

# Water Stewardship Coca-Cola North America

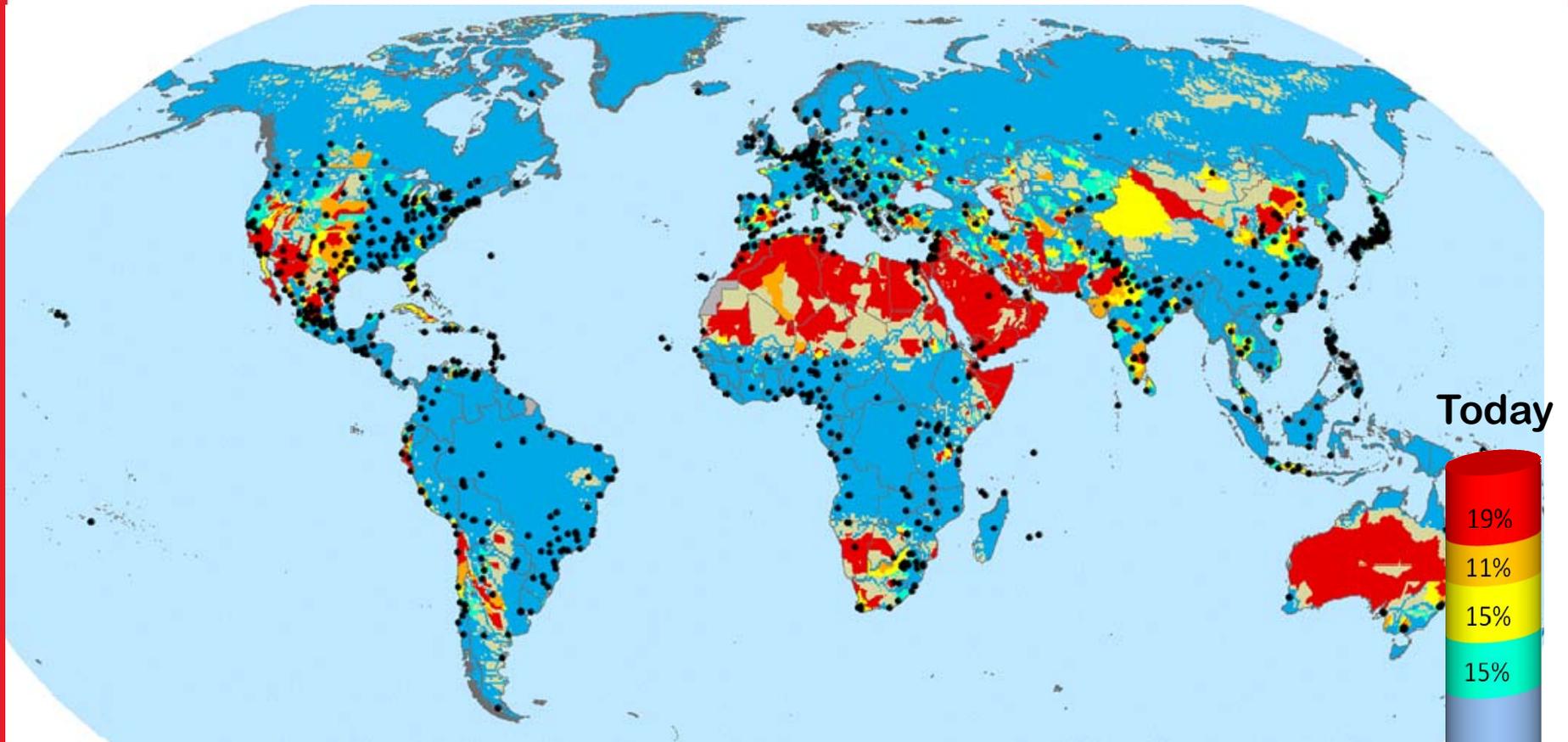
Bruce Karas



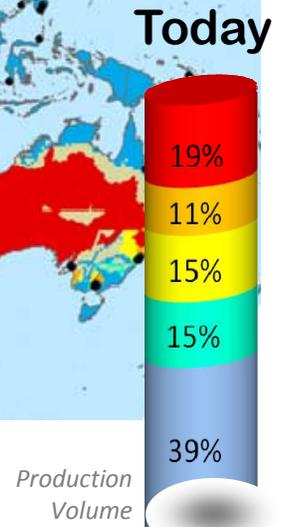
Without a **healthy planet** and **sustainable communities**, there is no healthy business.

