



**DETERMINATION OF WATER RESOURCE CLASSES AND
ASSOCIATED RESOURCE QUALITY OBJECTIVES IN THE
INKOMATI WMA**

PROJECT STEERING COMMITTEE MEETING

Date: 20 August 2013

Time: 09:30

Venue: Bundu Country Lodge, Nelspruit



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PRESENTATION CONTENT

- The Water Resource Classification System (WRCS)
- Resource Quality Objectives (RQOS)
- Study Area
- Process for the classification of water resources and determination of the Resource Quality Objectives in the Inkomati WMA



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LEGAL MANDATE

- The classification of South African water resources is required by the National Water Act (NWA) (No. 36 of 1998) (Chapter 3 regarding the protection of water resources)
 - **Class**
 - Reserve (Preliminary)
 - **Resource Quality Objectives**
(RDM–Set objectives for the desired condition of water resources)
- Regulation 810 published in Government Gazette No. 33541 dated 17 September 2010 defined water resource management classes and the procedure to determine a Class
- According to the NWA, once the WRCS has been gazetted all significant water resources must be classified

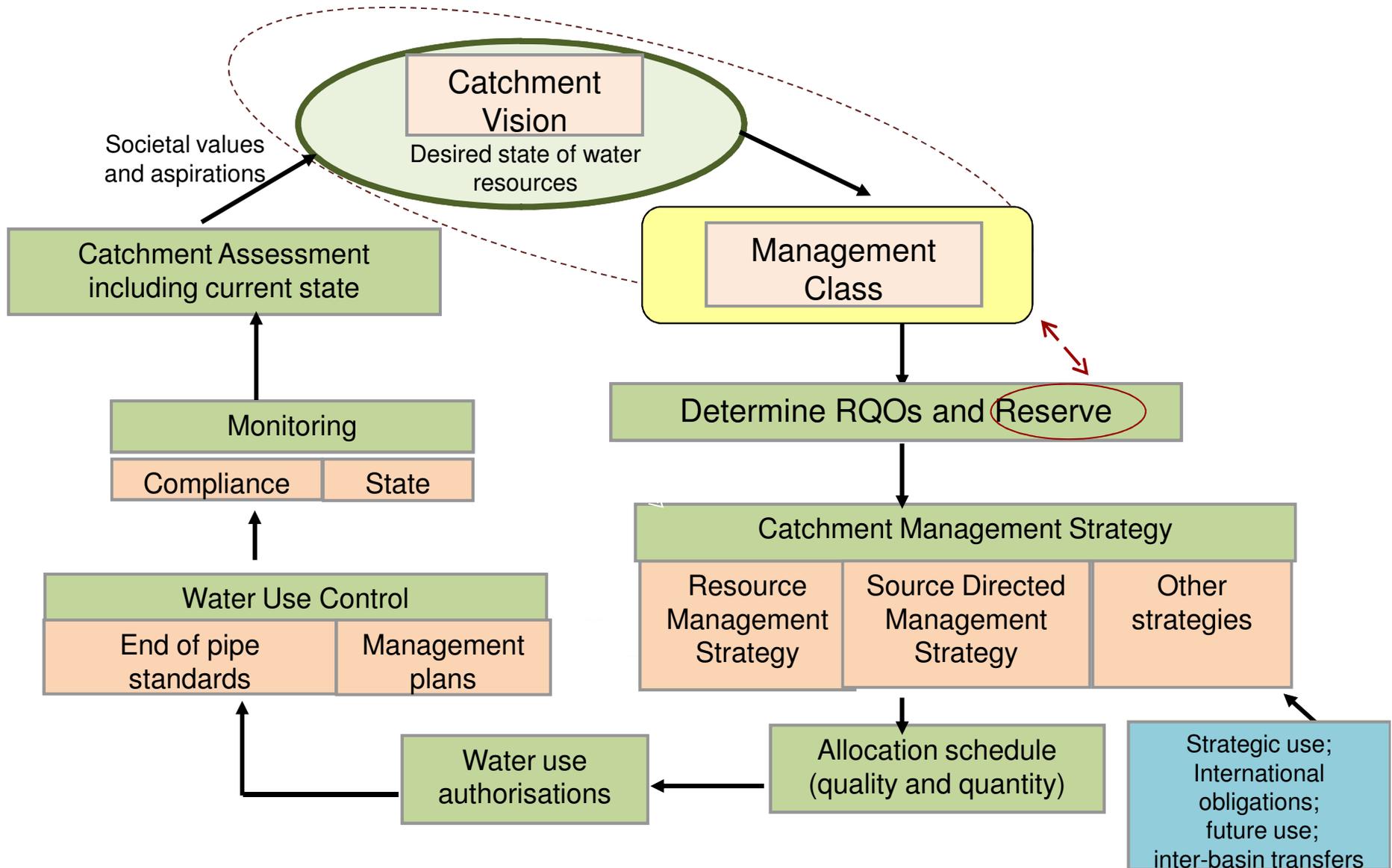


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INTEGRATED WATER RESOURCE MANAGEMENT





THREE MANAGEMENT CLASSES (MC)

Classes	Description of use	Ecological categories
