One Health : A holistic approach towards Freshwater Conservation

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CONSERVATION SOUTH AFRICA

Member of the CI Network

Presentation Outline

- Project Overview
  - Where we come from ?
  - What is the project about ?
  - Linkages Between Water Services and Ecosystem Health
  - Key Project Elements of One Health
- Success
- Reflection
- Next steps

Our beginnings

The impacts of climate change in Africa will be severe due to its geographic location, widespread poverty, and limited development and adaptive capacity. By 2020, 75–250 million Africans will experience increased water stress due to climate change, and rain-fed agriculture yields will decline by 50 percent. Although natural ecosystems are often an essential factor in reducing communities' vulnerability to climate impacts, these ecosystems are vanishing rapidly.

Linkages between water services and ecosystem health

435 000 ha is a severely degraded grassland landscape with

Degradation, encroachment and erosion are impacting nearly 10% of the upper catchment

Rich in biodiversity with over 40 000 ha of wetlands

47,000 households, 12,000 have no water

Poor sanitation facility and health

Nature of the Project

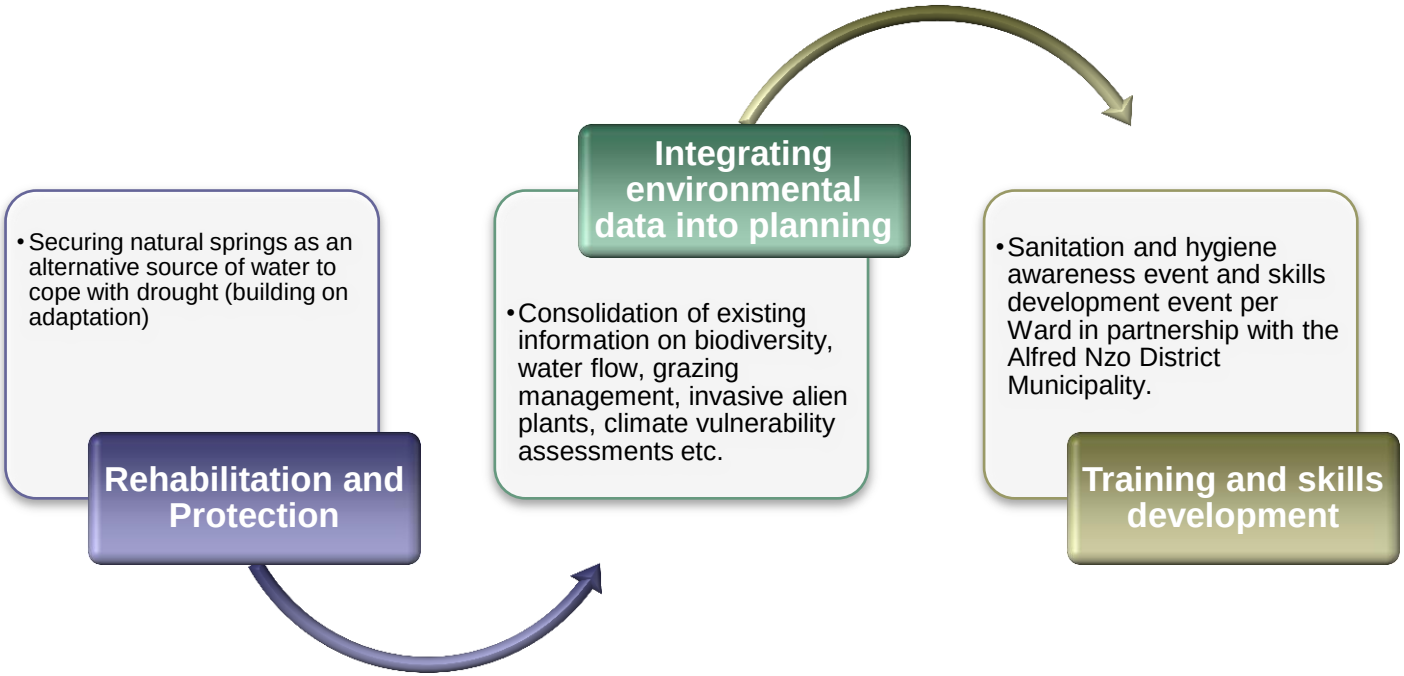
The “One Health” initiative integrates water, sanitation, and hygiene (WASH) activities with livestock improvement and conservation programs to improve the health of people, animals and ecosystems.

