

*The Coca-Cola Company*

# OUR COMMITMENT TO THE ENVIRONMENT



September 24, 2009  
San Jose, Costa Rica

Dr. Paul Bowen  
Water Technologies Director

# Our key environmental commitments

- **Water**



Our **water conservation goal** is to return to communities and nature an amount of water equivalent to what we use in all of our beverages and their production.



- **Sustainable Packaging**



We envision a world in which our packaging is no longer seen as waste, but as a **valuable resource** for future use



- **Climate change**

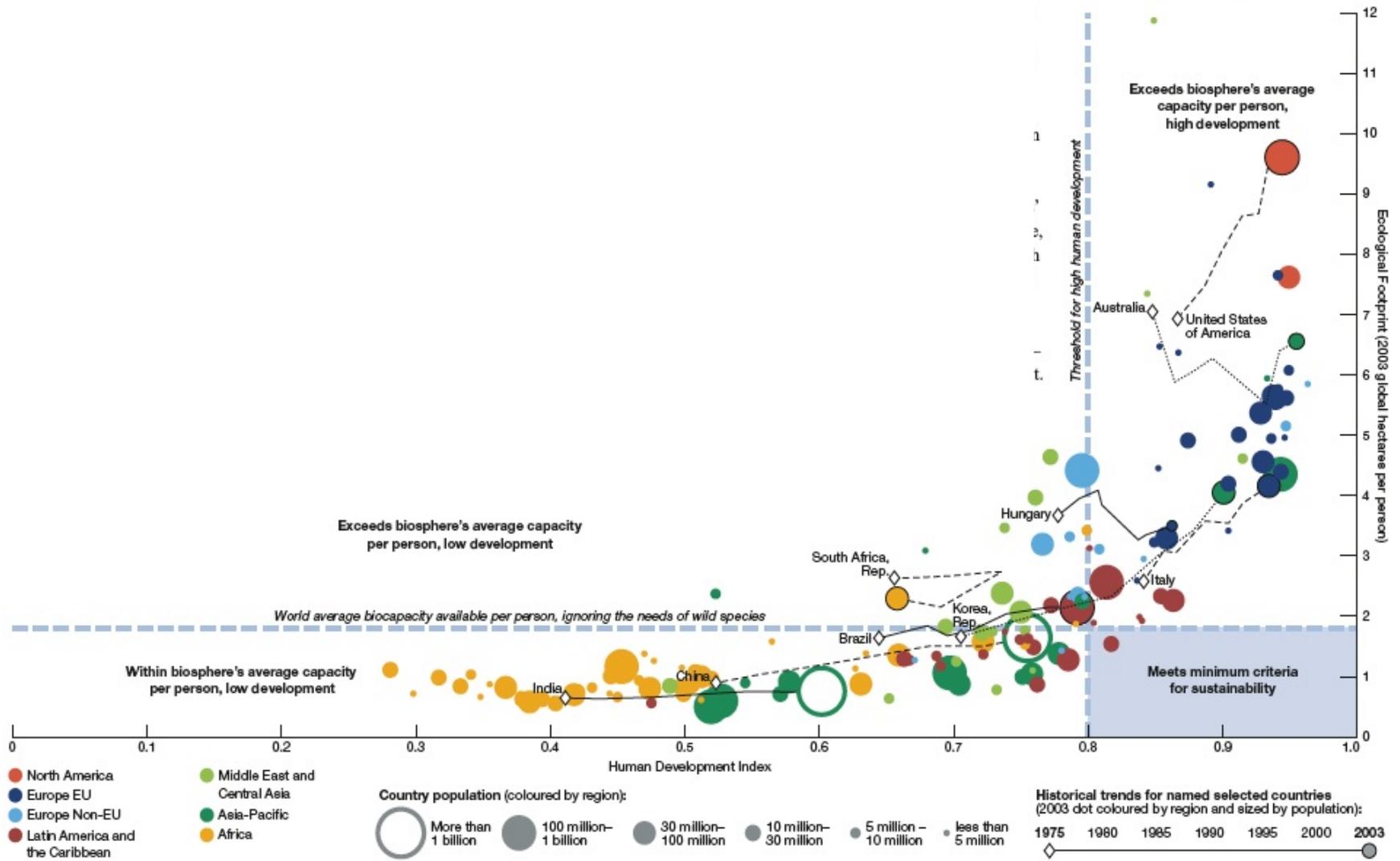


We aim to be the **beverage industry leader**... to grow our business but not the carbon



# Footprints and quality of life

Fig. 22: HUMAN DEVELOPMENT AND ECOLOGICAL FOOTPRINTS, 2003





# Why Water Stewardship?

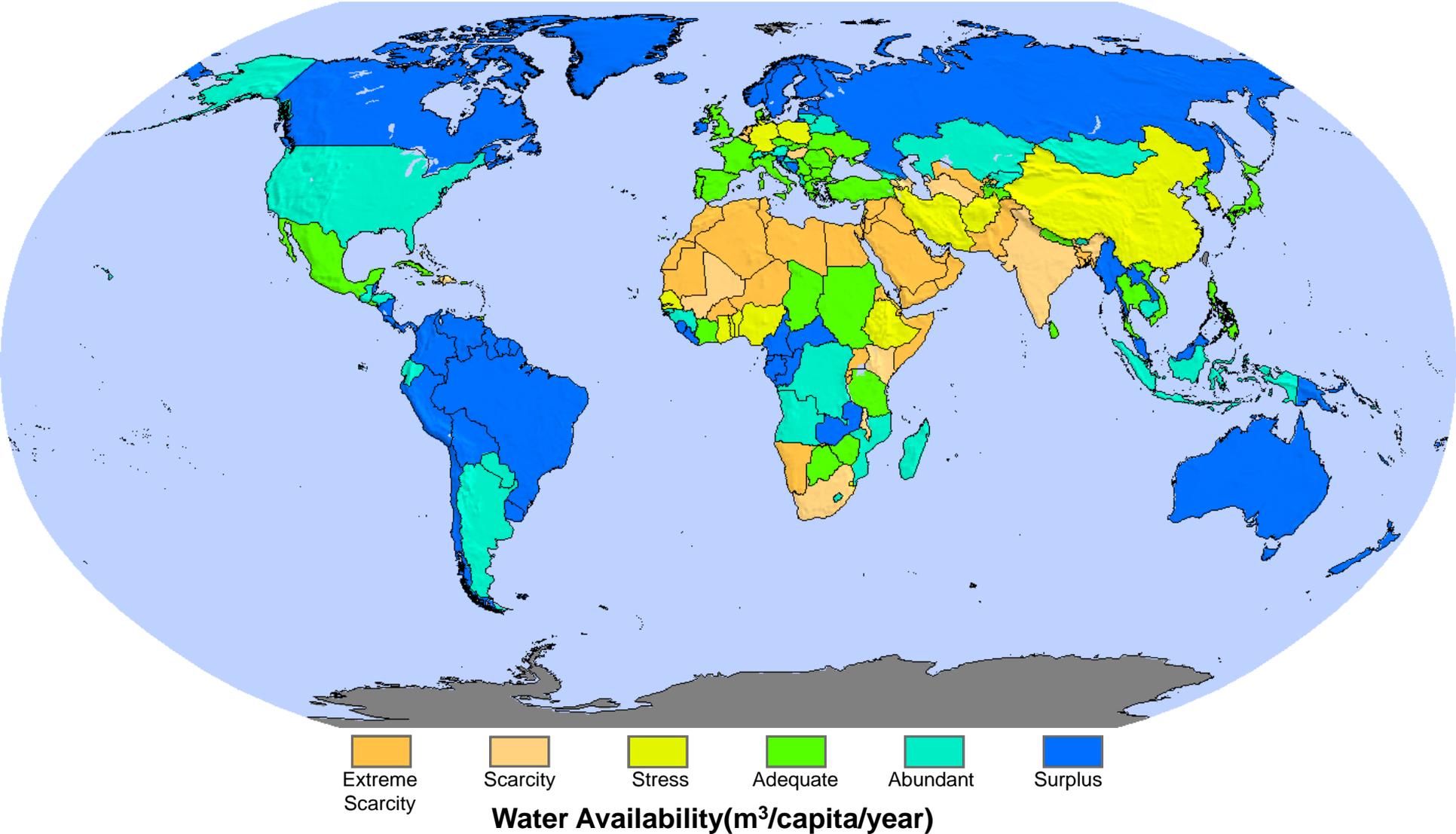
## Water is:

