

CATCHMENT MANAGEMENT STRATEGY (CMS)

NOVEMBER 2020

TABLE OF CONTENTS

1	Introduction	1
2	Background	1
3	Capacity Building, Awareness and Orientation workshops	1
3.1	Capacity Building and Awareness workshop locations and schedule of meetings	1
3.2	Format of workshops	1
3.3	Meetings with Government, the Governing Board and Water Sector stakeholders	1
4	Vision Development and Review Process in the Usuthu and other sub-catchments.....	1
4.1	Visioning checklist questions and stakeholder inputs during Visioning workshops.....	1
4.2	Vision development process in the six (6) sub-catchments	1
4.3	Results of visioning process	3
5	Emerging Vision for the future water management area.....	9
6	Workshop attendees.....	10
7	Summary of sub-visions	11
8	Consolidated list of feedback from stakeholders and the governing board	12
9	Conclusion.....	16

List of Figures

Figure 1: A workshop in the Crocodile subcatchment.....	2
Figure 2: A workshop in the Crocodile subcatchment.....	2
Figure 3: Inputs from stakeholders in the various workshops.....	3
Figure 4: Vision exercise in the Usuthu workshops	3
Figure 5: Vision review in the Sand workshop.....	3

List of Tables

Table 1: Workshop agenda	1
Table 2: Schedule of workshops	2
Table 3: CMS consultation with Governing Board.....	3
Table 4: Stakeholder inputs on the common themes.....	5
Table 5: Common visioning themes for all subcatchments	8
Table 6: Workshop attendance.....	10
Table 7: Profile of workshops Attendees (consolidated sectoral representation).....	10
Table 8: List of inputs received from stakeholders during consultation workshops	17

ACRONYMS AND ABBREVIATIONS

CMA	Catchment Management Agency
CMC	Catchment Management Committee
CME	Compliance Monitoring and Enforcement
CMF	Catchment Management Forum
CMS	Catchment Management Strategy
DARDLEA	Department of Agriculture, Rural Development Land and Environmental Affairs
DMR	Department of Mineral Resources
DWS	Department of Water and Sanitation
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
IB	Irrigation Board
IUCMA	Inkomati – Usuthu Catchment Management Agency
IWRM	Integrated Water Resources Management
MOU	Memorandum of Understanding
NWA	National Water Act (No.36 of 1998)
NWRS	National Water Resource Strategy
SFRA	Stream Flow Reduction Activities
V & V	Validation and Verification
WARMS	Water Use Authorisation and Registration Management System
WC/WDM	Water Conservation and Water Demand Management
WDCS	Waste Discharge Charge System
WMA	Water Management Area
WQM	Water Quality Management
WWTW	Wastewater Treatment Works
WUA	Water User Association
WULAS	Water Use Licence Authority Services

1 INTRODUCTION

This report outlines how the Inkomati-Usuthu Catchment Management Agency (IUCMA) embarked on an internal process of reviewing and updating the first generation Catchment Management Strategy (CMS) which is a legislative requirement in accordance with the National Water Act (Act 36 of 1998), (NWA). An inherent Catchment Management Agency (CMA) function requires a review and update of a CMS after every five years. Post the amalgamation of the former Inkomati catchment and the Usuthu catchment (of the former Usuthu to Mhlatuze Water Management Area), the IUCMA had to review and update the CMS to reflect the newly formed Inkomati-Usuthu Water Management Area (WMA).

Stakeholder participation started with the Visioning process and was a key step in the CMS development and review process. The initial visioning development phase focused on the Usuthu subcatchment, a part of the Inkomati-Usuthu WMA. Consequently, consultations were conducted in the other five subcatchments in the former Inkomati WMA, namely Sand, Sabie, Crocodile, Lower Komati, and the Upper Komati. This was an internally driven process facilitated by IUCMA personnel whereby water users and other affected stakeholders within the WMA were given an opportunity to determine the desired future of the catchment based on the existing and the projected status of the water resources.

A process of consolidating all the inputs collected during the visioning process culminated in the development and final adoption of a new vision for the institution. Inputs from all the subcatchments were combined to formulate a vision that was finally approved by the Governing Board of the IUCMA on 9 September 2018.

2 BACKGROUND

As part of the review and update of the CMS, the IUCMA conducted several stakeholder participation workshops in the Usuthu subcatchment to develop a vision for integration into the revised visions of other subcatchments and for ultimately developing one Vision for the entire WMA. This process ensured that the development of the Vision was a stakeholder-centred approach that took cognisance of new issues raised in the Usuthu and the revised visions of other subcatchments.

This process further brought to light the stakeholders' appreciation of the state of the water resources in the catchment and their desires for a future of a well-managed catchment. The desired state of the water resource and management includes the Vision, Values and Attributes as identified and determined by the stakeholders.