“One Health” is a project centralized on increasing, protecting and rehabilitating water sources, enabling people to access safe water and encouraging hygienic practices in Ward 21, Ward 8 and Ward 14 communities .

Baseline Work: The status

Copy of OnehealthBaselinemarch16.xlsx

Key Elements of One Health



- **Community facilitation and Implementation Support**: Facilitation of land-use mapping and implementation strategy development with communities and local government.
- **Monitoring and evaluation**: Track progress according to the ABCG Freshwater and WASH Integration M+E Framework.

Successes

Integrating WASH and Freshwater Conservation Activities Monitoring

Building an evidence base and measuring progress

Engaging and Listening to Stakeholders

Results to date

- 13 springs rehabilitated – 1 spring done independently by villagers! Through German Embassy , Starwood Foundation and ABCG
- 21 water monitors trained- Citizen Science, springs rehab and protection, best Hygiene practices etc
- 800 households Door to Door
- 8 villages engaged on hygiene best practices
- 8 villages engaged on linkages of WASH and Conservation
- improvements in water quality and quantity

Before and After ……Livestock?


Ndakeni
Conservation South Africa (One Health/WASH) location of Springs in Ndakeni and Madadiyela
Google Earth
© 2017 AfriGIS (Pty) Ltd.
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N
Dyasi B
Dyasi A
Madadiyela
Spring 2
Ndakeni
Spring1
Legend
Ndakeni
Springs
Wattle
1 mi

Livestock

+ Success also looks like….

