


Corporate sector engagement

World Parks Congress
Sydney, 2014

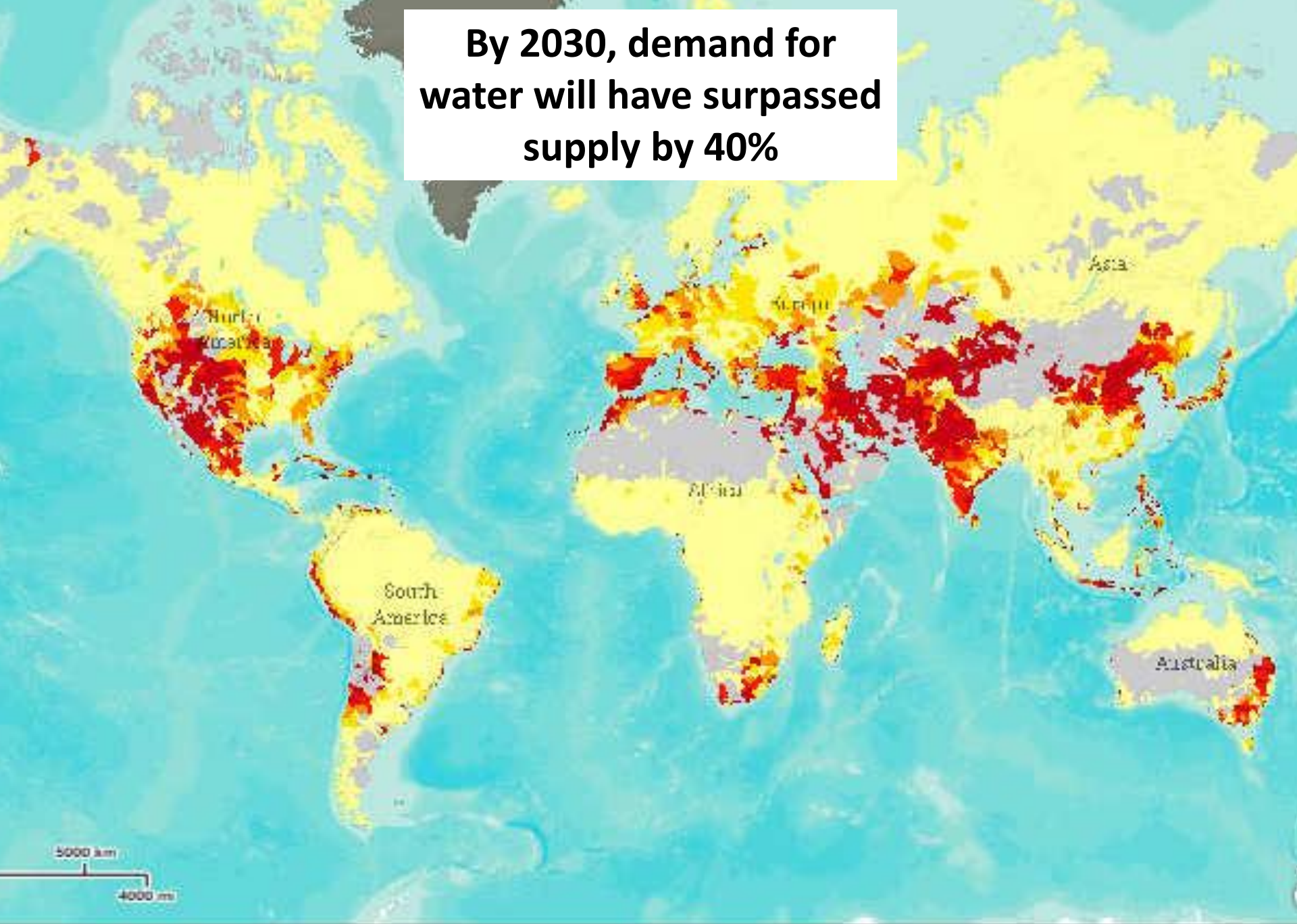
Fernando Veiga
Water Security Manager



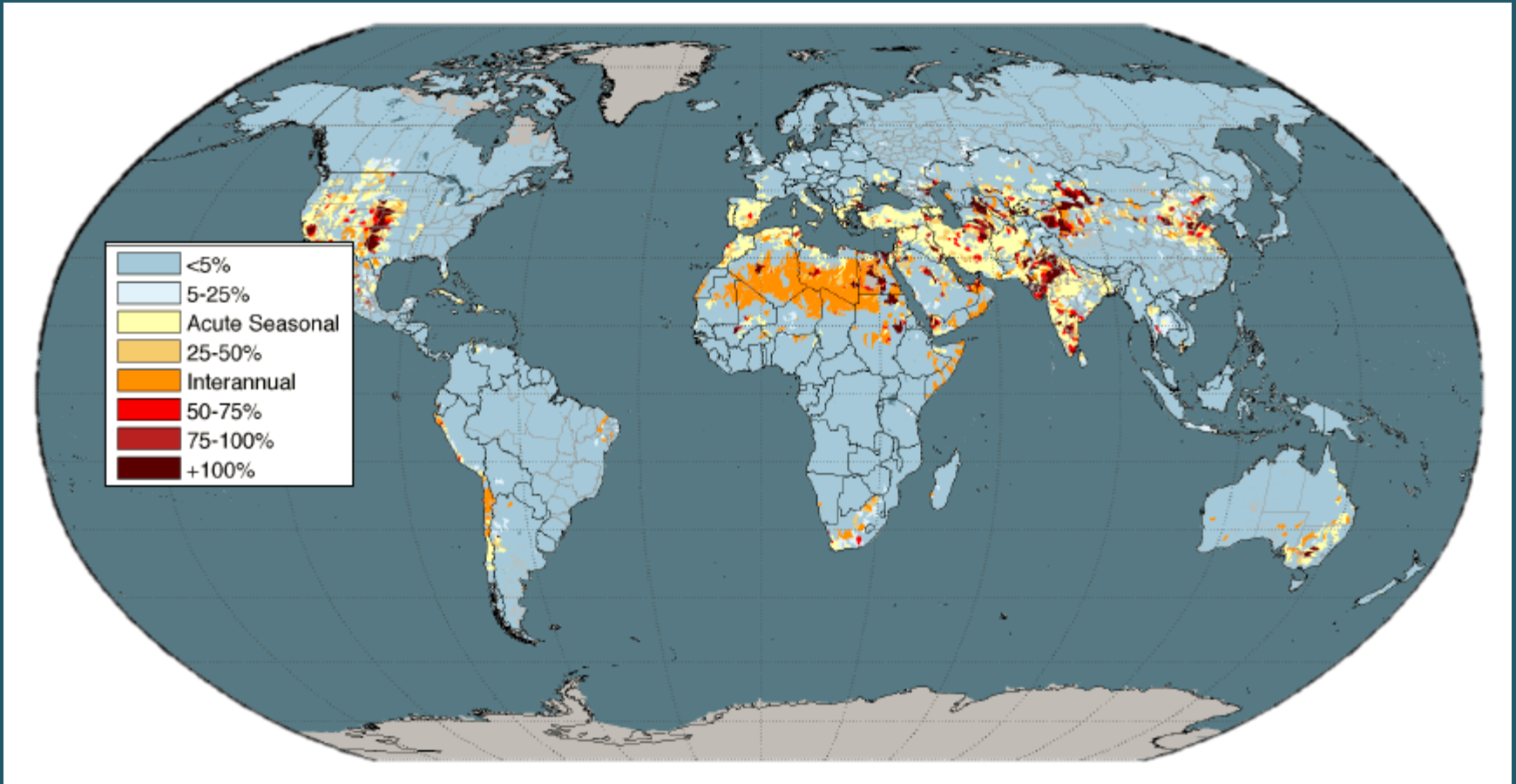
A photograph of a mountain range with dense green forests. The peaks are partially obscured by white mist or clouds. The text is overlaid in the center of the image.