Information on the vision, values and attributes of the water resources was collected during consultation meetings. The data collected were based on words and statements that were used to develop a concise statement to describe the (shared) desired future conditions of the (sub) catchment, and combined with the revised 'visions' of the other subcatchments were used to formulate the Vision of the entire Inkomati-Usuthu Water Management Area.

The review and update of the CMS covered the following:

- Reduction of CMAs from nineteen (19) to nine (9) and amalgamation of the Inkomati and Usuthu catchments thereby creating the Inkomati-Usuthu WMA;
- Alignment of the National Water Resource Strategy (Second Edition, 2013) to the NWA and the Constitution of South Africa;
- Classes of Water Resources and Resource Quality Objectives (RQOs) for the former Inkomati catchment were gazetted in December 2016;
- Water Resource Quality Strategy;
- Needs of water users and other stakeholders;
- Finalisation of the Usuthu Water Availability Assessment Study (UWAAS) in 2016;
- Completion and commencement of the Validation and Verification process for the former Inkomati and Usuthu areas respectively;
- The need to focus on Water Allocation Reform and the Water Allocation Plan for the WMA;
- Rapid urbanisation of some areas and the need for other areas to prioritise securing water for agricultural production or tourism;
- Financial model for the IUCMA; and
- Possible alternative revenue sources

3 CAPACITY BUILDING, AWARENESS AND ORIENTATION WORKSHOPS

3.1 Capacity Building and Awareness workshop locations and schedule of meetings

The IUCMA conducted the first capacity building workshop in the Usuthu subcatchment targeting historically disadvantaged individuals (HDI's) and other emerging water users in the irrigation industry. The purpose of these workshops was to gather information from stakeholders on how to optimally manage the catchment in a more sustainable way. These workshops also served as preparatory sessions and provided an overview to the HDI's from identified rural areas and ensured that they had an understanding of CMS development, specifically of the visioning process. The objective was to ensure that there was meaningful participation from the HDI's.

The stakeholders enquired about a range of matters related to water resources management and water services.

3.2 Format of workshops

Facilitation of the stakeholder engagement workshops was done by the Institutions and Participation (I&P) division of the IUCMA. They encouraged active participation by stakeholders and guided them through issues during the development of a vision. The stakeholders were given an overview of the WMA and how it operates in order to ensure that they understood the roles and responsibilities of the CMA and its different functions. The facilitator highlighted the areas of focus in the visioning development according to the CMS development Guidelines. Emphasis was placed on the identification of Values and Vital Attributes towards the development of the Vision. The status quo of the WMA was also presented to give stakeholders a better understanding of the current assessment of water resources. These presentations provided information on water availability, water quality, compliance monitoring and enforcement (CME), and water resource utilisation which included licensing processes. Presentations regarding revenue collection and the billing system from Raw Water Use provided stakeholders with the financial status and how management of the water resource could be sustained financially. This was also done to ensure that stakeholders grasp the financial implications that result from water resources management and how costs are recovered from the users.

3.3 Meetings with Government, the Governing Board and Water Sector stakeholders

Workshops were planned for the government sector departments which are directly or indirectly involved in water use activities such as the Department of Agriculture, the Department of Water and Sanitation, the Department of Minerals and Energy, and Municipalities. Other sector role players targeted were the Mining and Forestry industries which are operating in the Usuthu area. It was decided to conduct a separate workshop for these institutions so that information from a governance and business perspective is collected for the Visioning purpose. Please refer to Table 1, 2 and 3 in this regard.

Table 1: Workshop Agenda

CATCHMENT MANAGEMENT STRATEGY UPDATE & REVIEW
Capacity Building & Awareness Workshop
A stakeholder-centered process to develop the Usuthu catchment Vision

AGENDA

Date: 07 June 2017

Venue: Mkhondo Local Municipality Town Hall

Time: 10:00

Facilitated by Mr. Mabunda HJ (IUCMA)

10h00	Registration and tea
10h30	Welcome: Municipal Manager of Mkhondo Local Municipality
10h35	Overview of the Water Management Area, CMS review and Delegated Functions Presented by Dr. Thomas Gyedu-Ababio: CEO of the Inkomati-Usuthu Catchment Management Agency
11h00	Highlighting areas of focus for the preparation of the Visioning process. Presented by the Facilitator Vision development process Values and Attributes determination and identification Projecting the desired future of the water resources
11h30	Water Management Area Assessment (status quo) Presented by (IUCMA Divisional Managers) Presentation 1: Water Resources Protection and Waste Water Resource Utilization, Compliance Monitoring and Enforcement
12H15	Presentation 2: River Systems Planning and Operations
12h45	Presentation 3: Institutions and Participation
13h00	Lunch
14h00	Group Discussions
16h00	Way forward and Closure