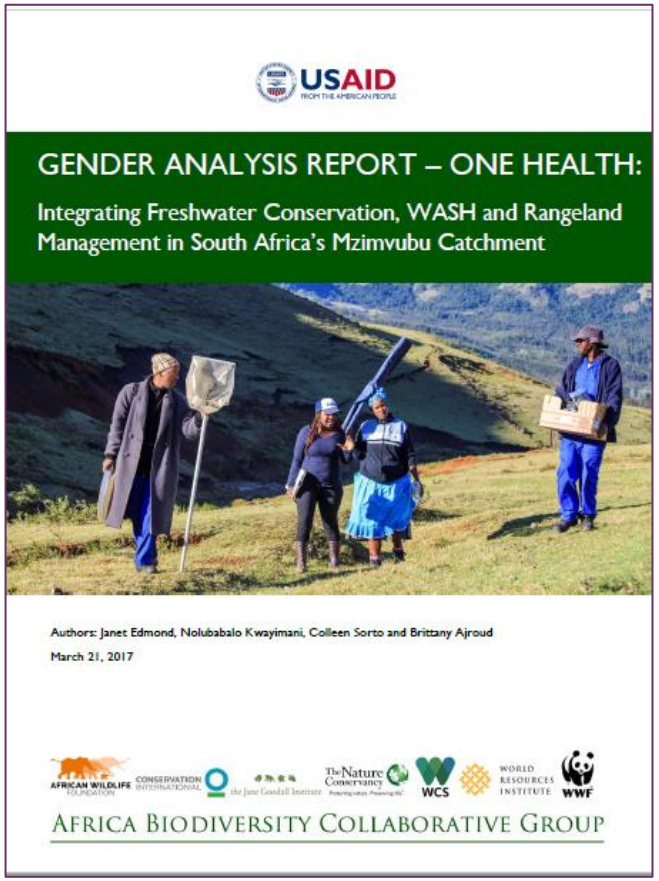

FISH
BIRD
TADPOLE
GRASS
INSECT
REPTILE

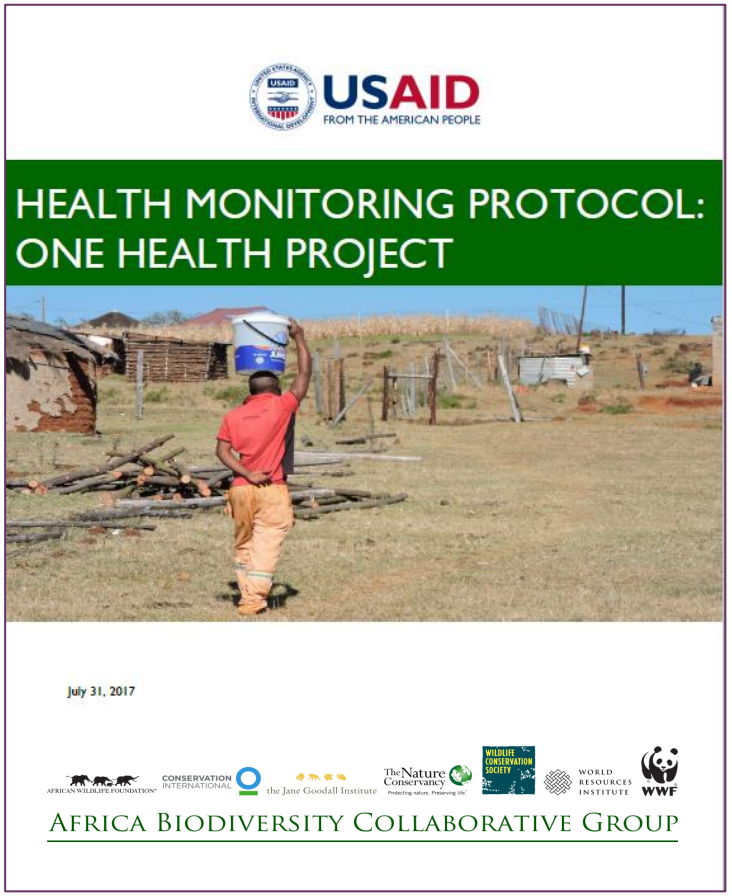

FISH
BIRD
TADPOLE
GRASS
INSECT
REPTILE

Sanitation


Phambi Kokuba
Emva Kokuba
Izandla ezicocekileyo yimpilo
Hlamba izandla
ukuze ubenekhaya elisempilweni

+ Our Pride


USAID
FROM THE AMERICAN PEOPLE
GENDER ANALYSIS REPORT – ONE HEALTH:
Integrating Freshwater Conservation, WASH and Rangeland Management in South Africa's Mzimvubu Catchment
Authors: Janet Edmond, Nolubabalo Kwayimani, Colleen Sorto and Brittany Ajroud
March 21, 2017
AFRICA BIODIVERSITY COLLABORATIVE GROUP


USAID
FROM THE AMERICAN PEOPLE
HEALTH MONITORING PROTOCOL:
ONE HEALTH PROJECT
July 31, 2017
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Share about the Eco-ranger Toolkit