- A life-sustaining resource for the communities and ecosystems that make any endeavor possible
- The main ingredient in all of our beverages
- Essential to our manufacturing processes
- A key component of many of our ingredients, including sweeteners and juice

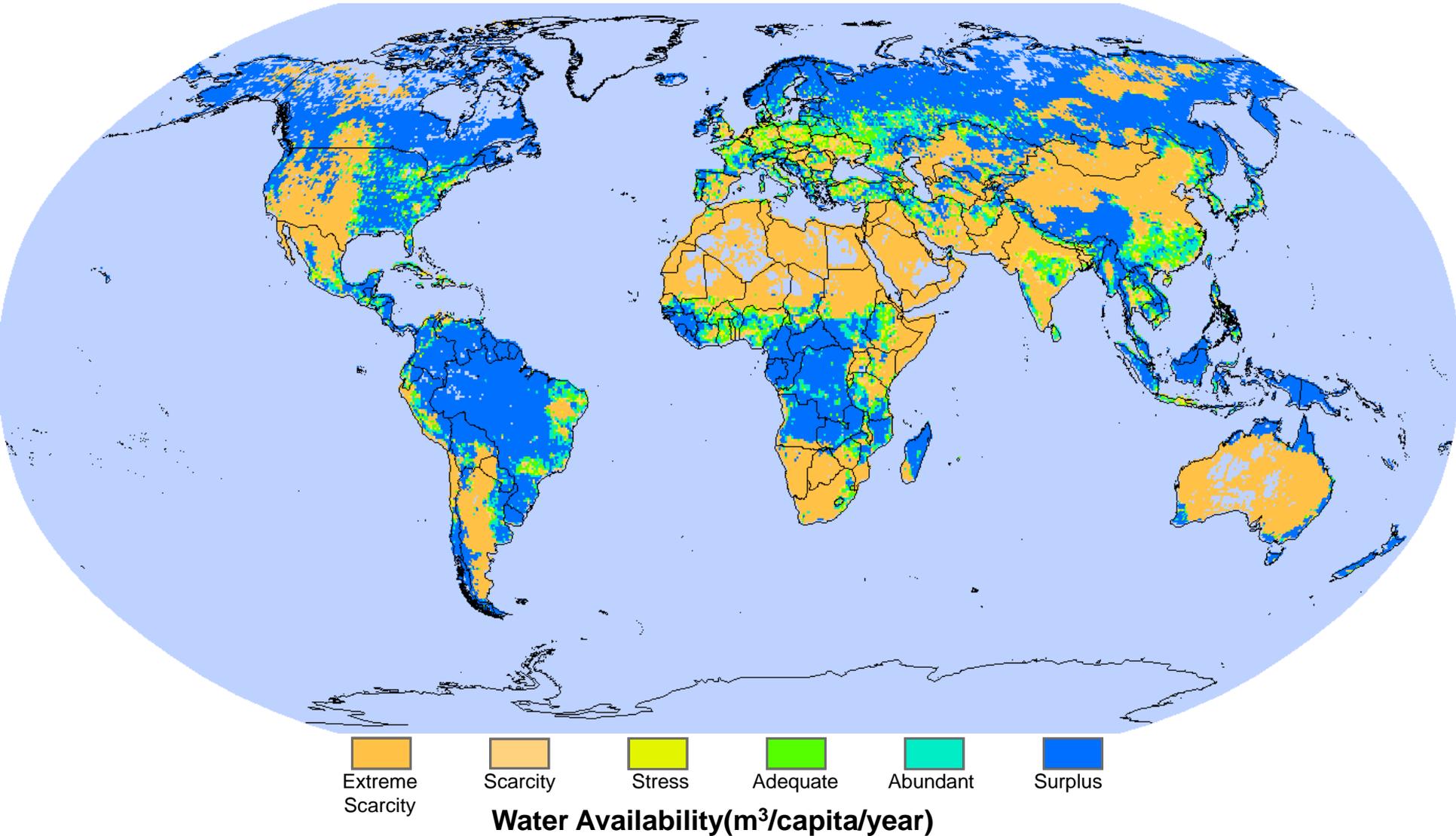
“  
*Water is not just important to our businesses. It is critical to the communities we serve. We cannot have a sustainable business unless the communities we serve are sustainable themselves.*”

*E. Neville Isdell  
Chairman  
The Coca-Cola Company*

# Annual Renewable Water Supply Per Person



# Global Water Scarcity Crisis



# Water...The Human Impact

- **450** million people suffer severe water shortages
- **~1** billion people do not have access to safe drinking water
- **2.6** billion people without access to sanitation
- **5,000** daily deaths from waterborne diseases (90% children)

***2015 -- Date for MDG goals to reduce by 50% those without access***

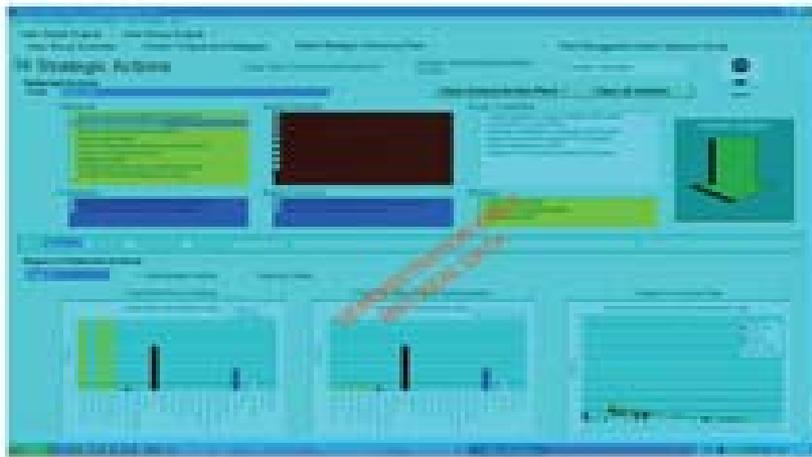


*If the MDG targets are achieved by 2015, there will still be more than 800 million people without safe water and 1.8 billion people without sanitation.*

# Water Risk Management

- Initial, plant-level survey and risk assessment conducted in 2005 (updating this year)
- KOala and K2 tools available for evaluation and risk mitigation

**KOala™ Water Risk Management Model**



# Using Technology to Understand Risk Exposure

Plant Locations

Water Withdrawal Ratio

Runoff

Irrigation

Night Lights

Population



Our **water conservation goal** is to return to communities and nature an amount of water equivalent to what we use in all of our beverages and their production.

**REDUCE**

TCCC will set specific water efficiency targets for global operations by 2008 to be the most efficient user among peer companies.

