uMZIMVUBU SOURCE2SEA
Eco-Catchment Initiative

Understanding the potential of one of SA’s last (mostly?) natural river systems
Figure 1.2. Conceptual diagram of the broadening range of plausible alternative futures as one moves farther away from the present and different events and decision points shift trajectories. (From BOR 2012, adapted from Timpe and Scheepers 2003).
UCPP Statement of Intent:
“to build stewardship capacity among community groups in the upper Umzimvubu catchment, through establishing replicable demonstration projects which restore watershed functions, and to position these groups as potential sellers of such services to be integrated into the conservation economy.”
PARTNERSHIP COMPOSITION

34 MEMBERS: 35% GOVERNANCE ORGANISATIONS, 65% CIVIL

- 2 TRADITIONAL AUTHORITIES 6%
- 2 MUNICIPALITIES 6%
- 4 STATE DEPARTMENTS 12%
- 2 PARASTATALS 6%
- 7 NATIONAL NGOs 22%
- 3 REGIONAL NGOS 9%
- 10 LOCAL CBOs 28%
- 2 SMALL CONSULTANTS 6%
- 2 UNIVERSITIES 6%
PARTNERS’ PROFILE

- TOTAL GREEN ECONOMY SPEND > R50 MILLION IN 3 YEARS IN SUB-REGION
- MORE THAN 30 PERMANENT STAFF IN SUB-REGION, 70% HAVE LOCAL OFFICE
- EMPLOYING OVER 800 PEOPLE IN SHORT TERM ‘GREEN JOBS’ (DEA LUI, CEPF GRANTS, CWP & OTHERS)
- TACKLING OVER 800 ha OF ALIEN INFESTATION AND 5000 HA GRAZING LAND
- 4 M.Sc. AND 4 B.Sc.Hons STUDENTS
“ALLIANCE ‘PRODUCTS”

- QUARTERLY ‘FORMAL’ PARTNERSHIP EXCHANGES WITH FOCAL TOPICS: fire, water, M&E, alien plants etc as sharing platform
- COLLABORATIVE CO-IMPLEMENTING
- REGULAR SITE EXCHANGES & PRACTICAL PROBLEM TACKLING
- FORMAL SUBMISSIONS TO ESTABLISHMENT OF NEW UMZIMVUBU-TSITSIKAMMA CMA
- STAKEHOLDER / PUBLIC PARTICIPATION REPRESENTATION IN MINING AND WINDFARM APPLICATIONS
- INFORMATION EXCHANGE & DATABASE
UMZIMVUBU CATCHMENT PARTNERSHIP PROGRAMME:
RESTORATION THROUGH LOCAL STEWARDSHIP
catchment restoration & water security through stewardship

**Process:***
- agreement on land use and communal grazing plan
- land stewardship agreement between land users
- restored groundcover

**Outcomes & Benefits:***
- improved health people & ecosystems
- improved grassland quality
- reduced erosion & topsoil loss
- improved rainfall infiltration & recharge
- healthy grassland buffering alien plant infestation
- increased land productivity & food security
- year round water security
- longevity of water supply systems
- clean water
VITAL STATISTICS

- Source over 2,400m in Kokstad Municipality in grasslands KBA with >30,000ha of wetlands;

- >400km to Port St Johns, in Pondoland KBA/PCE;

- Forms majority of WMA7, draining over 2 million ha – poss highest sediment load of any river in SA!

- Supports over 1 million people along its length: upper quarter through private/commercial, and rest through communal tenure landscapes.
PRODUCTIVE COMMERCIAL LAND USE, with HABITAT TRANSFORMATION, APPROX 30% OF CATCHMENT
RURAL SETTLEMENTS APPROX 70% OF CATCHMENT
EXTENSIVE DEGRADATION, LOSS OF TOPSOIL & GROUND COVER, SEDIMENTATION OF WATER SYSTEMS & LOW AGRIC PRODUCTIVITY
ALIEN PLANT INFESTATION IS OPPORTUNISTIC IN DEGRADED AREAS WHERE GRASSLAND & GROUNDCOVER IS DISTURBED
Understanding the potential of one of SA’s last (mostly?) natural river systems
“A ‘living catchment’, managed collaboratively under an ethos of stewardship, providing optimal livelihoods for the maximum number of people based on biodiversity and ecosystem services (BES)”

But what would this look like??????

