



RESEARCH AND
EDUCATION PROGRAM

*Water Security
in Africa (WASA)*

Water Security in Africa - Stakeholder Information Event

Monday, 10/10/2022 | 10:00 – 13:00 | Online - Event

CoSMOS

Community Based Sustainable Water Management and Observation Systems

The project CoSMOS has been pre-structured, discussed and presented before DWS, WRC, GIZ and the African water community at the WISA conference 2022



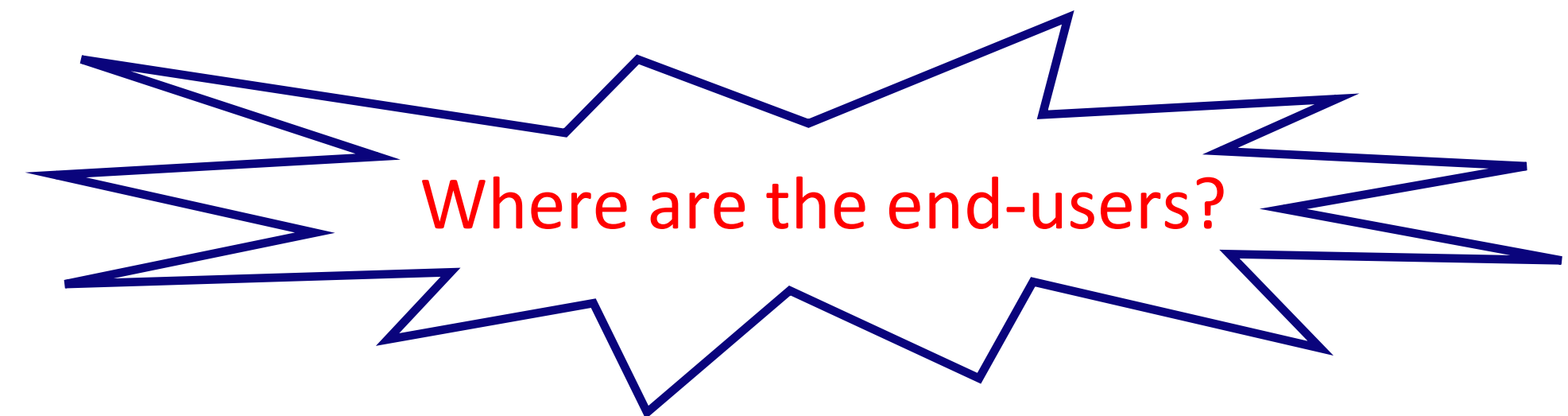
3 important messages from ZA are incorporated in the CoSMOS approach :

- 1.) “DWS has announced to further support municipalities, wherever this looks promising, but **remove the water service authority from communities, who fail.**” *
- 2.) 898 billion Rand are needed for the latest National Water and Sanitation Master Plan, excluding costs for urbanization and extreme weather events. **New financing concepts with better cost recovery are inevitable.***