We all need to take actions to protect the planet we share.

# Assess: TCCC Global Water Stress: 2008 Update



Total Water Withdrawals as a Percentage of Renewable Supply



# 2020: Water Megatrends and Effects

## MEGATRENDS

### **POPULATION GROWTH**

Expected to increase by  
1.5 billion to 8 billion by  
2020

### **CLIMATE CHANGE**

0.8° C temperature  
increase by 2020

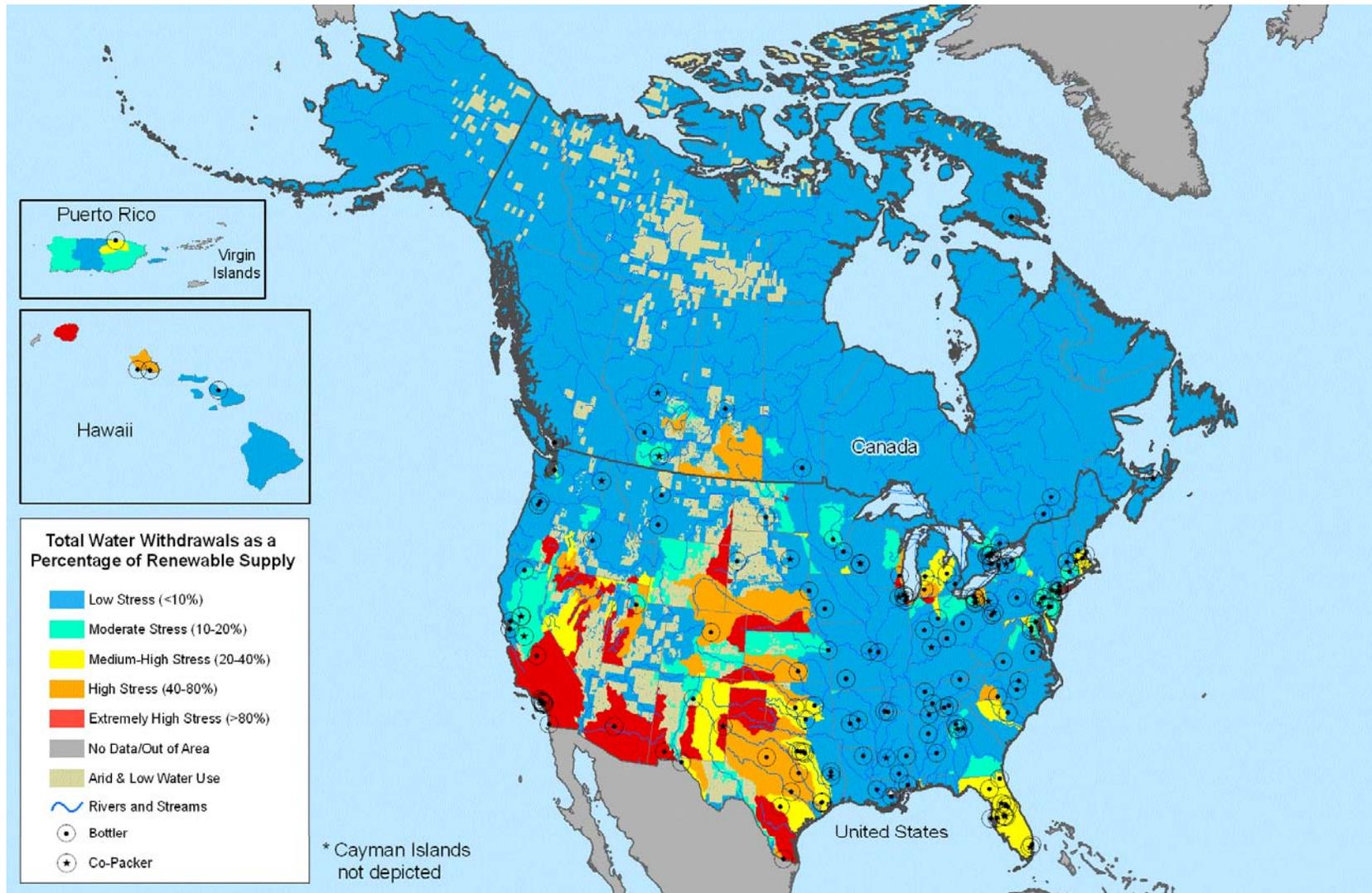
### **GLOBAL DEVELOPMENT**

Dramatic increase in  
number of developed  
economies

