



Classification of Water Resources (Crocodile (West) & Marico WMA, Mokolo and Matlabas Catchments)

Directorate: Water Resource Classification

Maintenance of the reconciliation strategy for the crocodile West water supply system: SSC meeting

Date: 25 July 2012

Venue: Lonmin Conference Centre, Stone Room, Game Farm



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PURPOSE OF THE PRESENTATION

To provide background to the classification project in the Crocodile West

To provide progress to date on the classification project in the Crocodile West



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PURPOSE OF THE WATER RESOURCE CLASSIFICATION

- **Ensure long term sustainable use of the water resources**
 - Quality and quantity
- **Provide regulatory certainty**
 - Facilitate decision making
- **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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RELATIONSHIP BETWEEN RECONCILIATION AND CLASSIFICATION STUDIES

Reconciliation strategies are developed in order to ensure sufficient and reliable supply of water of appropriate quality to all existing as well as future users, taking into account provision for the RDM (Class, Reserve & RQOs) requirements.

Information emanating from Reconciliation studies is used as a decision-support framework during the classification process when evaluating scenarios with stakeholders where trade-offs are made.



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LEGAL MANDATE

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



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MANAGEMENT CLASSES

CLASS I	Minimally used
CLASS II	Moderately used
CLASS III	Heavily used



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BACKGROUND TO CLASSIFICATION PROJECT IN THE CROCODILE (WEST)

- **Classification study in the Crocodile West was initiated in October 2011**
- **Timeframe: 24 months**
- **The objective of the study is to classify all significant water resources into Management Classes**
- **The Golder Associate Africa was appointed to assist DWA.**



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PROJECTS STATUS

Step	Description	Status	Deliverable
Step 1:	Delineate the units of analysis and describe the status quo of the water resources	Complete	IUA delineation report
Step 2:	Link the socio-economic and ecological value and condition of the water resources	In progress	Status Quo report
Step 3:	Quantify the ecological water requirements and changes in non-water quality ecosystem goods, services and attributes	In progress	Ecological Water Requirements report
Step 4:	Determine an ecologically sustainable base configuration (ESBC) scenarios		Base scenarios and proposed starter configuration scenarios report
Step 5:	Evaluate scenarios within the integrated water resource management process		Scenarios Report
Step 6:	Evaluate the scenarios with stakeholders; and		Proposed MC
Step 7:	Gazette and implement the class configuration.		Class configuration



