Strategic Water Partners Network
SOUTH AFRICA

# Partnering for Water Stewardship
## Collective Business Case - SWPN | Sanjeev Raghubir, Nestlé

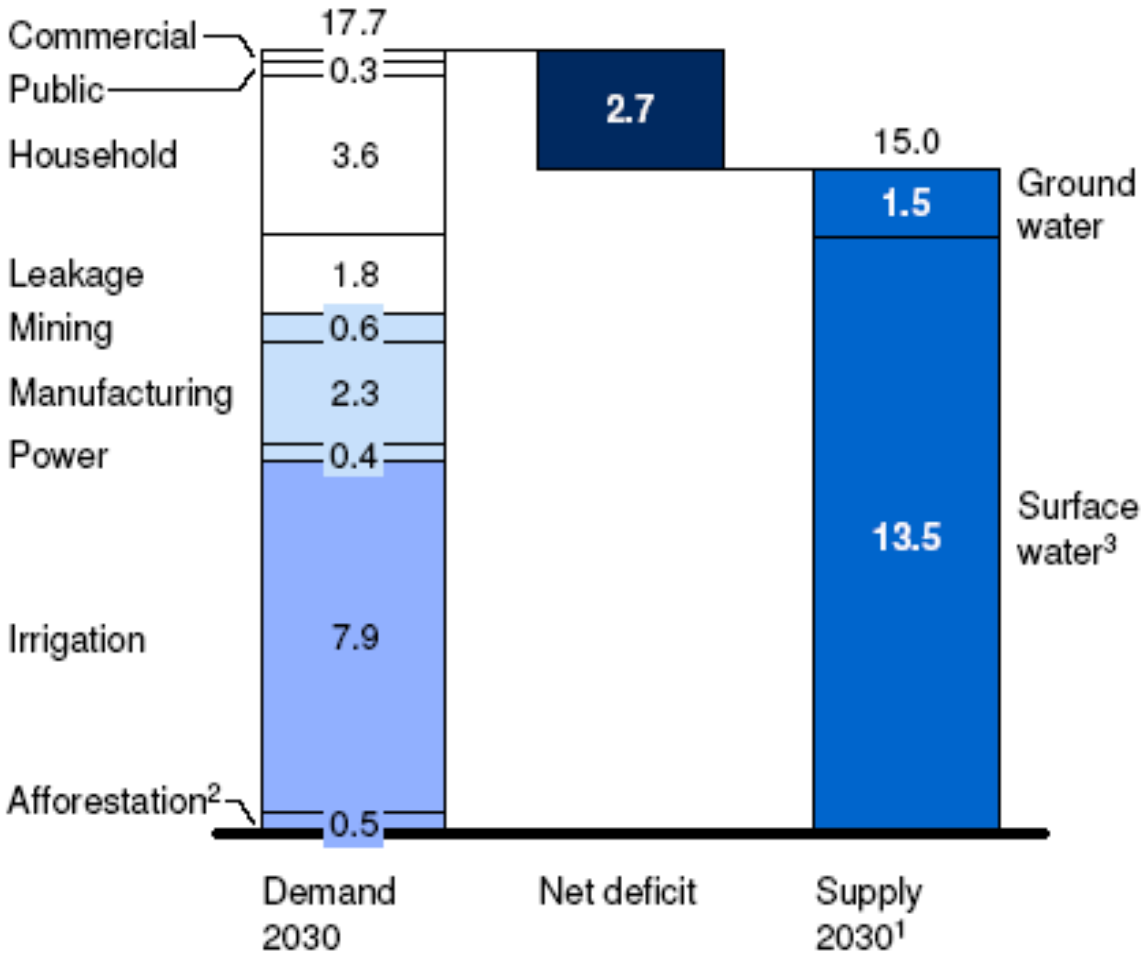
Nest
Good Food, G

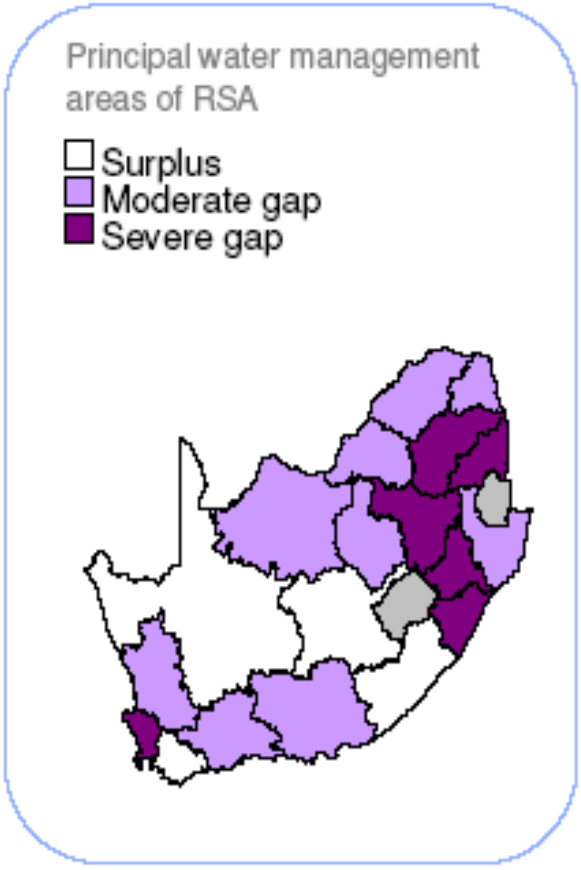
# Addressing the water risk in SA requires partnership

## 2. Under current efficiency levels, in 2030 South Africa will face a supply-demand deficit of ~17% of demand

2030 (estimate), billion cubic meters

2030 Water Resources Group




1 Considers local (yield) of reservoirs plus net transfers to each basin; reliability criteria is 98%, as used by DWAF

# SWPN Milestones

## 2010

**November**
Exploratory workshop by WEF and DWA at CEO Water Mandate conference in Cape Town

**May**
Declaration of partnership between the South African Department of Water Affairs (DWA) and WRG at the WEF Africa in Cape Town

