assist in a solution based approach towards the creation of a sustainability-lead landscape.

The BR concept was better understood by municipalities and viewed as one that could assist their respective jurisdictions with improved public participation, future spatial planning, service delivery and improved management.

A functioning biosphere reserve would contribute directly to the following CEPF Strategic Direction for the Maputaland-Pondoland-Albany Ecosystem Profile.

Table 3: Alignment of the GuBR as a project to the CEPF Strategic direction.

CEPF Strategic Direction	CEPF Investment Priority	Contribution
2. Expand conservation areas	Develop and implement	Biosphere Reserves are
and improve land use in 19 key	innovative approaches to	voluntary cooperative
biodiversity areas through	expand private and communal	conservation areas that are
innovative approaches.	protected areas, particularly for	focused on sustainable
	habitats underrepresented in	development. They are unique
	the current protected area	in that they focus on
	network.	partnerships and the integration
		of networks in order to realize
		this. The approach allows for the
		inclusion of informal and formal
		protected areas as well as
		creating awareness of the need
		for better land management by
		owners in buffer areas. As the
		process is voluntary the
		likelihood of cooperation in
		better land use and
		management practices within
		incorporated land parcels is
		high. Through the biosphere
		reserve process where
		stakeholders become
		increasingly informed on issues
		of sustainability, there is greater
		opportunity for the conversation
		around contributing to
		sustainable development
		principles. Although the time
		frames made it difficult to be
		able to realise the benefit of the
		process, there were two areas

		identified as part of the core conservation area of the Biosphere Reserve which entered into stewardship to attain the Nature Reserve Status. The total area of these two sites would be just over 4000ha.
3. Maintain and restore ecosystem function and integrity in the Highland Grasslands and Pondoland corridors.	Develop and implement innovative projects that expand conservation management and benefit people in threatened catchment, freshwater and estuarine ecosystems.	The Greater uMngeni Biosphere Reserve Initiative (GuBRI) is situated within the uMngeni River Catchment area and encompasses a number of threatened ecosystems. During stakeholder engagement decisions were made amongst some core area land owners of the GuBRI to look at dropping fences between properties in order to secure the integrity of the landscape and the natural processes.
4. Create an enabling environment to improve conservation and management of Maputaland-Pondoland- Albany priority sites.	Establish and strengthen institutional arrangements that will increase and coordinate civil society participation and facilitate lessons sharing to promote linkages that ensure effective conservation action at a broad scale.	Through the stakeholder engagements and attendance at other forums, the networks that have already been established have provided a more receptive landscape towards the implementation of sustainable development projects and concepts. These engagements have also been educational for stakeholders therefore developing a more informed society within the proposed GuBRI. The landscape approach to conservation efforts in the proposed area lends itself to improved efficiency and access to support for priority sites and species. Workshops held with municipalities allowed for knowledge sharing and discussions around how BRs can be integrated into planning for better environmental decision- making to support local,

	national and international
	objectives.

Connecting Landscapes -

- 1. Although it is not a project activity, the project was approached by the Duzi uMngeni Conservation Trust (DUCT) to present the concept of the creation of a new Urban conservancy within Howick and attain municipal approval for the erection of signage and commitment to the concept. Stakeholders presented to the uMngeni Municipal Council the concept of formalizing the Symonds Lane Stream into a conservancy. The stream creates a link between the uMngeni Valley and Beacon Hill (a recently proclaimed protected area under the stewardship programme in Howick). The formation of the conservancy puts the responsibility for its care with the resident citizens as the riverine system has been impacted upon a number of times in recent years by human activity.
- 2. Fountain Hill Estate, Cumberland and Private Landowner Cumberland Nature Reserve and the adjoining land owners have met to discuss how they could connect their conservation land units together to form a larger ecological system. This has developed since identifying the area as being able to play a valuable function as a core conservation area of the biosphere reserve. Further opportunities exist to expand this further which has been communicated to the respective landowners. Creating and maintaining green corridor areas is becoming increasingly difficult, especially in a landscape which is so intensely utilised. It is for this reason that such initiatives are so important. SAPPI (corporate organisation) has land that could further enhance the corridor and then possibly it could connect with Mayibuye which is aiming to become a Wildlife development reserve (also part of the stewardship programme).
- 3. A third example is the proposed dropping of fences between Karkloof Safari Spa and Umgeni Valley Nature Reserve. Adjoining neighbours have also expressed interest to drop fences. —This will promote a greater area of contiguity (total 4500ha) and be valuable for biodiversity conservation and improved ecological functioning in the area.

The project core zones expanded to additional formally protected areas (Please refer to Table 1) and 19 Conservancies (please refer to Table 2) from its initial 3 formally protected areas and 3 conservancies. During the project phase three new reserves were established in the area namely; James Wakelin Grassland; Fort Nottingham Nature Reserve and Beacon Hill.

Table 4: Nature Reserves in core area of GuBR

Proclaimed Sites inside the GUBR Boundary		
Name	Category	
Alternative Complementing Category		
Beacon Hill	Protected Environment	
Blink water	Nature Reserve	
Blue Crane (Stonehaven)	Nature Reserve	
Boston View	Biodiversity Agreement	
Contract Negotiation inside the GuBR Boundary		
Cumberland Private Nature Reserve*	Natural Heritage Site (#320)	

Fort Nottingham	Nature Reserve
Fountain Hill Estate*	Entering stewardship with a portion assigned
	Natural Heritage
Hilton College	Nature Reserve
James Wakelin Grassland	Nature Reserve
Karkloof Dartmoor	Biodiversity Agreement
Karkloof Safari Spa and Mahathunzi*	Nature Reserve
Mayibuye	Nature Reserve
Mbona	Nature Reserve
Michael House	Nature Reserve
Mpushini	Protected Environment
Mt Gilboa	Nature Reserve
Umgeni Valley Nature Reserve*	Nature Reserve

Proclaimed Sites that are just outside the GuBR Boundary

Name	Category
Bosch Berg	Nature Reserve Bill
Barn Crane & Oribi	Nature Reserve Mpushini
Protected Environment Umgeni Plateau	
Nature Reserve	
Mount Shannon	Protected Environment
Tillietedlum	Biodiversity Agreement (Board Approval stage)

*Note: is not formally proclaimed yet.

Name	Abbreviation	Size (ha)
uMngeni valley Nature Reserve	UVNR	900
Karkloof Nature Reserve	KNR	2 681
Karkloof Safari Spa Private Nature Reserve	KSSNR	3 500
Cumberland Nature Reserve	CNR	300
Fort Nottingham Nature Reserve	FNNR	1 227
Dargle Nature Reserve	DNR	350
Albert Falls Nature Reserve	AFNR	3 000
Midmar Nature Reserve	MNR	2 857
Mbona Private Nature Reserve	MPNR	700
Fountain Hill Estate Nature Reserve	FHENR	1 400
Hilton Collage Nature Reserve	HCNR	550
Mayibuye Game Reserve	MGR	4 650
Total Core Size (ha)		22 115

Note: The total area of Nature Reserves is less than the total core area of 25 507ha because some areas included as core are not Nature Reserves and some very recently proclaimed reserves have not been accounted for.

Table 5: A list of the conservancies within the GUBR *[excluding*]

Conservancy Name

- Dargle Conservancy
- Boston Conservancy
- Ngenyane Conservancy
- Balgowan Conservancy
- Wartburg Conservancy
- Beacon Hill Conservancy
- Curry's Post Conservancy
- uMgenyane Conservancy
- World's View Conservancy
- Balgowan Conservancy

- Karkloof Conservancy
- Lions bush Conservancy
- Table Mountain Conservancy
- Mshwati Conservancy
- Midlands Conservancy
- Mpophomeni Conservancy Group
- uMngeni/Howick Urban Conservancy
- Winterskloof Conservancy
- Broadmoor Estate Conservancy

The CEPF's commitment allowed for the Initiative to potentially secure and or assist in better land management of the following Ecosystems as <u>r</u>Recognised in South African Government Gazette 34809 of 2011.

Table 6: List of threatened ecosystems within the GuBR

Ecosystem	Status	Biome	Criterion
Blinkwater Valley	CR	Grassland	Priority areas for meeting explicit biodiversity targets
New Hanover Plateau	CR	Grassland/Savanna/Forest	Priority areas for meeting explicit biodiversity targets
Oakland and Townhill Ridge	CR	Grassland/Savanna/Forest	Priority areas for meeting explicit biodiversity targets
Karkloof Forest Collective	EN	Grassland/Savanna/Forest	Priority areas for meeting explicit biodiversity targets
KwaZulu-Natal Sandstone Sourveld	EN	Savanna	Irreversible loss of natural habitat
Umgeni Valley Bushveld	EN	Grassland/Savanna/Forest	Priority areas for meeting explicit biodiversity targets
Beinn Mheadmon Mountain Grasslands	VU	Grassland	Priority areas for meeting explicit biodiversity targets
Drakensberg Foothill Wattled Crane Habitat	VU	Grassland/Forest	Priority areas for meeting explicit biodiversity targets
Easingwold Grasslands	VU	Grassland/Forest	Priority areas for meeting explicit biodiversity targets
Fort Nottingham Lowland Grasslands	VU	Grassland/Forest	Priority areas for meeting explicit biodiversity targets
Impendle Lowland Grasslands	VU	Grassland/Forest	Priority areas for meeting explicit biodiversity targets

Comment [MG2]: Has text been cut off here?

