

### Two decades of WRC support for SANParks objectives



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Talk emphasis: More about the PROCESS and the CONSEQUENCES than about the WHAT

#### **Outline of presentation**

- early days (the eighties)
- the celebrated KNPRRP esp. the structured phases II and III
  - Led to KNP aquatic objectives, and then spread far further
  - Contributed to the forming National Water Act
- some interim conclusions from the KNPRRP
- .... long gap (during which there was a *Boundaries Programme*)
- .... and a mental models workshop
- Shared Rivers Initiative
- Adaptive Management including international brochures
- partly involved in several other national programs
- Overall lessons, conclusions and projections

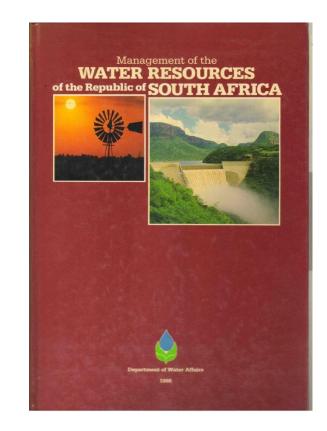
#### Early days

Mid 1980s – DWA declares intent to provide water to the natural environment

Concurrently, CSIR and FRD <u>specialist visits to Kruger Rivers</u> to assess situation (mid-80's).

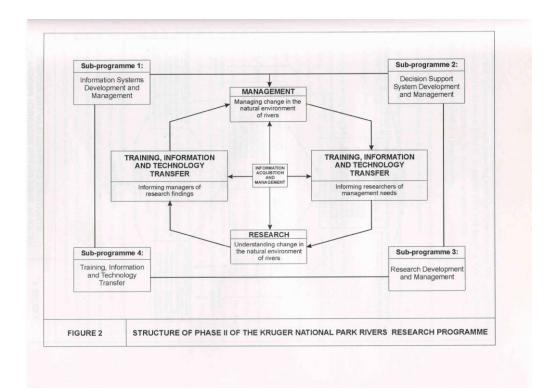
<u>Workshop (March 1987)</u> Need to determine water quantity and quality requirements. Complexity of rivers – cooperative, interdisciplinary approach necessary. KNP rivers selected (deteriorating situation in KNP, growing tensions between demand sectors)

Kruger National Park Rivers Research Program (KNPRRP) begins Dec 1988. Engaged with enthusiasm and vigour by researchers, much progress, but lacked integration. Recommendation (Gorgens & Lee)  $\rightarrow$  Program MD



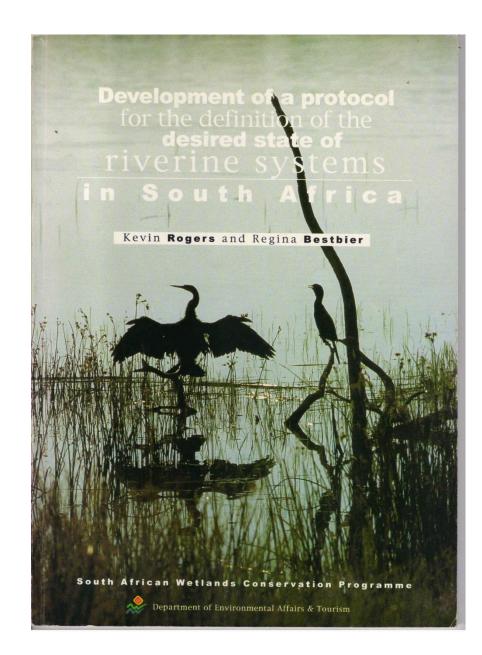
#### Phase II of KNPRRP (1994-1996) and Phase III (1997-2000)

- consolidation into a unified direction under Charles Breen
- clear vision with shared mental models of how those subsystems work
- Clear sub-programmes, of which a minority were conventional R&D
- governance structures (A and B teams)