- GOOD SANITATION AND HYGIENE PRACTICES FOR HERDERS THE VELD

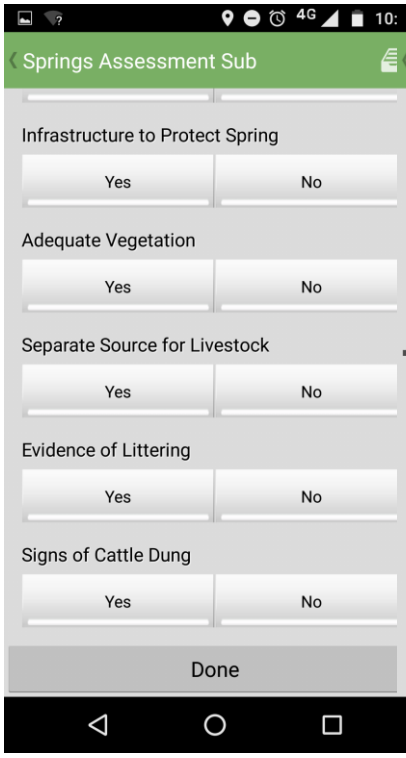
World Vision

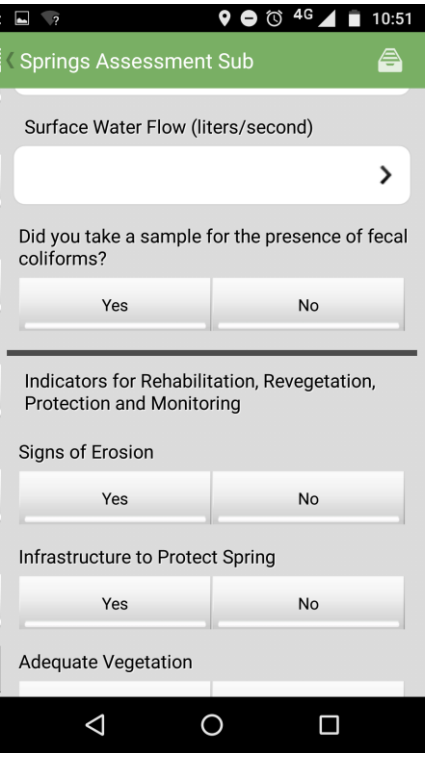
CSA's intention is to promote behavior change around hygiene practices and improve people's' understanding of how their sanitation and hygiene practices are connected to protecting water resources. This manual is the basis for a capacity building program for peer-to-peer education on improved sanitation and hygiene practices for herders

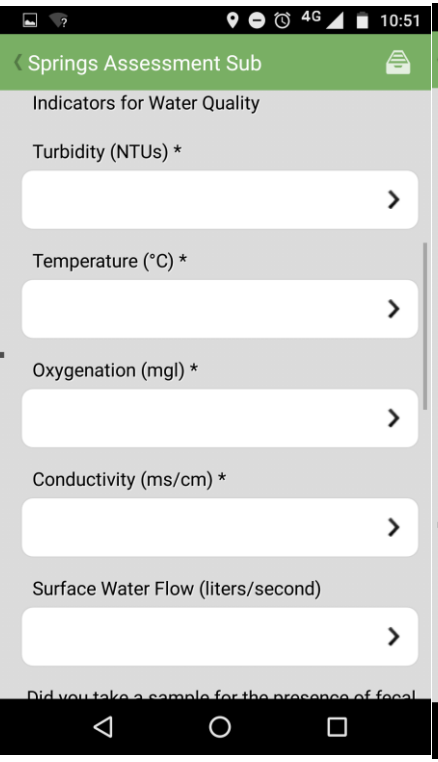
“One Health" Project Indicators

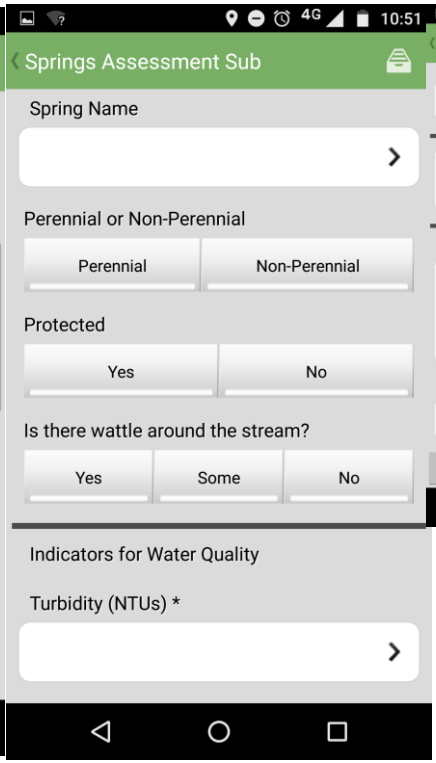
IR 1: Increased first time and improved access to, and improve the quality of, sustainable water supply services
Indicator 1.1. Proportion of people with access to improved drinking water source
Indicator 1.2. Proportion of improved water sources that are functional
Indicator 1.3. Number of water monitors trained
IR 2: Increased the first time and improved access to sanitation
Indicator 2.1. Proportion of population with access to improved sanitation facilities
Indicator 2.2. Proportion of improved sanitation facilities that are functional
Indicator 2.3. Proportion of population using improved sanitation facilities
IR 3: Increased adoption of key hygiene behaviors
Indicator 3.1. Proportion of households with soap and water at a hand washing facility commonly used by family members
Indicator 3.2. Proportion of households practicing safe water storage
Indicator 3.3. Reported incidences of waterborne diseases
Indicator 3.4. Number of WASH education materials distributed
Indicator 3.5. Number of herders trained in wilderness sanitation
Indicator 3.6. Number of herders practicing wilderness sanitation
IR 4: Improved governance of water resources
Indicator 4.1. Proportion of villages involved in the management of freshwater resources
Indicator 4.2. Number of men and women trained in forestry and land management
Indicator 4.3. Number and proportion of women in decision-making roles for WASH and freshwater conservation
Indicator 4.4. Number of villages able to renew, replace and rehabilitate their water infrastructure
Indicator 4.5. Number of community members satisfied with WASH and freshwater conservation interventions being implemented
Indicator 4.6. Number and proportion of people reporting livestock and people use separate water sources
Indicator 4.7. Number and proportion of people reporting waste is dumped in water sources
IR 5: Improved freshwater ecosystem functionality, including water quality and natural flow regime
Indicator 5.1. Percent change in surface water flow
Indicator 5.2. Water quality
Indicator 5.3. Reduction of turbidity levels of water
Indicator 5.4. Presence/absence of fecal coliforms
Indicator 5.5. Abundance and distribution of sample freshwater species