**RECYCLE**

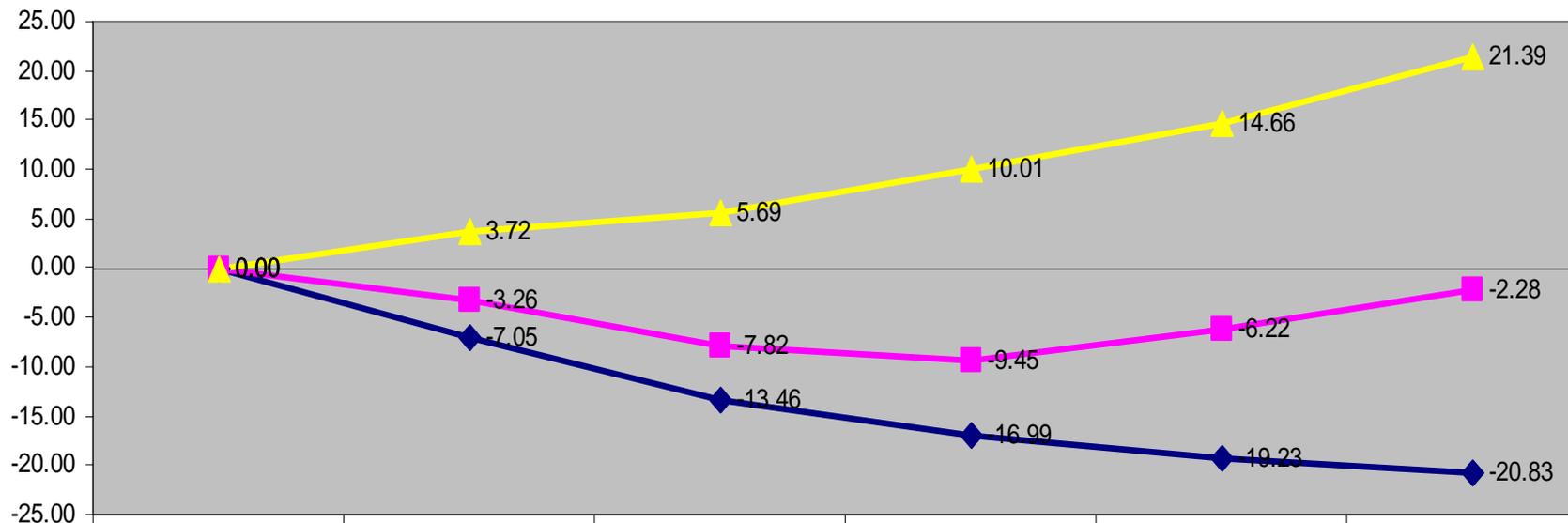
TCCC will align our entire global system with stringent wastewater treatment standards which require returning all water that is used in our manufacturing processes to the environment at a level that supports aquatic life by the end of 2010.

**REPLENISH**

On a global basis we will expand support of healthy watersheds and sustainable community water programs to balance the water used in our finished beverages.

# Reduce

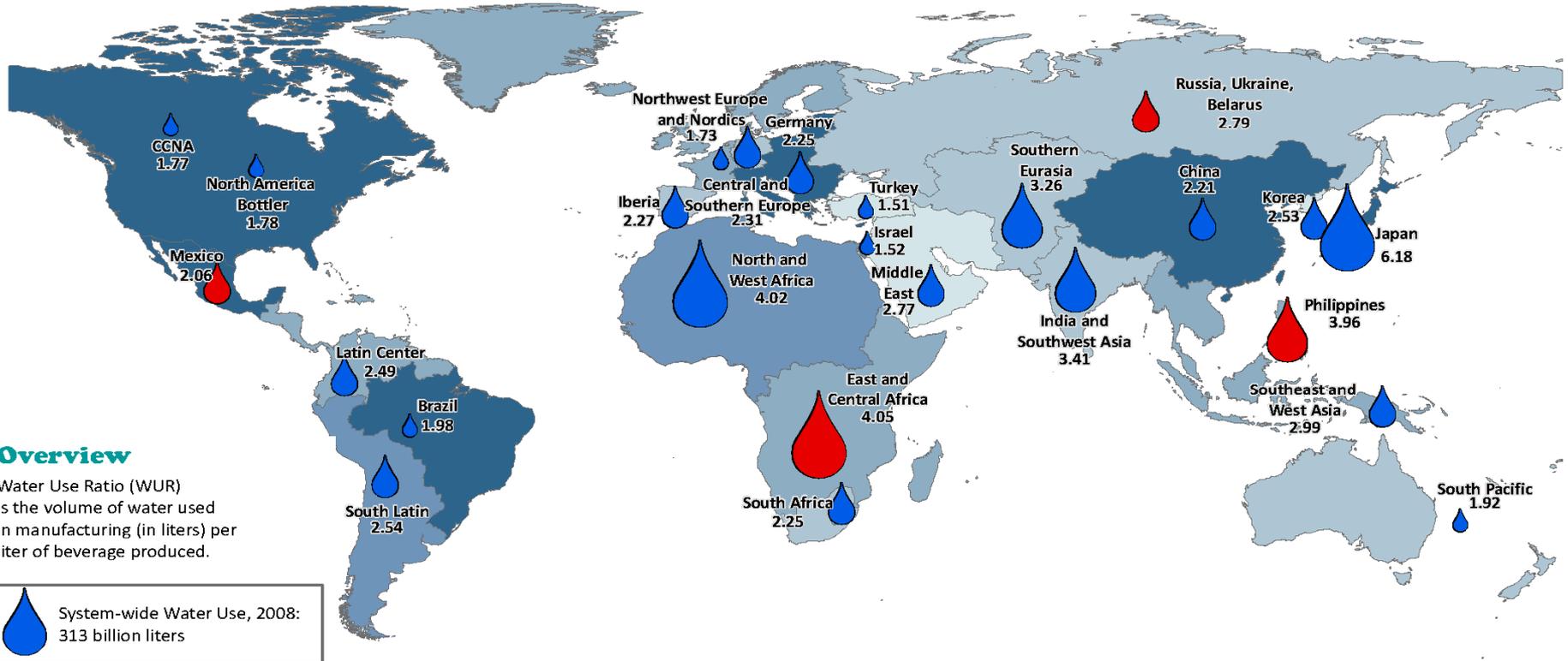
- Between 2002 and 2007, we improved global water efficiency by over 20% while sales volume increased over 21%
- We have set a target to improve water efficiency 20% by 2012 (compared with a 2004 baseline)



|                     |      |       |        |        |        |        |
|---------------------|------|-------|--------|--------|--------|--------|
| ◆ Water usage ratio | 0.00 | -7.05 | -13.46 | -16.99 | -19.23 | -20.83 |
| ■ Water usage       | 0.00 | -3.26 | -7.82  | -9.45  | -6.22  | -2.28  |
| ▲ Sales Volume      | 0.00 | 3.72  | 5.69   | 10.01  | 14.66  | 21.39  |

◆ Water usage ratio ■ Water usage ▲ Sales Volume

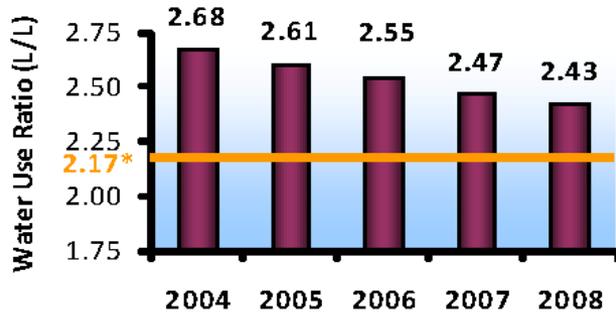
# Water Use: The Coca-Cola System



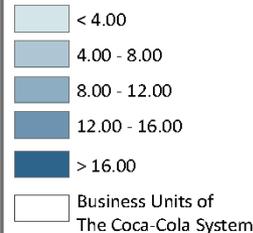
## Overview

Water Use Ratio (WUR) is the volume of water used in manufacturing (in liters) per liter of beverage produced.