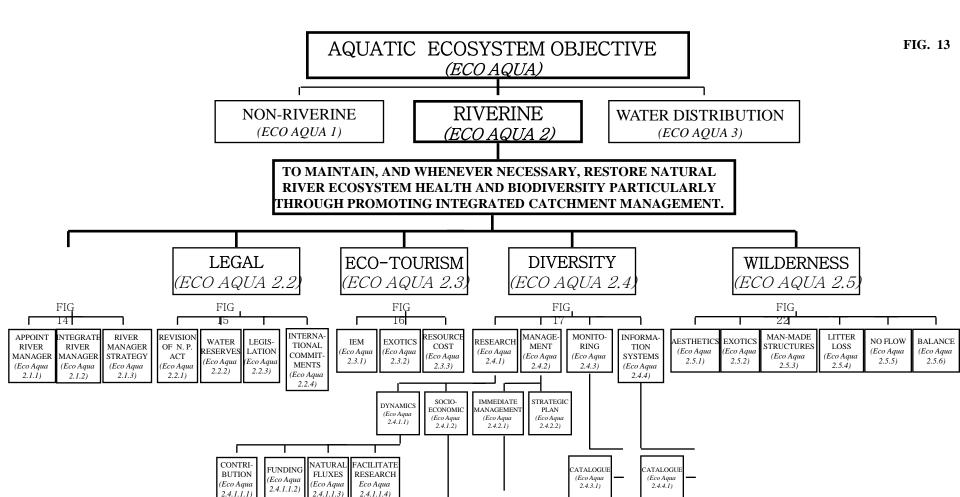
A key development was establishment in phase II of the <u>KNP aquatic objectives.</u> This followed what later became known as Adaptive Planning Process to set the <u>desired state</u>. Cornerstone of wider adaptive management (Strategic Adaptive Management = SAM) and adaptive governance.

Adaptive Planning Process embedded in DWA catchment management strategy, and Related concepts widely used e.g. thresholds of potential concern



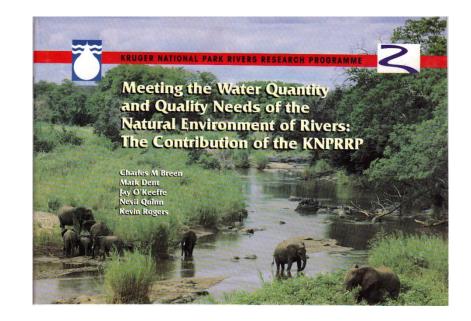
Same technique used for park management plans (Following IUCN's AfESG and Bell recommendation)

Led to whole park plan based on this tree structure, and many more elsewhere later



In 2000 the participants and funders reluctantly agreed that it had to come to an end. Actually tailed off till 2004

Wide (if not universal) "parentalism" – sign of success



Then there was a long gap ...everyone waiting for the "implementation of the NWA" (Phase III, in retrospect, hadn't come near – important lesson) There were some activities that KNPRRP had started that were part-implemented e.g. rule-based models from KNPRRP

"Boundaries Program" [funded by Andrew W. Mellon Foundation] not really a follow-on, esp not in advocacy sense. But made important other contributions for our context.

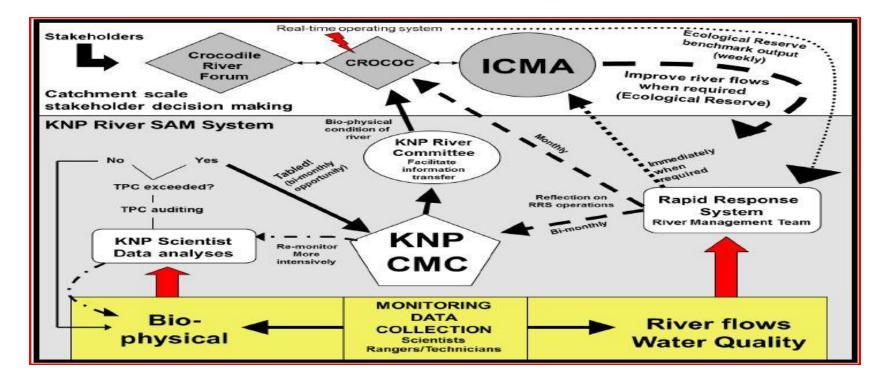
#### What characterised the successful KNPRRP programme?

