

The role of Resource Directed Measures in Biodiversity Conservation

Biodiversity Planning Forum 2015

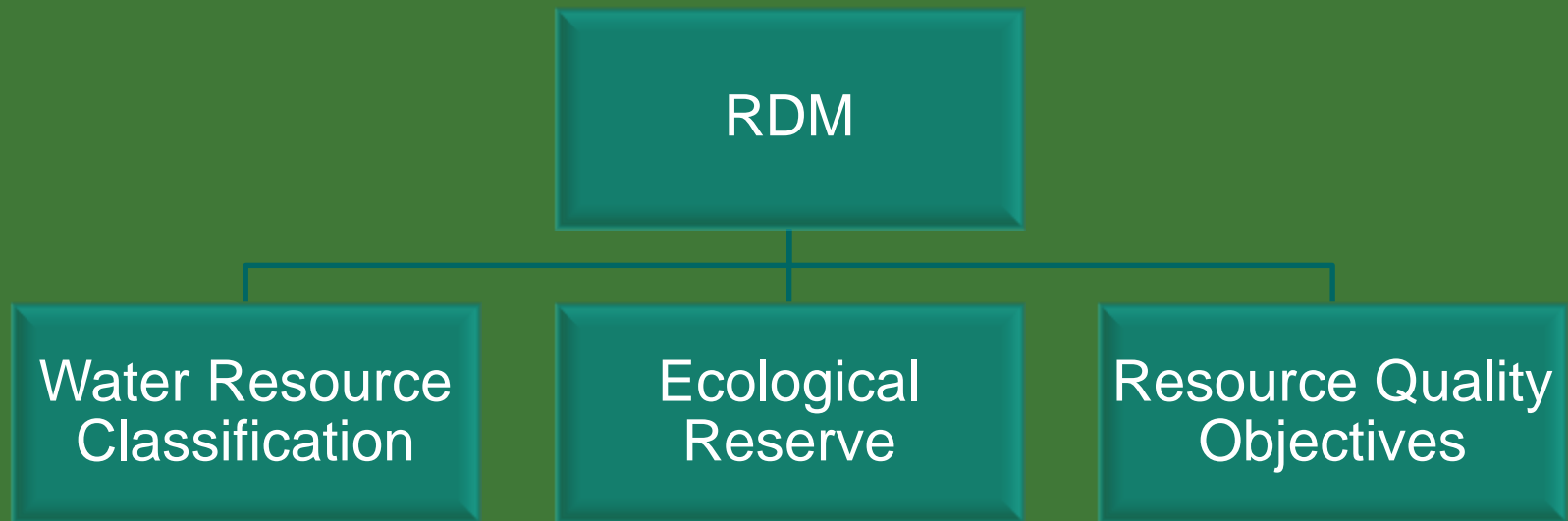
Kate Pringle
Institute of Natural Resources



Institute of
Natural Resources

What are Resource Directed Measures?

- NWA aims to protect, use, develop, conserve, manage and control water resources