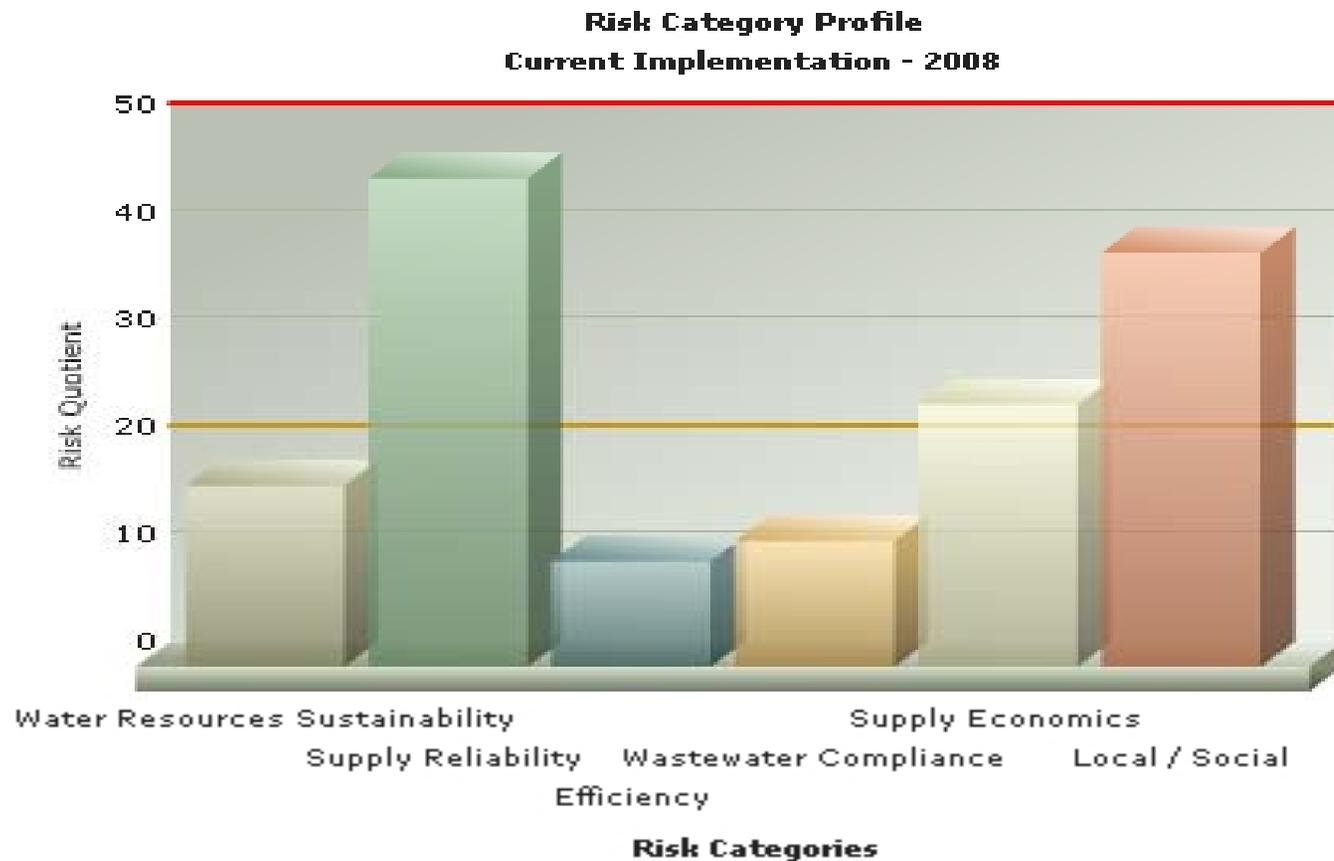
## EFFECTS

1. 2/3 of world population in severe water stress
  2. 1/3 of world land area in severe water stress
- Significant water quality degradation
  - Precipitation patterns change: more droughts and floods
  - Significant increase in competition for freshwater
  - More aggressive allocation , increased prices, conflict potential
  - Two billion more urban residents by 2030
  - Variable adaptation by public sector
  - Water infrastructure needs require \$1 trillion+ between now and 2025