- -inter-disciplinarity
- -multi-institutional nature
- -shared vision and goals
- -partially practical orientation
- mentorship (deemed only partly successful in end review)
- -Sustainable funding, thanks ultimately to WRC (others slowly withdrew) There was a long-term commitment by WRC to see the programme to an ultimate end,
- -Sense of partnership with main funder
- leadership (often including emergent leadership)

After the long gap ... and growing discontent about "non-implementation"

Stirrings from 2005 led to formation of <u>Shared Rivers Initiative</u> – can be considered a governance-biased follow-on of KNPRRP

- Involved Lowveld Rivers, KNP a partner
- Contextual profiles done by AWARD esp influential
- Now continuing into a phase II
- Plus a key <u>adaptive management</u> project (emphasising real feedbacks in practical contexts), again SANParks with Craig McLoughlin as executant. Now taken over by ICMA into 4<sup>th</sup> year.

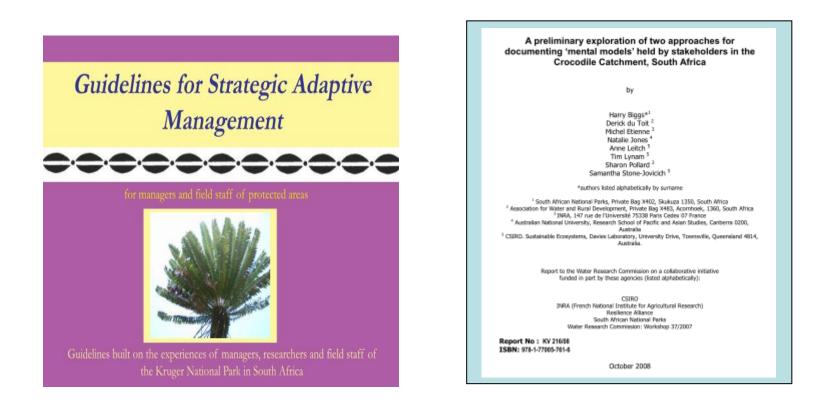


This all has also had international consequences.

Several Publications in well-rated journals

For instance SAM has IUCN brochures

Mental models work (conducted partly with WRC workshop funding) led to international publications and a better understanding of the use of this concept. Also forms important part of a special edition of Ecology & Society.



#### Also deserving some mention

Some important (at least part WRC-funded) national programmes of which SANParks part

- River Health Program
- National Freshwater Ecosystem Priority Areas
- SANParks marginal in some others (Estuaries programme, various wetlands and livelihoods inititiatives, Orange River blackfly)



#### Lessons from this twenty-odd-year experience

- trans-disciplinarity key. "The V in V-STEEP" and the adaptive planning process
- develop an understanding of how to manage large programmes

- build full relationship with funder. SANParks-WRC now has own informal committee. WRC less remote than most other funders. (Two most significant research funders in Kruger were Mellon and WRC, different styles and interests, but both excellent relationships).

- governance arrangements practical and co-learning bias, participatory
- leadership is important, much of it emergent
- continuity essential.

- Decision-making/management body should take over admin and management from early enough in the cycle (Breonadia, Blackfly examples)

#### Consequences of which we are jointly proud

-Several viable resultant research and praxis fields today

-SANParks very widely influential in spreading ideas which had their origin here

-aquatic research recognised and functionally important in conservation context (and not just special wetland parks NB Kruger partly for rivers)

- integration of aquatic and terrestrial (esp Boundaries Programme)
- These are sustainable, and on their own independent trajectories

- a major part of Kruger's research and management identity was built in association with WRC, giving rise also to so-called "watchdog role"

- Conversely WRC found in SANParks a partner with the need for and capability to implement the results of longer-term research programs

#### The future?

- Recent crocodile death crisis has potentially galvanised support for catchment restoration. Although not consolidated, this program offers very good scope for trans-discipinarity, and for possible long-haul holistic intervention. Also touches on international commitments.

SANParks' aquatic responsibilities currently taking on a wider national look – this will reinforce the mutualism between SANParks and WRC

Several of WRC's longer-term goals (e.g. model catchments; knowledge hubs) look amenable for building this SANParks-WRC relationship productively into the future.

SANParks has become better at multiple concurrent collaboration – this offers attractive synergistic options with WRC.

SANParks' watchdog function (esp. regarding delivery of the Reserve) likely to become an important part of sustainability agenda in SA

Headwater parks more visibly seen as delivering aquatic ecosystem goods and services. SANParks likely to enter wider debate around livelihoods and water-energy nexus.

# Apart from one more graphic (!)

## Thank you