**NATURE PROVIDE SERVICES
TO THE HUMAN SOCIETIES -
FUNDAMENTAL ROLE TO SECURE WATER
AS GREEN INFRASTRUCTURE**

By 2030, demand for water will have surpassed supply by 40%



Water Scarcity



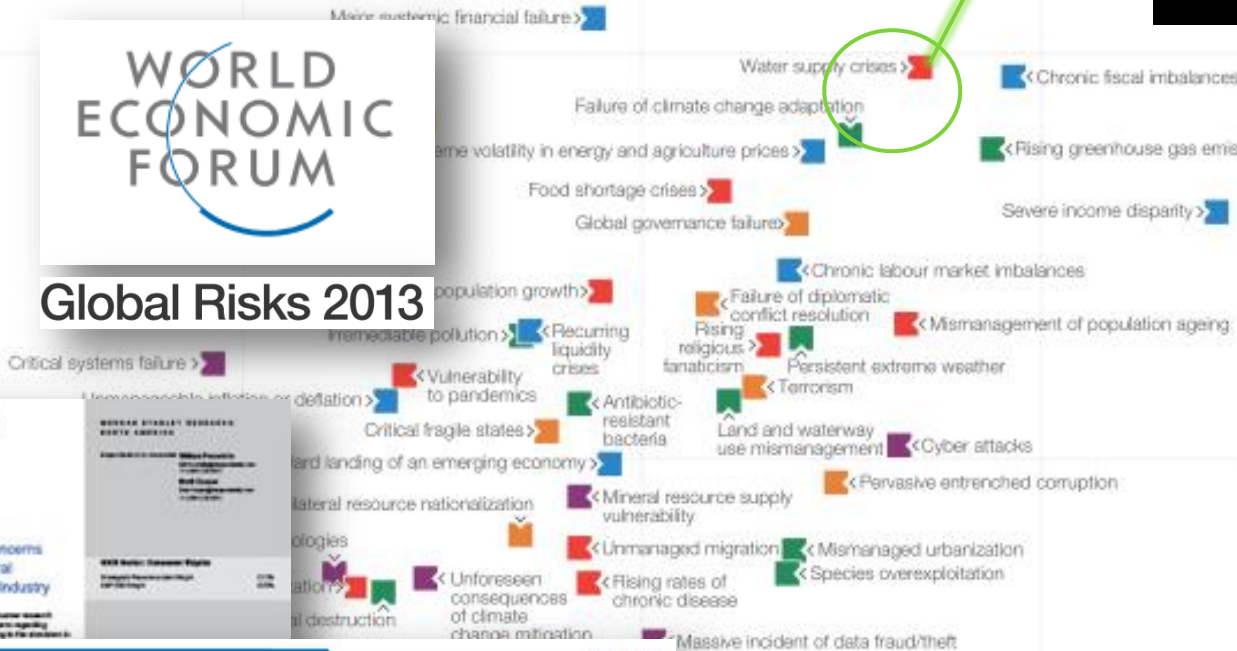
Water shortages are occurring in 20% of the planet's watersheds and aquifers

35% of the world's population is affected

60% of the world's irrigated acreage is affected

What has changed?

WORLD ECONOMIC FORUM Global Risks 2013



Morgan Stanley

BEVERAGES
Environmental Concerns
Present a Structural
Challenge for the Industry

FEBRUARY 13, 2013

Moody's
INVESTORS SERVICE

SPECIAL COMMENT

Global Mining Industry
Water Scarcity to Raise Capex and Operating
Costs, Heighten Operational Risks

“68% of companies have already identified substantial risks associated to water in their businesses”