Class I	Minimally used	A-B
Class II	Moderately used	C
Class III	Heavily used	D

Ecological Category (EC) - means the assigned ecological condition to a water resource in terms of the deviation of its biophysical components from a pre-development condition.



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CLASSIFICATION SYSTEM

- The WRCS provide guidelines and procedures for setting different MC (MCs) ;
- MC describes what state the water resources need to be in to satisfy beneficial use;
- MC facilitates the balance between protection and use of the water resources;
- MC is defined by taking into account the social, economic & ecological landscape;
- Process requires co-operation & transparency with all stakeholders.



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RESOURCE QUALITY OBJECTIVES (RQOS)

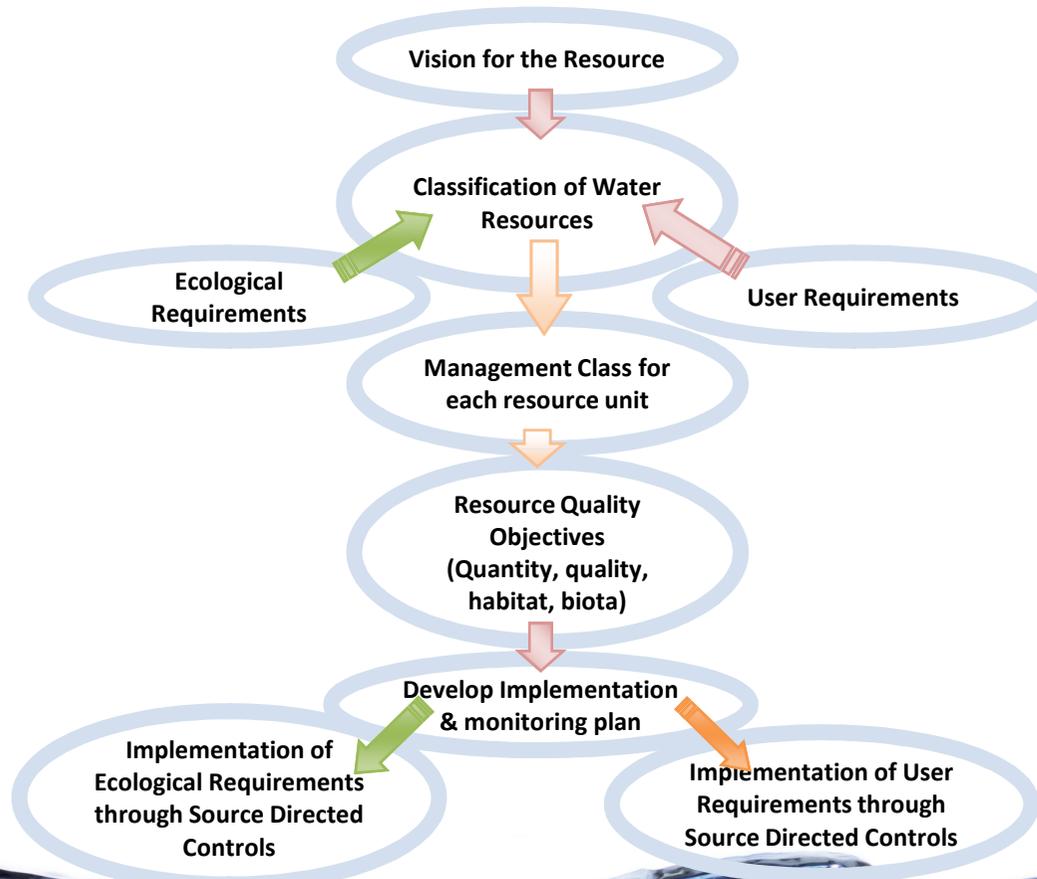
- RQOs are numeric or descriptive statements of conditions which should be met in the receiving water resource;
- RQOs represent the requirements for water quantity, quality, and habitat and biotic integrity to be maintained in aquatic ecosystems.
- They are targets that can be measured/audited, and can be used as benchmarks to monitor a combined resource that may have several licensed users.
- RQOs provide measurable goals that give direction as to how the resources need to be managed.