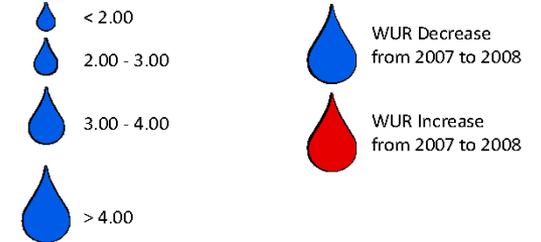
## System Trend in Water Use Ratio



## Total Water Use, 2008 Billion Liters



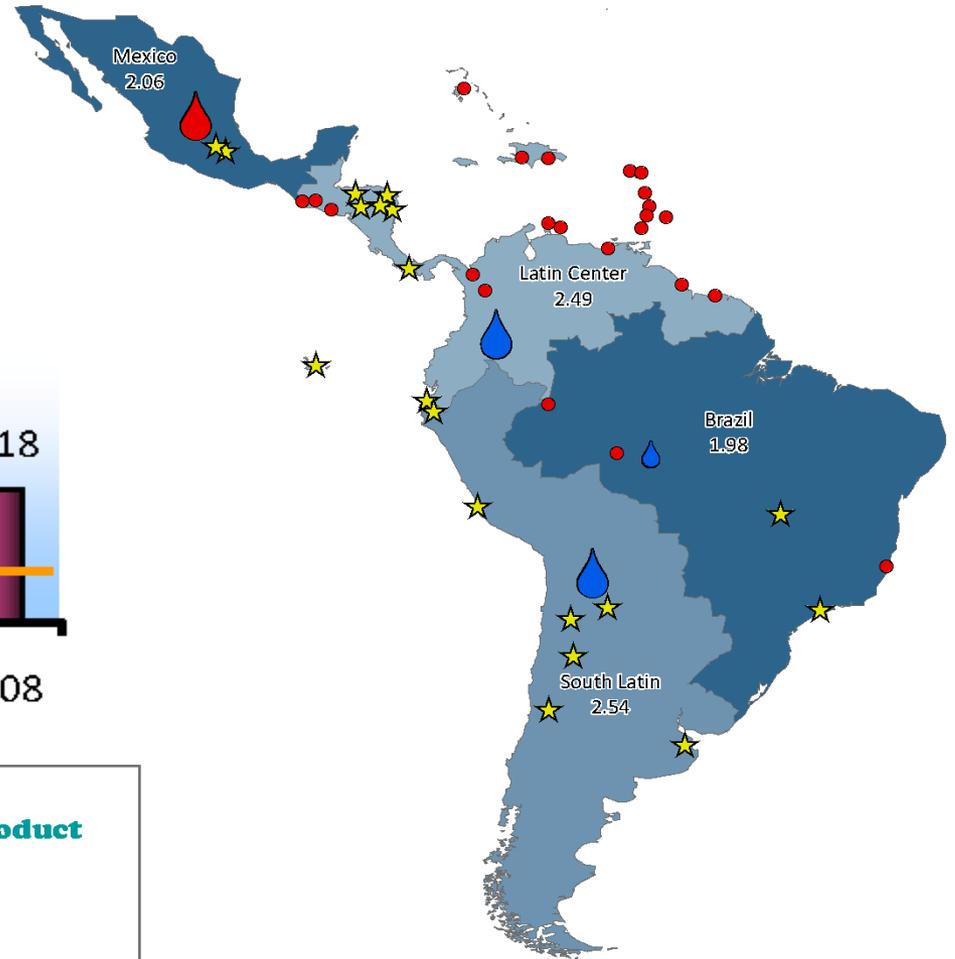
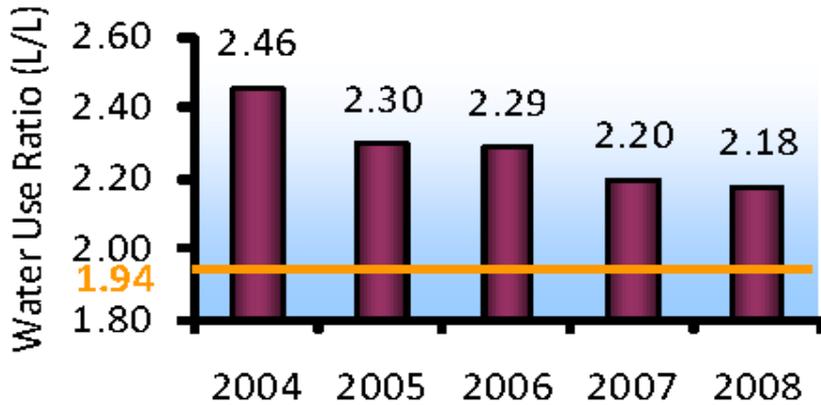
## Water Use Ratio, 2008 Liters Water Use / Liters Product



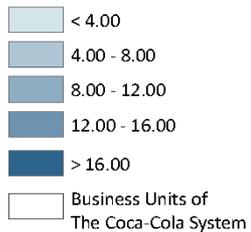
# Water Use: Latin America Group

Latin America Water Use, 2008:  
81 billion liters

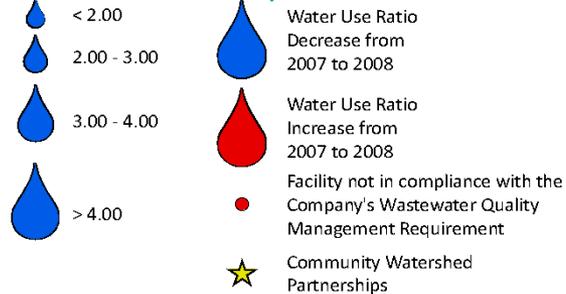
### Latin America Water Use Ratio Trend



### Total Water Use, 2008 Billion Liters



### Water Use Ratio, 2008 Liters Water Use / Liters Product



# Reduce

- With WWF, we developed an interactive, plant-level water efficiency toolkit, harvesting best practices from throughout our system

how to use this tool | contact us | water efficiency toolkit

## Three important tools for you to know about:

### Wastesmart

A basic training course on the methodologies of minimization

[DOWNLOAD](#)

### Watersavers

A training program to understand use & target critical minimization points

[DOWNLOAD](#)

### Aquacheck

A 30-day, comprehensive assessment designed to maximize the efficiency of the system

[LEARN MORE](#)

Sort by your water efficiency priorities:

Select priority  [See results](#)

### Plant

Plant name appears here

### Water-use ratio

**2.95**

|     |  |
|-----|--|
| 3.5 | country average  |
| 3.0 | division average   |
| 2.8 | company average  |
| 2.9 | comparable plants  |
| 3.1 | peer group   |
| 41  | % population in this country without safe drinking water |

[CHOOSE ANOTHER PLANT](#)