CDP Global Water Report

Water is already halting progress in business


53%

Companies that have already
suffered detrimental impacts from
water

40% increase from 2011

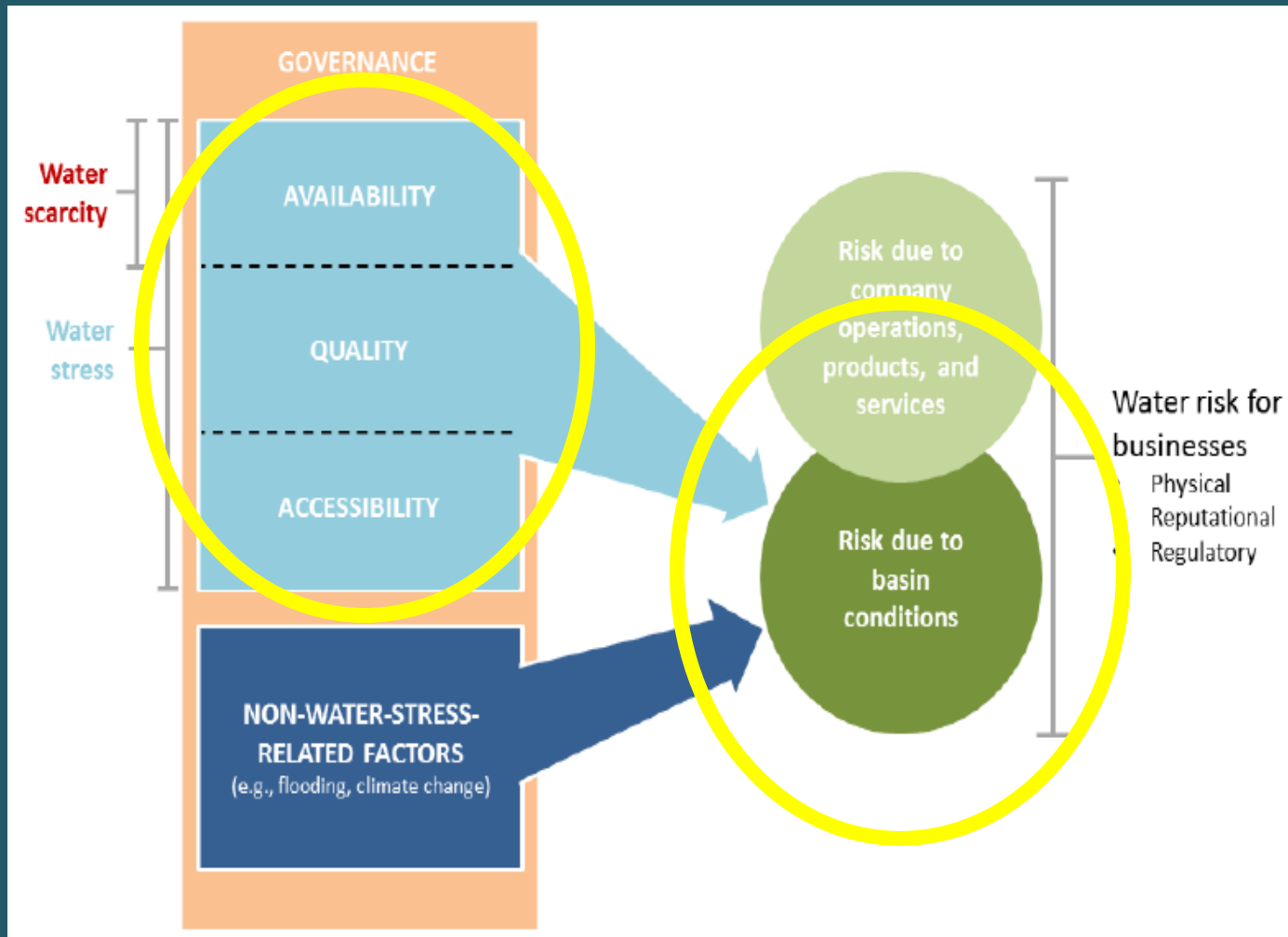
Barrick Gold suspends construction of
\$8.5 billion Pascua Lama Mine in Chile
due to water risks and stringent
permitting conditions