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THE LINK OF RQOS WITH WATER RESOURCE CLASSIFICATION



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Classification and RQOs Determination

The determination of classes and RQOs is a step-wise process consisting of:

- Assessment of the study area and delineate the IUAs
- Identify and evaluate the scenarios
- Setting of the class, userspecs and ecospecs
- Stakeholder engagement



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WHY CLASSIFYING INKOMATI WMA?

- **Agricultural and mining runoff impacting on water quality – salts**
- **AMD – Impacting on water quality**
- **Further exacerbated by over-abstraction & unlawful water use (Surface and groundwater)**
- **Degradation of natural resources**
- **International obligation towards neighboring countries**



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THE PURPOSE OF WATER RESOURCE CLASSIFICATION

- **Ensure long term sustainable use of the water resources**
 - Quality and quantity
- **Provide framework in which goals (resource quality objectives) can be set to measure regulatory performance and compliance**
 - Water Quality
 - Water Quantity
 - River and wetland habitat and biota



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HOW WILL CLASSES AND RQOS ASSIST IN THE MANAGEMENT OF THE CATCHMENT?

- The catchment vision requires a desired state of the water resources
- RQOs will give effect to the implementation of the MCs
- There will be management framework describing the following:
 - The extent to which every significant water resource can be used, and
 - The level of protection every significant water resource will be afforded.
- Develop plan of action for implementation of recommended classes and RQOs which must include a monitoring programme.