The Coca-Cola Company

supported by WWF

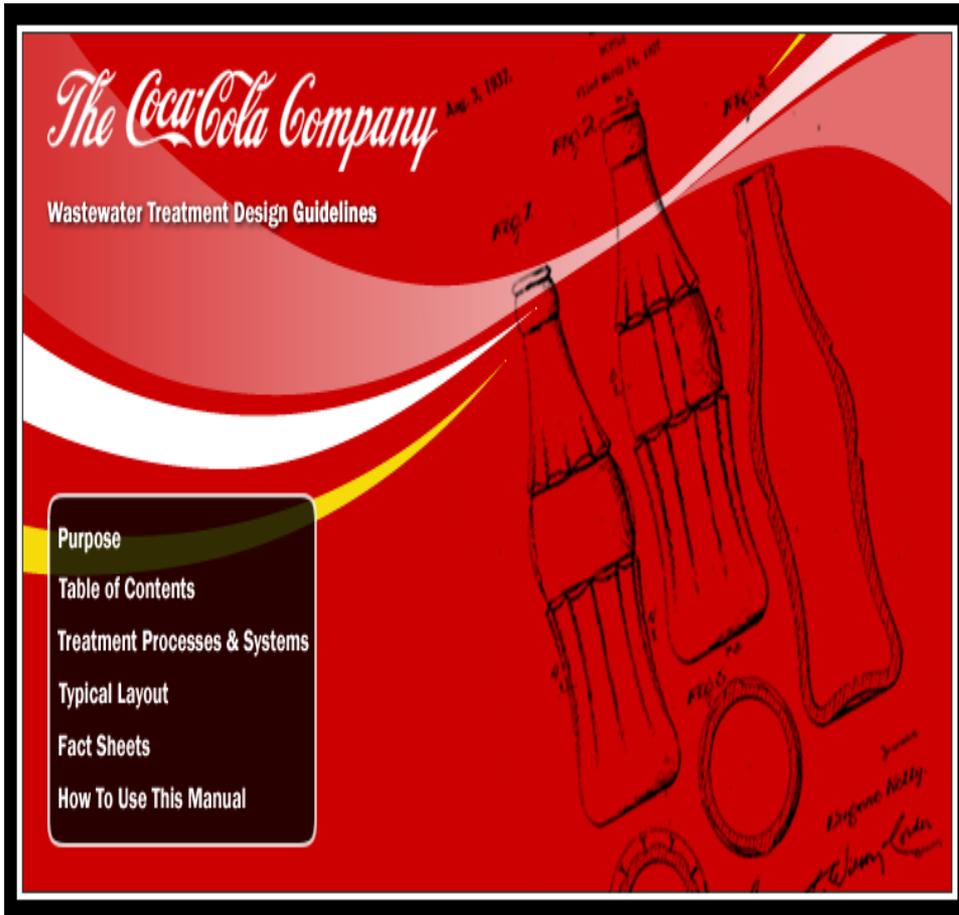
# Recycle

- **Wastewater treated in accordance with applicable laws and regulations; where municipal or other external treatment facilities do not exist, or do not fully treat wastewater, our manufacturing operations must construct on-site treatment systems**
- **85 percent of operations align with the standard**

*TCCC will align our entire global system with stringent wastewater treatment standards which require returning all water that is used in our manufacturing processes to the environment at a level that supports aquatic life by the end of 2010*

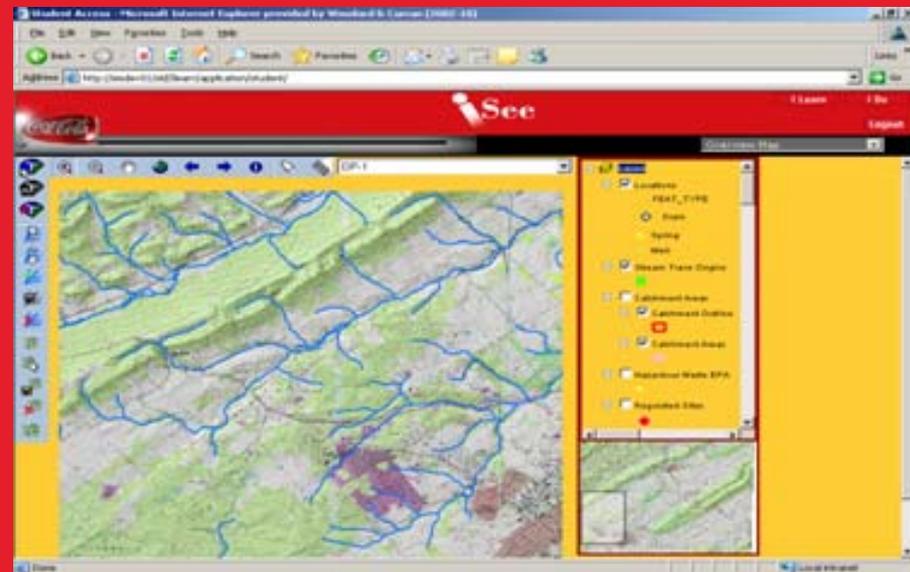


# Recycle



# Source Water Protection

- Standard for Source Water Protection requires water source mapping, source vulnerability assessment, and development and implementation of a Source Water Protection Plan
- All plants (private or municipal sources) required to develop a SWPP by the end of 2013
- Supported by the iLMP (I Learn, Manage, Protect) program for training, GIS-mapping, data analyses and plan development
- Also issued Water Scarcity Guidance document with associated water stress and drought indices/mapping



# Replenish

- “Replenish” is the manifestation of our community and watershed partnership work, with the aim to “off-set” at least as much water as the products we produce
- Working with the Water Footprint Network, The Nature Conservancy, World Business Council for Sustainable Development, WWF, Twente University, UNESCO-IHE and others to define water footprint methodologies and water off-sets



*We are engaged in over 120 community water projects in 50+ countries to protect and preserve water resources and help enable greater access to water and sanitation. Our partners include USAID, UN-HABITAT, CARE, UNDP, TNC, WWF, local governments and implementing NGOs*

# Calculating Replenish

Offsetting the water we use in finished product, through locally relevant projects that support communities and nature.

$$\boxed{\text{Total Water used in Manufacturing}^*} - \boxed{\text{Treated Wastewater}} = \boxed{\text{Product Volume and Amount to Replenish}}$$

\* Does not include the embedded water in our products from ingredients and packaging. However, the concept of “water footprints” is developing and considers upstream and end-use water

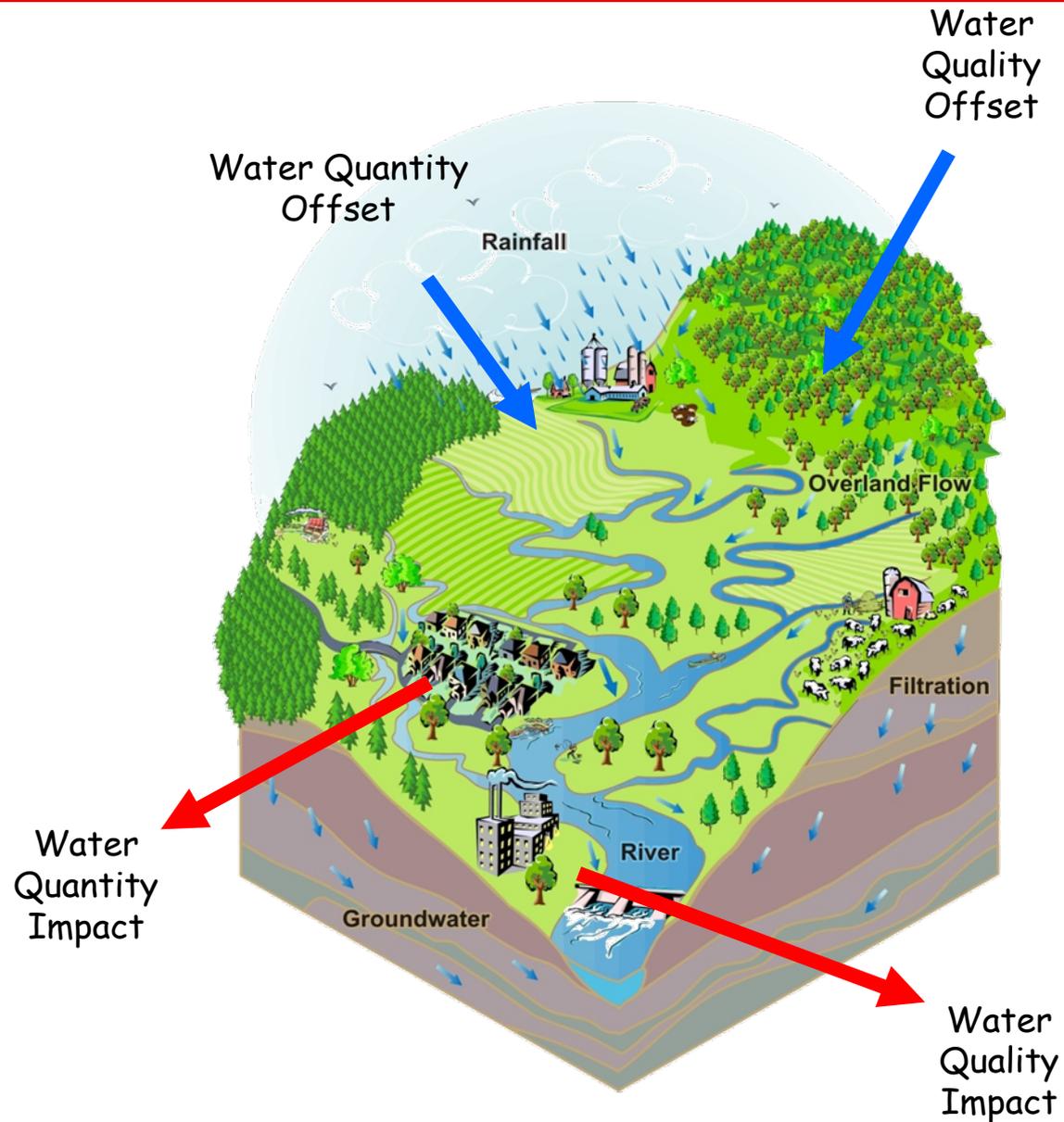
Based on 2007 data:

313 Billion liters of water were taken into plants to produce product;

184 Billion liters of water were returned to water bodies either directly or indirectly (via municipal systems); and

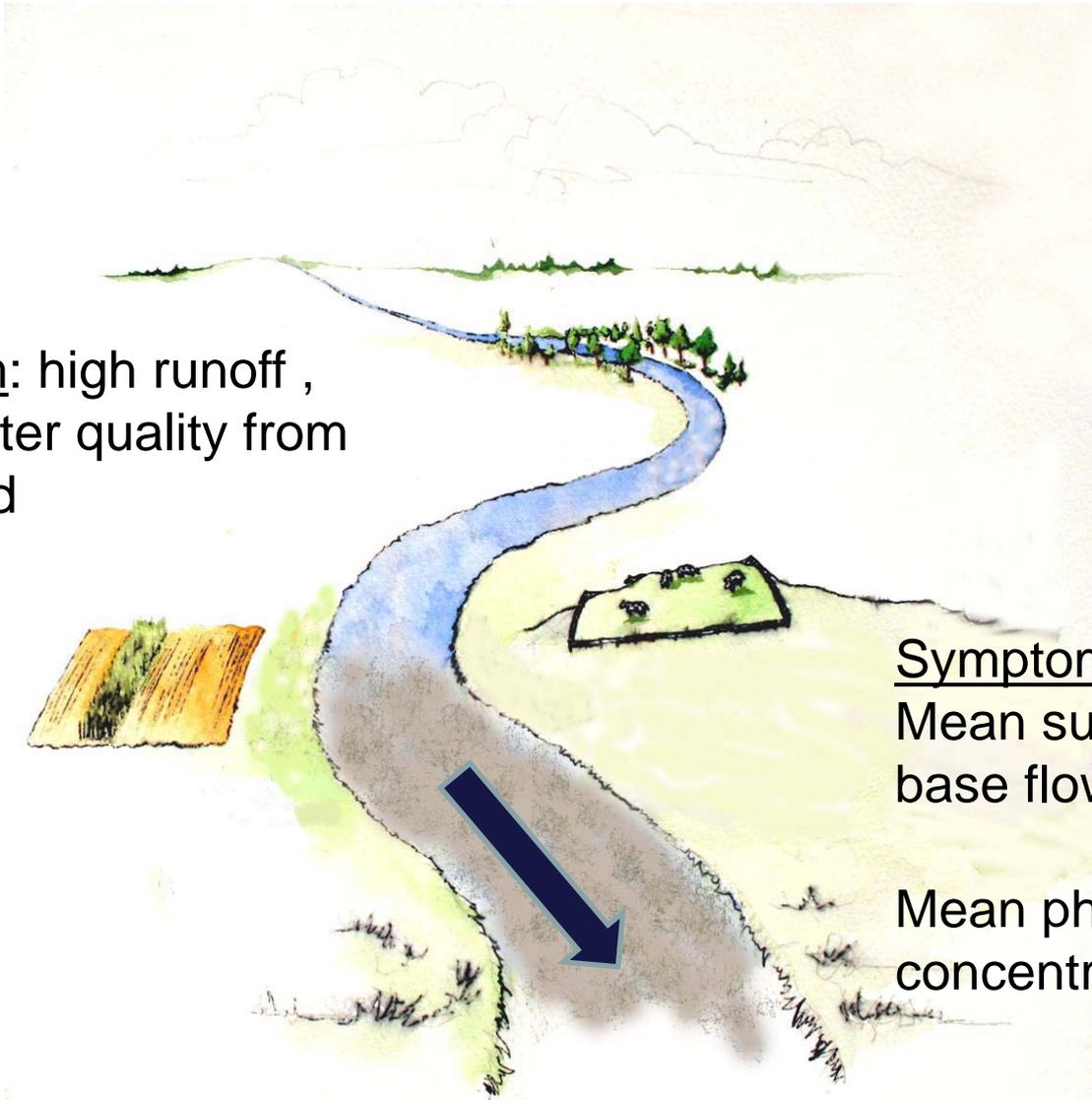
129 Billion liters of water went into finished product. 2007 Replenish target – our commitment grows with our product volume.

# Replenish



# Replenish “Off-set” Research: River Basin Conservation

Problem: high runoff ,  
poor water quality from  
farmland



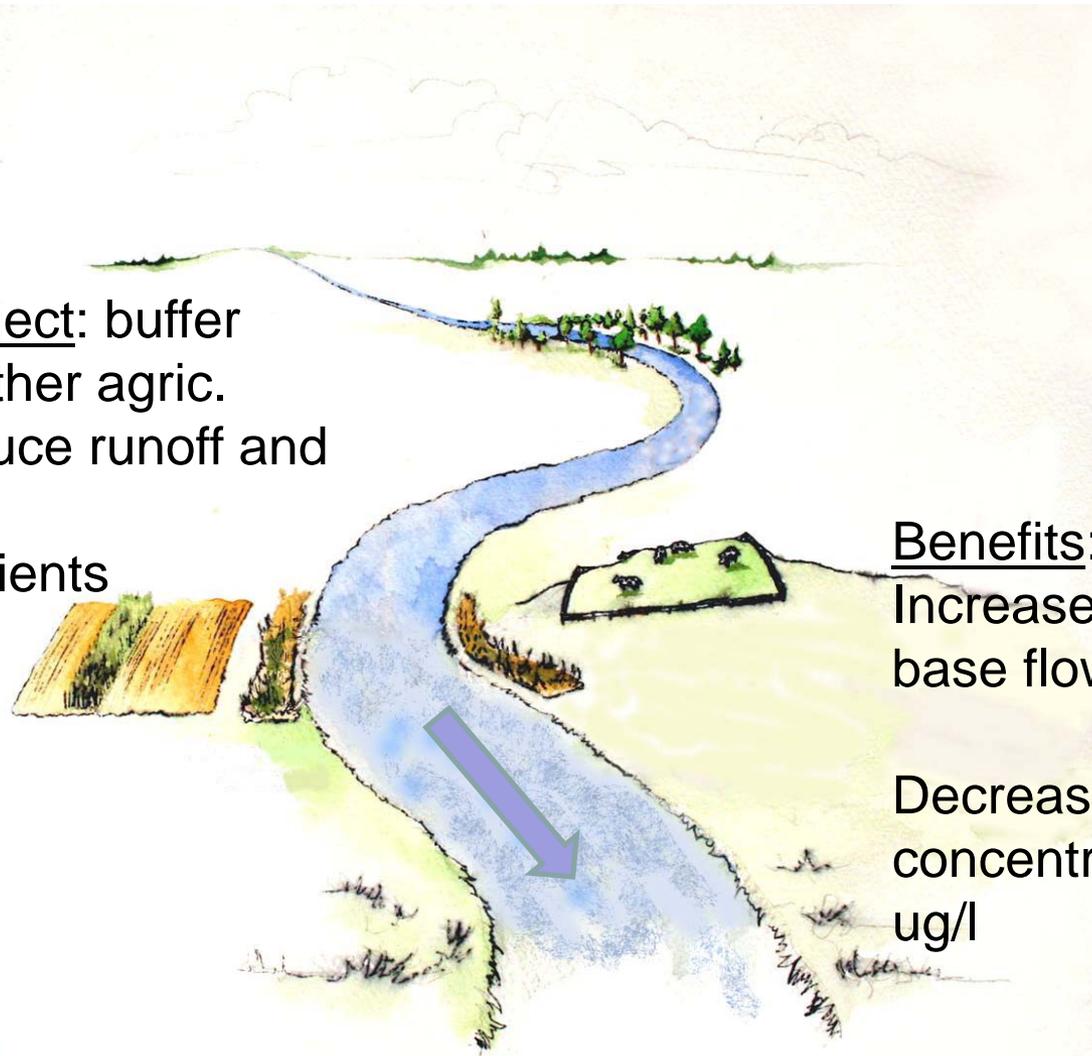
Symptoms:

Mean summer  
base flow: 75 cfs

Mean phosphorus  
concentration: 300 ug/l

# Replenish “Off-set” Research: River Basin Conservation

Offset Project: buffer strips, & other agric. BMPs reduce runoff and delivery of solids/nutrients



Benefits:  
Increased summer base flow to 150 cfs  
Decreased phosphorus concentration to 100 ug/l

# Water Footprint Network (WFN)

- Shared interest in promoting water stewardship
- The water footprint methodology offers a conceptually sound basis for an accounting system that can capture both direct and virtual water use in a uniform, consolidated metric.
- WFN is working to translate the theoretical water footprint concept into measurement tools and guidelines that are practical, applicable and generic.



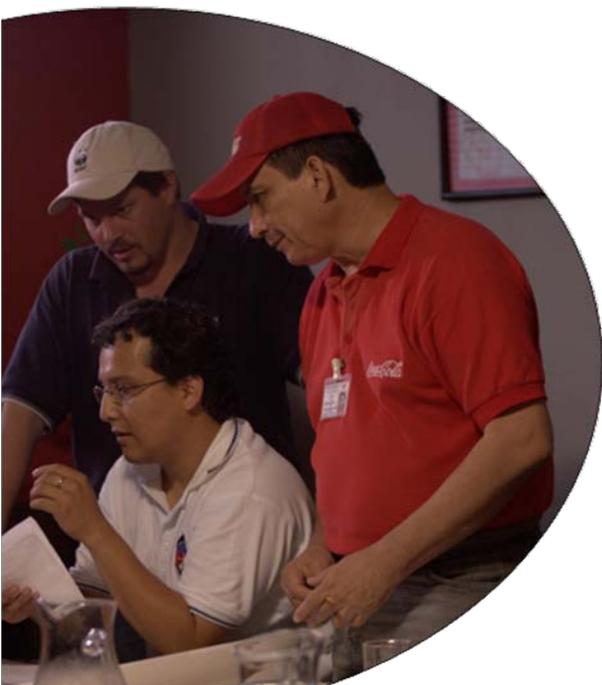
# WWF: A Transformational Partnership



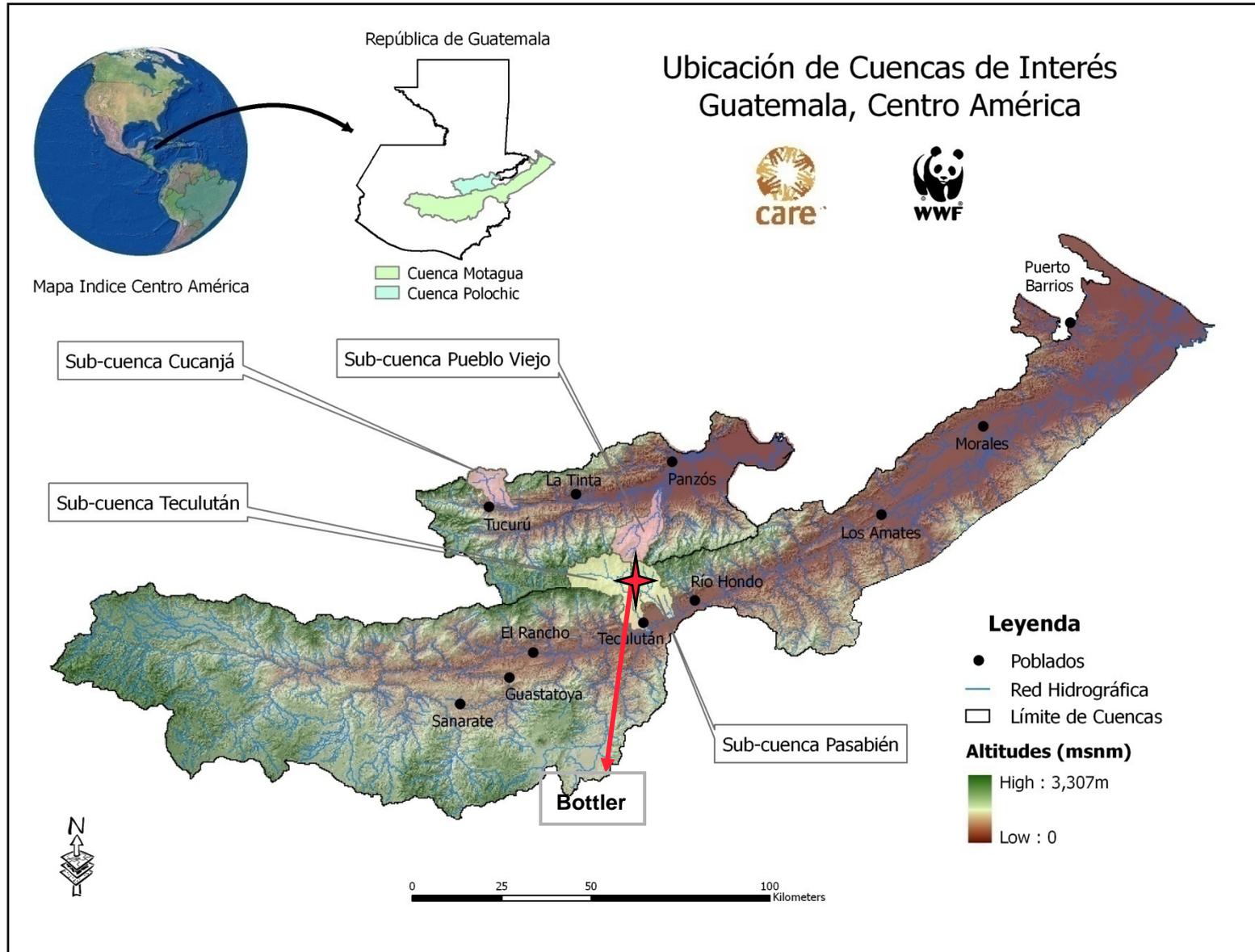
In 2007, we announced a multi-year partnership with WWF to combine our international strengths and resources to help conserve freshwater resources

## 2010 Objectives

- Measurably conserve seven key freshwater river basins
- Improve the efficiency of the Company's water use
- Support more efficient water use in TCCC's agricultural supply chain, beginning with sugar
- Decrease the company's carbon dioxide emissions and energy use
- Inspire a global movement engaging industry and individuals to support conservation of freshwater ecosystems, species and water resources



