



WWF-SA Water Balance Programme

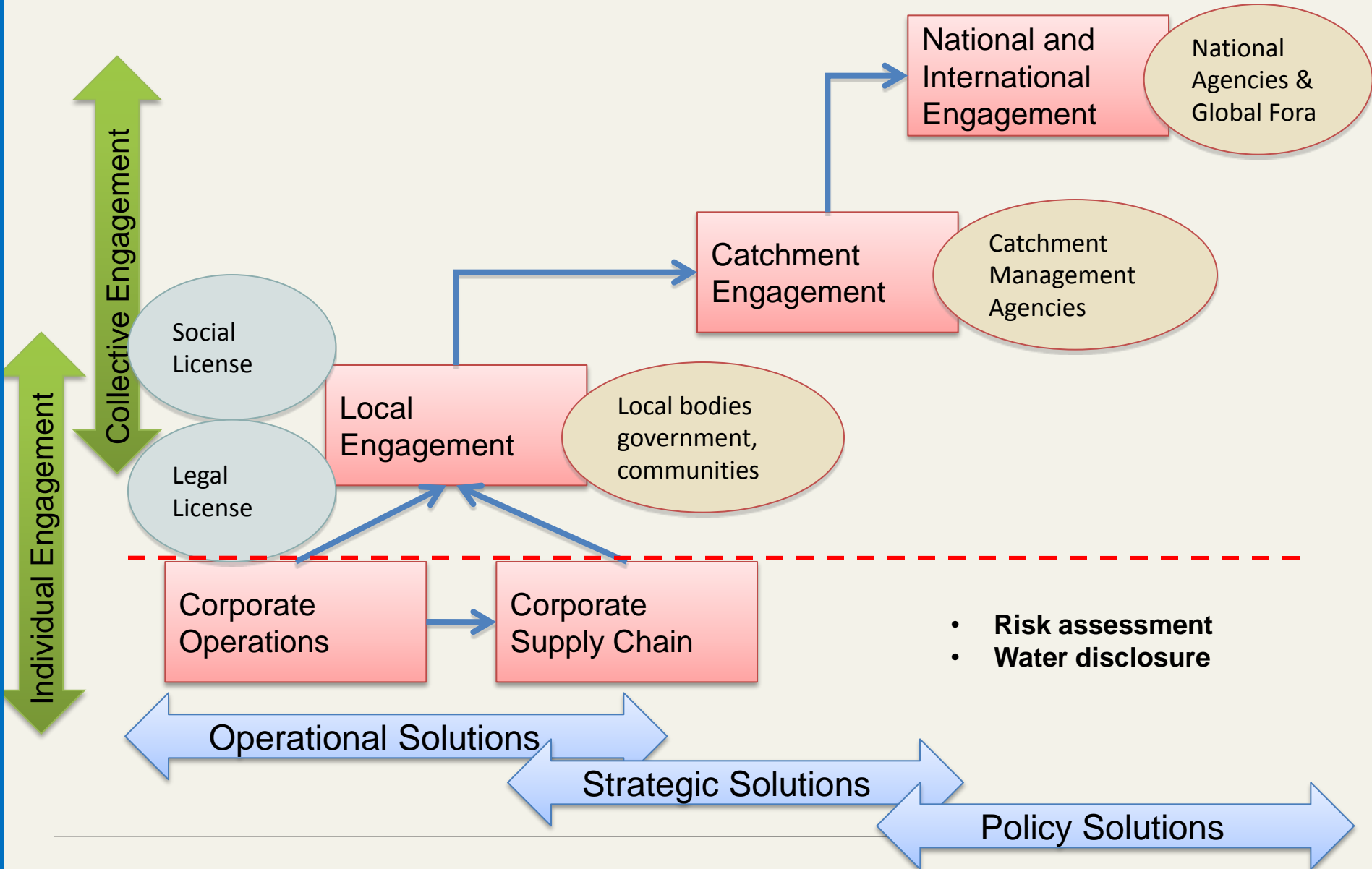
Enabling private
sector water
stewardship and
investment into
our natural
infrastructure

Helen Gordon 7/11/2012



The Water Stewardship Journey

(Corporate response)





Water User

Link to

Catchments



**Built
infrastructure**

**Natural
infrastructure**



The WWF-SA Water Balance Vision

Not a benevolent act - risk mitigation



Physical Risk Reputational Risk Regulatory Risk

**supply chain failures, operational crises, increasing costs,
brand management and broader corporate social
responsibility**

