Ecological Infrastructure

key considerations for planning
The Planning and Development Challenge

Municipalities invest in infrastructure, but often not to address this challenge.

Investment is to:
• enable construction linked to economic growth,
• create jobs,
• eventually increase municipal revenue to address this challenge.

IDP priorities:
• Housing
• Access to Services
• Infrastructure
Paradox

• Despite
  – Good integrated planning frameworks;
  – Sound environmental management policies;
  – Excellent ecological information;

• Environment often positioned as an obstacle to development.

• Chasing 6% growth through construction and extraction-based development model will result in environment being an obstacle.

• Need to shift our development (and therefore planning) frameworks.
Everyone has the right to have the environment protected through reasonable laws or other means that

- Prevent ecological degradation
- Promote biodiversity conservation
- Secure ecologically sustainable development while promoting justifiable economic and social development
Ecosystem goods and services – Links to municipal infrastructure and planning

- Bioprospecting
- Climate regulation
- Disaster risk reduction
- Crop pest control
- Erosion control
- Soil fertility
- Carbon storage
- Water provision
- Flow regulation
- Genetic resources for agriculture
- Pollination
- Grazing
- Fish nursery
- Recreation
- Ecosystem resilience
The planning context

- Historically driven by **Zoning schemes**.

- **Little proactive planning in rural domain** & scant consideration of landscapes.

- **Rural development**: poor capacity, overlapping jurisdictions, different objectives.

- Landscape level planning = **new paradigm** to municipal land-use planning.
Land-use planning

• not just a process to decide on development applications.

• **Social policy** to inform the spatial layout (and therefore impact) of human activity.

• Aims that land
  – is **used efficiently**.
  – is used for the **benefit of the wider society**.

• Aim to **prevent land-use conflicts**.
Why municipal planning is important
Mining potential
49 companies have applied to mine or prospect in 53% of protected areas of the province.
Implementing the optimal development futures hypothesis

• Ideal mix of land-uses to secure the productive, extractive, and non-extractive economic activities in the long term?

• Level of realignment of infrastructure investment required to support a scenario?

• Level of skilling/reskilling required & job opportunities created/lost through a scenario?
High supply of ecosystem services is mainly in financially poor rural areas!

High poverty munics: where 40% or more HHs are poor (annual income < R4 800/HH)

Sources: SANBI & 2nd ecn. report
Investing in ecological infrastructure

- Labour intensive, long-term jobs
- Cost savings
  - Disaster relief
  - Disaster risk management
  - Overall infrastructure spending
  - Reducing economic downtime
- Ecologically sustainable landscapes
Not investing in ecological infrastructure
Why not invest in Ecological Infrastructure?
Ecological Infrastructure

IDP
Informing Municipal vision and implementation plan
Influencing Policy framework for budget allocation
Unlocking Capacity and resource allocation

LUMs
(Re)defining zoning scheme
Informing overlay zones
Informing structure plan amendments
Informing applications for rezoning
Informing restrictions on development applications

SDF
Informing Status Quo Report
Informing Vacant Land Audit
Influencing Urban Edge
Influencing Densification Strategy
Determining Urban Conservation Networks

Longer term goal (hearts, minds and values)

Medium term goal (office practise and standards)

Short term priority (policy & plan)

But we need champions; strategic enablers; shift in investments
Ecological infrastructure: services from nature that underpin

- BETTER RETURN ON STATE INVESTMENT
- Improved services – urban and rural
- Job creation – through proper management of ecological infrastructure
- Disaster risk management and climate change

Ecological infrastructure

- Restore
- Maintain
- Enhance

Rural jobs and improved livelihoods