# Assess: North America Operations and Water Withdrawal Ratio



# Assessment: Global Water Risk Assessment Sample Plant Water Risk Profile



# Our Water Conservation Goal

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

**Water Efficiency**  
**20% improvement by 2012**

RECYCLE

**Stringent Wastewater Treatment Standards**  
**NA 100% Compliance with Company Standards**

REPLENISH

**Support Healthy watersheds and sustainable  
community water programs**  
**33 active watershed partnerships in the US**

# Reduce: Improve Water Efficiency in the Plant

reduce

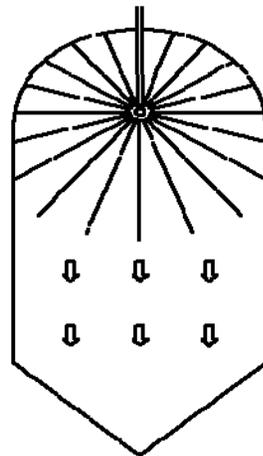
recycle

replenish

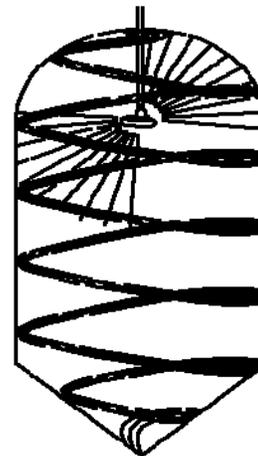
**Goal:** Be the most efficient water user among peer companies. Reduce water consumption by 20% by 2012 (baseline 2004).

**U.S. Coca-Cola System** is the most efficient, saving an estimated 2.6 billion gallons of water through reduction efforts across all facilities. Improved water efficiency by 8 percent since the 2004 baseline.