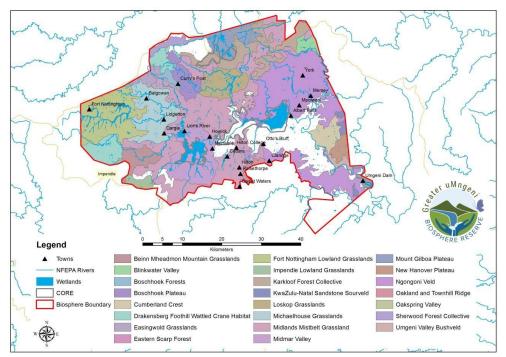
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Ecosystem	Status	Biome	Criterion
KwaMncane North Plateau	VU	Grassland/Forest	Priority areas for meeting explicit biodiversity targets
Michaelhouse Grasslands	VU	Grassland/Forest	Priority areas for meeting explicit biodiversity targets
Midlands Mistbelt Grassland	VU	Grassland	Irreversible loss of natural habitat
Ngongoni Veld	VU	Savanna	Irreversible loss of natural habitat
Sherwood Forest Collective	VU	Grassland/Forest	Priority areas for meeting explicit biodiversity targets

CR – Critically Endangered VU – Vulnerable EN

EN - Endangered

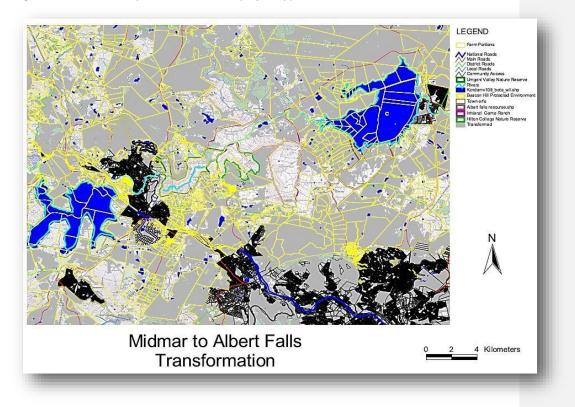
These ecosystems fall within the GuBRI in the following Manner:



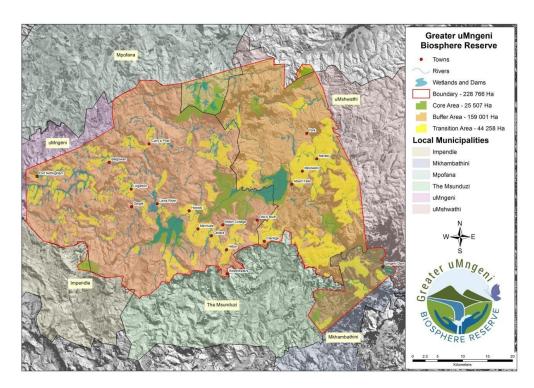
Map 2: Above are the threatened ecosystems within the GuBR.

Please summarize the overall results/impact of your project.

The project far exceeded the anticipated spatial impact in that it was able to get landowners and municipalities from further afield than expected involved in the project. The image below shows the original extent of the Biosphere Reserve in the project application in contrast to the actual extent.

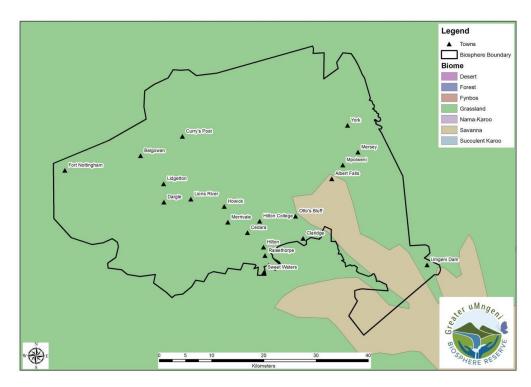


Map 3: Original proposed area of for the Biosphere Reserve.

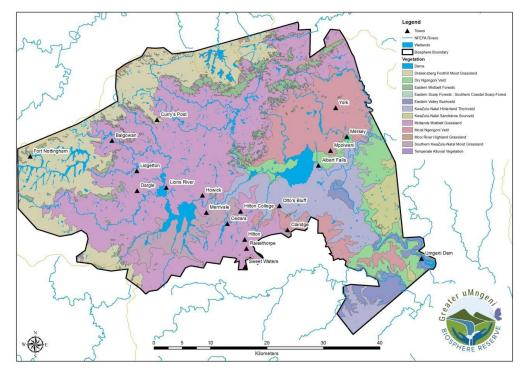


Map 4: Current proposed area of for the Greater uMngeni Biosphere Reserve.

The project was able to assist stakeholders on a number of occasions by creating access to information and in doing so, promote the concept of a Biosphere Reserve. This included supplying municipalities and landowners with contacts and other relevant information.



Map 5: Biomes of the GuBR – two biomes represented namely the grassland and savanah biomes. Due to the coarseness of the mapping, the forest patches in the GuBR are not represented. (Mucina and Rutherford, 2006).



Map 6: Vegetation types within the GuBR.

Table 7: The bioregions of the GuBR

BioRegion	Sub Biome Name
Sub-Escarpment Savannah Bioregion	KwaZulu-Natal Sandstone Sourveld
	Midlands Mistbelt Grassland
	KwaZulu-Natal Hinterland Thornveld
	Mooi River Highland Grassland
	Ngongoni Veld
	Southern KwaZulu-Natal Moist Grassland
	Drakensberg Foothill Moist Grassland
	Eastern Valley Bushveld
	KwaZulu-Natal Highland Thornveld
Zonal & Intrazonal Forests	Southern Mistbelt Forest
	Scarp Forest

Planned Long-term Impacts - 3+ years (as stated in the approved proposal):

1. UNESCO Biosphere Reserve within the Midmar and Albert Falls area will be created, entailing 4867 ha of land in areas of formal protection and large portions of production land better managed for biodiversity. The Biosphere reserve area will be clearly identified during deliverable 1.2 of the project where the area will be digitally mapped using spatial data showing land use and clear boundaries using GIS and field research data.

2. There will be a Biosphere Reserve Committee formed to ensure and be responsible for the managing of the Biosphere Reserve as a separate entity, registered as a NPO.

3. There will ideally be a large number of NGO's, business associations, government agencies and community members formally participating as part of the Biosphere Reserve steering committee.

4. The proposed Biosphere Reserve will serve as a platform for the smooth implementation of sustainable approaches to conservation and management. By combining the joint efforts of NGOs, National, Provincial and Local Government and other stakeholders into a single network, the MAB network offers a landscape or bio-regional approach to conservation development through which social upliftment can be achieved.

5. A successfully implemented Biosphere Reserve will achieve and enhance: Climate Resilience, Natural landscape preservation, improved green economy, improved water security, improved human welfare, and increase natural landscape connectivity, preserve bio and cultural diversity, and lead to healthy catchments.

Actual Progress Toward Long-term Impacts at Completion:

 UNESCO Biosphere Reserve within the Midmar and Albert Falls area will be created, entailing 4867 ha of land in areas of formal protection and large portions of production land better managed for biodiversity. The Biosphere reserve area will be clearly identified during deliverable 1.2 of the project where the area will be digitally mapped using spatial data showing land use and clear boundaries using GIS and field research data.

It was acknowledged that with the CEPF acceptance to fund the process in June 2014, there was going to be a positive challenge to achieve as much as possible in the available timeframe. The initial project plan entailed a three year process which was compacted in order to meet the CEPF closing date. The approach undertaken was for the project to generate support and administer stakeholder engagements in order for the BR to be seen as an area which would ultimately become an independent entity (as opposed to a WESSA driven and owned entity). This meant that new areas for inclusion and expansion were driven by stakeholders themselves. This increased

the size of the BR dramatically however it also meant that the initial area was continually increasing, and mapping had to be updated a number of times to reflect these inclusions. The original extent of the proposed GuBRI was 4867 hectares which consisted mainly of core conservation area.

Subsequently and as a result of the public engagement processes and networking, the project area expanded to around 230 000 hectares with nearly 25 000 hectares being designated as core (and under formal protection which is expected to increase to over 39 000 if Mayibuye Big Five Game reserves becomes established).

2. There will be a Biosphere Reserve Committee formed to ensure and be responsible for the managing of the Biosphere Reserve as a separate entity registered as a NPO.

The process of setting up the committee has been conducted. Request for nominations for the steering committee was sent out to stakeholders and 10 nominations were received.