Table 2: Schedule of workshops

Location	Description	Date	Time
Mkhondo Local Municipality Town Hall. Piet Retief	Capacity Building and Awareness (HDI in the west/ eastern region of Usuthu)	07/06/2017	10:00-16:00
Mayflower Community Hall.	Capacity Building and Awareness: (Preparatory meeting)	08/06/2017	10:00-16:00
Mkhondo Local Municipality Town Hall. Piet Retief	Orientation meeting with Government and Water Sector	13/062017	10:00-16:00
Mkhondo, Local Municipality Town. Piet Retief	Usuthu Visioning Workshop.	27/06/2017	10:00-16:00

Location	Description	Date	Time
Bushbuckridge Local Municipality, (Thulamahashe).	Sand catchment: Vision, Revision and CMS Review.	15/08/2017	10:00-16:00
Tonga Agricultural Centre, Nkomazi Local Municipality.	Lower Komati catchment: Vision, Revision and CMS Review.	18/08/2017	10:00-16:00
Hazyview, City of Mbombela Local Municipality	Sabie catchment: Vision, Revision and CMS Review.	25/08/2017	10:00-16:00

Table 3: CMS consultation with Governing Board

INKOMATI-USUTHU CATCHMENT MANAGEMENT AGENCY	
CATCHMENT MANAGEMENT STRATEGY VISIONING WORKSHOP	
Date :	09 September 2018
Time :	9:00 to 13:10
Venue :	IUCMA Boardroom, 7 th Floor, Maxsa Building, Mbombela
PRESENT	
Governing Board	
Nyakane-Maluka, Ms TP	Chairperson
Mthembu, Mr MS	Deputy Chairperson (arrived at 9:08)
Wiggins, Ms SD	
Govender, Mr N	
Venter, Mr PJ	
Mathebula, Mr JM	(arrived at 9:04)
Tshabangu, Mr PA	(arrived at 9:30)
Gyedu-Ababio, Dr TK	Ex Officio
IUCMA Staff	
Boshoff, Adv JE	Board Secretary
Sawunyama, Dr T	Acting: Executive Water Resources Management
Mabunda, Mr JH	Manager: Institutions and Participation
Mahlangu, Ms B	Control Environmental Officer: CME
Sandleni, Ms SG	Committee Secretary

4 VISION DEVELOPMENT AND REVIEW PROCESS IN THE USUTHU AND OTHER SUBCATCHMENTS

4.1 Vision development process in the six (6) subcatchments

The actual Visioning workshops followed the same approach and were conducted from 27 June to August 2017 where all stakeholders were represented. This workshop targeted both Government, industries, commercial farmers and emerging farmers who are mostly HDIs. The workshop facilitator detailed the Visioning process and presented the key areas that stakeholders had to focus on in projecting the desired future state of the catchment.

The purpose of the process was to determine the water users' view on what should be achieved through the integrated water resources management (IWRM) and what effective water management should look like in the future. The process was based on the following focus areas:

- Vision
- Values
- Vital Attributes
- Threats to the water resources
- Sustainability

4.2 Visioning checklist questions and stakeholder inputs during Visioning workshops

The visioning process was conducted using a checklist that was prepared to ensure that the Vision is integrated appropriately into CMS and that it fits well with other sub-strategies:

- Is the vision presented as a desired future state for the WMA?
- Does the vision align with national objectives captured in the NWRS?
- Does the vision for the WMA consider the individual visions for sub catchments?
- Do these visions and the overall WMA vision provide strategic direction in terms of equity, sustainability, and efficiency?
- Was the vision reached through consensus?
- Was the vision based on an understanding of the situation assessment and reconciliation results?
- Is the vision expressed as a medium-term to long-term state?
- Is the process of reaching the vision recorded? Since public participation is the cornerstone of visioning, did the process address stakeholder preparation and participation adequately and appropriately?
- Is the vision clear about specific commitments?
- Does it include plans for monitoring progress towards achieving the vision, and to review it?
- Does it include a plan for communication of this vision to stakeholders

Values

Values are described as lasting beliefs or ideals shared by the stakeholders about what is good or bad and desirable or undesirable. These principles are used to evaluate the consequences of action or inaction to propose and choose between alternate opinions and decisions.

Vital attributes

Vital attributes are the most important properties and or characteristics of a system that needs to be managed. These may be technical, ecological, historical, legal, socioeconomically or political.

Threats to water resources

Threats refer to detrimental factors that have a negative impact on the sustainability and use of water resources management.

Sustainability

Sustainability refers to long-term attributes that will ensure that the water resource is protected and preserved for future generations.