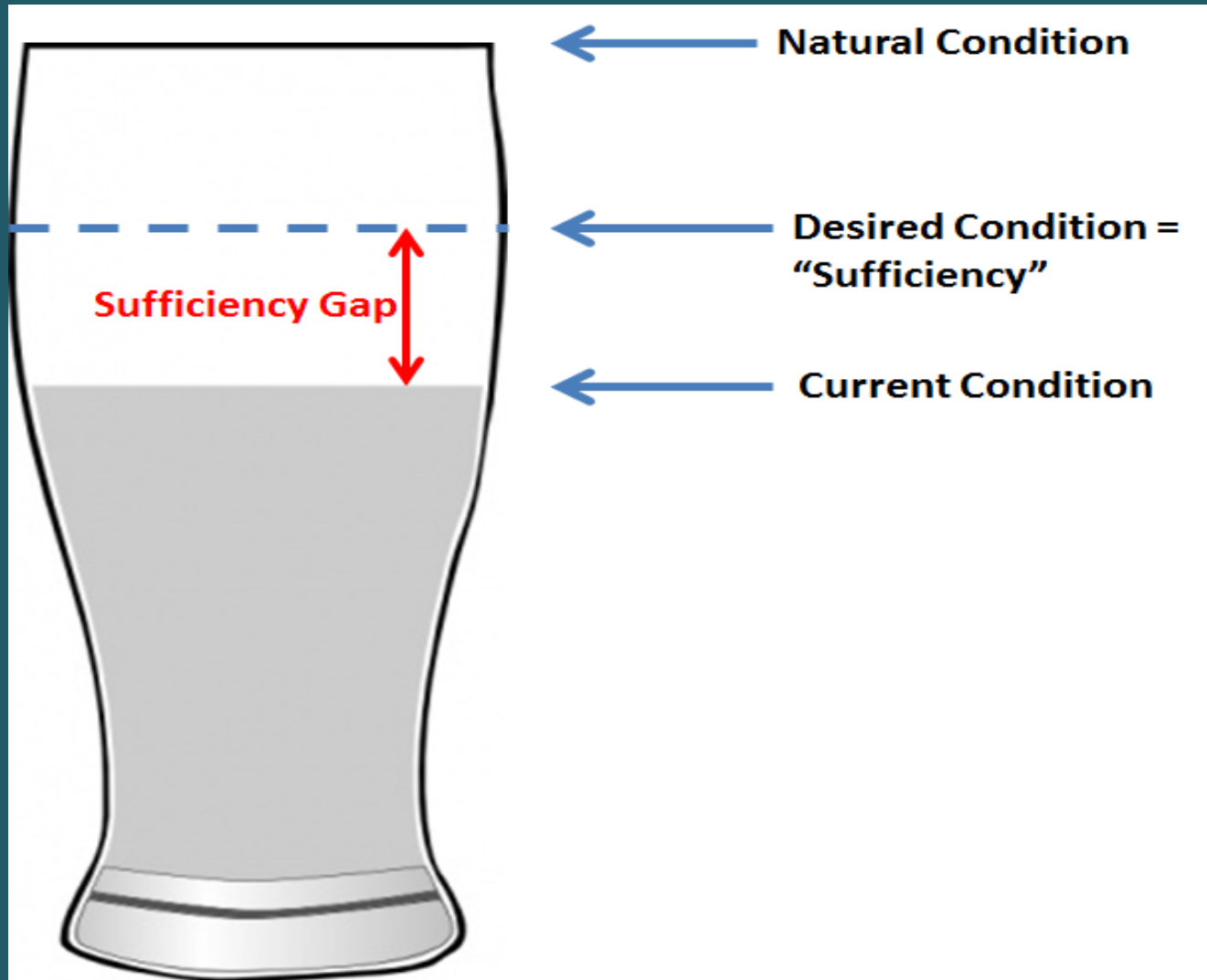


Water management is no longer
a corporate social responsibility
issue

It is a business risk



“Sufficiency” in Water Stewardship



← Natural condition

← Desired condition: "Sufficiency"