- The legal entity required for the GuBR to operate is in the process of being established. This is being undertaken by Austen Smith Attorney's.
- 4 x people have offered to act as trustees for the trust. Due to the legal Trust establishment process, it is envisaged that this will be completed by the end of November.
- The nominations received reflected stakeholders from within the Biosphere Reserve as private and government.
- The late addition of new stakeholders and land may have meant that a more comprehensive nomination process could have taken place in order dispel any perceptions that the Biosphere Reserve process was biased toward those that were included earlier on.
- With the advised changes being the establishment of a trust as opposed to a company, the
 relationship between the stakeholders and the trustees has not been finalized as this would need
 to be put out to the stakeholders for discussion and comment so as not to be seen as a 'WESSA
 Biosphere Reserve'.

Despite the stakeholder committee not being officially formalized yet, the GuBRI is in an advanced position to being legally established and in a position to function according to the NGO structure outlined in the Management Manual of UNESCO Biosphere Reserves in Africa (2015).

3. There will ideally be a large number of NGO's, business associations, government agencies and community members formally participating as part of a Biosphere Reserve steering committee.

Although the Steering Committee (SC) is not legally established yet as a result of the Trust being in the process of registration, nominations for the SC have been received.

The aim is to have a small committee at this stage because:

- The SC will be tasked to bring on additional members, so as not to be seen as a WESSA driven process.
- Precaution has been taken against having too many steering committee members at the outset as it could reduce the likelihood of getting the GuBR functional.

There is a good stakeholder representation on the nominated steering committee (namely government, NGOs and private representatives).

A range of public engagement processes have been conducted and have resulted in a comprehensive and representative stakeholder register.

The combination of expanded GuBRI area meant that the already time constrained project was further constrained.

The process of educating stakeholders and particularly SC members is time consuming. The necessity of education is not limited solely to this initiative, as the same challenge has been experienced by nearly all the other BRs in South Africa that we have engaged with. Through effective and comprehensive education, the establishment and functioning of a BR can certainly be fast-tracked.

Table 8: Letters of support

	Name	Surname	Organisation	Position	Contact info
1	lan	Felton	DEDTEA	On behalf of the Head of Department	lan.Felton@kzndard.gov.za>
2	Fred	Wörner	Karkloof Safari Spa and Mahathunzi Nature Reserve	MD	fred@skema.com
3	lan	Rushworth	EKZNW	Biodiversity Research and Assessment	lan.rushworth@kznwidlife.com
4	Shari	Cade	WESSA Umgeni Valley Nature Reserve	Manager	manageruvnr@wessa.co.za
5	Sibusiso	Khuzwayo*	uMgungundlovu District Municipality (UMDM)	Municipal Manager	Sibusiso.Khuzwayo@umdm.gov.za>
6	Edwin	Gevers	Fountain Hill Estate	On behalf of the Board	ehgevers@gmail.com
7	Marian	Evans	Midlands Meander	Manager	management@midlindasmeander.co.za
8	Bheki	Zondi	uMshwati Municipality	Manager: Economic Growth and Development	bhekiz@umshwati.gov.za
9	Raylene	Kleinhans	Stihl	Marketing and Sponsorship	raylene.kleinhans@stihl.co.za

*a general letter that supported any activity that we undertook to improve natural resource management as this was a priority in the UMDM,

4. The proposed Biosphere Reserve will serve as a platform for the smooth implementation of sustainable approaches to conservation and management. Through combining the efforts of NGOs, National, Provincial and Local Government and other stakeholders into a single network, the MAB network offers a landscape or bio-regional approach to conservation development through which social upliftment can be achieved.

The GuBRI has been able to re-establish, as well as form, stronger relationships between different organisations. The BR has also strengthened partnerships between many NGOs and Government. The Initiative has seen the interaction of individuals and organizations that do not normally interact with each other on a regular basis as they focus on different fields of interest. This allows for a cross platform approach (3 functions of BRs) which will in future be of benefit to the organisations and the GUBR. Examples of this were having planners and environmental staff from municipalities in one room as well-being joined by a biodiversity planner from EKZNW. The National MAB committee has been, to date, supportive of the concept of the GUBRI to the point where the Initiative was presented by the Department of Environmental Affairs' National Representative to the African Man and Biosphere network (AfriMAB).

The project has already researched and disseminated ecological information to the uMshwathi Municipality, and in so doing, allowed for this information to be included into the Municipal Integrated Development Plan.

During the last phase of the project two 1-day capacity building and learning exchange programmes for authorities on the implementation and benefits of implementing an internationally recognised BR were held. The workbook was designed for use in conjunction with the Management Manual for UNESCO Biosphere Reserves in Africa: A practical guide for managers. This was a non-accredited workshop and learning exchange that aimed at introducing the participants to the topic of the UNESCO MAB Program for Biosphere Reserves (BRs), and highlighted how it works, and how they can benefit from the establishment of a BR. The foundation information on BRs was shared, such as the zonation of a BR; the three areas of focus and sustainable development; and local experiences and knowledge sharing from a representative from a working BR in South Africa. Participants were also able to share all their thoughts and concerns and ask any questions which resulted in good discussions. In some cases we were not always able to answer the questions because of a lack of practical BR implementation experience.

The main aim of the workshop was to develop capacity within municipalities to take the BR concept further and to improve the implementation of BRs within local municipalities. This helped create a greater level of awareness amongst key authorities. By them embracing the concept, it would lead to a smoother implementation of the GuBR going forward.

Insight into the Workshop and Learning Exchange

Main Objectives of Training

- 1. Improve understanding and valuing of BR's as a tool to assist in achieving municipal targets.
- 2. Integrate BR's into authorities' planning frameworks.
- 3. Increase capacity of authorities in the implementation of BR's

Course Target Groups

- Town Planners
- Conservation planners
- Municipal officials
- Councillors
- Community leaders (e.g. Local project leaders, decision makers)
- BR Steering committee members

5. A successfully implemented Biosphere Reserve will achieve and enhance: Climate Change Resilience, Natural landscape preservation, improved green economy, improved water security, improved human welfare, and increase natural landscape connectivity, preserve bio- and cultural diversity, and lead to healthy catchments.

Although the BR is currently part of the Upper uMngeni Catchment Management forum and the uMngeni Ecological Infrastructure Partnership, it is envisaged that once the BR is formally registered with UNESCO it will assist municipalities in promoting greener economies. The South African National Biodiversity Institute is currently implementing a project funded by the Adaptation Fund within the District Municipality where a portion of the area falls within the GuBR and is focused on aspects such as reducing the negative impacts of flooding, erosion, landscape management and fire, with increased focus on early warning and reaction systems.

Improved communication and networks will enhance efficiencies and create new opportunities for people living in the GuBR. For example, the linking people within the GuBR who are in need of assistance with clearing alien plant infestations. They will have access to DUCT and their teams who are experienced in alien clearing, as well as WESSA in terms of accessing invasive alien species training.

Already the GuBRI has assisted conservancies in better understanding the laws and how to respond to a recent oil and gas exploration right application that includes the majority of the GuBRI area. This is an example of developing social resilience across a landscape to unsustainable activities or activities that are not congruent with the vision of the GuBR.

The already mentioned examples of landowners exploring the dropping of fences and entering into stewardship, as well as some of the research that has been conducted over the project time, hint at the potential of what can be achieved with a fully functional BR.

Future projects and initiatives established through the BR will enhance all three function (Development, logistics and conservation) aspects of the area. The GuBRI has sparked interest at a national level as the concept was presented at two of the AfriMAB and DEA meetings (Kogelberg and George in 2014). During these meetings a great deal of guidance and support was shown to the GuBRI and the growing interest in South Africa with regards to the establishment of more BRs was evident. Once the GuBR is established with a working steering committee it will have international recognition and support which will increase funding opportunities in the area significantly.

Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal):

1. The project over its first year will look to consolidate a key network that will then become focused on achieving the future state and vision for the proposed GuBR area (as outlined above in the long-term impacts).

2. Networks created with NGO's, government, business associations and community members to support Greater Umgeni Biosphere Reserve Initiative.

3. Formal acceptance of a Government Agency (unknown at this stage) to promote the MAB BR with UNESCO and other government agencies going forward.

4. Networks created amongst stakeholders and the sharing of knowledge amongst stakeholders.

5. Human capacity development within the direct and indirect area through linking projects and people together.

6. Once Biosphere Reserve status has been achieved then the implementation of how to achieve the desired future state will be implemented. In essence the Short term impact of the project would be the bringing together of interested and affected parties within the area, the establishment of a steering committee and registration of the Biosphere Reserve as an independent NPO and the Biosphere Reserve submission to, and the implementation of, UNESCO MAB criteria.

Actual Progress Towards Short-term Impacts at Completion:

1. The project over its first year will look to consolidate a key network that will then become focused on achieving the future state for the proposed Biosphere Reserve area (as outlined above in the long-term impacts).

A range of stakeholders were engaged throughout the project period. Education and awareness on what a UNESCO Biosphere Reserve is, and specifically the proposed Greater uMngeni Biosphere Reserve, was communicated in a range of different ways and through a number of different channels. Face-to-face meetings were held, electronic information shared, brochures distributed, and participation in forums and presentations given. As a result, the project has been able to gain the interest and support of a much larger network of diverse groups than initially anticipated. The list of partners and supporters in Table 1 is testament to this. The strengthening of key authority stakeholders through the Biosphere Reserve Capacity Building Programme was of great value for the GuBRI because it may well translate into being included in future local strategic planning tools when they are reviewed. This would be a formal adoption of the BR as a land-use/management tool for the relevant local municipalities.