Figure 1: A workshop in the Crocodile subcatchment

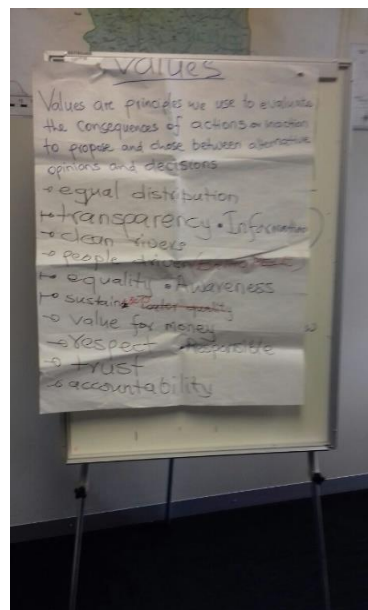
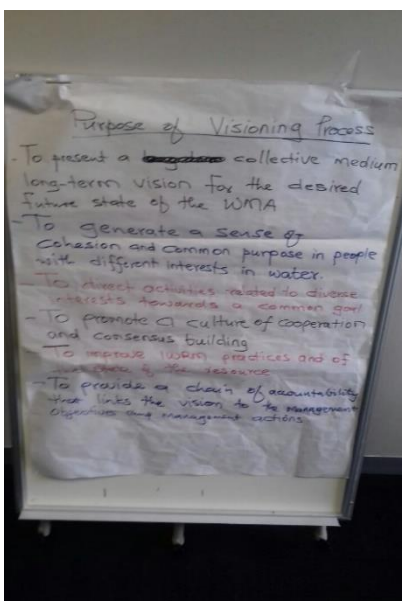


Figure 2: A workshop in the Crocodile subcatchment

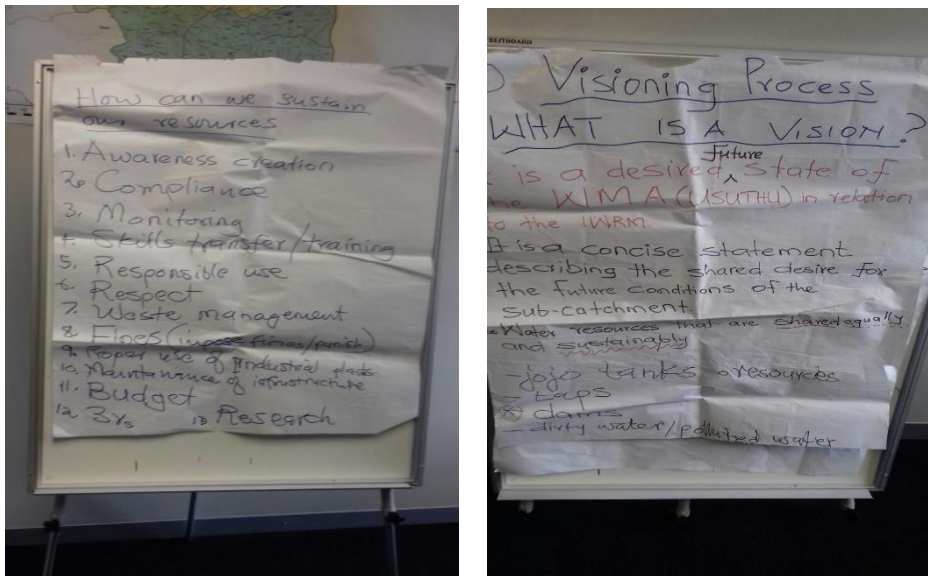


Figure 3: Inputs from stakeholders in the various workshops



Figure 4: Vision exercise in the Usuthu workshops



Figure 5: Vision review in the Sand workshop

4.3 Results of visioning process

Based on the discussion above the stakeholders devised a wide range of words, phrases and statements that represented their views on the mentioned five categories. The stakeholders were

requested to use words and statements that best describe how they perceive the Vision of a well-managed catchment. A vision was described as a desired state of the water management area; a concise statement describing the shared desire for the future condition of the subcatchment. Stakeholders mentioned these words in relation to the Vision of the subcatchment. (Please refer to tables.)