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DETERMINATION OF CLASSES AND RQOS IN THE INKOMATI WMA



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DETERMINATION OF CLASSES AND RQOS IN THE INKOMATI WMA

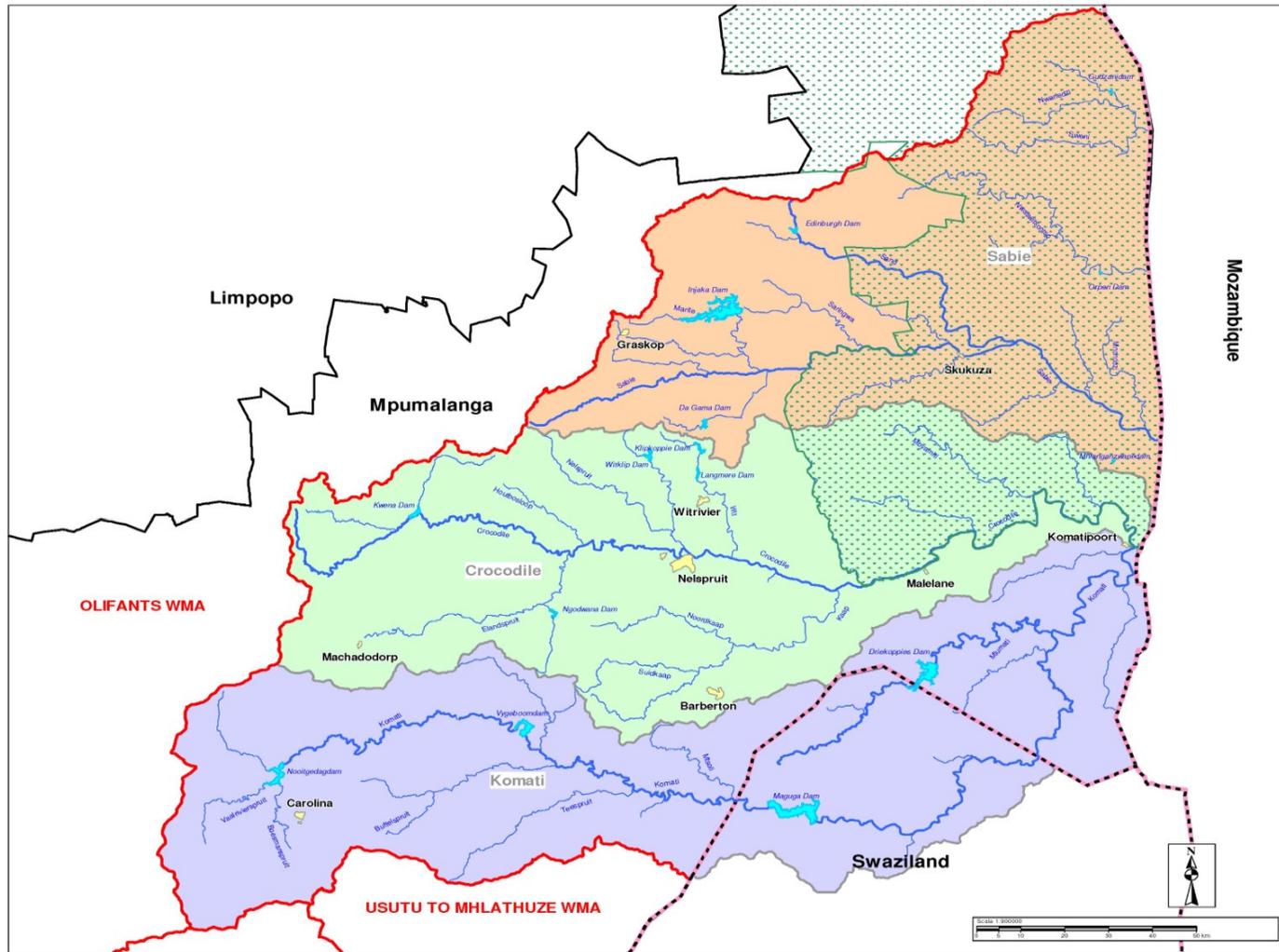
- **The study was initiated in April 2013: still in the inception phase**
- **Timeframe: 24 months**
- **IWR Water Resources was appointed to assist DWA**
- **The objective of the study is to determine classes and RQOs in the Inkomati WMA**



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STUDY AREA



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GUIDING PRINCIPLES ON THE PROJECT

- **Alignment with the existing work and current studies**
- **Transparency and Stakeholder engagement**
- **Consultation and collaboration**
- **The classification and determination of the RQOs are step-wise processes**