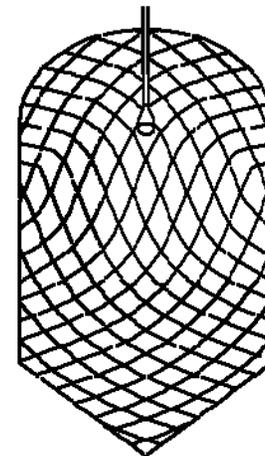
*Challenge  
Convention*



Static spray ball



Rotating spray head

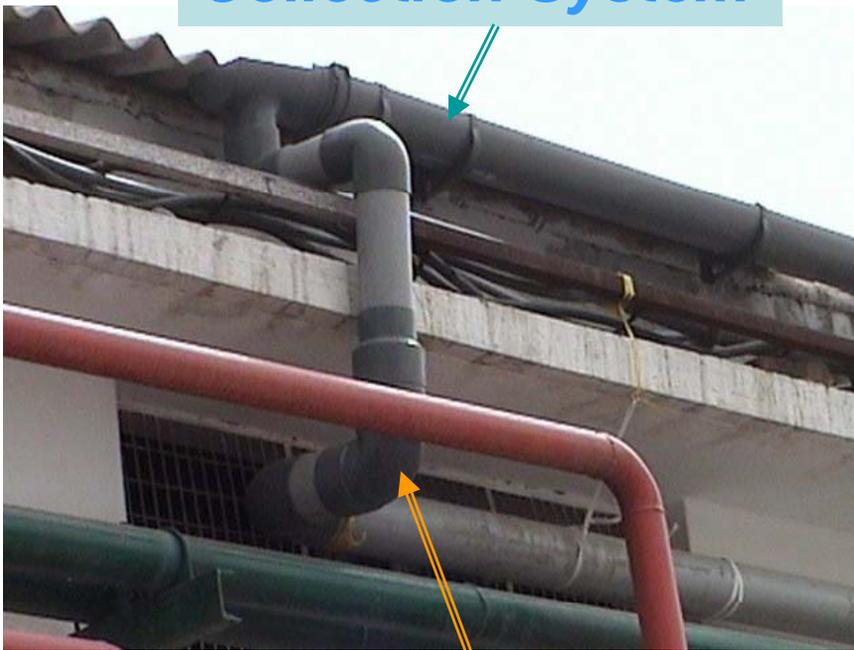


Rotating jet head



# Innovate - Roof Rain Water Harvesting

*Collection System*

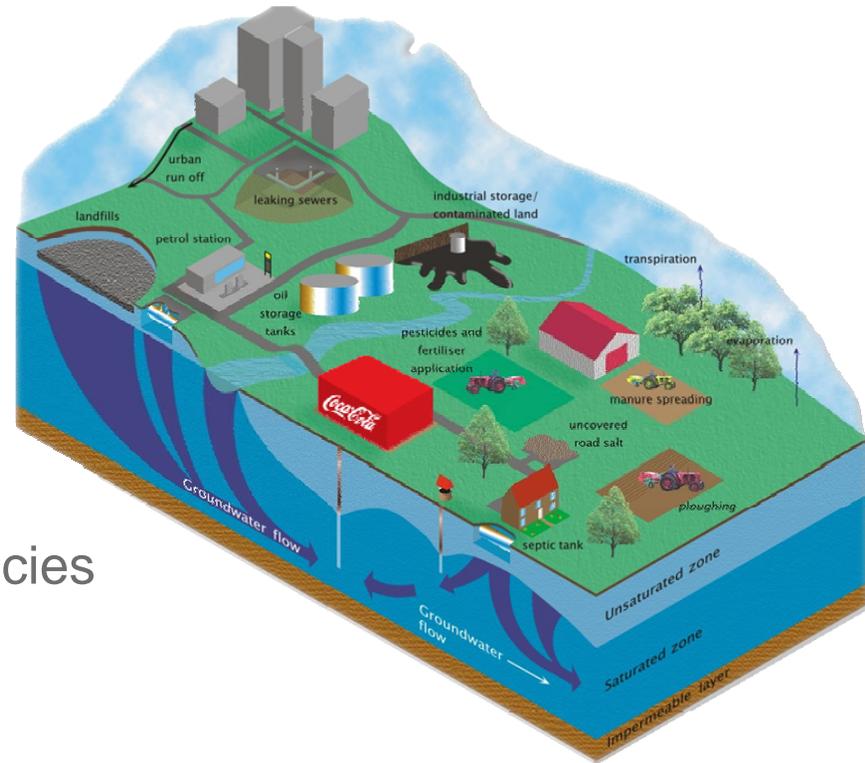


*Transportation System*

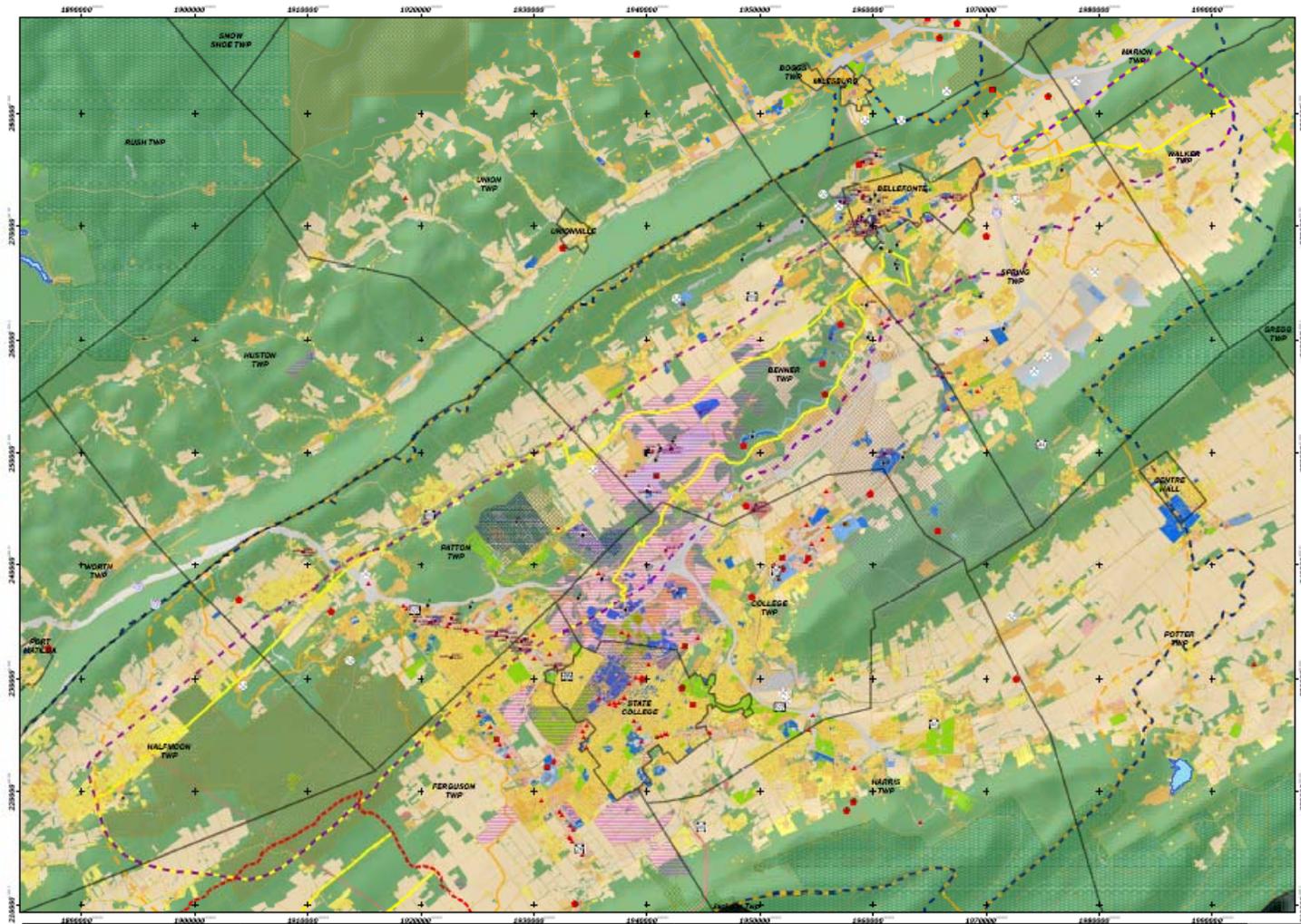
- Increase capture and use of Rain Water for non-product uses
- Displacement of potable water from utility
- Capture and use of other water streams for re-use – ex. HVAC Condensate

# Assess: Source Vulnerability Assessment Process

- SVA Process Includes:
  - Hydrology/Hydrogeology
  - Land use
    - Pollution sources
    - Competing users
  - Regional Water Supply Plans
  - Climatic Effects
    - i.e., drought susceptibility
  - Water Rights, Permits and Policies
  - Social/Community Issues
- Plant Water Resource Management Team
- **Output** – Source Protection Plan