Table 4: Stakeholder inputs on the common themes

Stakeholders inputs	Usuthu	Crocodile	Sand	Sabie	Lower Komati	Upper Komati
Vision	<ul style="list-style-type: none"> • Accessibility • Equality • Future use • Governance • Improved management • Pollution • Safety • Security • Sustainability 	No inputs made	<ul style="list-style-type: none"> • Equitable share • Protective use • Education and awareness • Quality control • Inspection • Water storage • Repair infrastructure • Cooperative governance 	<ul style="list-style-type: none"> • Accessibility, • Control, • Equality, • Governance • Safety • Security, • Sustainability 	<ul style="list-style-type: none"> • Equitable share • Protective use • Education and awareness • Quality control • Inspection • Water storage • Repair infrastructure • Cooperative governance 	<ul style="list-style-type: none"> • Transparency • Participatory • Inclusivity • Responsibility • Dynamic • Equity • Democratic • Sustainability • Simple
Values	<ul style="list-style-type: none"> • Accountability • Control • Equity • Integrity • Protection • Respect • Responsibility • Responsiveness • Transparency • Trustworthiness 	<ul style="list-style-type: none"> • IUCMA forums running effectively • Water Management System i.e Crococ • HydroNet system in place • Green Drop achieved • Partnership • Innovation 	<ul style="list-style-type: none"> • Transparency • Responsibility • Accountability • Equity • Respect • Trustworthiness • Protection • Integrity • Control • Responsiveness 	<ul style="list-style-type: none"> • Accountability • Control • Equity • Honesty • Communication • Commitment, • Integrity • Preservation and loyalty • Protection, • Respect • Responsiveness • Transparency • Trustworthiness 	<ul style="list-style-type: none"> • Accessibility • Accountability • Affordability • Equitable • Responsibility • Stewardship. • Sustainability 	<ul style="list-style-type: none"> • Democratic • Sustainability • Simple • Practical • Representative • Accountability
Vital Attributes	<ul style="list-style-type: none"> • Reliable water • Scenic • Farming • Recreation • Tourism • Business sector • Economic development • Agricultural use/fertile soils • Game farms • Hotels • Forestry 	<ul style="list-style-type: none"> • HydroNET • Innovation • Technology 	<ul style="list-style-type: none"> • Heritage sites • Tourism • Economic Development • Waste man initiatives • Dams • Awareness and education • Corporate Governance 	<ul style="list-style-type: none"> • Sustainable water supply, • Portable water • Farming opportunities, • By-laws by municipality, • Fertile soil, • Food security, • Recreation, • Tourism, • Heritage sites, • Business sectors, 	<ul style="list-style-type: none"> • Water • Reliable • Fair • Fertile soil • Infrastructure • Citrus foods • Leadership • Resilience, • Biodiversity • Favourable climate • Cross border basin • Heritage sites 	<ul style="list-style-type: none"> • Agri-villages • Agricultural use/fertile soils • Dams • Economic development • Electricity generation • Forestry • Game farms • Heritage sites/historic sites • High rainfall • Hotels • Industries/mines • Nature conservation

Stakeholders inputs	Usuthu	Crocodile	Sand	Sabie	Lower Komati	Upper Komati
	<ul style="list-style-type: none"> • Saw/timber mills • Industries/mines • High rainfall • Dams • Electricity generation • Agri-villages • Transboundary water management • Nature conservation • Heritage sites/historic sites 		<ul style="list-style-type: none"> • Nature conservation (KNP) 	<ul style="list-style-type: none"> • Conditions of water storage • Economic development, • Exports • Game farms, • Hotels • Forestry • High rainfall, • Dams • Mines • Industries, • Road networks, • Consumer power • Electricity generation 	<ul style="list-style-type: none"> • Tourism • Economic Development • Waste man initiatives • Dams • Awareness and education • Corporate Governance • Nature conservation (KNP) 	<ul style="list-style-type: none"> • Saw/timber mills • Transboundary water management
Threats to the water resources	<ul style="list-style-type: none"> • Acid rain • Alien/invasive species • Automation • Climate change • Development • Drought • Fires • Floods • Fragmented environmental governance • Greed • Lack of consultation • Lack of resources • Old infrastructure • Over population • Politics • Pollution/waste management • Poor planning • Power utilisation • Rituals • Soil erosion • Technology • Theft 	<ul style="list-style-type: none"> • Climate change impact • Lack of integrated planning • Lack of skills and capacity • Lack of water enforcement Act • Sand mining issues • Threatened biodiversity • Working in silos 	<ul style="list-style-type: none"> • Climate change and veldt fires • Diseases • Drought • Old infrastructure • Pollution • Rituals • Theft 	<ul style="list-style-type: none"> • Alien biota • Climate change • Drought • Floods • Greed • Illegal connections • Invasion of wetland for agricultural; purposes • Poor consultation • Rituals • Soil erosion • Water leakages • Sewage spillage • Human settlement on buffer zones • Pollution of the resource • Veld fires • Water abuse • Technology • Occupation of plots on wetlands • Vandalism • Sand mining 	<ul style="list-style-type: none"> • Acid drainage • Climate change • Disposable nappies • Drought • Floods • General Waste Disposal sites • Illegal connections • Lack of Resource Poor Farmers support (approval for applications delay) • Lack of resources • Lack of sewage drainage system • Lack of storage dams • Minimal awareness on water issues • Old infrastructure (Damage) • People (Fire) • Poor planning • Poor water quality • Rain water harvesting • Sand mining • Sewage spillage 	<ul style="list-style-type: none"> • Disposable nappies • Lack of Resource Poor Farmers support (approval for applications delay) • Minimal awareness on water issues • Sand mining • Sewage spillage • Uncontrolled settlement • WWTWs licensing