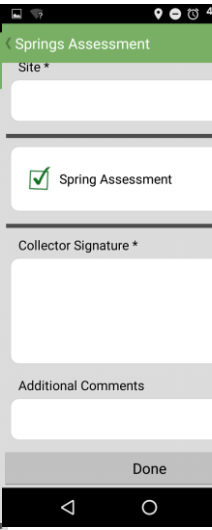
Springs/Stream Assessments









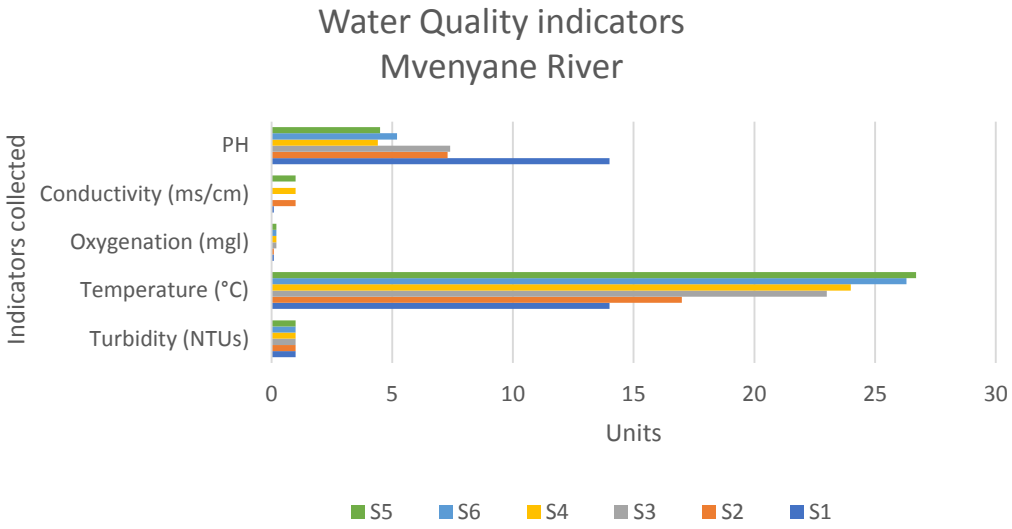


Impact and Amplification: Indicators

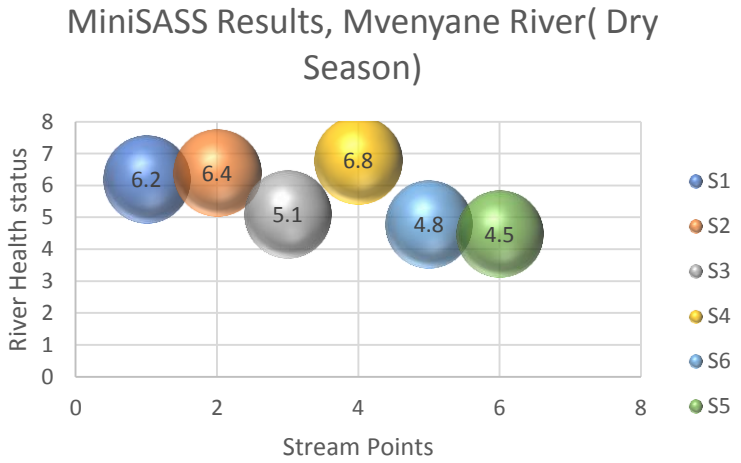
Indicator 1.1: Time (number of hours) spent collecting and inputting data