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DELINEATION OF INTEGRATED UNITS OF ANALYSIS

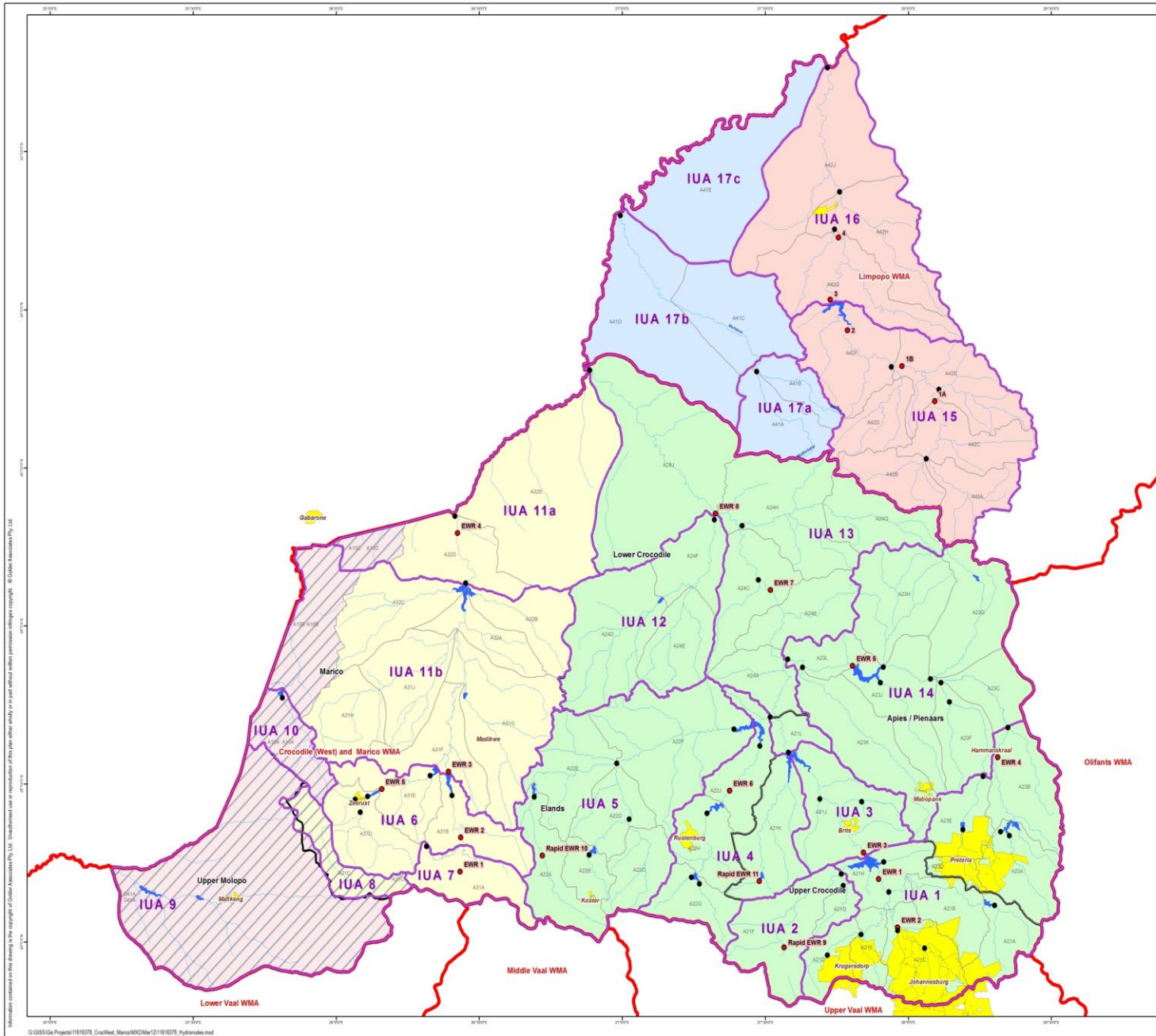
The identification and selection of the IUAs were based on the following considerations:

- Catchment area boundaries (drainage regions and water resource systems);
- Similar land use characteristics/land based activities;
- Socio-economic zones (SEZs);
- Eco-regions and geomorphology;
- Ecological information;
- Present Ecological State (PES); and
- Stakeholder input



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LEGEND

- HydroNodes
- EWR Site
- Major Drainage
- Major dams
- Urban Areas
- ▨ Groundwater zones
- ▨ Quaternary catchments
- ▭ IUA delineation
- ▭ Water Management Sub Areas
- ▭ Water Management Area
- ▭ Crocodile West Catchment
- ▭ Marico Catchment
- ▭ Upper Moloopo
- ▭ Matlabas Catchment
- ▭ Mokolo Catchment

RESOURCESNOTES

PROJECT NO 11616378	REFERENCE GCS WGS 1984
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PROJECT CLASSIFICATION OF SIGNIFICANT WATER RESOURCES IN THE MOKOLO AND MATLABAS CATCHMENTS: LIMPOPO WMA AND CROCODILE (WEST) MARICO WMA