Stakeholders inputs	Usuthu	Crocodile	Sand	Sabie	Lower Komati	Upper Komati
	<ul style="list-style-type: none"> Vandalism 				<ul style="list-style-type: none"> Soil erosion Uncontrolled settlement Water abstraction measurements Water Conservation and Demand Management (Water loss) Water reticulation in some villages WWTWs licensing 	
Sustainability	<ul style="list-style-type: none"> Accountability and responsibility Awareness Creation Budget Compliance Good governance Implementation of 3 R's - Reduce, reuse and recycle Impose fines on violators Improved service delivery Monitoring and control Skills transfers Training and development 	<ul style="list-style-type: none"> Green Drop achieved HydroNET system in place Innovation IUCMA forum running effectively Partnership Water Management System i.e Crococ 	<ul style="list-style-type: none"> Good use / control Awareness creation Control and Monitoring Good governance Maintenance of infrastructure 	<ul style="list-style-type: none"> Accountability Commitment, Communication Control Equity Honesty Integrity, Preservation and loyalty Protection, Respect Responsiveness Transparency Trustworthiness 	<ul style="list-style-type: none"> Adapt to change Budget Capacity building Compliance Continuous awareness creation Innovation, Knowledgeable Law enforcement Monitoring Policy review Stakeholder consultation and involvement 	<ul style="list-style-type: none"> Awareness Creation Compliance Monitoring and Control Skills transfers Training and development Good governance Accountability and responsibility Improved service delivery Implementation of 3 R's - Reduce, reuse and recycle Budget

Table 5: Common visioning themes for all subcatchments

Theme categories	Common water management themes
Vision	<ul style="list-style-type: none"> • Accessibility • Accessibility • Equality
Values	<ul style="list-style-type: none"> • Accountability • Equity • Accessibility
Vital Attributes	<ul style="list-style-type: none"> • Reliable water • Agricultural use/fertile soils • Transboundary water • Nature conservation • Tourism • High rainfall
Threats to the water resources	<ul style="list-style-type: none"> • Pollution/waste • Sand mining issues • Threatened biodiversity • Climate change
Sustainability	<ul style="list-style-type: none"> • Monitoring and control • Water Management System communication • Stakeholder consultation and involvement • Good governance
Outcomes of Visioning	<ul style="list-style-type: none"> • Creation of accessible, equitable and sustainable water resources in the catchment
Other	<ul style="list-style-type: none"> • Appreciating diversity in the water management area in realisation of a common goal

5 EMERGING VISION FOR THE FUTURE WATER MANAGEMENT AREA

The following emerging issues were raised by stakeholders during consultation meetings:

- Cooperative governance
- Enough quality water availability
- Equity sharing of water resources
- Fair allocation of resources
- Implementation of the polluter pays principle
- Increased awareness on water resource protection
- Production of quality farming products
- Cooperative governance
- Equity share
- Good job creation.
- Happy water users
- Healthy ecosystem (biodiversity)
- Successful / viable economy

6 WORKSHOP ATTENDEES

Table 6: Workshop attendance

Subcatchment	Number of attendees
Crocodile	36
Lower Komati	44
Sabie	77
Sand	84
Upper Komati	70
Usuthu	62
Total	373

Table 7: Profile of workshops attendees (consolidated sectoral representation)

Sector represented	No of participants
Commercial farmers	08
Historically Disadvantaged Individuals	144
Mining	09
Forestry sector	06
Municipalities	10
Sector departments	26
Environmental sector	15
Emerging farmers	18
Farmers Associations	02
Irrigation Boards	08
Non-governmental organisations (NGOs)	10
Others	60
Civil society	17
Total	333

7 SUMMARY OF SUB-VISIONS

Below is the summary of sub-visions solicited from the six (6) subcatchments. These sub-visions infer to a balance between environmental protection and agricultural, tourism and urban development with a focus on the needs and aspirations of the catchment. This process highlighted the need for adaptation and the possibilities of diversifying the economy through innovative energy and information technologies. Consolidation of these sub-visions was translated into a water-related catchment vision for the entire Inkomati-Usuthu Water Management Area.

- Usuthu subcatchment
- Reliable water resources accessible to all in the subcatchment

- Lower Komati subcatchment
- Cooperative protection and management of water resources

- Sabie subcatchment
- Sustainable water resources for human and biodiversity

- Sand subcatchment
- Protection of water resources and equitable sharing for economic growth

- Crocodile subcatchment
- Quality water infrastructure and resources through innovation and management systems

- Upper Komati subcatchment
- Sustainable water resources management for economic development and biodiversity

The revision of the Vision of the IUCMA was discussed and it was agreed that the following two visions be submitted to stakeholders for them to choose with a closing date in time for inclusion in the CMS Visioning Report to the Governing Board meeting on 25 October 2018:

1. Sufficient, equitable and quality water resources for all in the Inkomati-Usuthu Water Management Area;

2. Sufficient water resources of suitable quality for all in the Inkomati-Usuthu Water Management Area.

The two Vision statements were presented to the stakeholders during CMF meetings and other communication platforms where stakeholders could voice their preference. The following statement received a majority vote and was adopted as the new vision of the IUCMA:

<p>SUFFICIENT, EQUITABLE AND QUALITY WATER RESOURCES FOR ALL IN THE INKOMATI-USUTHU WATER MANAGEMENT AREA.</p>

8 CONSOLIDATED LIST OF FEEDBACK FROM STAKEHOLDERS AND THE GOVERNING BOARD

The draft version of both vision and sub-strategies was presented to stakeholders during the catchment management forum (CMF) meetings and during targeted workshops with stakeholders. Inputs were collected from the wide range of stakeholder representatives and incorporated into the CMS. An observation was that most of the comments were sectoral directed and that individual stakeholders would express views based on their background and challenges faced in their sectors, respectively. The inputs are a representation of the wide stakeholder representation of sectors which the IUCMA engaged with on issues related to integrated water resources management (IWRM) at community and catchment levels. This consultative exercise provides assurance for a public participation-based decision-making process that the IUCMA undertakes in strategic matters that have an impact on the water resources and water use activities.

Table 8: List of inputs received from stakeholders during consultation workshops

	Comments	Name of stakeholder	Institution	Date	Sub catchment
1	Co-opt Environmental Affairs, sustainability, protecting ecosystem. -Water Chapter document to be released in few weeks should be shared with forum and the IUCMA to align the strategy with the Water Chapter document.	Dr. Gordon O'Brian	University of Mpumalanga	22/09/2019	Crocodile
2	The first sentence under clause 1.2 was rephrased to read as follows: "The powers and functions of a CMA are set out in the NWA and if it is listed as a public entity in Schedule 3A of the PFMA, it must comply with the provisions of the PFMA".	Dr. Eddie Riddell	San Parks Kruger National Park	22/09/2019	Crocodile
3	Situational analysis (risks, gaps, challenges and opportunities) per catchment must be done accepting that some challenges would be overarching.	Dr. Eddie Riddell	San Parks Kruger National Park	22/09/2019	Crocodile
4	Water quality and availability must be indicated per catchment, with trends, status quo and projections for the next five years that takes the impact of climate change into consideration.	Speaker Mahlake	Emerging farmer	11/11/2020	Sand
5	Rainfall measuring and monitoring per catchment must be captured with trends, status quo and projections for the next five years considering the impact of climate change on water availability and use that will include variations in rainfall and temperatures.	Speaker Mahlake	Emerging farmer	22/11/2020	Sand
6	The status and projections of water uses in Water Services Development Plans must be captured in the CMS document.	Governing Board	IUCMA	09/09/2018?	
7	A Strategy for Transformation of Water Use per sector and catchment must be clearly set out in the CMS document.	Sophie Lubisi	Zimiseleni	19/11/2019	Sabie
8	Arrange one-on-one meetings between the Executive Managements accompanied by relevant politicians of the IUCMA and relevant municipalities to facilitate Municipal Council Resolutions that their Executive Managements must get involved in WRM to get all municipal WWTWs operational.	Speaker Mahlake	Sand CMF Committee	11/11/2019	Sand
9	The strategy on how to engage municipalities with a focus on infrastructure maintenance must be captured in the CMS Document.	M Khoza	Farmer	11/11/2019	Lower Komati
10	To use water effectively, re-use, recycle and reallocation of water must be considered wherever possible.	Thomas Mokoena	Gingirikani	11/11/2019	Sand
11	The revenue generated on the water demand per sector and catchment must be mapped out in the CMS document with a strategy for additional sources of revenue as well as the funding and tariff model.	L Koetzee	DARDLEA	11/11/2019	Crocodile

	Comments	Name of stakeholder	Institution	Date	Sub catchment
12	The possible closure of Eskom's power stations, namely Hendrina, Arnot and Komati power stations in the next 10 years was mentioned in lieu of water resources that may become available for reallocation [This is in the southern part (Upper Komati catchment) of the WMA while the need is in the northern part of the WMA].	Govender MN	IUCMA Governing Board	11/09/2018	IUCMA
13	There must be a strategy to supply or obtain different sources of water to make up any shortage of water per catchment and also to decrease excess demands on available water resources.	C Nagel	Farm Inde Middel	22/11/2019	Crocodile
14	The status of groundwater levels and its quality must be reported.	M Kortze	Falls Fish Farms	22/11/2019	Crocodile
15	The status of government and private dams within the WMA must be reported in the CMS document.	Elsabe Koetsee	SAPPI	22/11/2019	Crocodile
16	The status of WWTWs per municipality and unlawful water uses must be reported and statistics in the WWTWs tables must balance.	Portia Ngwenya	Ehlanzeni District Municipality	19/11/2019	Lower Komati
17	Focus should be on the strategy to resolve the challenge with malfunctioning WWTWS.	Tebogo Mhlongo	Ehlanzeni District Municipality	19/11/2019	Lower Komati
18	The possibility of using closed mines as water sources and storage should be investigated.	Lungelo Twala	Kangra	22/11/2019	Usuthu
19	Stakeholders' database is to be adjusted to provide for stakeholder representation per sector as far as possible and stakeholders such as Mpumalanga Agriculture, Transvaal Agriculture Union, TWK, Mkhondo Plaas Farmers Association should be included.	Nelly Mantswitshi	Kangra	22/11/2019	Usuthu
20	Sectorial representation of stakeholders at Catchment Management Forums must be promoted by means of promoting membership of representative bodies.	PJ Venter	IUCMA Governing Board	09/09/2018	IUCMA
21	Stakeholder participation and a reporting matrix should be developed to identify stakeholders and Interested and Affected Parties (I&APs) for engagement and communication.	Governing Board	IUCMA	09/09/2018	
22	A Stakeholder Communication Strategy must be developed.	Wiggins SD	IUCMA Governing Board	11/09/2018	IUCMA