Governance

Gray infrastructure

Water use efficiency

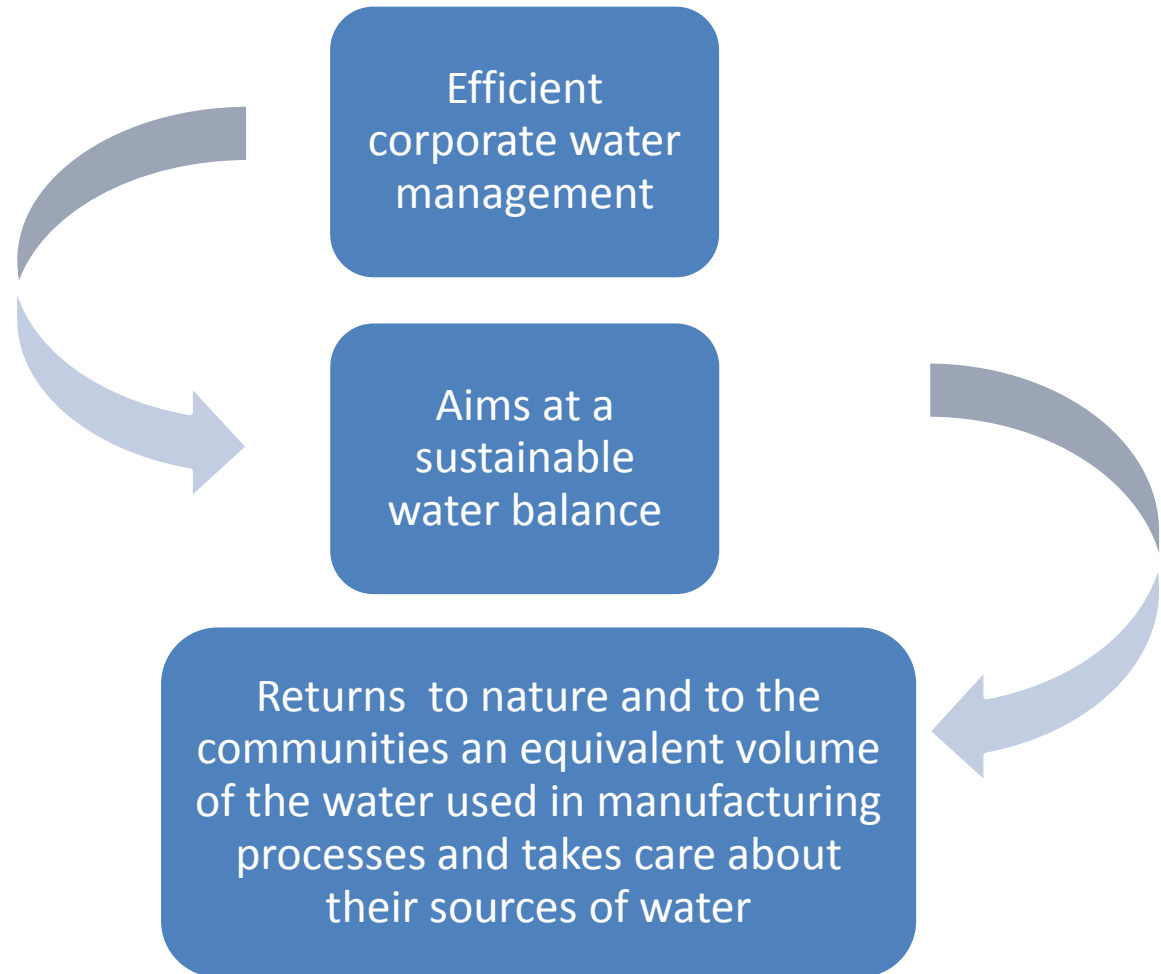
Green infrastructure

NATURE

GREEN INFRASTRUCTURE

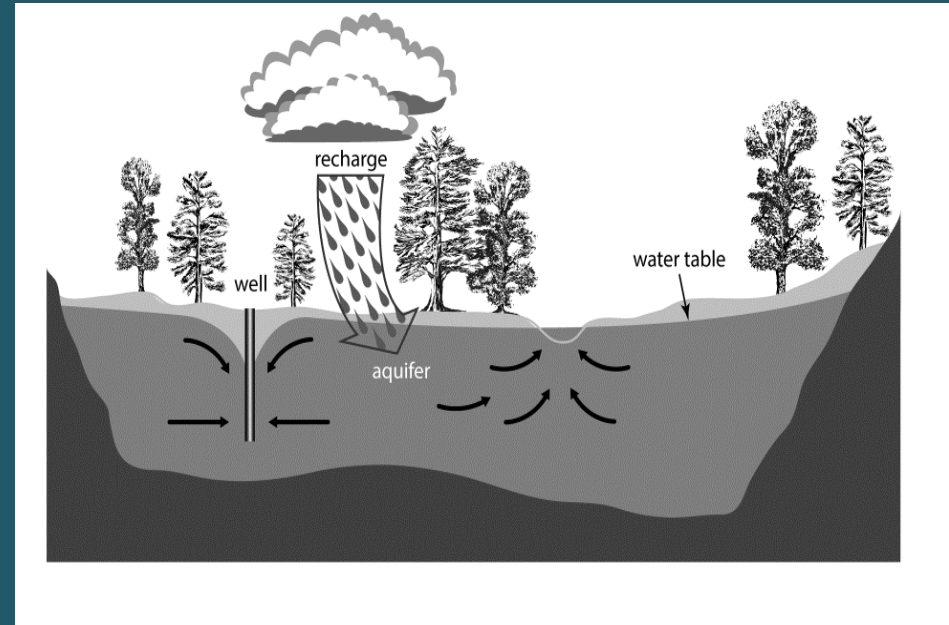