**To challenge and empower corporate South Africa to
help create a water secure future**

The WWF-SA Water Balance Programme

- Investing back into the country's water security in proportion to the water user's size – **quantitative approach**

big operational
water use =
big investment

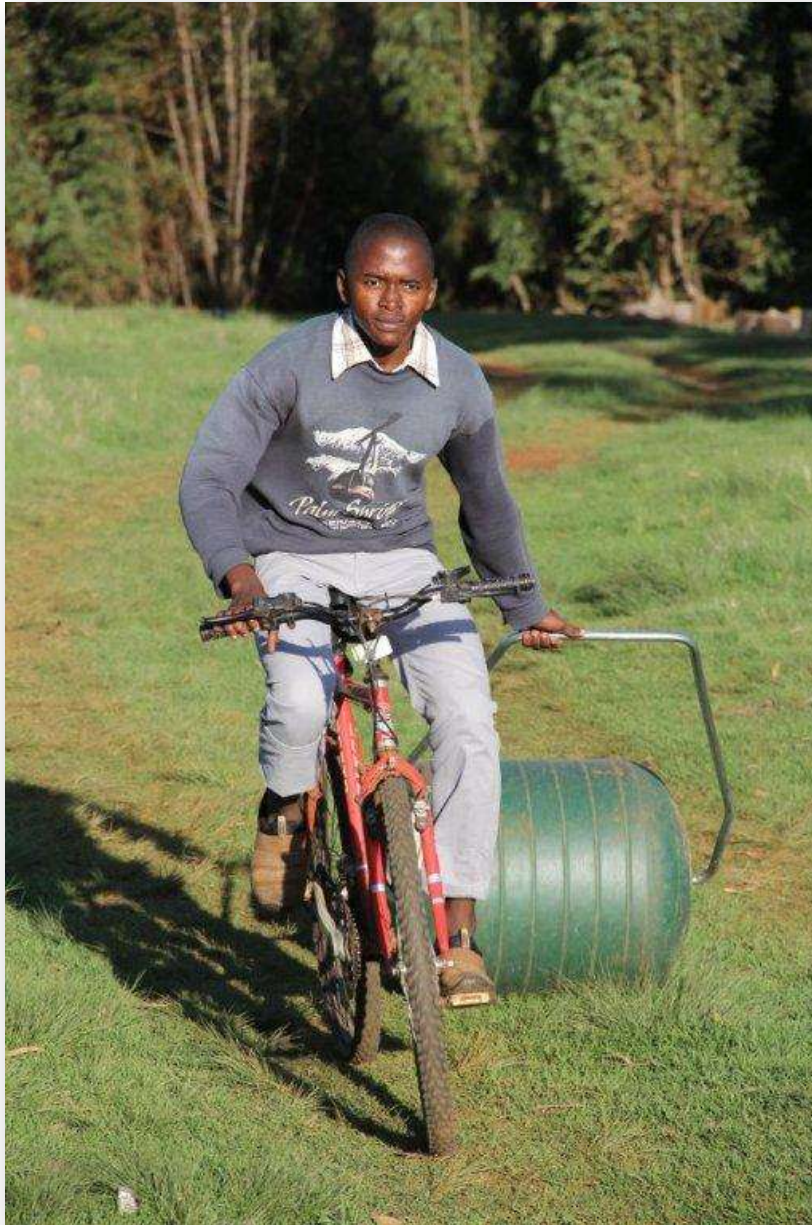


- Taking a **holistic approach** to the fresh water systems considering biodiversity, carbon and water impacts of any intervention
- Platform linking corporates to tangible impacts where it counts most for the country

12% of SA's land generates over 50% of our water!

South Africa's “water factories”

- ☐ Umgeni (KwaZulu Natal – Durban/PMB supply)
- ☐ The Grasslands (Mpumalanga – North Central KZN & Gauteng supply)
- ☐ Garden Route from George to Plett (Western Cape)
- ☐ Upper reaches of the Berg & Breede catchments (Western Cape – Cape Town supply)





R³

Review
Reduce
Replenish



Demand side management

Supply side management

Approach

1. Review:

Participants are required to accurately measure their operational water usage.

2. Reduce:

Participants are required to develop and implement a water reduction & efficiency strategy.

3. Replenish:

Participants are required to invest in projects that will make available 'new' water into fresh water ecosystems, approximately in proportion to their operational water use.



