



WATER  
RESEARCH  
COMMISSION

# Wetland Research Supported by the Water Research Commission

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NFP Workshop in JHB



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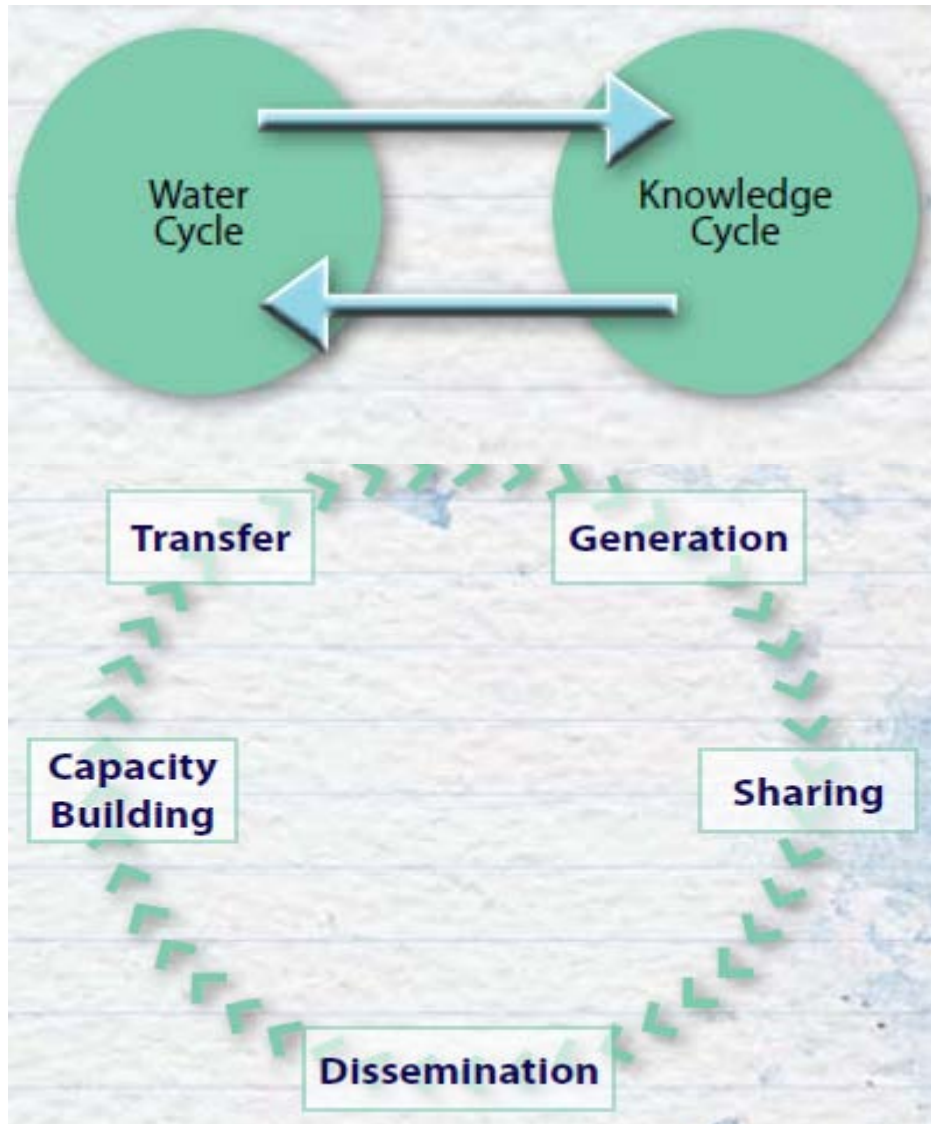
# The Mandate of the WRC

The mandate of the WRC highlights the following functions to be carried out by the organisation:

- 💧 Promoting co-ordination, co-operation and communication in the area of water research and development
- 💧 Establishing water research needs and priorities
- 💧 Stimulating and funding water research according to priority
- 💧 Promoting effective transfer of information and technology
- 💧 Enhancing knowledge and capacity building within the water sector



# The Strategic Context



Knowledge generation  
(develop, acquire)

- New knowledge
- Repackaged knowledge

Knowledge sharing

Knowledge dissemination

Knowledge transfer

The knowledge base  
(capacity building)

Impact



# Mission and Vision

## *Mission*

The WRC is a dynamic hub for water-centred knowledge, innovation and intellectual capital.