*W&S 08.2022 and infrastructurenews 09.2022

- 3.) “The end-users need to be actively involved.” **

** Statement from a WRC-funded project, 2019



Operationalizing Community-Driven Multiple-Use Water Services in South Africa



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

Target regions



Letaba

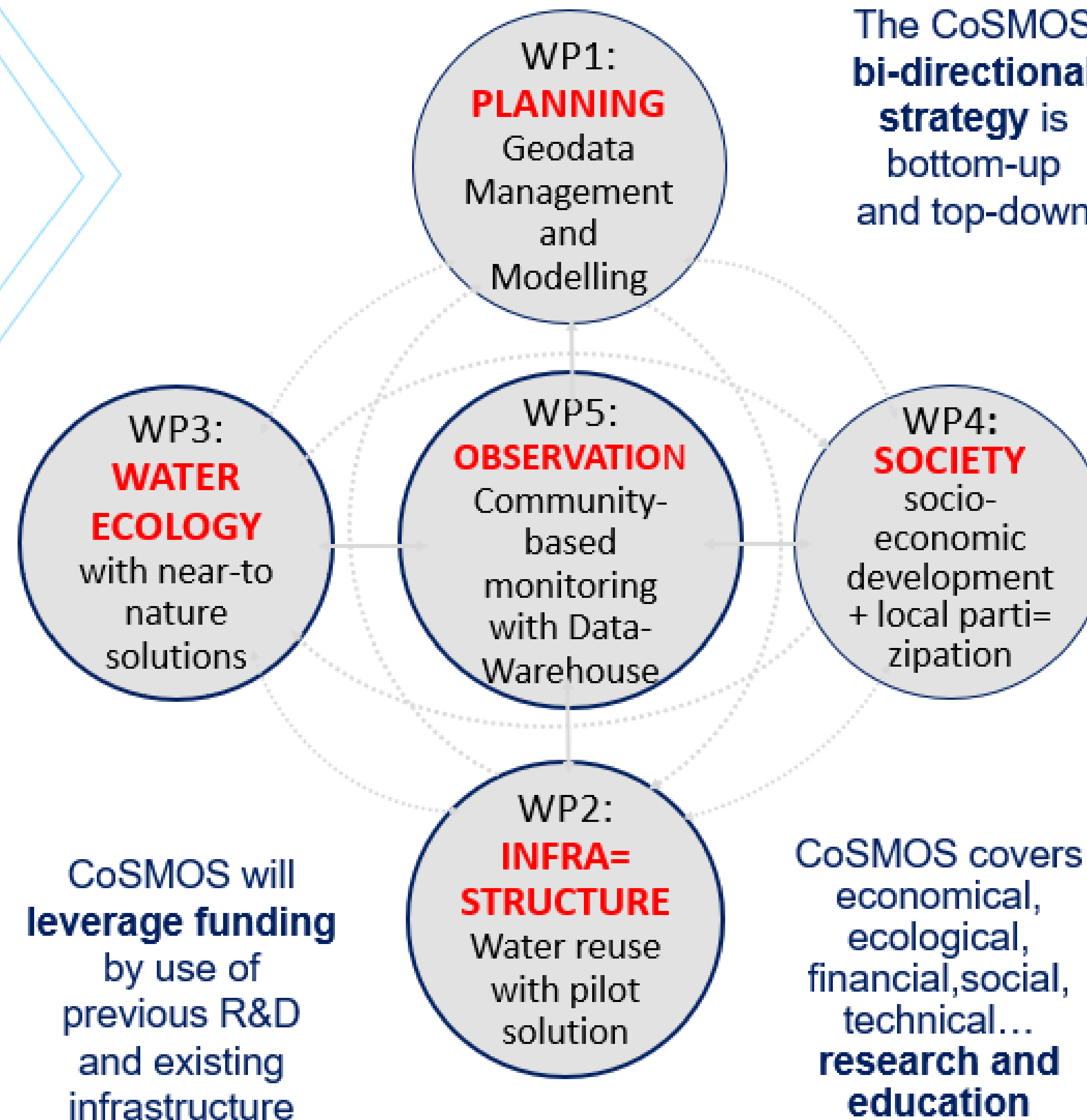
- Monitoring
- Observation
- Data collection
- Stakeholder-Engagement
- Infrastructure assessment
- Pilot concepts, solutions
- Systems analysis

taking account of economical, ecological, financial, social, technical... regionalized and localized in two pre-selected target regions for cross-verification



Kaap

Approach & Work Packages



Deliverables



Applicable and replicable outcomes of applied German-South African research cooperation



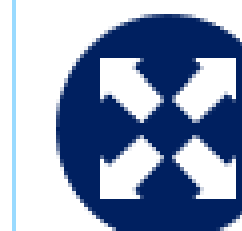
Web-GIS based river basin information system with open Data-Warehouse



Community-based concepts and solutions to secure water reuse utilizing existing infrastructure



Community-based monitoring concepts building on previous work on IWRM in the region



Plans and programs to optimize the ecological functions, status of waters and biotopes

CoSMOS – Conclusion

- **CoSMOS** follows a **bidirectional strategy, bottom-up and top-down**, enforcing ownership of local water users and communities.
- **CoSMOS** is being **designed for implementation** with Kruger National Park, water user associations in the target areas and is advised by DWS, WRC, GIZ and the water industry.
- **CoSMOS** will **community-based pilot solutions** for water reuse, for water ecology and for water society, all this integrated in regional planning and data management.
- **CoSMOS**, utilizing research outcomes and existing infrastructure, can **leverage R&D funding** significantly.

!!! Thank you for listening to CoSMOS !!!

mail@uni-wh-ieem.de christian.jolk@th-owl.de