	Comments	Name of stakeholder	Institution	Date	Sub catchment
23	The relevance of presentations at CMF meetings must be verified.	PJ Venter	IUCMA Governing Board	11/09/2018	IUCMA
24	Municipalities should be convinced to invite the IUCMA to their IDP consultation sessions.	Mathebula JM	IUCMA Governing Board	11/09/2018	IUCMA
25	The Institutions and Participation Division of the IUCMA must educate water users regarding water in boreholes.	Governing Board	IUCMA	11/09/2018	Upper Komati
26	The CMS document must be action and solution driven.	Nancy O'Farell	Inkomati Irrigation Forum	22/11/2019	Crocodile
27	The challenges with municipalities regarding malfunctioning Wastewater Treatment Works must be captured in the covering letter to the Minister when submitting the CMS document to the Minister.	Governing Board	IUCMA	11/09/2018	
28	Transfer of land should be made subject to clearance certificates in respect of water use charges.	L Koetzee	DARDLEA	22/11/2019	Crocodile
29	Water resource management charges must be approved by the Governing Board of the IUCMA for its WMA.	Nancy O'Farell	Inkomati Irrigation Forum	22/11/2019	Crocodile
30	The strategy to verify the debtors transferred from DWS to the IUCMA in accordance with the GRAP 105 principle within two years from 01/11/2017 must urgently be drafted and implemented with a Funding and Tariff Model for the IUCMA.	Nancy O'Farell	Inkomati Irrigation Forum	22/11/2019	Crocodile
31	Wastewater Discharge System Charges must be implemented and partnerships with the private sector such Eskom and the Chamber of Mines (Mining House), can be formed in respect of industrial and mining water.	Zodwa Ngomane	DARDLEA	22/11/2019	Upper Komati
32	A strategy must be developed for post closure procedures in respect of mines to be followed to ensure rehabilitation of the environment to protect water resources.	Love Shabane	DAFF	19/11/2019	Upper Komati
33	A strategy for the protection of wetlands must be developed and partnerships created with the Department of Environmental Affairs in this regard. (Implementing agents are used to protect and rehabilitate wetlands).	Sibeko Lumkile	EYEC	19/11/2019	Lower Komati

The following challenges were identified to be incorporated in the sub-strategies:

- Transformation of the water sector referring to HDIs, gender and B-BBEE compliance;
- Licence applications take too long to be finalised (up to three years);
- Ageing water infrastructure not maintained results in water losses;
- High levels of E. coli in groundwater;
- Increasing number of boreholes on small holdings;
- Increasing number of boreholes by municipalities;
- Municipal boreholes not included in the water services development plans;
- The representatives of municipalities are not attending the Catchment Management Forum meetings and when representatives do so they are not part of the executive management making decisions;
- Non-compliant municipalities in respect of authorised water use regarding quantity and quality;
- Ageing infrastructure with the focus on failure to maintain the infrastructure;
- Water resource demand exceeds the availability of water resources in the WMA;
- Water use transformation regarding the allocation of water to HDIs and women;
- Unlawful sand mining;
- People using water directly from the source for domestic purposes;
- Municipalities fail to invite the IUCMA to their IDP consultations;
- The water resource management charges must be approved by the Governing Board, but is still manipulated by the DWS via their National Tariff Consultations without acknowledging this power of the operational CMAs;
- Increasing development of informal settlements on wetlands without mitigating measures; and
- Insufficient storage capacity (dams) within the WMA.

9 CONCLUSION

During the Catchment Management Forum (CMF) meetings in the second quarter of 2020/21, the CMS Team used this platform to provide feedback to the stakeholders and to capture final inputs for consolidation into the CMS sub-strategies for the final development of the CMS. From the 4th quarter of 2019/20 financial year the visioning and sub-strategies inputs were collected through the CMFs platforms and targeted meetings. This was to ensure that stakeholders' voices were reflected in the final development of the CMS and that challenges were being addressed.