

CLASSIFICATION OF WATER RESOURCES

A **Management Class** describes the desired condition of the resource, and the degree to which it can be utilised, where a water resource can be:

- Watercourse (spring, natural channel, wetland, lake or dam)
- Surface water
- Estuary
- Aquifer
- Any other water resource deemed significant

The Management Class is **not the same as the ecological condition category** given below:

A

Natural

B-C

Moderately used/impacted

C-D

Heavily used/impacted

E-F

Unacceptably degraded

Classification water resource classes (I, II and III):

Class I	The configuration of water resources within a catchment results in an overall water resource condition that is minimally altered from its pre-development condition
Class II	The configuration of water resources within a catchment results in an overall water resource condition that is moderately altered from its pre-development condition
Class III	The configuration of water resources within a catchment results in an overall water resource condition that is significantly altered from its pre-development condition

7-Step classification procedure (Ecological Aspects only):

Step 1: Delineate units of analysis and describe the status quo:

- Identify a network of significant resources, describe water resource infrastructure and identify water user allocations.
- Define a network of significant resources and establish biophysical nodes.
- Define Integrated Units of Analysis.

Step 2: Link value and condition (Socio-economic task)

Step 3: Quantify Ecological Water Requirements and changes in Ecosystem Goods, Services and Attributes:

- Identify nodes to which Resource Directed Measures data can be extrapolated.
- Develop rule curves, summary tables and modified time series for nodes for all categories.
- Quantify the changes in relevant ecosystem components, functions and attributes for each category for each node.

Step 4: Set Ecological Sustainability Base Configuration scenario and establish starter configurations:

- Set scenario and screen for water quantity, quality and ecological feasibility.
- Incorporate planning scenarios.
- Establish Resource Directed Measures catchment configuration scenarios.

Step 5: Evaluate scenarios within the Integrated Water Resource Management process:

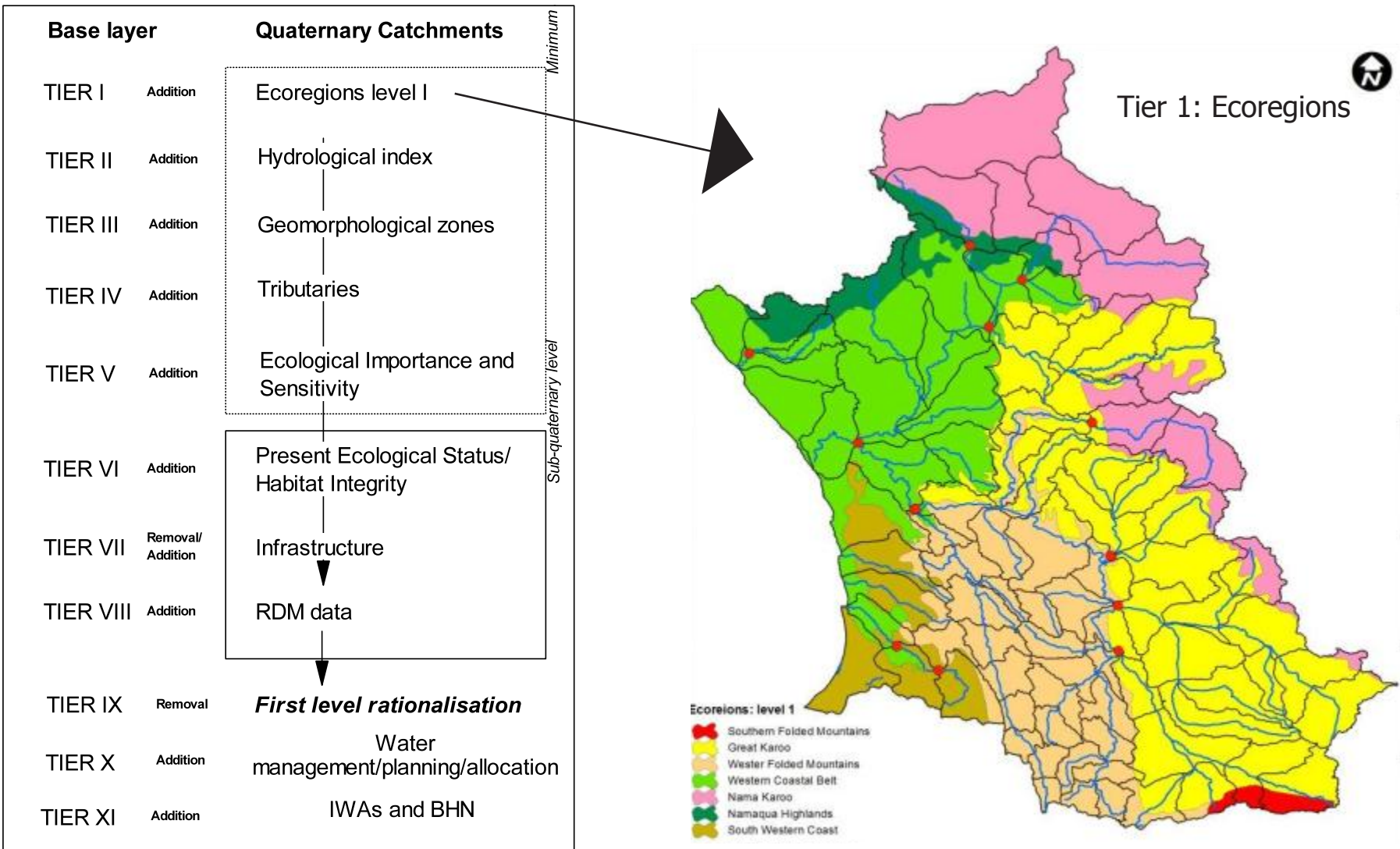
- Run yield model catchment configuration scenarios.
- Assess fitness for use for all users.
- Report on ecological condition and impacts per IUA for each scenario.