**August**
Initial local investment secured to establish the Secretariat

**November**
Public-private-civil expert leadership group – SWPN, formally launched at COP 17 in Durban

## 2011

**January**
Request by Minister Molewa to WEF Water Initiative to catalyse the SWPN partnership in Davos


## 2012

**Jan – Apr**
Thematic Working Groups formed and carry out sector analysis

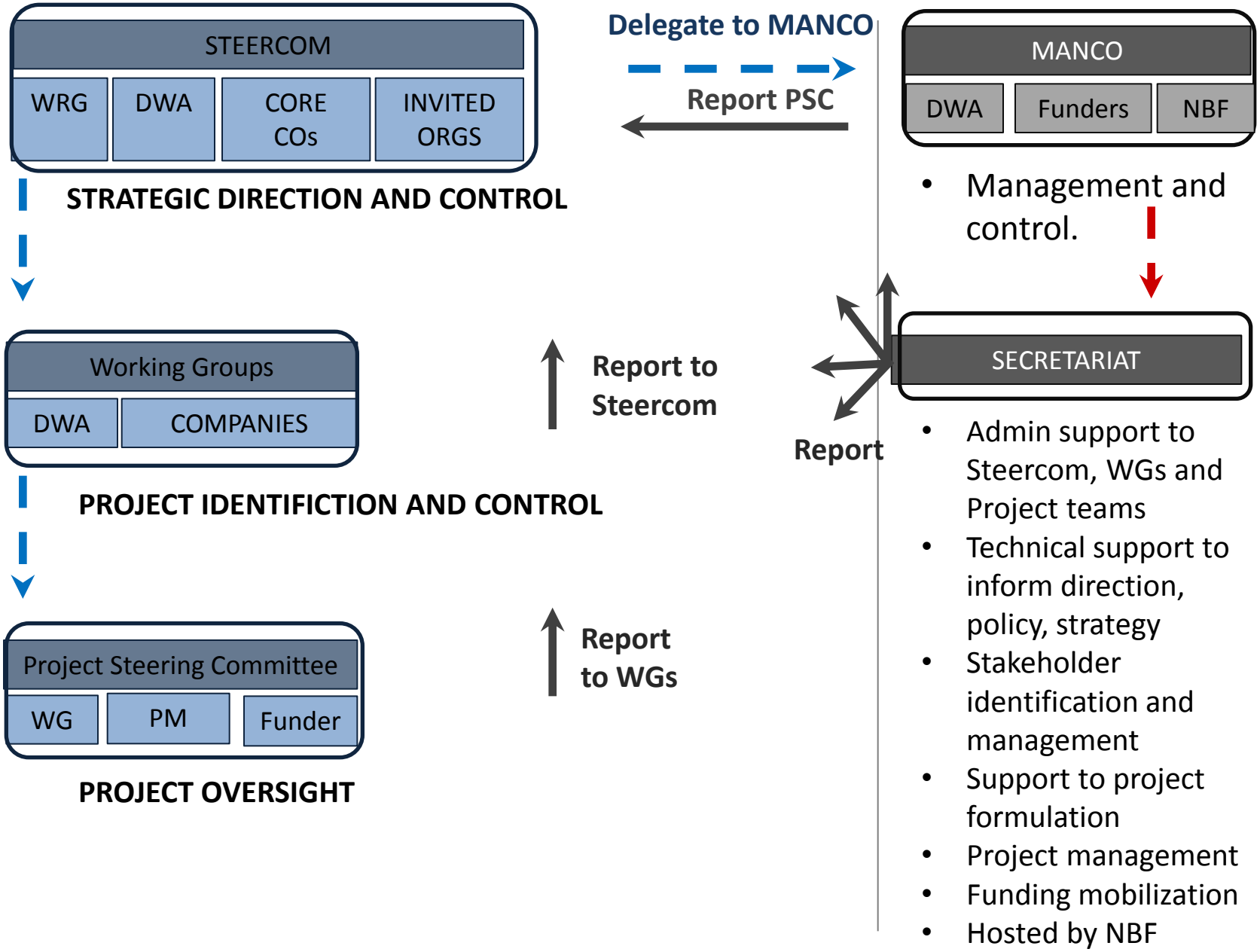
**May – Aug**
Thematic working groups consider intervention options

**Sep – Nov**
Thematic working groups fully functional and robust and prepare projects

# SWPN partners

***building on private-public-civil society strengths***

# Governance and management Structure



# Strategic focus areas to close the water gap

**Effluent and Waste Water Treatment**

- Mine water management
- Municipal waste water management and reuse

**Water Use Efficiency and Leakage Reduction**

- Municipal and industrial water loss

**Agricultural Supply Chain Water**

- Unlock funding and improve equity in water access for irrigation schemes
- Water use efficiency in irrigation

**Priority areas based on:**

- **Major impact on future water demand or supply**
- **Potential for scalable action**
- **Opportunity for public-private partnership**

# Project example : Sustainable mine water management

**The challenge**

- Mpumalanga is South Africa's largest coal producing province
- Mines generate jobs, income but also pollution
- Basin projected to run into a water deficit by 2017
- Pollution
- Current mine water management not sustainable institutionally and financially

**Potential solution**

- Improved water quality and 52.2 million $m^3$ per year, closing the regional Olifants water gap by 26.2% in 2020

**SWPN contribution**

- Developing the institutional and financial models and policy reforms required to support financially sustainable mine water management
- Includes: (i) options analysis of collaborative interventions mine area catchment scale; and (ii) establishment of a public–private coordinating body

# Projects addressing municipal water losses

**The challenge**

- Water loss in municipal systems is estimated at 32%. Non revenue water is 37% and is worth R7 billion .