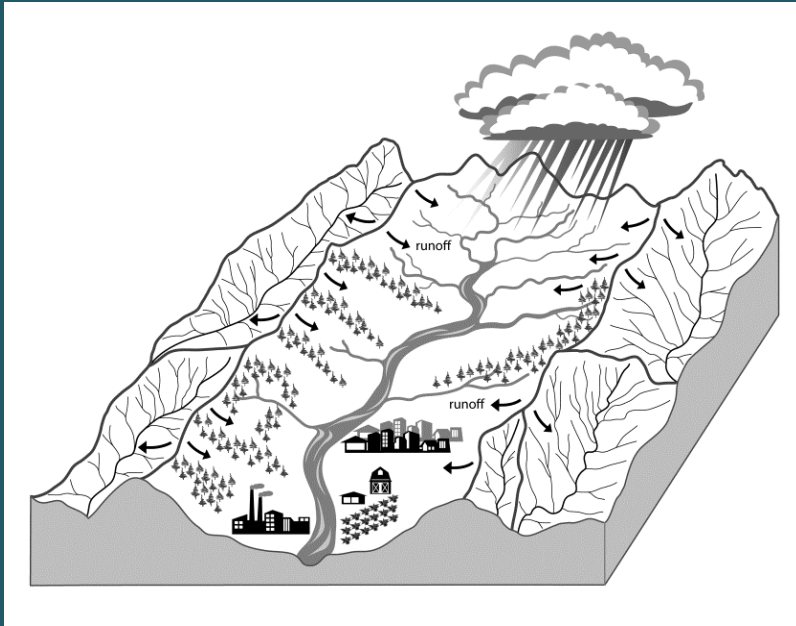


Water Corporate Management



Adapted from
Rozza et al. 2013

Focus on Local Watersheds and Aquifers



How to assure green infrastructure investments?