- Total area invaded = 18 mil ha (condensed=1.5 mil ha).
- Est. reduction in surface runoff = $> 3000 \text{ mil m}^3$ ($\pm 7\%$ of national total). Could increase > 8 times
- Working for Water has treated 2.3 mil ha since inception (1995 – 2012) & spending over R800 mil / annum





What's the issue with IAP?

- ❑ Invasive alien plants (IAP) destroy proper functioning of riparian zones & wetlands & hence diminishes the ecosystem services (benefits from the environment) these provide

Debris dams



Bank slump



Erosion

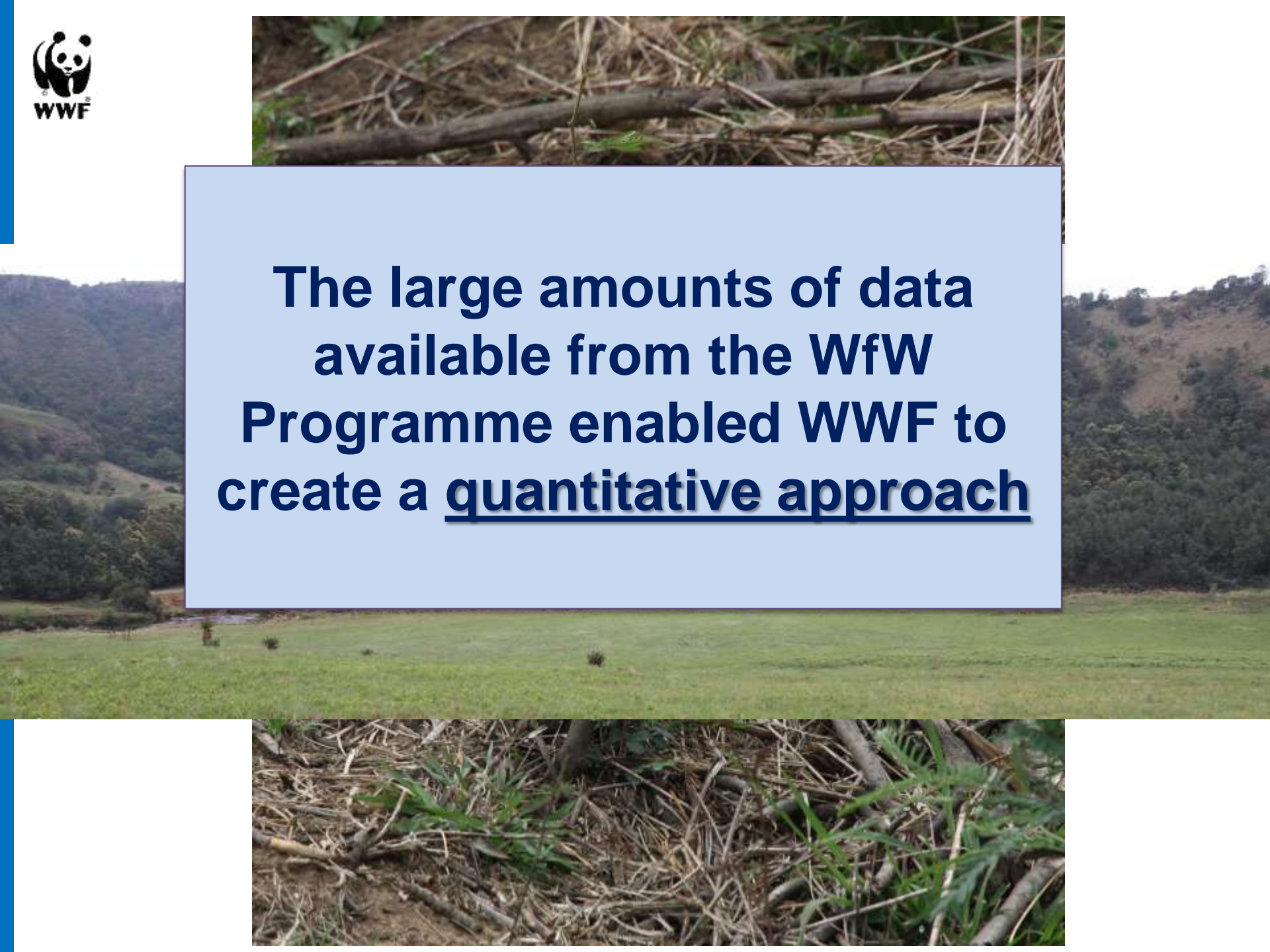


Dense invasions







The background of the slide is a landscape photograph showing a green field in the foreground, a river or stream in the middle ground, and forested hills in the background. There are two inset images: one at the top center showing a close-up of dry sticks and green plants, and another at the bottom center showing a similar close-up of dry sticks and green plants.