Form	**Mobile**	**Paper**	**Time Difference**	**% Difference (Mobile/Paper)**
Biomass Measurements	13 minutes, 45 seconds (825 seconds)	15 minutes, 8 seconds (908 seconds)	1 minute, 23 seconds (83 seconds)	9.14% 825/908
Bare ground Assessment	10 minutes, 55 seconds (655 seconds)	14 minutes, 12 seconds (852 seconds)	3 minutes, 17 seconds (197)	23.12% 655/852
Veld Assessment	9 minutes, 8 seconds (548 seconds)	18 minutes, 23 seconds (1103 seconds)	9 minutes, 15 seconds (555 seconds)	50.31% 1103/548
Aquatic Steam Points	26 minutes, 38 seconds (1598 seconds)	35 minutes, 22 seconds (2122 seconds)	8 minutes, 44 seconds (524 seconds)	24.69% 1598/2122
Total	60 minutes, 26 seconds (3626 seconds)	83 minutes,5 seconds (4985 seconds)	22 minutes, 39 seconds (1359 seconds)	Avg. 26.82%

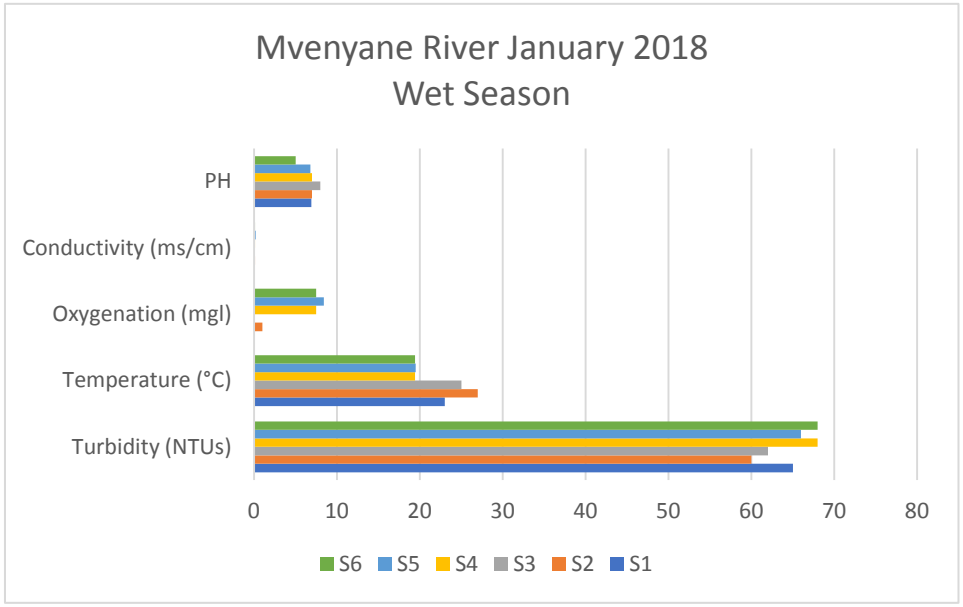
Collected in September 2017 : Dry Season