Step 6: Evaluate scenarios with stakeholders:

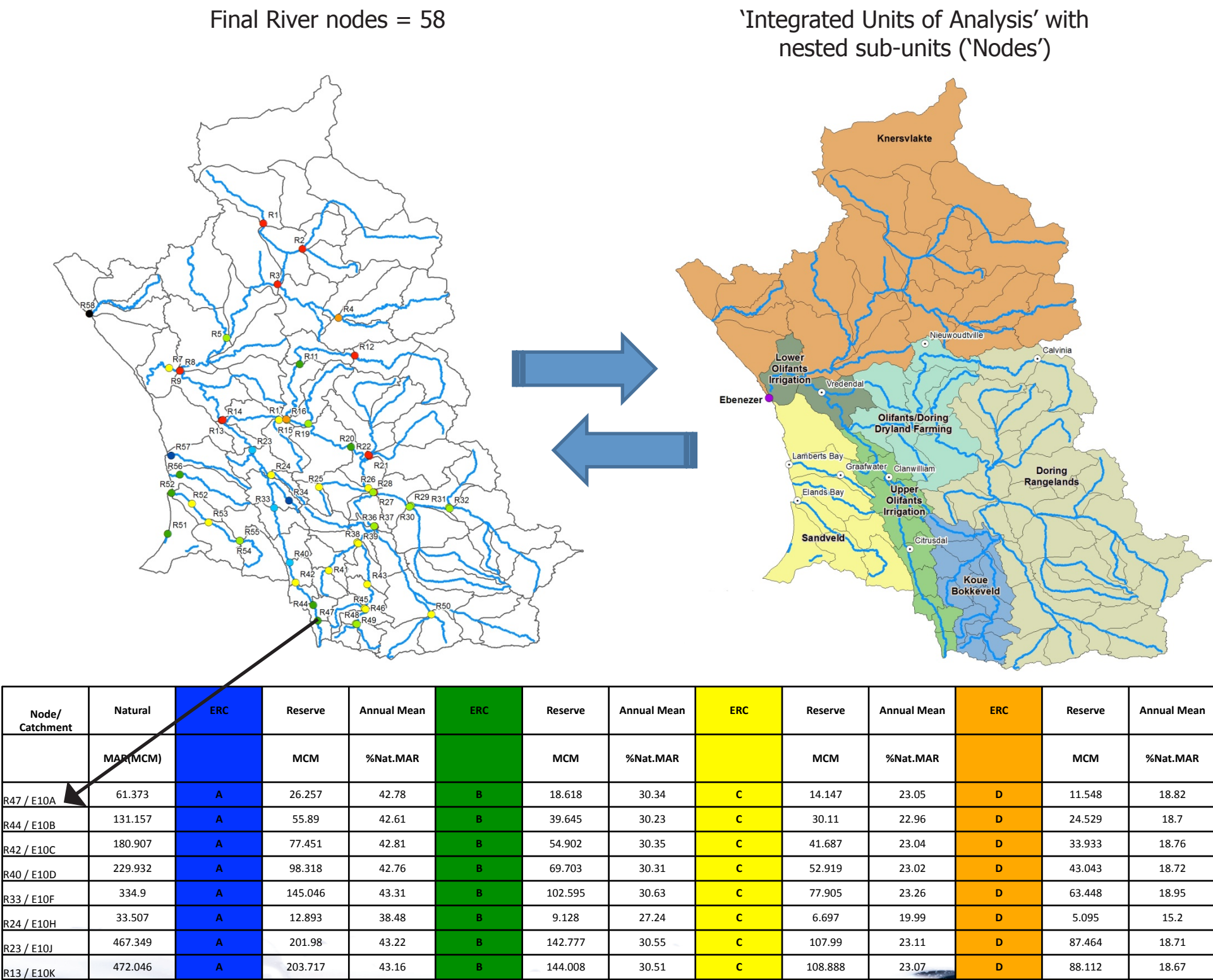
Step 7: Gazette class configuration

1: Delineate units of analysis and describe the status quo

Selection of river nodes



1. Delineate the catchment & describe the status quo



Summary Table of River Node Characteristics

NODE CODE	R7
QUATERNARY	E33H
X COORDINATES	18.32512
Y COORDINATES	-31.56546
ECOREGION	Western Coastal Belt
HYDROLOGICAL INDEX	Perennial
GEOMORPHOLOGICAL ZONE	Lower River
ALTITUDE	0-200
RIVER NAME	Olifants
EIS CATEGORY	Moderate
PES CATEGORY	D: Largely Modified
INFRASTRUCTURE	Lower Olifants Canal
RDM DATA	Estuary Reserve
EXTRAPOLATE FROM	no extrapolation
nMAR (Incremental)	3.629 MCM
WQ site	E2H003
ESTUARY/WETLANDS	Estuary
AQUIFER DEPENDENT ECOSYSTEM PROBABILITY	High
IUA	Lower Olifants Irrigation

1. Delineate the catchment & describe the status quo

Include Wetland and estuary nodes as well as river protected areas