# Meso-American Reef Conservation Project



# Using Technology to Understand Risk Exposure – What is Next?

Plant Locations

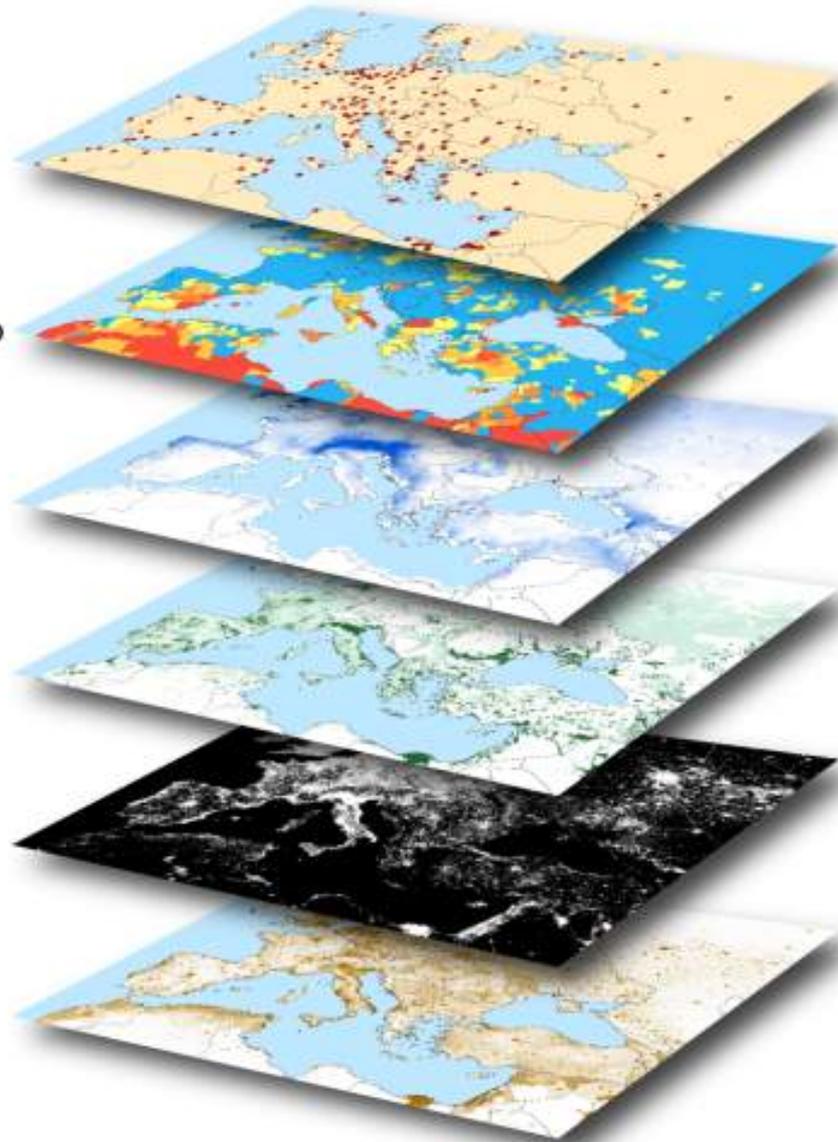
Water Withdrawal Ratio

Runoff

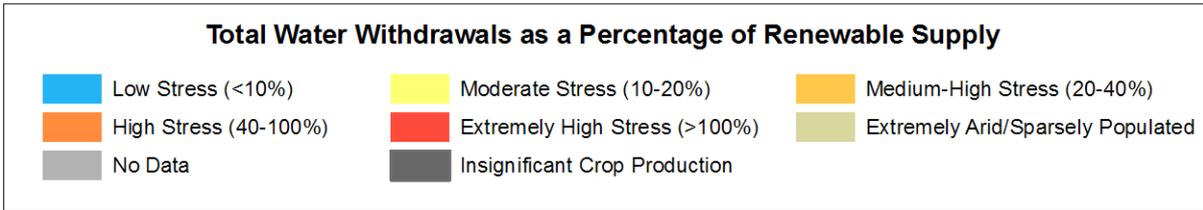
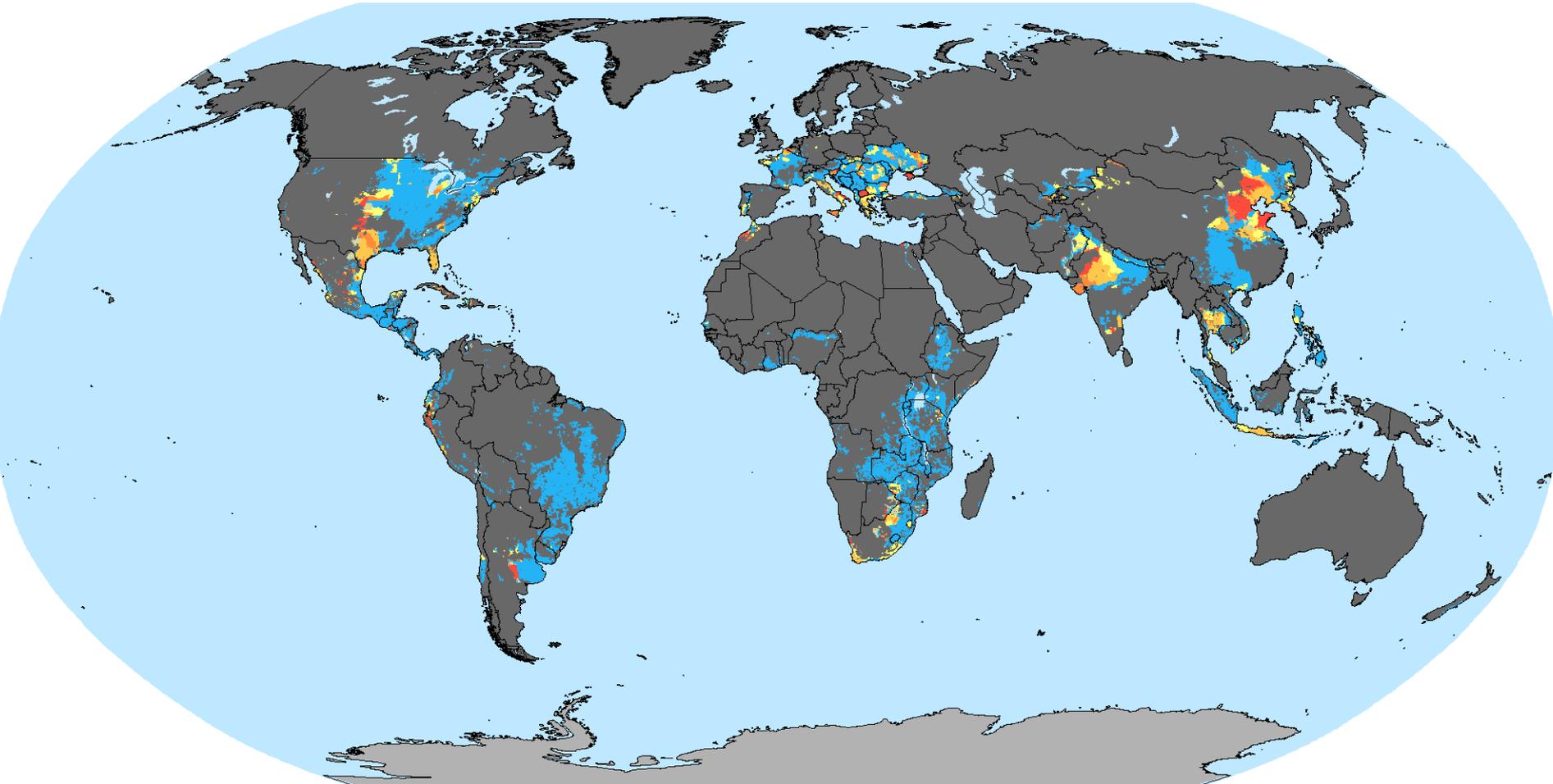
Irrigation

Night Lights

Population



# Global Maize Cultivation and Water Stress



# Agricultural Supply Chain: Water Footprints and Sustainability

## *Working together to:*

1. Calculate the amount of virtual water in the supply chain (footprint)
2. Assess impacts of water footprint (water stress, pollution)
3. Find ways to reduce the impacts in the context of the wider water challenges (Poverty Reduction, Water Supply etc)

## *TCCC Key Issue - Sugar*



Better Sugarcane Initiative



India Sugar Project



El Salvador Sugar & Labor



## *Multi-stakeholder Initiatives*



Sustainable Agriculture Program



Sustainable Agriculture Initiative



Water Footprint Network