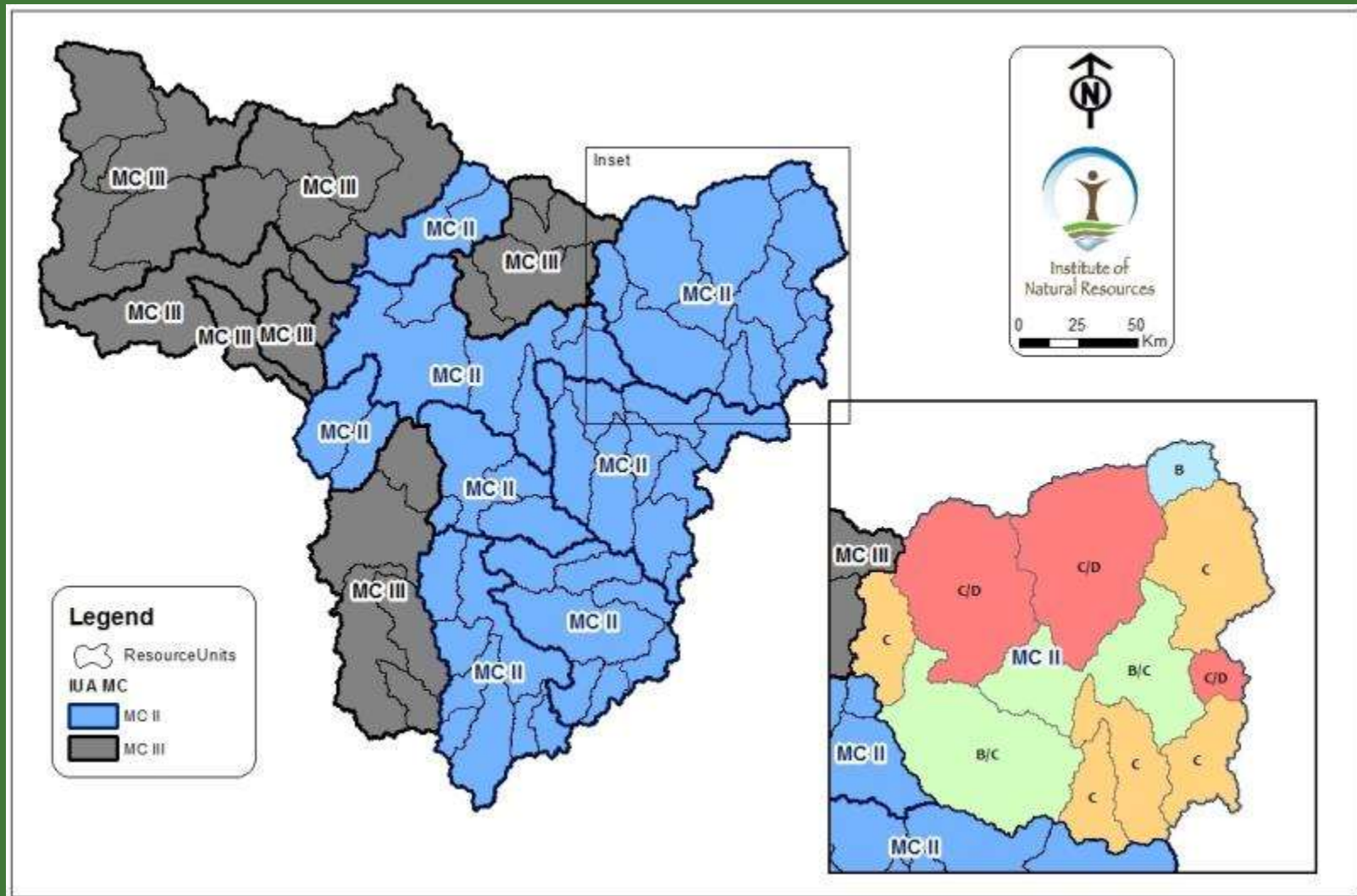


Water Resource Classification

- Balances use and protection of water resources

| MC | Description | Configuration |
|------------------|---|---|
| Class I | Minimally used Overall condition minimally altered from pre-development condition | Mostly B ecological categories & higher |
| Class II | Moderately used Overall condition moderately altered from pre-development condition | Mostly C ecological categories |
| Class III | Heavily used Overall condition significantly altered from pre-development condition | Mostly D ecological categories |