**The large amounts of data
available from the WfW
Programme enabled WWF to
create a quantitative approach**



Water Balance – the maths



1) the *average* amount of **water “replenished”** through clearing a hectare of IAP & maintaining it clear

2) the *average* **cost** of clearing a hectare of IAP & maintaining it clear





PARTNERSHIPS

WWF Water Balance

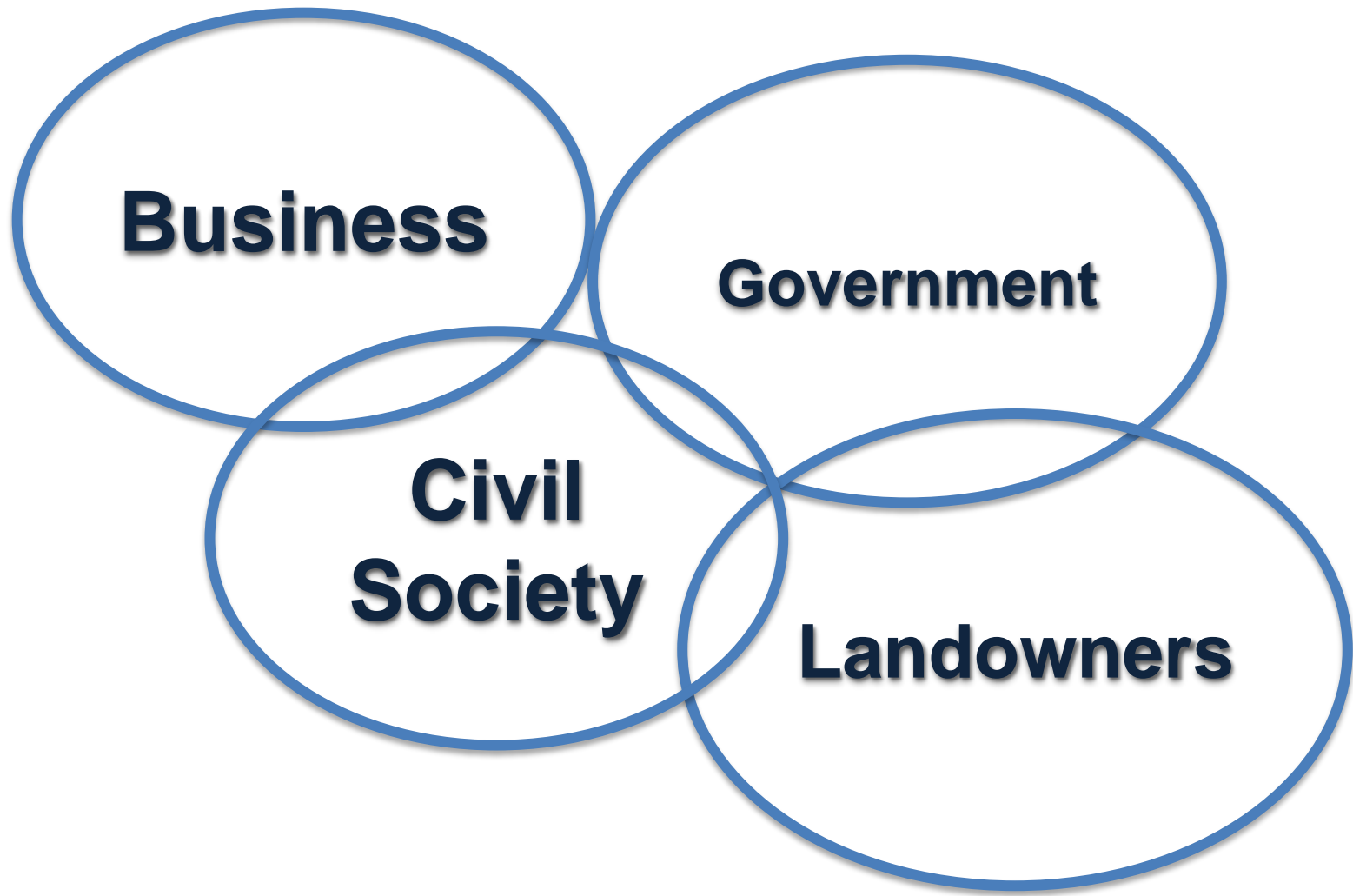


Landowners



PARTNERSHIPS

WWF Water Balance





Corporate Participants

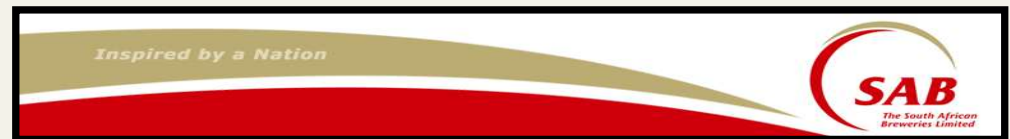


**Sonae
Novobord**

A company of the group



Founders:



What Water Balance has achieved to date...

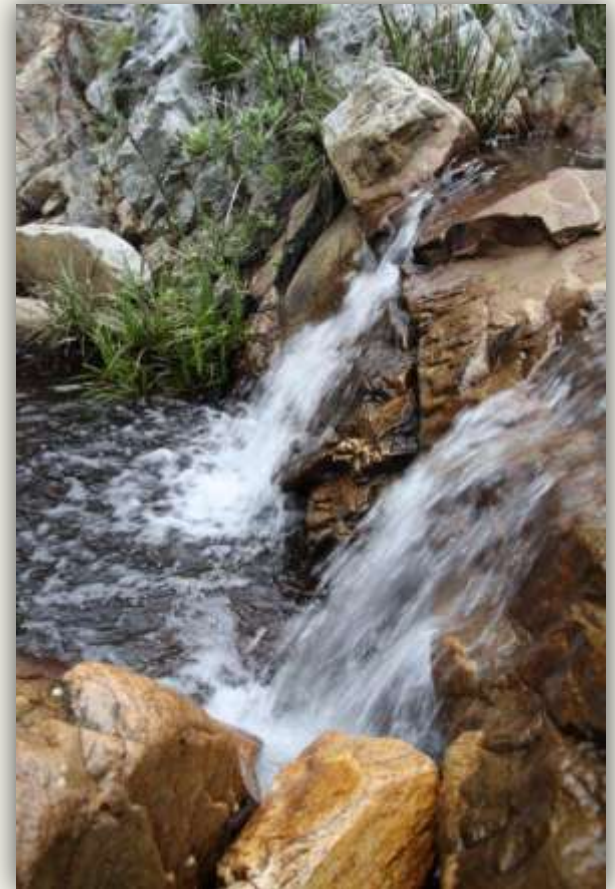
- ✓ Just over **1500 ha** have been cleared or been committed to clearing
- ✓ Prevented **1.7mil kl** being lost to IAP annually & once clearing targets are achieved this will increase to approx. **3.1mil kl** each year
- ✓ **R15mil** committed mostly over 5 yrs
- ✓ Approx **14 260 person days** of work have been created so far
- ✓ 2012 biomass supported secondary markets with **643 tons** of charcoal & **345 tons** of pulp wood



More than only contributing to water security

economic, environmental & social benefits

- Improving water quantity & quality
- Reducing fire risks & the intensity of the impacts of both fire & flood events should they occur
- Adds to food security by addressing the loss of productive land





economic, environmental & social benefits cont'd

- Improving the functioning of ecosystems & protection of biological diversity (climate change adaptation/resilience)
- Incentivising best management practices
- Job creation





Thank you

wwf.org.za/waterbalance

Key aims for WWF – SA FW programmes

12% of RSA critical for water security is protected

Land and water stewardship protect critical water source areas from inappropriate development.

Local government is incentivised to integrate FW protection into plans

Land-use planning, economic development planning and water services planning ensure necessary protection of water resources.

Investors support water security

Water risks and water security impacts are visible to investors and insurers and influence decisions.

Best water practice for agriculture & mining

SAMBF guidelines implemented.
Guidelines for water stewardship and riparian buffers for agriculture.

Corporate funding catalyses catchment security

Water Balance reinvests in natural water provisioning.
Water-user institutions empower stakeholders to respond to shared water risks (SAB, de Beers).





“Water availability is one of the most decisive factors that will affect the economic, social and environmental wellbeing of South Africa over the next decade”

Kadar Asmal (2008)