Due to time constraints the formal consolidation of the stakeholder steering committee has not been finalized but is well on the path to doing so. The project was able to consolidate a network of groups and individuals that will be critical to the Biosphere Reserve on an ongoing basis.

2. Networks created with NGO's, government, business associations and community members to support Midmar to Albert falls MAB BR.

The establishement of the GuBRI is currently supported by various stakeholders and organizations as shown in Table 1. A number of stakeholders have sent letters of support for the establishment of the GuBR and have shown a great deal of interest in the initiative. Further support continues to grow as a result of a range of awareness interventions and communication through the established network. Support at a local level by the District Municipalities and the Department of Cooperative Governance and Traditional Affairs has been crucial.

At a National Level the Biosphere Reserve has been well supported as a new initiative by the National Department of Environmental Affairs where the project team represented the GuBRI during government forums and meetings. The National Department has regularly invited participation from the GuBRI in the National Man and Biosphere Reserve Committee and has willingly covered the cost of participation in these events. In submitting the final Nomination document to UNESCO, the Department has also stated that it would be willing to cover all costs in presenting the nomination to UNESCO.

Biosphere Reserves within the National MAB committee have also given valuable support and direction to the project.

At a provincial level, the GuBRI is supported by the Provinces conservation body, Ezemvelo KZN Wildlife (EKZNW). It is, however, envisaged that EKZNW's crucial support for the Biosphere Reserve will be ongoing as the GuBR has the potential to assist the State owned entity in carrying out its mandate.

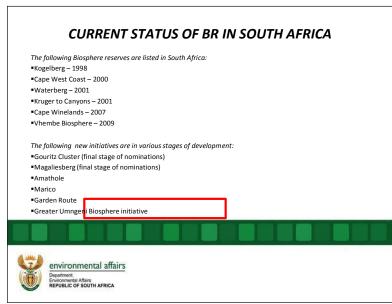


Figure 1: DEA presentation given at the National MAB gathering in the Kruger to Canyon Biosphere Reserve (17-19 March), which indicated the number of registered BRs and BR initiative under way in South Africa.

During the second AfriMAB meeting held in March 2015, where 49 people attended, the Department of Environmental Affairs presented to the MAB committee the current status of BRs in South Africa (Figure 3). The GuBRI was discussed and presented by the National Department of Environmental Affairs to other member countries and UNESCO. UNESCO officials formed an active part of this committee.

In a National report back to the UNESCO MAB International Coordinating committee (8-12th June 2015), DEA gave recognition to the new BR initiatives which are underway in SA - "The designation of the two new Biospheres [Gouritz and Magaliesberg BRs] will increase the South African Biosphere Reserves to eight, in addition, South Africa is also facilitating other new initiatives which are at various stages and as soon as they mature, they will also be submitted for consideration."¹

3. Formal acceptance of a Government Agency to promote the MAB BR with UNESCO and other government agencies going forward.

As mentioned previously, the National Department of Environmental Affairs is supportive of the proposed GuBR. It has given formal recognition to this process and there is communication between the South African MAB National Committee (SA MAB NATCOM) and the GuBRI project. The other provincial and local government relationships have already been highlighted above and it is firmly on their radar. The National Department has further stated, at the SA NAT COM meeting, that it would cover all transport arrangements and costs for at least one representatives of the GuBRI to present the UNESCO submission/application to the UNESCO MAB International Coordinating Council (ICC) at UNESCO Headquarters in Paris, France and would ensure that the Department is in attendance to show National support for the initiative.

National government has increased its investment into National Biosphere Reserves. This is evident through its commitment to:

- Having specific capacity within DEA to work on Biosphere Reserves in South Africa.
- The hosting of the 'Biosphere Reserves, sustainable land use management' event which will now become an annual event (February, 2015).
- Hosting of the African Network of the MAB Sub-Regional Workshop (March, 2015).
- Developing the first National MAB Strategy which will serve as a guideline in the implementation of the MAB Programme across all levels of management of biosphere reserves. It will also include a framework for funding of BRs in the country.
- The funding of short-term interventions of priority projects by the national government. The strategy will also include the guidelines for nominations of BRs as an annexure, and it is hoped that such guidelines will support nomination of new sites whilst assisting in improving the current portfolio.

By being included in the recent Investment Plan for securing ecological infrastructure to enhance water security in the uMngeni River (Pringle *et al*, November 2015), it gives recognition to the role that the GuBR can play in the important uMngeni catchment area. It states the following;

Landowner and land user initiative, buy-in and support are essential elements of success for investing in ecological infrastructure (SANBI 2013). Engaging with landowners may take a number of forms for example biodiversity stewardship. The Greater uMngeni Biosphere Reserve (currently being established

¹ http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/MAB_national_report_South-Africa_v2_MABICC27_en.pdf

by WESSA) provides an important opportunity to engage with willing landowners to undertake appropriate management and rehabilitation actions.

4. Networks created amongst stakeholder and the sharing of knowledge amongst stakeholders.

Establishing and maintaining networks are critical for BRs. As discussed previously, information sharing between municipalities and the project as well as individual landowners occurred regularly. The stakeholder engagement contributed to the creation of links between the Catchment Management Forums, the uMngeni Ecological Infrastructure Partnership (UEIP), conservancies and private landowners. It shared information and was able to answer queries regarding relevant activities and projects within the area concerned. A newsletter has been sent out to all stakeholders keeping them up to date with key events and news in the GuBRI. The project has also established its own twitter, Facebook and website with information that stakeholders can share which includes a children's section and a blog where questions can be exchanged and answered.

5. Human capacity development (HCD) within the direct and indirect area through linking projects and people together.

A range of human capacity developments initiatives took place during the project period. Each time the concept of a BR was discussed with a group of stakeholders it resulted in some form of enhanced human capacity development. In presenting the concept, the interconnectedness of the environment to our lives was highlighted. Additionally, one cannot explain the BR concept without working through the principles of sustainable development and how this forms the basis for MAB and our environmental rights and legislation in South Africa.

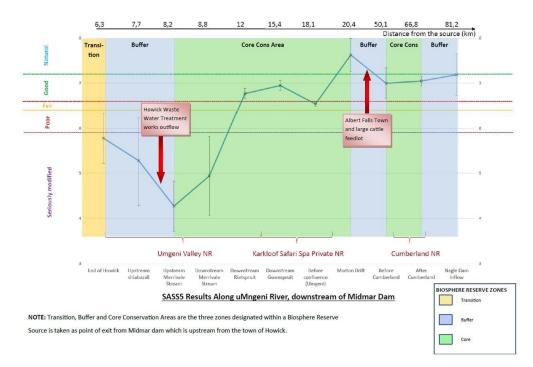
The BR concept as a land-use planning tool was fed into more formal HCD processes. The BR Capacity Building for Authorities has been explained in detail done in detail above. Since the training, there have been requests to conduct training for authorities in the Kruger to Canyon BR.

The BR also featured in a 2-day course for planners on Ecological Infrastructure in the uMngeni catchment. This training was developed by WESSA as part of an Ecological Infrastructure Project where 30 attended (16 participants on 31 March – 1^{st} April 2015 and 24-25th June 2015) representing local municipalities from the district municipality as well as representatives from the district municipality itself.

Many linking projects have been mentioned but one project that typifies the ability of a BR to create links and bring people together was the project titled *Value of core conservation areas in the Proposed Greater uMngeni Biosphere Reserve for water quality improvement, measured between Midmar Dam to Nagle Dam* (Melissa Aurelle and Chris Galliers, 2015). This project linked an international University (AgroSup Dijon University- France) through their intern programme, to the GuBRI. The project's focus drew on skills and networks within the Biosphere Reserve which included:

- Groundtruth (National NGO)
- DUCT (Local NGO)
- uMngeni Water (State water service provider)
- WESSA (National NGO)
- Landowners within the GuBR
- Talbot & Talbot (water quality analyst company)

The findings of the project showed how areas managed for conservation (Biodiverse landscapes and Core BR areas), have the potential through natural process, to rehabilitate water quality. This is graphically represented the simple graph below.



The project has been able to initiate various stakeholder and organizational interactions that would not have occurred without the CEPF investment into the project. The stakeholder liaisons have created a platform for discussions. An example that can be given, is when a meeting was held to present the BR concept to the uMngeni Municipal Council. At the presentation the Symmonds Lane Stream Conservancy was discussed and an action plan developed and later implemented.

6. Once Biosphere Reserve status has been achieved then the implementation of how to achieve the desired future state will be implemented. In essence the Short term impact of the project would be the bringing together of interested and affected parties within the area, the establishment of a steering committee and registration of the Biosphere Reserve as an independent NPO and the Biosphere Reserve submission to, and the implementation of, UNESCO MAB criteria.