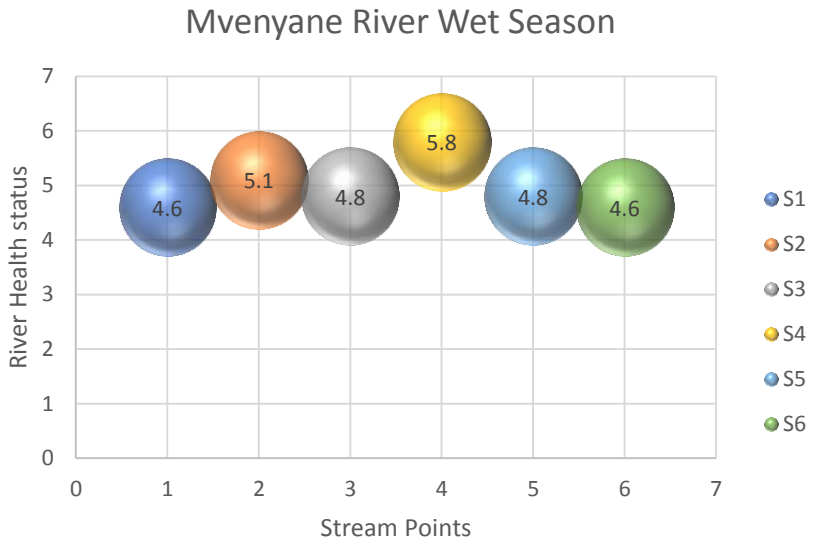


Rocky Type River
Few Modified (6.8 – 7.9)
Moderate Modified (6.1 – 6.8)
Largely Modified (5.1- 6.1)
Critically Modified (< 5.1)



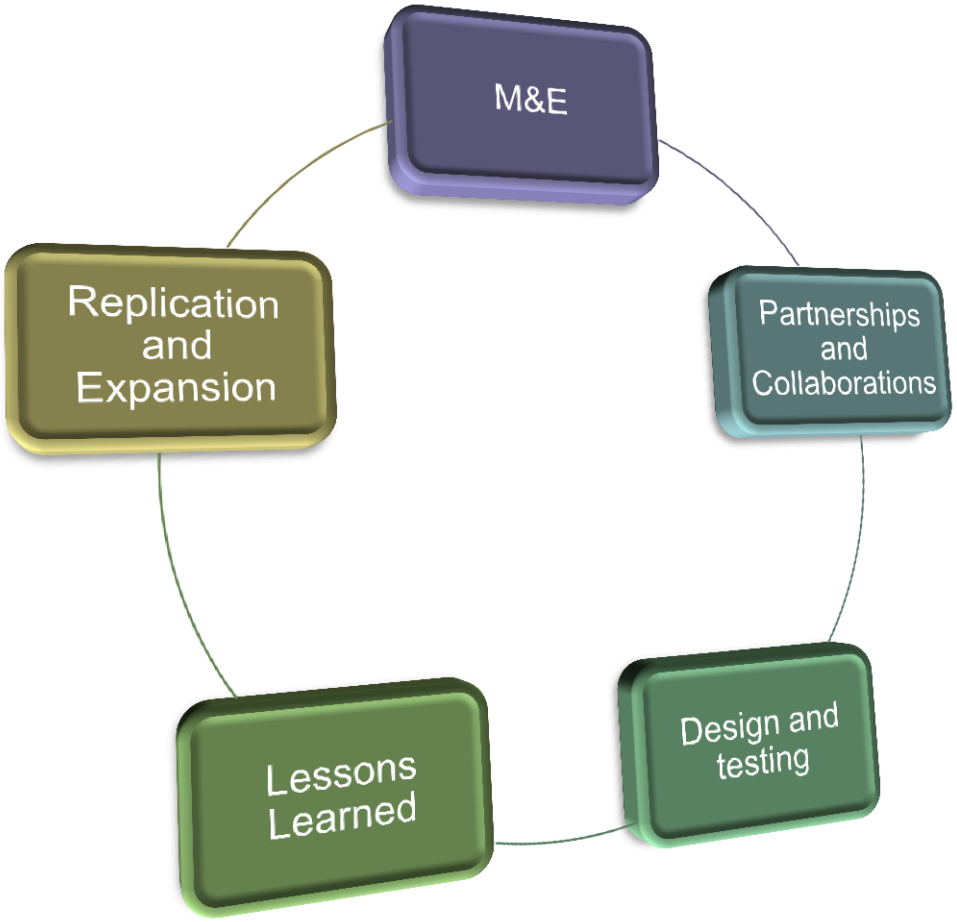
Collected in January 2018





Gender, Youth and Conservation

+ Next Steps


M&E
Partnerships and Collaborations
Design and testing
Lessons Learned
Replication and Expansion

Enkosi

"One Health is successful due to the combined passion and commitment from local stakeholders, the team on the ground, CI Headquarters staff, and our donors. Truly, conservation is possible through village changemakers and financial enablers."

USAID FROM THE AMERICAN PEOPLE

German Missions in South Africa, Lesotho and Swaziland

environmental affairs
Department: Environmental Affairs
REPUBLIC OF SOUTH AFRICA

starwood foundation
Hotels and Resorts

CONSERVATION INTERNATIONAL

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