We provide leadership for research and development through the support of knowledge creation, transfer and application.

We engage stakeholders and partners in solving water-related problems which are critical to South Africa's sustainable development and economic growth, and are committed to promoting a better quality of life for all.



## *Vision*

To be a globally recognised leader in providing innovative solutions for sustainable water management to meet the changing needs of society and of the environment.

# Overarching Goals - Impact Areas

Impact	Key Strategic Areas			
Society	Water resource management	Water linked ecosystems	Water use and waste management	Water utilisation in agriculture
Economy				
Health				
Environment				



## Water Resource Management

- Water resource assessment & planning
- Impacts on water resources
- Water resource protection
- Water resource institutional arrangements

## Water Linked-Ecosystems

- Ecosystem processes
- Ecosystem management and utilisation
- Ecosystem rehabilitation



## Water Use and Waste Management

- Water services
- Water supply & treatment technology
- Sustainable municipal wastewater and sanitation
- Industrial & mine-water management
- Sanitation and hygiene education

## Water Utilisation in Agriculture

- Food and fibre production
- Fuel wood and timber production
- Poverty reduction and wealth creation
- Resource protection and reclamation



# Wetlands

- 💧 **“Wetlands”** is a term that includes a suite of ecosystems ranging from rivers, springs, seeps and mires in upper catchments areas to midlands marshes , pans and floodplains, to coastal lakes , mangrove swamps and aquatic environments
- 💧 These ecosystems comprise of land which is transitional between TERRESTRIAL and AQUATIC environments
- 💧 Water is the common driving force in the wetlands environments
- 💧 The prolonged presence of water in wetlands determines both the soil characteristics and biota diversity or composition in that environment