As discussed the Biosphere Reserve in points 1-5 above.

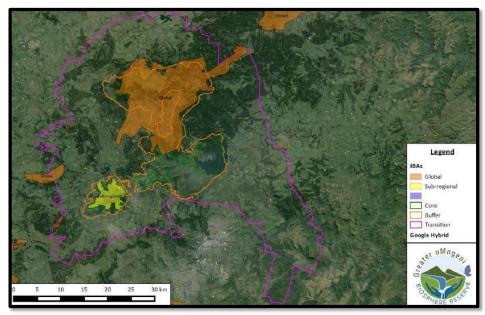
Please provide the following information where relevant:

Hectares Protected: 230 000 Species Conserved: No specific species were targeted for conservation, however the proposed GuBR area has a number of threatened species and vegetation types. Some flagship species have been identified for the area such as the Karkloof Blue Butterfly (*Orachrysops Ariadne*), Oribi antelope (*Ourebia ourebi*) and Natal Cycad (*Encephalartos natalensis*).

As the GuBRI area includes a number of important bird areas, there is increased opportunity for the conservation of a range of threatened bird species. (See table 3 below).

Name	Latin Name	Status	Endemic Status	Occurrence Status
Wattled Crane	Bugeranus carunculatus	CR		
African Marsh- Harrier	Circus ranivorus	VU		
Blue Crane	Anthropoides paradiseus	VU	Endemic	Nomadic
Cape Vulture	Gyps coprotheres	VU	Near- endemic	
Denham's Bustard	Neotis denhami	VU		Nomadic
Grey Crowned Crane	Balearica regulorum	VU		
Martial Eagle	Polemaetus bellicosus	VU		
Pink-backed Pelican	Pelecanus rufescens	VU		
Southern Bald Ibis	Geronticus calvus	VU	Endemic	Localised
African Crowned	Stephanoaetus	NT		
Eagle	coronatus			
Black Stork	Ciconia nigra	NT		Nomadic
Black-winged Lapwing	Vanellus melanopterus	NT		Altitudinal migrant
Bush Blackcap	Lioptilus nigricapillus	NT	Endemic	Altitudinal migrant
Great White Pelican	Pelecanus onocrotalus	NT		Nomadic
Half-collared Kingfisher	Alcedo semitorquata	NT		
Lanner Falcon	Falco biarmicus	NT		Partial migrant
Orange Ground- Thrush	Zoothera gurneyi	NT		
Secretarybird	Sagittarius serpentarius	NT		Nomadic
Woolly-necked Stork	Ciconia episcopus	NT		Partial migrant
Yellow-billed Stork	Mycteria ibis	NT		Partial migrant

Table 9a: Species identified by birdlife within the GuBRI zonation



Map 6: A showing the Important Bird Areas (IBAs) in the GuBR.

Table 9b: A list of mammal species to be found in the GuBR

SCIENTIFIC NAME	ENGLISH NAME	ISIZULU NAME	STATUS
Cercopithecus mitis	Samango Monkey	iNsimango	VU
Philantomba monticola	blue duiker		LC
Ourebia ourebi	Oribi		VU
Dentrophraz arboreus	tree hyrax	uMuqha	VU
Felis serval	serval		LC
Orycteropus afer	aardvark	iSambane	LC
Pelea capreolus	grey rhebok		LC
Mellivora capensis	honey badger		LC
Hyaena brunnea	brown hyena		NT
Crocuta crocuta	spotted hyena		LC
Lepus saxatilis	Scrub hare		LC
Ceratotherium simum	rhino		NT
Syncerus caffer	African buffalo	iNyathi	LC
Hippopotamus amphibius	hippo		VU
Giraffa camelopardalis	Giraffe	iNdlulamithi	LC
Equus quagga	Plains Zebra	iDube	LC
Connochaetes taurinus	wildebeest		LC
Damaliscus pygarus	blesbok		LC
Connochaetes taurinus	blue wildebeest		LC
Tragelaphus scriptus	Bushbuck	iNkonka / uNkonka	LC

Sylvicapra grimmia	grey duiker		LC
Tragelaphus oryx oryx	Eland	iMpofu	LC
Aepyceros melampus	impala		LC
Tragelaphus strepsiceros	Kudu	uMgakla	LC
Panthera pardus	leopard		NT
Tragelaphus angasii	Nyala		LC
Alcelaphus buselaphus	Red hartebeest	iNdluzele	LC
Redunca fulvorufula	Mountain reedbuck	iNxala	LC
Chlorocebus pygerythrus pygerythus	Vervet Monkey	iNkawu	LC
Kobus ellipsiprymnus	Waterbuck	iPhiva	LC
Caracal caracal	caracal		LC
Genetta genetta	common genet		LC
Herpestes pulveruulentus	large grey mongoose		LC
Atilax paludinosus	water mongoose		LC
Herpestes sanguineus	slender mongoose		LC
Ichneumia albicauda	white tailed mongoose		LC
Lutra maculicollis	Spotted-necked otter	uMthini	Protected
Aonyx capensis	African clawless otter	uMthini	NT
Potamochoerus larvatus	bushpig		LC
Canis mesomelas	Black-backed Jackal		LC
Proteles cristatus	Aardwolf	iNgci / iSinci / iSanci	LC
Civettictis civetta	African civet	iMbaluthi / uMhlangana	LC
Redunca arundinum	Common reedbuck	uMziki	LC
Canis adustatus	Side-striped jackal		LC

Note: A comprehensive list of bat species specifically found in the GuBR needs to be added to the above list.

The GuBR will be able to work with other organisations to improve water flows and water quality. This will have a positive effect on the aquatic fauna, of which there are a number of threatened species.

Table 10: The CSIR notes the following freshwater fish species within the uMngeni River. The Initiative could assist by not transforming the habitat of the indigenous population of fish species.

Common Name	Species Names	Notes
Riverbream	Acanthopagrus berda	FW/estuarine
Longspine Glassy	Ambassis productus	FW/estuarine
Natal Mountain Catfish	Amphilius natalensis	
African Mottled Eel	Anguilla bengalensis labiata	
Madagascar Mottled Eel	Anguilla marmorata	
Longfin Eel Anguilla	Anguilla mossambica	

Natal Topminnow	Aplochilichthys myaposae	
Freshwater Goby	Awaous aeneofuscus	
Chubbyhead Barb	Barbus anoplus	
Redtail Barb	Barbus gurneyi	
Straightfin Barb	Barbus paludinosus	
Bowstripe Barb	Barbus viviporus	FW/estuarine
Duckbill Sleeps	Butis butis	
Goldfish	Carassius auratus #	
Sharptooth Catfish	Clarias gariepinus	
Grass Carp	Ctenopharyngodon idella #	
Carp	Cyprinus carpio #	
Dusky Sleeper	Eleotris fusca	FW/estuarine Red Data
Blackthroat Goby	Favonigobius melanobrachus	FW/estuarine Red Data
Tropical Sand-Goby	Favonigobius reichei	
Mosquitofish	Gambusia affinis #	FW/estuarine
Estuarine Roundherring	Gilchristella aestuaria	FW/estuarine Red Data
Sleepy Goby	Glossogobius biocellatus	
River Goby	Glossogobius callidus	
Tank Goby	Glossogobius giuris	Red Data
Golden Sleeper	Hypseleotris cyprinoids	
Scaly/KZN Yellowfish	Labeobarbus natalensis	
Bluegill	Lepomis macrochirus #	FW/estuarine
River Snapper	Lutjanus argentimaculatus	FW/estuarine
Opossum Pipefish	Microphis brachyurus	
Freshwater Pipefish	Microphis fluviatilis	
Smallmouth Bass	Micropterus dolomieu #	
Spotted Bass	Micropterus punctulatus #	
Largemouth Bass	Micropterus salmoides #	FW/estuarine
Natal Moony	Monodactylus argenteus	FW/estuarine
Cape Moony	Monodactylus falciformis	FW/estuarine
Flathead Mullet	Mugil cephalus	FW/estuarine Red Data
Freshwater Mullet	Myxus capensis	
Rainbow Trout	Oncorhynchus mykiss #	
Mozambique Tilapia	Oreochromis mossambicus	
Guppy	Poecilia reticulata #	

Southern Mouthbrooder	Pseudocrenilabrus philander	Red Data
Checked Goby	Redigobius dewaali	
Brown Trout	Salmo trutta #	FW/estuarine Red Data
Bearded Eelby	Taenioides jacksoni	
Redbreast Tilapia	Tilapia rendalli	
Banded Tilapia	Tilapia sparrmanii	
Swordtail	Xiphophorus helleri #	

Denotes alien fish species

Developing a comprehensive and verified species list for the entire area of the GuBR needs to be done. (For more species information Annexure 3: Species lists). The intension was to get EKZNW to do at least 3 x bio-blitz's. Specific sites of altitudinal, climatic and ecosystem type were arranged but unfortunately due to capacity constraints, they were never able to second the necessary staff for the undertaking. It is hoped that this can still be done as it will be most valuable.