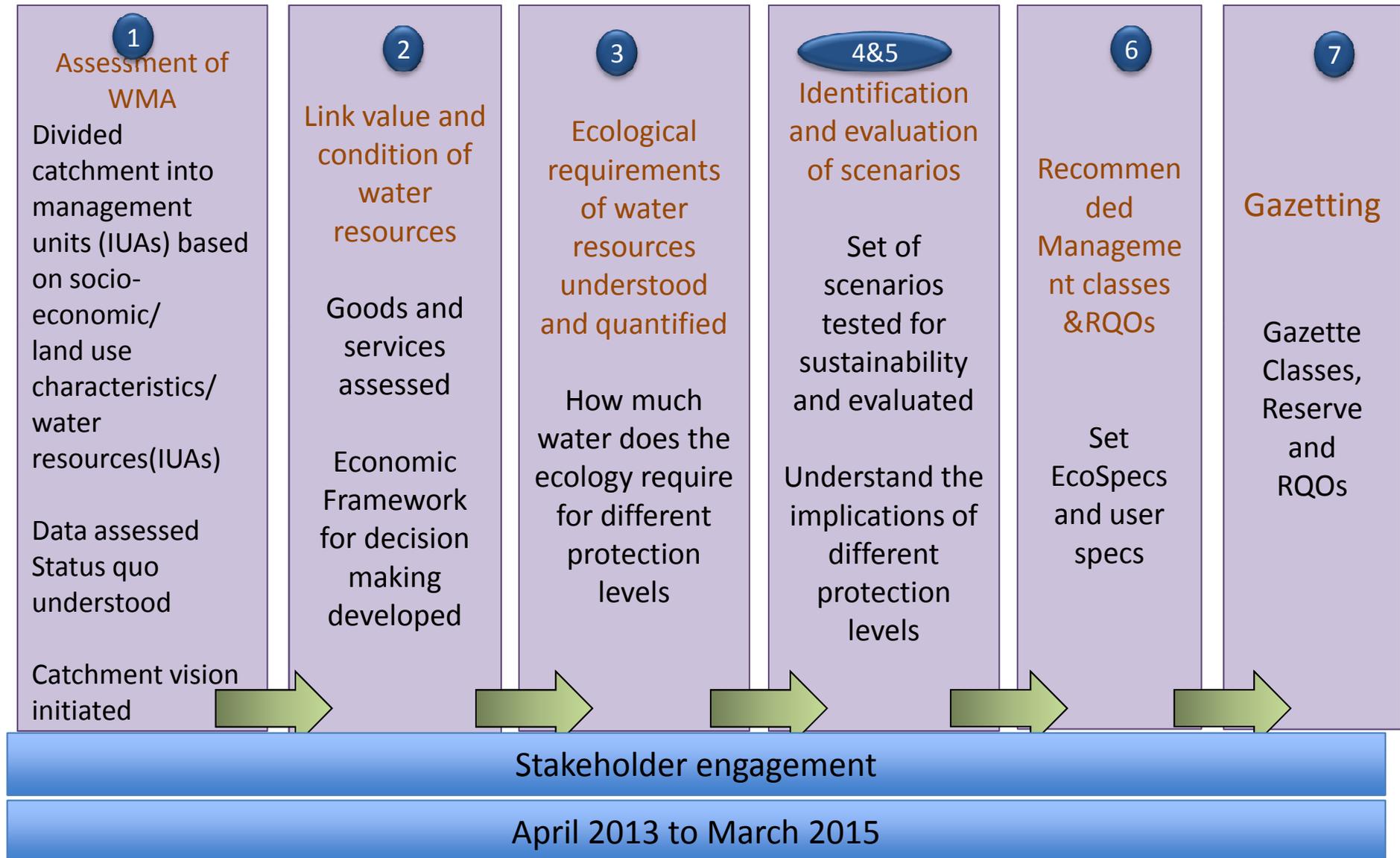
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STUDY PROCESS

In accordance with the classification and RQOs guidelines: 7 step process applies





STAKEHOLDER ENGAGEMENT



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PURPOSE OF THE STAKEHOLDER ENGAGEMENT PLAN

- To engage with stakeholders on the determination of the Management Classes & RQOs in the Water Management Area
- To extend stakeholder engagement to all the key stakeholders
- To have one-on-one meetings with the key stakeholders who could not attend the workshops
- To communicate Communication Plan for the study



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OBJECTIVES OF THE STAKEHOLDER ENGAGEMENT PLAN

- To improve the management process of this project.
- To reduce the potential for future conflict.
- To enable the Department and stakeholders to share knowledge and expertise.
- To inform and educate stakeholders about the Department's function and responsibilities.



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TARGETED STAKEHOLDERS

- Agriculture – Agri SA, NAFU, Irrigation boards, Tvl Agric Union of SA
- Emerging Farmers
- Mining – COM and mining houses
- Industries – Eskom, SAPPI, TSB Sugar, etc
- Local government – local and district municipalities in WMA
- Conservation – SANBI, Sanparks, WESSA, Bird Life Africa
- NGOs – AWARD, Federation of Sustainable Environment
- Regulators – DWA & DEA (regional and national), DMR, Department of Agriculture, Land Affairs
- Water Service Authorities/Providers- SembCorp, BCT Water, etc



TARGETED STAKEHOLDERS [*Cont.*]

- Information/Academic institutions – libraries, universities
- Unions & House of Traditional leaders
- Catchment Forums & WUA
- Civil society and the environment representatives
- Community members (public at large)