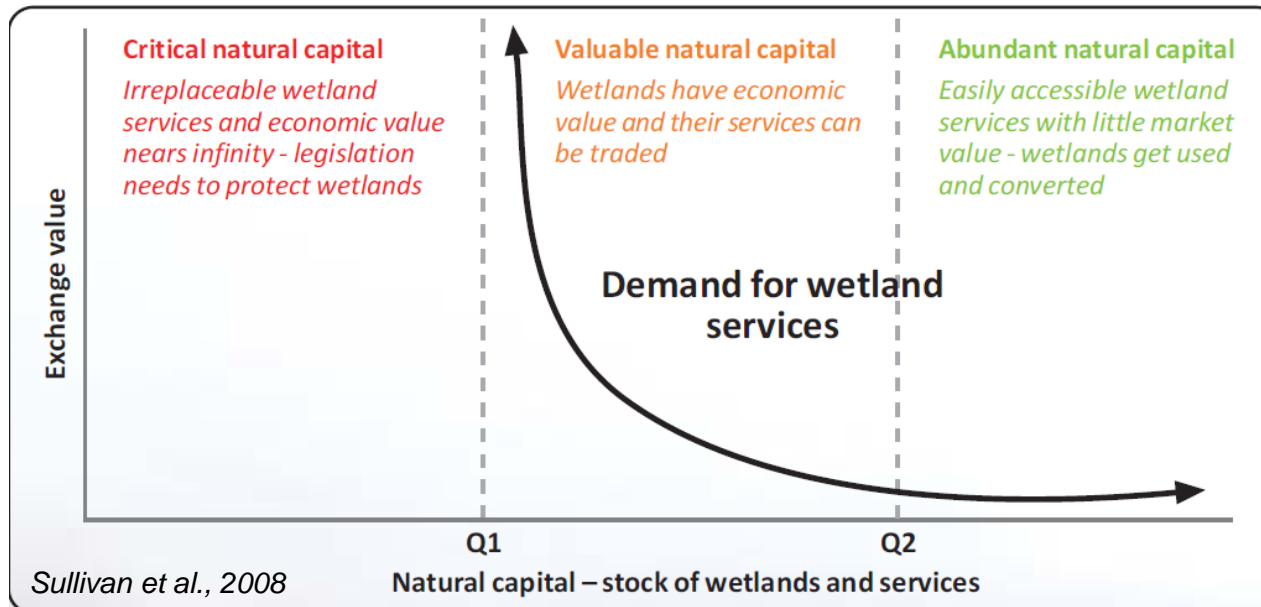
# Wetlands Services

- 💧 Wetlands are important ecosystems, but they are threatened all over the world
- 💧 Wetlands function like our bodies' kidneys by cleaning water; and this water treatment function is one of many services that wetlands provide (especially to the poor living in rural areas)
  - 💧 **Provisioning Services** (resources such as water, medicine and food)
  - 💧 **Cultural Services** (e.g. spiritual, recreational and aesthetic)
  - 💧 **Regulating services** (water purification, erosion and flood control etc.)
  - 💧 **Supporting Services** (nutrient cycling and soil formation)



# Wetlands Research

- 💧 The WRC has three research thrusts that generate knowledge on wetlands (management, wise-use, protection and governance)
- 💧 **Ecosystems process**
- 💧 **Ecosystems management and utilisation**
- 💧 **and Ecosystems rehabilitation**



# Impact of WRC Wetlands Research

The WRC conducted a study to determine the **IMPACT** of its wetlands research in 2009/10



# Financial Investment: WRC Wetlands Research

- 💧 The study indicated that the WRC has invested (spent) about R50 Million between 2002-2009 (8 years)
- 💧 10% of the projects were co-funded with other institutions (stakeholders such SANBI, DWA, and DEA)

*This indicates that the WRC is committed to supporting wetlands management and development.*

- *This has been confirmed by the overall perception of the stakeholders that expressed the view that the WRC plays a key role in funding and managing wetlands research in South Africa*








# Projects: WRC Wetlands Research

- 💧 The WRC has funded 67 projects in the past 8 years
- 💧 The projects generated knowledge in:
  - 💧 Sustainable or Wise-use of wetlands
  - 💧 Protection and Management of wetlands
  - 💧 Policy and governance
  - 💧 Few projects on Resource Economics
  - 💧 Implementation of legislations
  - 💧 Biodiversity
- 💧 WRC published 41 reports on wetlands in the past 8 years



# Use of Project Reports: Knowledge Application

- 💧 The WRC reports are used for variety of purposes by different people and organisations, such as:
  - 💧 Education and training (universities and consultancy organisations) 
  - 💧 Policy formulation (policy makers) 
  - 💧 Decision making and Governance support 
  - 💧 Environmental assessment (e.g. EIA) 
  - 💧 Planning. 

*“The WRC is held in high regard by all stakeholders and has a reputation for publishing credible research findings”*

[Stakeholders views (WRC Impact study report, 2010)]

# Impacts: WRC Wetlands Research

- 💧 The WRC contributed in supporting social cohesion in the country by:
- 💧 Involving female researchers in > 80% of the projects
- 💧 55% of the researchers involved were HDIs
- 💧 Each project had at least one postgraduate (MSC/PhD) student involved
- 💧 The WRC research (view of stakeholders) has assisted in strengthening
  - 💧 Institutional arrangements
  - 💧 Management (protection, development and rehabilitation)



# Key Research Needs Expressed by Stakeholders

The following research needs were expressed:

- 💧 Strengthen programmes addressing **Resource Economics** and **Wise-use/livelihoods**
- 💧 Knowledge to enhance the **Return of Biodiversity** in wetlands
- 💧 RSA to have a “**National Wetlands Monitoring System**” in order to have a systematic determination of long-term impact of wetlands interventions (use and rehabilitation)





growing knowledge  
for south africa's  
water future



*Thank you for  
your attention*