**SWPN response**

**1. No Drop programme**

- Scorecard and strategy to incentivize municipal water loss reduction
- Target: reduce water losses from the current 32% to 18% by 2025, saving over 600 billion litres annually with a financial value of over R2.5 billion

**2. Performance contract**

- Developed a model contract compliant with the MFMA to assist municipalities better contract or partner with private sector to reduce water and revenue loss

no drop
CERTIFICATION
water use efficiency
REGULATION

# Project example: Vaalharts irrigation scheme upgrading

**The challenge**

- SA's oldest and largest irrigation scheme covering over 35,000 ha
- Infrastructure built between 1938 and 1966; some at risk of imminent collapse
- Business as usual risks lowering agricultural output, local jobs and water supply to 400,000 residents of 7 municipalities

**Potential solution**

Infrastructure refurbishment will:

- Save 40 million $m^3$/annum
- Contribute to equity targets through access to saved water
- Improve the schemes productivity
- Create an additional 2,000 jobs to the existing 7,500

**SWPN role in solution**

- An investment of R4 billion over 20 years is required to rehabilitate and upgrade the infrastructure
- The SWPN is convening stakeholders to develop a joint business case for the upgrading

# Project example: Roll out of the Water Administration System (WAS)

**The Opportunity**

- To Reduce water losses from the selected irrigation schemes
- Contribute to closing the local water gap within the catchments where the schemes are located
- Projected direct savings = 17.8 million $m^3$ = 0.7% of the national 2030 water gap

**Potential solution**

- Implementation of the Water Release module of the Water Administration System (WAS)
- To unlock private sector funding for roll out of WAS or its water release module

**SWPN role in solution**

- Facilitate installation and implementation of Water Release module at selected irrigation schemes
- Including all technical support required to get the module running at the schemes

# Industrial challenges

Southern Cape region 2009 – 2010
Wolvedans Dam < 20%

# Industrial challenges

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Babelegi Factory (Hammanskraal)
Recent investment: R250 million
Permanent Jobs: 350

Water and electricity reliability of supply.
Water quality

Harrismith Factory

Recent investment: R80 million
Permanent Jobs: 310

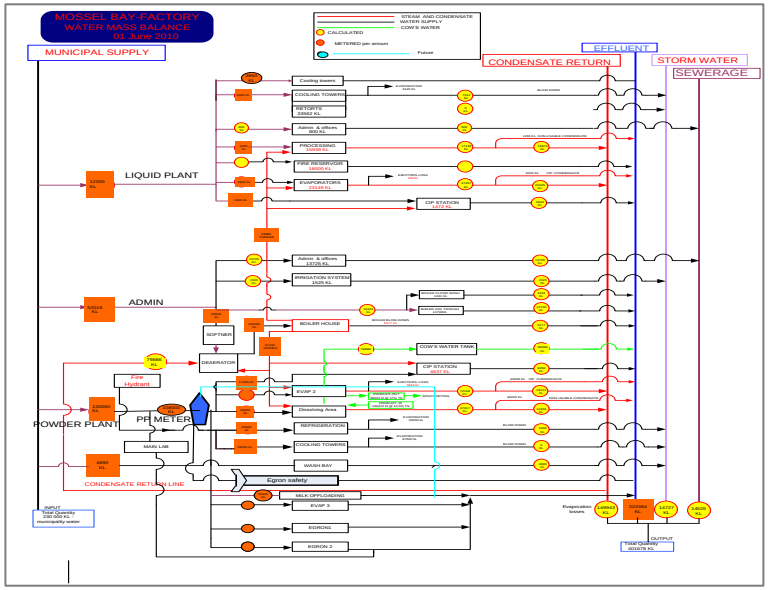
Water and electricity reliability of supply.