High impact activities implemented in **strategic places**

Best available **science** to select **cost-effective** activities and places



Risk mitigation activities

Conservation and restoration of native ecosystems

Protect



Restore

Risk mitigation activities

Best agricultural practices

- Soil conservation;
- Agroforestry systems
- Rotational grazing



Risk mitigation activities

Collective action

- Build synergies
- Reduce transaction costs
- Cost-efficient
- Greater impact



Water Funds Model

Users



Financial and
Governance
Mechanism



Providers

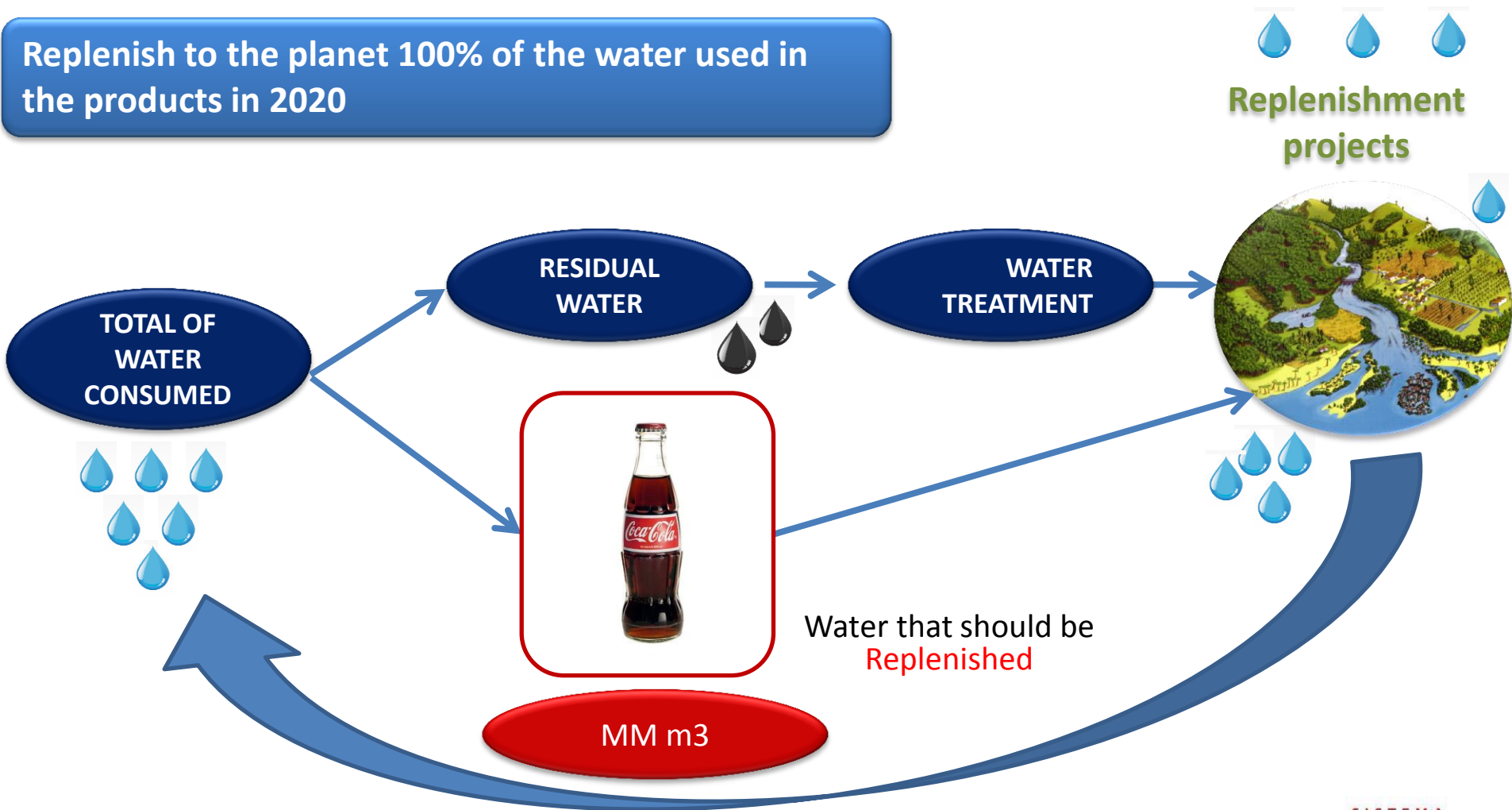


WATER
Quality Quantity



Replenishment projects

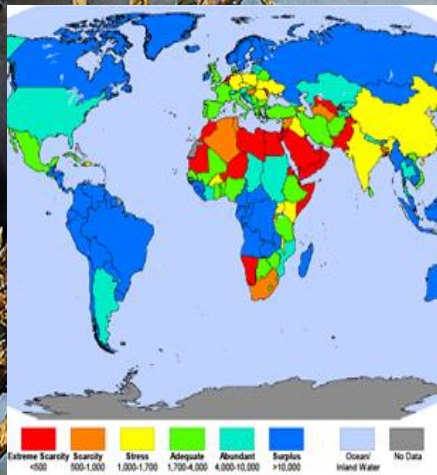
Replenish to the planet 100% of the water used in the products in 2020



7 Countries – 16 Water Funds

Jaguariúna Watershed Project São Paulo State

- Launched on World Water Day 2013
- Result of a comprehensive global water risk assessment process
- New global goal to engage in watershed protection measures at all facilities located in key areas





Water Footprint Odebrecht Ambiental

**Pilot Project
Water Treatment Plant
Palmas – TO
Brazil**