Corridors Created:

The value of developing and maintaining biodiversity corridors within the GuBRI has been identified, particularly because of the altitudinal variation across the GuBRI area and the role these corridors can play in assisting with climate change adaptation. The direct creation of corridors was not however a focus for this project but the Biosphere Reserve concept can promote and act as a catalyst for the creation of corridors. Thus, no corridors have been created during the project time but two corridors have been initiated, or developed momentum, since the start of the project. A third corridor opportunity exists and the respective landowners have held a meeting to look into linking of properties. The first two initiated are between Karkloof Safari Spa and Umgeni Valley Nature Reserve; and Mbona Nature Reserve, private landowners and Blink Water Nature Reserve (EKZNW).

The third one is between Fountain Hill Estate, a private landowner and Cumberland Private Nature Reserve.

Further opportunities are being explored especially within the Mayibuye project. These would all contribute to the expansion of the core areas.

The buffer zones also hold value in terms of biodiversity corridors as the GuBRI is made up of agricultural activities, forestry (Sappi) and low human impact areas. Conservancies are also classified within the buffer areas. The reason for selecting these areas as a buffer is due to their ability to accommodate a large portion of the GuBRI landscape which still holds biodiversity value and through which biodiversity can move.

The transition area includes all the areas surrounding the buffer zone that accommodate human activities such as industry, residential and other high impacting activities. These areas have been extensively transformed and do not act as biodiversity reservoirs. That said, there are still significant green open spaces that do facilitate a reduced level of biodiversity movement particularly through riparian areas. Examples are Symmonds Lane Stream Conservancy. Opportunities to improve the transition zones corridors must be seen as important within the GuBRI.

Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.

What should be acknowledged is that at the project planning and preplanning phases, there was no specific consolidated information source giving direction to the implementation and or creation of a Biosphere Reserve in the National context. The project plan attempted to foresee and plan for this based on existing Biosphere Reserves, which are all situated outside of the Province of KwaZulu-Natal and have varying degrees and levels of support for the programme as a whole.

As mentioned above the project attempted to allow stakeholders to drive the process and thus they would readily take ownership of the Biosphere Reserve upon formation. The positive responses received from sectors coupled with the project approach, resulted in considerable concept uptake and GuBRI area expansion. This was a big positive but it did result in an overextension on available project time and, to some degree, resources.

As "new" areas were included into the GuBRI, unplanned processes of contacting relevant landowners, local agencies, neighbours and other "new" stakeholders had to be undertaken. Although this wasn't always the case, late additions severely strained the project efficacy.

The budgeting process overestimated the amount of travel undertaken and underestimated the amount of time taken by the project team on administration aspects of the extended area such as constantly having to set up appointments, sourcing appropriate contacts within organisations and government agencies, creating platforms for information sharing and general administration. Coupled with this was the time set aside for the project manager and the project support. The project Manager was appointed as a three day a week position. The project may well have benefited further with fulltime employment (5-days a week).

We learned that the BR concept is fairly complex and it often takes more than one engagement with stakeholders for them to understand and conceptualise the value of a Biosphere Reserve.

Additional information requests were not catered for within the timeframes, thus in order to show the benefit of the Biosphere Reserve concept, the project team needed additional time to supply this, in order to show the benefits of an improved Biosphere Reserve Network.

The original project plan did not anticipate the level and frequency of updating required for the area. The expansion of the area meant additional mapping and subsequent species, ecosystem and other data was needed for updating the GuBRI, all of which was not catered for as the project was to initiate and liaise with stakeholders on a preconceived land area. The concept was that the project would gather information in order to facilitate the UNESCO application but at the same time to run an inclusive process.

These late changes meant that an adaptive approach needs to be taken, but also that the gained areas and support for the GuBRI will improve its chances of success because of its inclusive approach. A hardlined participatory process would have been divisive and certainly not conducive to the successful implementation of a Biosphere Reserve.

Summary of Challenges which could have affected the short and long-term objectives of the project:

- The project most likely would have completed all of the deliverables before the project end date.
- The future UNESCO application would probably have been rejected at the National MAB due to the less than 50 000 hectare minimum, which is a guideline put forward in 2015.
- The Initiative would have to have undergone the "extension" process to exceed 50 000 hectares without the CEPF's commitment, thus losing all momentum gained as the process would have had to start from the beginning.
- The Initiative would have been seen as a WESSA or small localised initiative and thus not area owned and may have been poorly supported by National NGO's and the National Government agency.
- Valuable conservation areas and significant contributors to the uMngeni water ecology would not have been included and thus not encompass the Savannah and Grassland Biomes toward the South and the Karkloof forest collective toward the North.
- Support from EKZNW- with all good intentions EKZNW was fully supportive of the proposed GuBR. Unfortunately they had severe capacity constraints which reduced their ability to provide valuable support. Perhaps it was untimely circumstances due to management and structural changes occurring whilst the project was under implementation.
- There are certainly stakeholders that would not have been consulted or adequately consulted in this process. Whilst every effort was made to be as inclusive as possible, more consultation is needed going forward.

Were there any unexpected impacts (positive or negative)?

As mentioned the concept was well received. This led to the expansion of the Biosphere Reserve to incorporate a number of areas that were not in the original project scope.

when introducing the MAB concept to stakeholders for the first time.

 Gas and Petroleum permit exploration application which includes most of the GuBR area.

Project Components

Project Components: Please report on results by project component. Reporting should reference specific products/deliverables from the approved project design and other relevant information.

Component 1 Planned (as stated in the approved proposal):

Research biosphere reserve requirements and any links to activities .e.g. Agriculture, communities, recreation, etc.

Component 1 Actual at Completion:

The research was concluded. This included the production of two documents (see Annexure 1a and 1b): 1. Biosphere Reserves in South Africa and

2. UNESCO MAB establishment requirements

As this would be the first Biosphere Reserve to be established within the Province of KwaZulu-Natal, the knowledge base and government support structures are not as established as other provinces within South Africa.

The research documents highlights, among other aspects, the following:

- The concept of Biosphere Reserves and relevant implications.
- The Criteria for Nomination.
- The Process of Nomination within South Africa.
- The possible short comings and lessons learnt by other Biosphere Reserves in their processes (note that Information of the two newest Biosphere Reserves which were only proclaimed in June 2015 are not included the Gauritz and Magliesberg BRs).
- Legislation regarding Biosphere Reserves in the South African context.

In the creation of the research document, WESSA made contact with a number of Biosphere Reserves Nationally and Internationally which also led to a better knowledge and understanding of possible pitfalls and required processes. The information gathered from the document provided useful insight in paving the way forward for the project. The document gave further clarity on the requirement, nationally and internationally, that would be needed to fulfil the requirements for a fully functional biosphere reserve. The document was integral for determining how the BR would work and the required steps needed in order to complete the UNESCO MAB application.

Component 2 Planned (as stated in the approved proposal):

Scoping of proposed area to acquire geospatial information about area and compile maps and report

Component 2 Actual at Completion:

This aspect was concluded as per the timeframes, but the constant changes to the scope of the Biosphere Reserve meant that the mapping had to be updated regularly.

The following maps have been completed:

Greater uMngeni Biosphere Reserve Initiative Area Maps

- 1. With towns and major roads
- 2. Conservation areas (formally proclaimed and stewardship sites)
- 3. UNESCO MAB zonations
- 4. Schools
- 5. National Freshwater Priority Areas
- 6. Temperature
- 7. Rainfall
- 8. Vegetation
- 9. Biodiversity corridors
- 10. Land cover map
- 11. Invasive Alien Species Priority map
- 12. Fire likelihood
- 13. Biomes
- 14. Threatened ecosystems
- 15. Tourism
- 16. GuBR in relation to proposed gas and petroleum exploration right
- 17. Important Bird Areas
- 18. Conservancies
- 19. 3D Map of the angles of slope within the GuBR

Component 3 Planned (as stated in the approved proposal): Stakeholder consultation

Component 3 Actual at Completion:

Stakeholder consultation began as planned with the dissemination of the concept at the National MAB committee in early September 2014. The National Biosphere Reserve Committee members commented on the relatively small size of the planned Biosphere Reserve and advised that it was not the norm to incorporate a biosphere reserve of under 50 000 hectares.

With the addition of new areas the project has also attempted to incorporate all comments, responses and input from these new areas as part of a commitment to an open consultative process.

Written submissions from stakeholders were found to be few. In order to address the reduced number of
writtenresponsetheprojectinitiated;

1. Written surveys at meetings handed to respondents prior to the close of these meetings which are then manually captured.

2. An online survey for those not in attendance at meetings, or as an interested party.

All meeting invites sent to stakeholders requested that the stakeholders utilize their existing networks to publicize the upcoming meetings in order to get as many interested parties involved. An example of the online survey may be found at:

https://docs.google.com/forms/d/196qq1DEBJg41FgemErFybXtYoLRj_Zu3rAmAM7NB1ts/viewform?usp =send_form

Stakeholder engagements took place constantly throughout the project and at different locations within the GuBRI. They involved specific focus group meetings, general stakeholder meetings, attending a range of forums (e.g. Upper uMngeni Catchment Management Forums) and presentations.