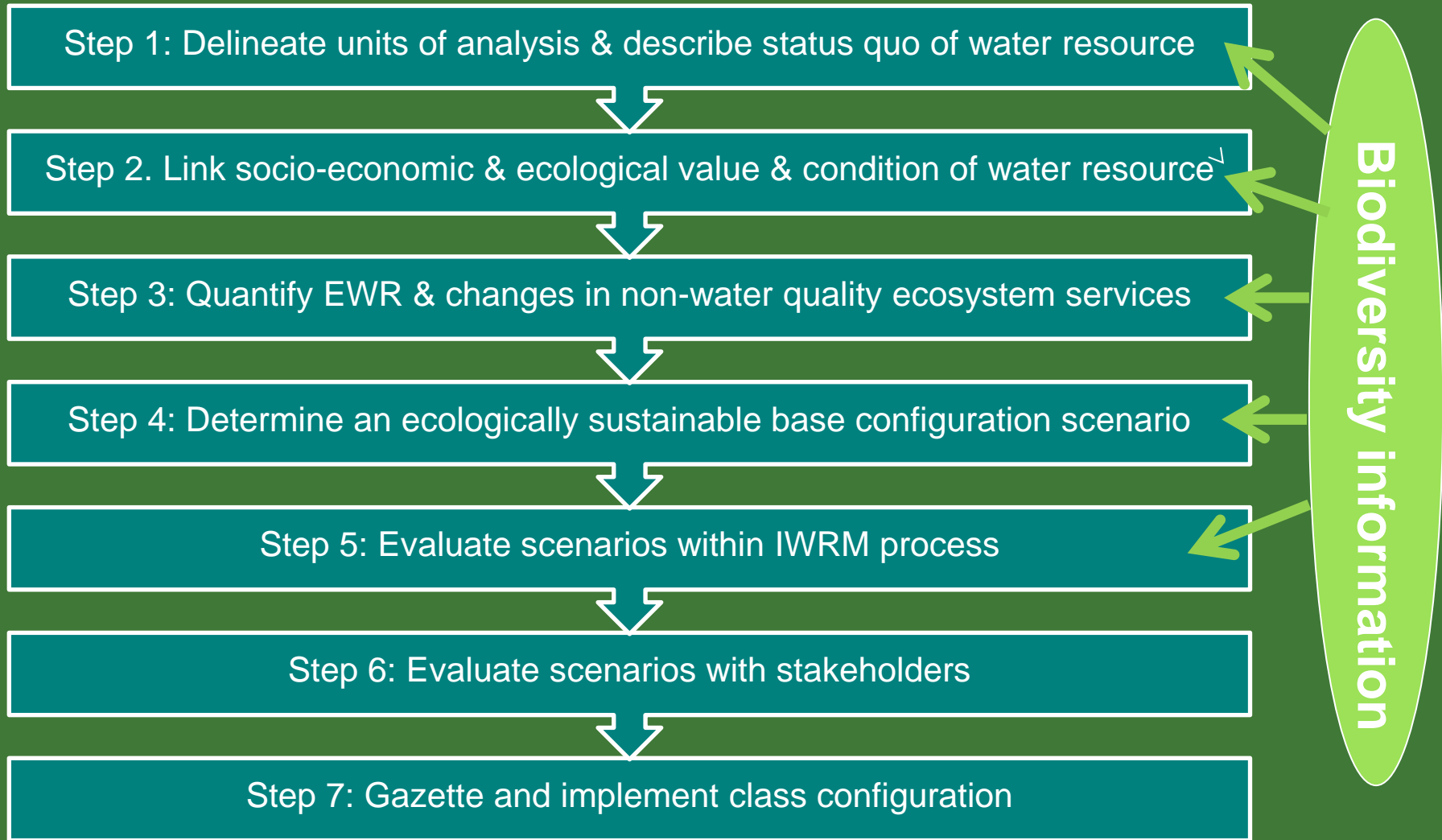
Water Resource Classification Output





EWR sites

Water Resource Classification Procedure



Resource Quality Objectives

- Narrative descriptors of conditions that must be met in order to achieve the WRC
- Underpinned by numerical limits



Photo: D. Macfarlane

Resource Quality Objectives

| IUA | Class | RU | Sub-Component | RQO | Indicator/ measure | Numerical Limits |
|-----|-------|-----|---------------|---|---|---|
| UA | II | RU8 | Fish | Fish communities should be maintained/improved so that they include viable populations of ecologically important species. | State of critical instream habitat for the Orange-Vaal largemouth yellowfish & Vaal rock catfish according to Rapid Habitat Assessment Method (RHAM). | Maintenance of critical habitat for indicator species in a state equivalent to \geq B/C EcoStatus (\geq 78 Score). |

| Quantity | Quality | | | | Habitat | | | | Biota | | | | | | | |
|-------------------------------|---------------------|-----------|-------|------------------|---------|-----------|------------------|------------------|-------|----------------------------------|---------|-------|-----------------------|------------|-----------------------|---------|
| Low Flows (Maintenance Flows) | High Flows (Floods) | Nutrients | Salts | System variables | Toxics | Pathogens | Instream habitat | Riparian Habitat | Fish | Aquatic & riparian plant species | Mammals | Birds | Amphibians & reptiles | Periphyton | Aquatic Invertebrates | Diatoms |

RQO Procedure

Monitoring & Compliance

Delineate the IUAs and RUs

Establish the vision for the catchment

Prioritize & select preliminary RUs

Prioritize sub-components & select indicators

Agree on direction of change of sub-components

Stakeholder engagement

Develop draft RQOs & numerical limits

Finalize & Gazette

Biodiversity input

Biodiversity input

Biodiversity input

Biodiversity input

Linkages to Biodiversity

- RDM dependent on biodiversity inputs
 - Real need for aquatic biodiversity plans
 - Expert input is critical!
- Provide opportunity to legally protect selected biodiversity components
- Register as a stakeholder & attend workshops





Thank you

kpringle@inr.org.za

033 3460796