TITLE

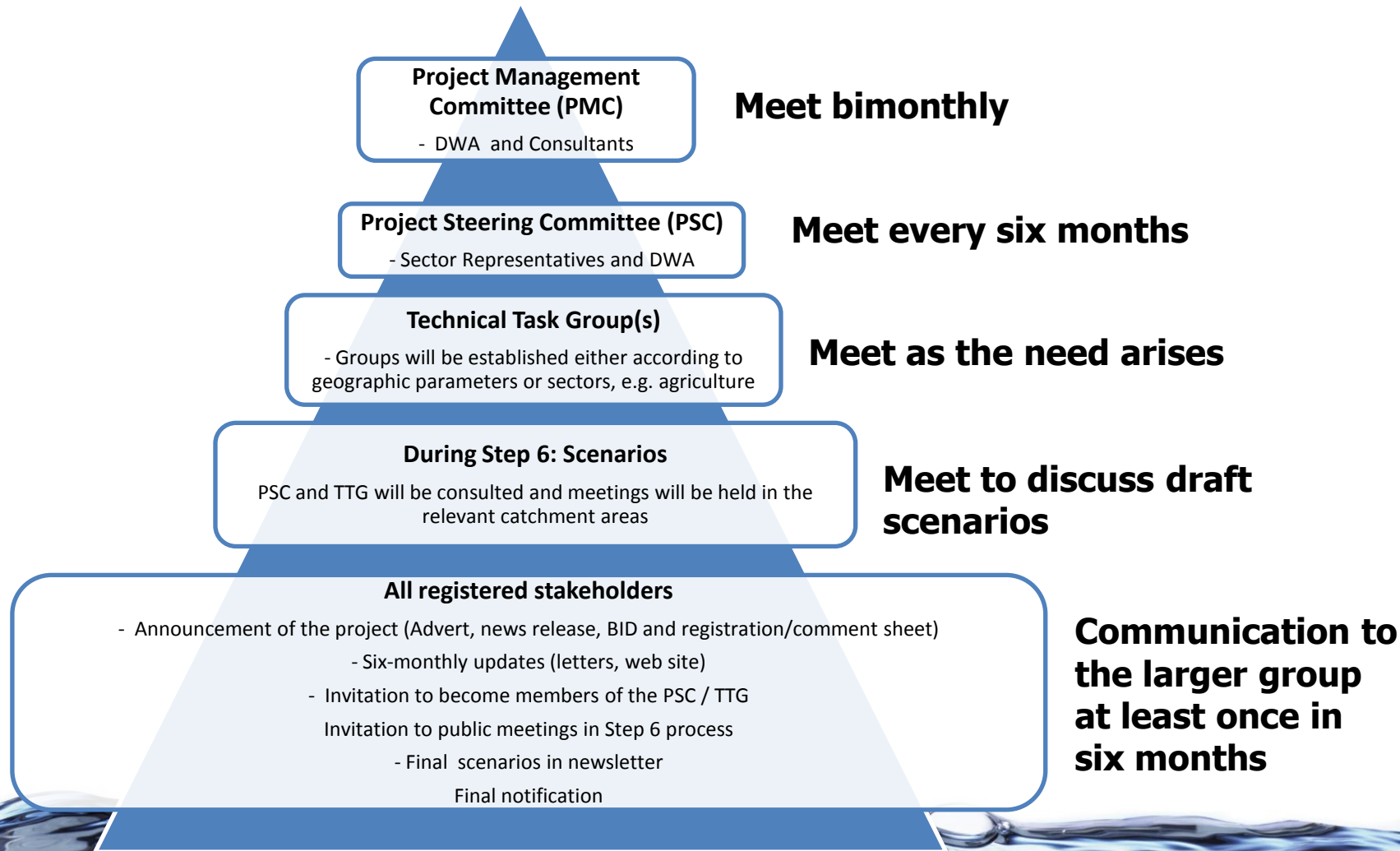
HYDRONODES

SCALE	A3	REV 0
GIS	MM	15/05/2012
CHECK	LB	15/05/2012
REVIEW	RH	15/05/2012

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STAKEHOLDER PROCESS



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For more information visit the Departmental website:
www.dwa.gov.za/rdm/WRCS/default.aspx

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