Stakeholder lists were compiled with contact information and attendance registers taken (see Annexure 2).



Figure 2: The above image shows the meeting with local landowners held in November 2014

The meetings that followed moved to the associations and groups within the area in April and May 2015. The concept was at this stage to expand to include the Karkloof at the advice of these stakeholder meetings. As the theme was introduced to more and more groups and individuals, the land parcel grew to include other areas which needed more meetings which required more administration and planning.

The Transition zone was loosely buffered so that it could be refined at a later date and to allow for the inclusion of some of the other areas within the transition area.

Despite requests to look into these further at a later stage, the stakeholders were still requesting area expansions as late as July 2015 which meant the municipality approval was still needed. The last meeting

with the Mkambathini Municipality on the 19 August 2015 meaning that the mapping also had to include the area suggested by the Municipal Planning unit which was done.

Initiative with an overlay of International Birding Areas. In reviewing this image, and the above two, one can clearly see the requested changes over time.

The expansion of the BR which led to perhaps a dilution of the stakeholder engagement processes has meant that participation in reviewing the terms of reference for the steering committee has not been done with as much participation as one would like. The nomination of steering committee members numbered 10 and they came from diverse backgrounds. This is positive and it is envisaged that once the legal entity is in place and the steering committee takes charge, the TORs can be amended further.



Figure 3: The image above shows a meeting with NGO's and Conservancies held on the 7th April 2015

Component 4 Planned (as stated in the approved proposal):

Meet requirements for organisational establishment of BR and preparation of nomination form for UNESCO submission

Component 4 Actual at Completion:

Efforts to formalize the Biosphere Reserve started in June 2015. Due to the delay in appointing a stakeholder committee the project team attempted to quick start the process by creating the Terms of Reference for the steering committee (at the request of a stakeholder).

Thus, the in anticipation of the appointment of the steering committee. Due to constant expansion requests this was never formalized.

Draft Terms of Reference for the Steering Committee were drafted by the project team. However the legal entity for the GuBR has not been established yet and therefore the steering committee is not active. The reason for this has been the expansion and corresponding need to continue to run as much as possible an inclusive and open process which has meant providing equal opportunity for all to have representation on the committee.

Were any components unrealized? If so, how has this affected the overall impact of the project?

Yes. The formation of the Biosphere Reserve Company was not realized as at the end of September 2015 due to the previously mentioned reasons. However it is not anticipated that this will have an impact on the project. With a steering committee nominated and just waiting on the finalisation of the Trust, it will allow the momentum from phase 1 (i.e. this project) to flow into phase 2 (the taking over by the steering committee). Enough momentum and interest has been generated to see the past years effort come to naught.

Please describe and submit (electronically if possible) any tools, products, or methodologies that resulted from this project or contributed to the results.

Marketing and training materials were developed by the project for the BR for profiling the GuBRI and for conducting local government input workshops and training. The project was also able to create a GuBRI website which is found on this link <u>http://www.greaterumngenibr.org/</u>.

Some of the materials were quickly outdated as the project area increased.

Products and materials developed where (See Annexure 3 to see examples of these materials):

- 1. Biosphere Reserve Capacity Building for Authorities (learner manual, presentation and workbook)
- 2. Website: www.greaterumngenibr.org
- GuBR logo
- 4. Bumper stickers
- 5. Brochure
- 6. Newsletter template
- 7. Short video on the GuBRI
- 8. A Guide to the GuBRI
- 9. A number of powerpoint presentations

Lessons Learned

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.

Stakeholder engagements or consultations are a complex process and therefore it requires time for planning and to achieve public engagements that are more meaningful from all affected groups and individuals. It is very difficult to get commitment in terms of attendance from key stakeholders such as the government officials due to different priorities and this has to be considered when planning. The project team also learnt that the concept of the Biosphere Reserve is not easy to understand particularly by stakeholders who do not have any environmental background and again more time is required to capacitate stakeholders on the concept. The perspectives of what a "Reserve" is differs in different contexts as is the case with South Africa especially based on the traditional perspectives of what is a "Reserve" which required a lot of explaining from the project team in order to develop an appropriate understanding of what the Biosphere Reserve is and is not.

The solution is that there is not necessarily a more efficient way to hasten such learning. Time for discussion and distilling of information is essential. As environmental practitioners, we sometimes take much of what we know for granted.

Project Design Process: (aspects of the project design that contributed to its success/shortcomings)

It was always understood that the timeframes set for the development of a new Biosphere Reserve in KZN (where none currently exist) was going to be a challenge and one that WESSA accepted. This was due to the defined end of the CEPF investment period. Many of the challenges have been mentioned prior, as well as the successes, but for the purposes of this report, there are two main features that need to be highlighted.

As a shortcoming – the time frame was the biggest constraint and perhaps associated with that, more funding needed to be allocated to capacity within the project time. A project manager for 3 days a week proved to be inadequate. Obviously this has been compounded by the expansion of the project area and the associated stakeholders. This has been particularly evident in the latter part of the project where the public engagements increased awareness which resulted in a compounding effect of interest.

As a success – the layout of the project (i.e. the logistical framework) was certainly the correct process to follow. Each of the steps undertaken were a good investment in the next one to follow. It was an innovative project which looked to address a range of current challenges but at the same time, create opportunities through the sensitisation of stakeholders in the BR. BRs create an enabling environment for the enhancement of environmental management.

Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)

The shortcomings of the design manifested itself in the implementation of the project. Better allocation of the budget to do more within the allotted timeframes was a shortcoming.

As the project engaged with stakeholders so awareness increased. With this awareness came interest. As the interest grew so did the number of new stakeholders who were in new areas. This compounding effect of increased awareness resulted in what seemed to be an exponential increase in area to be included in the GuBR. This was seen as a positive as it could be assumed that stakeholder engagements were effective.

However it was this awareness that resulted in the application to develop a Biosphere Reserve Capacity Building learning exchange for authorities. This training was incredibly valuable as it not only improved key stakeholders understanding of the GuBR, but it developed the BRs network for further engagements with them. It also created an almost common collective undertaking by the different municipalities who don't often get to collaborate.

There was an element of fortuitous timing for the project because the project period coincided with a number of important National Biosphere processes which assisted in providing guidance to the project but at the same time elevated the profile and importance of the project. These were:

- The strengthening of the MAB within DEA
- A National MAB workshop
- The African Network of MAB: Sub-regional Workshop
- Development of the first National Biosphere Reserve Strategy
- The Publication of the Management Manual for UNESCO Biosphere Reserves in Africa

Other lessons learned relevant to conservation community:

- The current capacity of the state conservation agency is severely compromised which effects support reliability, but increases the opportunity for the BR to fulfil some of their functions.
- The capacity challenges extend to law enforcement, biodiversity monitoring, reserve management and biodiversity planning.
- Engaging municipal authorities although initially challenging, has turned into a positive. It is, however, about engaging with the right people in the right positions, at the right time.
- Empowering authorities and becoming part of their support network will only stand the BR in great stead going forward.
- There seemed to be a bit of "one-upmanship" which developed between the municipalities around participation in the BR. This is healthy competition and could be a valuable driver for participation going forward.
- Having the necessary social skills to run stakeholder engagement processes are vital as the BR is all about developing new and strengthening existing networks. It is a socially driven process with environmental outcomes.
- The BR can be seen as a threat by some NGOs focus on the whole being greater than the sum of all the parts must be the view and explanation when the issue arises.
- Loosing land of conservation value to irreversible land transformation activities is seemingly all too common and very difficult to prevent especially small scale developments. It is a case of a death by a thousand cuts. At the same time where there is natural land, an assumption is that it requires less management. This is not the case and certainly not in our protected areas. There is a need to invest more into these areas to not only secure their natural resources, but also to ensure that they are able to provide optimal ecological services.

Additional Funding

Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of the CEPF investment in this project.

Donor	Type of Funding*	Amount	Notes
SANBI	В	\$7000 (R92 000)	This funding was for the
			development and
			implementation of the
			Biosphere Reserve Capacity
			Building for Authorities where
			21 participants from authorities
			within the GuBR were trained.

*Additional funding should be reported using the following categories:

- A Project co-financing (Other donors or your organization contribute to the direct costs of this project)
- **B** Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project.)
- **C** Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

Sustainability/Replicability

Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.

Achievements

- Project approach to get area buy-in has been largely successful.
- Project scope increased dramatically, which resulted in the possibility to improve environmental management of a larger landscape than initially proposed.
- Despite the more than tenfold scope increase of the project area, networks were established that have generated necessary momentum for the GuBRI going forward.
- Creation of learning materials that can be used repeatedly in this proposed BR but also for other BRs in South Africa (established and initiatives).
- An identity and profile developed for the GuBR through marketing efforts (local and nationally) of the GuBRI in the short project time.
- Social sensitisation across the GuBR around the role and value that a BR can play it has created an enabling environment for more responsible land-use management.
- Social equity gained in the BR concept in KZN.
- Negotiations for dropping of fences and creating a contiguous landscape have started and will extend past the project period.
- Good relationships developed with the municipalities.
- Diverse representation of authorities (municipality and EKZNW on the trust and steering committee).