COMMUNICATION METHODS/ APPROACH

- Direct –PSC, TTG meetings & Stakeholder engagement workshops
 - Distribution of documents and presentations for comments
- Interviews – One-on-One meetings
- Printed Documents – BID, Newsletters & Brochures
- Electronic media – DWA website: www.dwa.gov.za/rdm/WRCs/default.aspx

ICMA website: www.inkomaticma.co.za

E-mail (database list)



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PROPOSED COMMUNICATION PLAN

Platform	Group	Frequency	Purpose
PSC	Sector reps important to the study	Once in 6 months	<ul style="list-style-type: none"> •Delineation of IUAs •Status quo •Visioning exercise
			<ul style="list-style-type: none"> •EWRs •Select & define operational scenarios
			<ul style="list-style-type: none"> •Scenarios Consequences •Recommended classes, RQOs
TTG		Twice in 24 months	<ul style="list-style-type: none"> •Obtain advice on methodology •Input on possible data gaps •Comments and input on technical milestones • Prioritisation of RUs for RQOs determination



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PROPOSED COMMUNICATION PLAN

Platform	Group	Frequency	Purpose
Public Participation	Broader public	Twice in 24 months	<ul style="list-style-type: none"> •Announce project •Overview of classification process •Integrating classification into other IWRM processes
			<ul style="list-style-type: none"> •Recommended classes, RQOs
Existing Fora	Croc River	Once per 1/4	Information sharing Project status
	Croc operational		
	Sabie River		
	Sabie operational		
	Komati		
	Komati Joint Operations		
	Inkomati Irrigation		
	Olifants Letaba Limpopo Inkomati		
	Mpumalanga Wetlands		
	REMCO		



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PROPOSED COMMUNICATION PLAN

Platform	Group	Frequency	Purpose
Sectors (one-on-one)	Domestic: Municipalities Ward councillors Traditional leaders communities	Twice in 24 months	<ul style="list-style-type: none"> •Info sharing •Engage on scenarios developed •Recommended classes, RQOs
	Mining & Industries, e.g. Chamber of mines ESKOM	Twice in 24 months	<ul style="list-style-type: none"> •Obtain input on possible data gaps & verify the appropriateness of data/info collected •Engage on scenarios developed •Recommended classes, RQOs



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PROPOSED COMMUNICATION PLAN

Platform	Group	Frequency	Purpose
Sectors (one-on-one)	Agric: AGRISA NAFU Individual Farmers	Twice in 24 months	<ul style="list-style-type: none"> •Obtain input on possible data gaps •Engage on scenarios developed •Recommended classes, RQOs
	Conservation/Environment: SANPARKS SANBI WESSA FSE MTPA AWARD	Twice in 24 months	<ul style="list-style-type: none"> •Obtain input on possible data gaps •Engage on scenarios developed •Recommended classes, RQOs



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THE ROLE OF PROJECT STEERING COMMITTEE (PSC)

- **Non-statutory, voluntary body.**
- **Oversight body for water resource management within WMAs**
- **To guide the project in all stages as it unfolds**
- **To provide inputs on behalf of the sector it represents**



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THE OBJECTIVES (1)

- **Provide strategic direction and guidance on the study process and tasks;**
- **Guide the study team on the desired state of water resources within the study area;**
- **Provide technical input and support to the process**



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THE OBJECTIVES (2)

- **Provide direction on the significant water resources to be classified;**
- **Provide input to the technical process;**
- **Serve as representatives of the stakeholder bodies and organisations and report back to them on an ongoing basis regarding the study decisions and results.**



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FUTURE MEETINGS

- **The PSC meeting will be held when the study team has reached milestones.**
- **It is anticipated that the PSC will not meet more than three times over the two-year period.**
- **The meetings will be facilitated by the DWA.**
- **Proposed timeframes for the meetings are**
 - **August 2013**
 - **February/March 2014**
 - **September/October 2014**



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WAY-FORWARD

- **The Finalisation TOR for the PSC**
- **Collation of information arising from catchment visioning exercise**
- **Distribution of newsletter and reports for comments**
- **Updating the Issues & Responses Register**
- **To engage with identified stakeholders**
- **Updating the Stakeholder Engagement Plan**



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THANK YOU



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