And how do we get there??????

OBJECTIVE/VISION:
Ecosystem Services
What Nature provides us for free

Supporting:
- Soil Formation
- Photosynthesis
- Biodiversity
- Habitat
- Stewardship
- Aesthetic
- Recreation
- Education

Provisioning:
- Food
- Fish
- Wood
- Pollination
- Cool Temperatures
- Control Flooding
- Purify Water
- Store Carbon
- Clean Air

Cultural:
- Recreation
- Education

Regulating:
- Clean Water
- Fish
- Wood
- Pollination
- Cool Temperatures
- Control Flooding
- Purify Water
- Store Carbon
- Clean Air
Planning Phase:

- identify feasibility for a network of source to sea adventure trails as a long term non-consumptive ecotourism use....
- develop a ‘story’ of the river corridor & understand drivers of impacts & changes;
- collect footage & basic status data as baseline;
- identify other actors, gaps and sleeping assets;
Prep1: scoping

- SOURCE2SEA flight/s scoping data collection;
- Break into manageable segments;
- Communications Plan;
- Secure finances, Teams & logistics;
- ........

Prep2: testing

- Map key assets;
- Water quality sampling;
- Paddle, trail run, hike, Mtn bike; horses;
- Potential community trail nodes, access and needs;
- Catchment –wide network?
### Phased Approach

- 3 zones based on climate and ecological parameters;
- Soils, landcover, landuse;
- Water quality;
- Biodiversity features;
- Resources and ease of access;

### Continual testing

- Stakeholder buy-in;
- Proof of concept;
- RoIs for local stakeholders;
- UCPP mandated!
UPLANDS: Matatiele Local Municipality; grasslands biome; focus on alien clearing and range management to address water services from upper catchment.

CENTRAL: Ntabankulu and part of Mbizana Local Municipalities; grasslands and valley bushveld biomes; focus on erosion control in riparian.

LOWLANDS/ PONDOLAND: portions of Nyamideni, Port St Johns and Ngquza Hill Local Municipalities, under OR Tambo District. Bushveld and Coastal biome; possible focus on alien clearing around forest reserves to protect carbon sequestration assets.
Immediate Strategy Challenge

- UCPP has current rationale, but no common ‘destination’...
- What would a “restored, optimally functional catchment” look like in say 2050?
- Can we agree this ‘VISION’, in order to plan what we need to get from ‘here’ to ‘there’?
- Scenarios development to map ‘possible futures’;
- UCPP decide on a ‘preferred future’ and work collectively towards this.....
Scenarios....imagining possible futures

- Plausible;
- Based on key known external drivers of change;
- And what is possible through internal drivers of change i.e. governance options - what will the UCPPP partners put in place?
- Requires considerable workshopped effort to derive preferred future option.....
- And then work towards this!
# Stewardship Options

<table>
<thead>
<tr>
<th>Type of agreement</th>
<th>Legal mechanism</th>
<th>Typical contract length</th>
<th>Binding on the property</th>
<th>Binding on the landowner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature Reserve</td>
<td>Protected Areas Act 57 of 2003</td>
<td>30–99 years or in perpetuity</td>
<td>Protected area declaration and title deed restriction</td>
<td>Contract agreement</td>
</tr>
<tr>
<td>Protected Environment</td>
<td>Minimum of 30 years</td>
<td></td>
<td>Protected area declaration and title deed note</td>
<td>Contract agreement</td>
</tr>
<tr>
<td>Biodiversity Management</td>
<td>Biodiversity Act 10 of 2004</td>
<td>5–10 years</td>
<td>Not binding</td>
<td>Agreement governed by the Biodiversity Act</td>
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<tr>
<td>Agreement</td>
<td></td>
<td></td>
<td></td>
<td>Contract agreement</td>
</tr>
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<td>Contract law</td>
<td>5–10 years</td>
<td>Not binding</td>
<td></td>
</tr>
<tr>
<td>Biodiversity Partnership Areas</td>
<td>Informal agreement</td>
<td></td>
<td>Not binding</td>
<td>Not binding</td>
</tr>
</tbody>
</table>
“It is useful to view sustainability as an emergent property of stakeholder interaction, and not just a technical property of the ecosystem”

Dr. Mark Dent, UKZN