Challenges

- Short timeframes given to the project.
- No current standards in South Africa on planning or implementing such a project.
- The expansion of the project area was underestimated.
- Stakeholders sometimes needed multiple engagements to fully understand the BR concept and its value.
- Stakeholder fatigue.
- Underestimated complexity, knowledge and time required to follow the UNESCO application process. Other BR's utilise a team of four to eight members over a period sometimes extending into six months to create the document.
- Stakeholders took some time to fully understand the concept and how it works and required a whole day workshop which posed a challenge as many stakeholders were only able to sacrifice a couple of hours to attend meetings/workshops. It was found short presentations with little or no interaction during the presentation led to minimal support. Longer and more interactive sessions resulted in more positive support where there was no need for a second follow up presentation to address queries not answered in the first presentation.
- Presenting the concept to municipal council meetings proved challenging due to the short timeframe of five to ten minutes given per timeslot as per the above point.

In replicating this project elsewhere:

- Future budgeting should incorporate more for time.
- Continual updates to information (e.g. Biosphere Reserve boundary) should be catered for instead of a "once off" approach
- Stakeholders should be given more time to process the information and disseminate the ideahowever it is expected that in the future the BR concept will be much better understood as there is a growing interest and drive from government to implement such programs.
- More money and time to be spent generating awareness and marketing the concept.
- Materials developed in training and knowledge sharing amongst authorities can be used internally but can also benefit other current or proposed Biosphere Reserves.

The UNESCO MAB concept is a sustainable concept as it is grounded in informed decision-making processes by community and it is an internationally accredited status that has no end date. Once status has been assigned to an area it is permanent. The replicability of the BR concept varies depending on the situation and the area in which it is found, therefore each Biosphere reserve is unique to the area in which it is located. The basic foundations set by UNESCO MAB ensures that biosphere reserves are run accordingly and follow set guidelines that allows it to gain UNESCO MAB status.

WESSA believes that the Biosphere Reserve project will enable the area to grow socially, environmentally and economically and lay the foundation to better management and sustainable land use in the area. The main functions of a Biosphere Reserve is; Conservation, Sustainable Development, Research and Monitoring, Training and Education. All four of these functions will help ensure the sustainability of the project. The establishment of the steering committee consisting of different stakeholders and partners will ensure the sustainability of the projects in the ongoing management and implementation that will occur with professional organizations and interested and affected parties with national and international support.

Once the GuBR is established and functioning it will be a model for other areas (particularly within the MPAH and KwaZulu-Natal) to gauge the suitability of initiating a BR.

Summarize any unplanned sustainability or replicability achieved.

- The human capacity development element in the form of the Biosphere Reserve Capacity Building for Authorities was not planned and is certainly replicable across all the Biosphere Reserves in South Africa.
- Sustainability is that Biosphere Reserves with their landscape approach to natural resource management is aligned to the WESSA biodiversity programme.
- WESSA is also a landowner in the GuBR
- There are a number of other NGOs that would do well and benefit from a well-supported, functioning BR.
- Learning form this BR so far could assist in starting a new BR elsewhere.

Safeguard Policy Assessment

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

The project attempted to create an open platform for interaction and discussions around the concept. This would allow for catering to as many perspectives and viewpoints as possible. The fact that Biosphere Reserves are voluntary allows for social safeguarding in that Biosphere Reserves do not, at this stage, enforce legislation upon stakeholders within the Biosphere Reserve.

Additional Comments/Recommendations

Good momentum has been generated through this process. The concept of a Biosphere Reserve is less tangible than many other conservation projects such as stewardship etc. However building a ground swell of people committed to a common concept and vision forms a valuable departure point for people to take steps towards becoming more sustainable and appreciating the full ambit of values received from the natural environment. Maurice Strong (Adviser to Rio +20), states; 'Everybody's actions are motivated by their inner life, their moral, spiritual and ethical values. Global agreements will be effective when they are rooted in the individual commitment of people, which arises from their own inner life." Getting individual inner commitment is certainly the role of Biosphere Reserves and it is one way of building a resilient landscape from the bottom up.

The project has been identified as one of that is an innovative approach to land management in the MPAH. It has been an opportunity for great learning; as individuals on the project, as an institution and we believe for the range of stakeholders that have been engaged through the process. We are under no illusions though that clearing the final hurdle of becoming a UNESCO recognised Biosphere Reserve is still going to take a continued concerted effort. It is however one that we will continue to drive as we know a firm platform has been created and the benefits of the implementation of a BR have been made apparent.

Biosphere Reserves fit firmly into the WESSA Biodiversity strategy. Therefore WESSA will look to invest further in the GuBR . Being a landowner in the GuBRI area is also a strong incentive to continue a strong level of involvement.

A big thank you to CEPF and Wildlands for investing in this project.

List of Annexures (attached as separate files via dropbox):

Annexure 1a	A Guide to the GuBRI Draft Nov 2015
Annexure 1b	MAB South African Biosphere Reserves information
Annexure 1c	UNESCO MAB Requirements
Annexure 1d	Draft Steering Committee Terms of Reference
Annexure 1e	Draft GuBR UNESCO nomination Form
Annexure 2	Maps of the Greater uMngeni
Annexure 3	Species list- GuBR KZN
Annexure 4a	Greater uMngeni Biosphere Reserve Material Developed
Annexure 4b	Water Quality Assessment Umgeni SASS5 results Publication Nov 2015
Annexure 4c	Midmar to Albert Falls Biosphere Reserve video
Annexure 4d	Greater-Umngeni-Biosphere-Reserve-Logo.jpg
Annexure 4e	Greater-Umngeni-Biosphere-Reserve-Logo.png
Annexure 5a	Article Greater Umgeni Biosphere Reserve Oct 2015
Annexure 5b	SANBI Biosphere Reserve Capacity for Authorities short story
Annexure 6a	List of individuals 2014
Annexure 6b	List of Organsiations Introduced Dec 2014
Annexure 6c	Amber Valley Attendees at Meeting
Annexure 6d	Letter 1 DEDTEA letter of support
Annexure 6d	Letter 2 EKZNW letter of support
Annexure 6d	Letter 3 Fountain Hill Estate
Annexure 6d	Letter 4 Karkloof Safari Spa letter of support
Annexure 6d	Letter 5 Midlands Meander Greater uMngeni Biosphere Reserve
Annexure 6d	Letter 6 Stihl Upper Umgeni Biosphere Reserve
Annexure 6d	Letter 7 UMDM Training with WESSA
Annexure 6d	Letter 8 Umgeni Valley Nature Reserve letter of support
Annexure 6d	Letter 9 uMshwati Letter of Support

Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

Please include your full contact details below:

Name: Christopher Galliers Organization name: WESSA Mailing address: 1 Karkloof Road, Howick, KZN, 3290 Tel: +27 33 330 3931 Cell: +27 79 504 4296 E-mail: chris@wessa.co.za

If your grant has an end date <mark>other than</mark> JUNE 30, please complete the tables on the following pages

		racking Re EPF Globa							
(Enter Grant Term) Provide a numerical amount and brief description of the results achieved by your grant. Please respond to only those questions that are relevant to your project.									
Project Results	Is this question relevant?	If yes, provide your numerical response for results achieved during the annual period.	Provide your numerical response for project from inception of CEPF support to date.	Describe the principal results achieved from July, 2014 to 31 October, 2015. (Attach annexes if necessary)					
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	N/A			Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.					
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	N/A			Please also include name of the protected area more than one, please include the number of hectares strengthened for each one.					
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	Yes	230 000ha		Although very intangible – but with introduction the proposed BR as a useful tool for improved natural resource management, it is hoped that i will influence positively, the 230 000ha of the GuBR which is within the MPAH and includes CEPF key biodiversity areas.					
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	Yes	Buffer – 159 000ha Transition – 44 000ha		The BR as a management tool looks to promote the integration of the 3 x UNESCO MAB land zonation's, meaning it looks to influence land mangement outside the core conservation area as much as inside them.					
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1 below.	N/A								

If you answered yes to question 5, please complete the following table

Name of Community	c	Community Characteristics							Nature of Socioeconomic Benefit												
				ss			the		Increased	Inco	me du	e to:	able	ter	other c.	-		, ú	lal	- on- Se.	
	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists/nomadic peoples	Recent migrants	Urban communities	Communities falling below t poverty rate	Other	 Adoption of sustainable natural resources management practices 	Ecotourism revenues	Park management activities	Payment for environmental services	Increased food security due to the adoption of sustainable fishing, hunting, or agricultural practices	More secure access to water resources	Improved tenure in land or other natural resource due to titling, reduction of colonization, etc.	Reduced risk of natural disasters (fires, landslides, flooding. etc)	More secure sources of energy	Increased access to public services, such as education, health, or credit	Improved use of traditional knowledge for environmental management	More participatory decision- making due to strengthened civil society and governance.	
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