Estcourt Factory

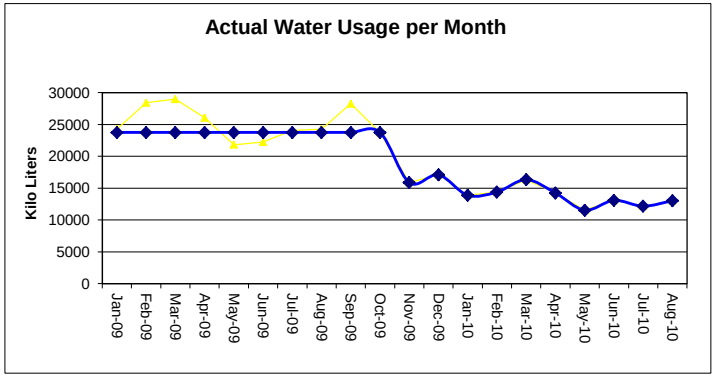
Recent investment: R500 million
Permanent Jobs: 550

Water and electricity reliability of supply.

# Industrial challenges: Response

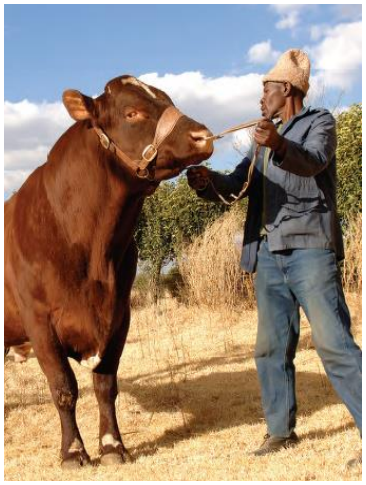






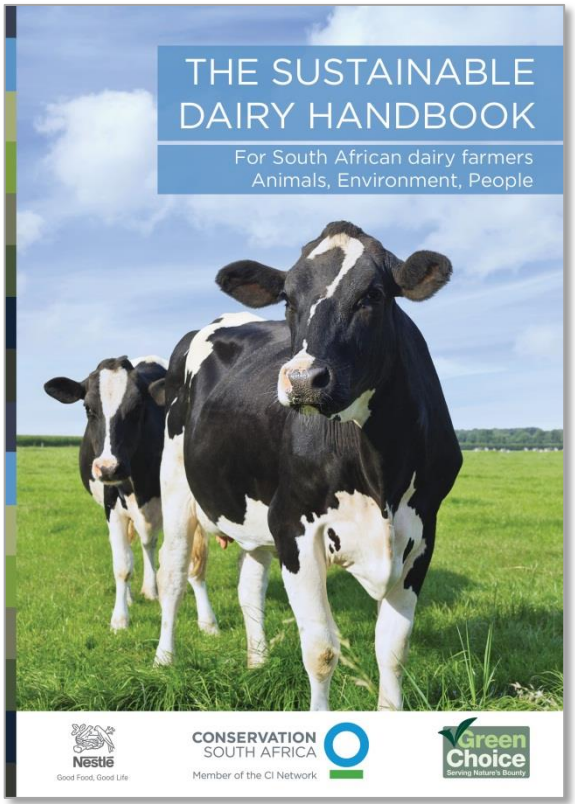

**50% Reduction!!**

# Industrial challenges: Response



## Sustainable Water Management in Agriculture: The 5 key Principles and Practices

1. **Sustainable Farming**
   - Recognise agriculture as a significant contributor to water pollution
   - Manage to reduce the impact of pollution from fertilisers, pesticides, manure, slurry, soil runoff
2. **Economic Sustainability**
   - Good water management will cut costs for farmers, reduce pollution and will often improve productivity
3. **Social Sustainability**
   - Improved working and social conditions for farmers will allow a higher priority for good water management
4. **Environmental Sustainability**
   - Good water stewardship benefits the natural environment and wildlife
5. **Focus on specific crops**
   - Examples from specific crops can set an example of good practice for all



# Industrial challenges: Response

- Multi-stakeholder partnerships
  - SWPN

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no drop
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# Thank you

A partnership between the Department of Water and Sanitation, the private sector and civil society working collectively to close the national water gap

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