South Africa’s
Strategic Water Source Areas:
benefit flows and mainstreaming

Janis Smith, Jeanne Nel, David Le Maitre, Nadia Sitas

Biodiversity Planning Forum, May 2014
Mpekweni Beach Resort, Eastern Cape
Linking to urban beneficiaries
Urban beneficiaries of water from Strategic Water Source Areas
Population and economic value

- Northern, Southern and Enkangala Drakensberg, and Boland Mountains extremely important
  - Collectively support ~50% of national population
  - Contribute >60% of national GVA

- Population high vs economic value
  - Soutpansberg
  - Wolkberg
Ecological infrastructure for urban water security

no shortage > 10 yrs
water resource shortage 1 - 10 yrs
water resource currently in deficit

Source: All Towns Data, Dept. Water Affairs’
Implications for biodiversity planning?

- Desalinization is only feasible in coastal areas
- As water stress increases, business and industry growth will be most viable at coast
- Supports the urgent need for a systematic biodiversity plan for our coastal areas
Identifying key pressures
Current land-use and pressures

% National land cover

<table>
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<tr>
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<th>Natural</th>
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<th>Degraded</th>
<th>Urban built-up</th>
<th>Waterbodies</th>
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Nationally mining overlap is insignificant, **BUT**

>30% overlap with coal fields in Mfolozi Headwaters and Enkangala Drakensberg
Invasive alien plants *(Pine, eucalypt & black wattle)*

- Use 460 Mm$^3$/year
- Greater than EThekwini's annual water requirements
- Highest losses
  - Boland Mountains
  - Eastern Cape, Enkangala, Mpumalanga Drakensberg
- Important to engage with the water reconciliation data on towns in water deficit
Tactics and mainstreaming
Mainstreaming tactics

- Cross-sectoral development planning
- Water-focused governance
- Protected area expansion strategies
- Natural Resource Management Programmes
- Sector-specific engagement with
  - Forestry, agriculture and mining
- Civil awareness
Guidance to the proposed 19th Strategic Integrated Project of the Presidency

SANParks management brief

Ecological Infrastructure, Ecosystem Services, Strategic Water Source Areas and SIP 19
Dirk Roux, Stef Freitag and Jeanne Nel (April 2014)

Background and rationale

Ecological infrastructure comprises the functioning ecosystems that provide a range of valuable and often essential ecosystem services to society (e.g. intact river banks and riparian vegetation that filter pollutants and recharge aquifers; wetlands that filter and regulate catchment runoff and slow down floods; wetlands can be important areas of water and AER due to their function in maintaining water quality in rivers and lakes).

Ch 5: National Water Resource Strategy

Addressing these challenges is a considerable task that cannot be undertaken by the DWaA alone. It requires cooperative governance with the Departments of Environmental Affairs, Agriculture, Forestry and Fisheries, Mineral Resources, Energy, Economic Development, Human Settlements, and Rural Development and Land Reform as well as the business sector and communities.

5.1.8 Lack of monitoring to inform management actions

To inform the management of water ecosystems, information about the ecological state of these systems as well as the trajectories and rates of change taking place in that state is needed. Such information is obtained through monitoring selected indicators, which can be defined as "measures, variables, or indices that represent or mimic either

WWF’s Journey of Water campaign

www.journeyofwater.co.za
http://www.youtube.com/watch?v=5Be6b70yrTM
Thank You