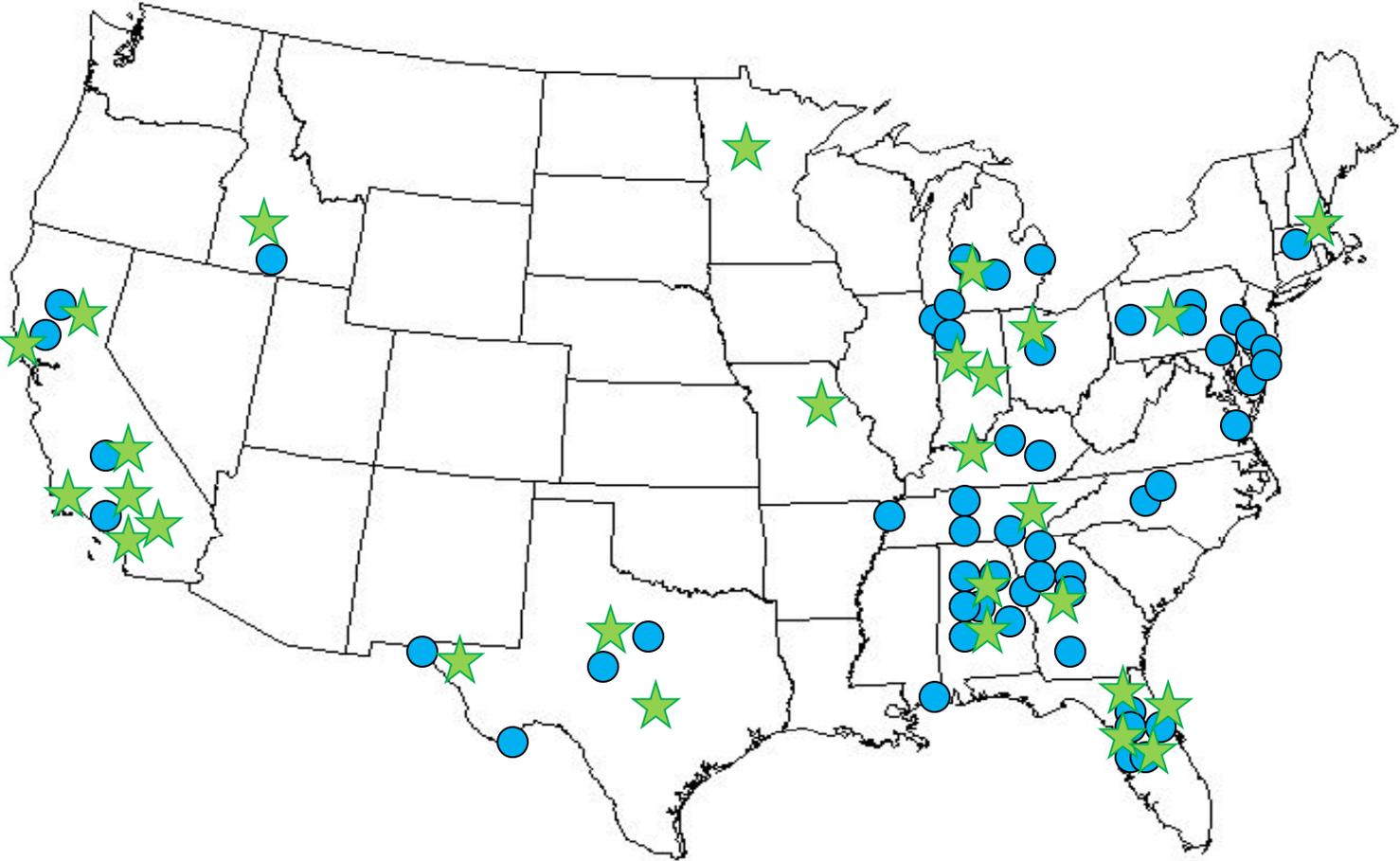


# SVA: Evaluate Land Use and Impacts to Watershed

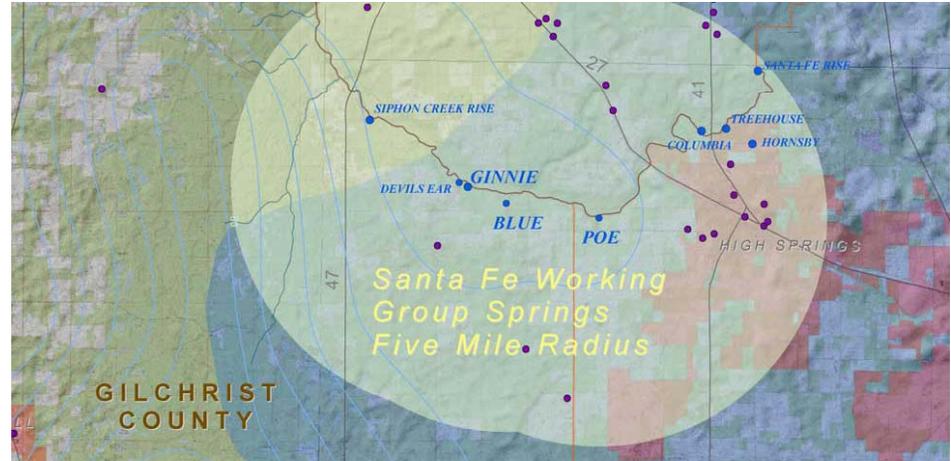


# Locations of CCNA Watershed Partnerships

reduce    recycle    **replenish**



# Partnerships are Vital



**Bellefonte Borough  
Authority**



*ClearWater Conservancy*



# Watershed Partnerships Can Replenish Water Sources

reduce

recycle

replenish

North America system has 33 active watershed projects

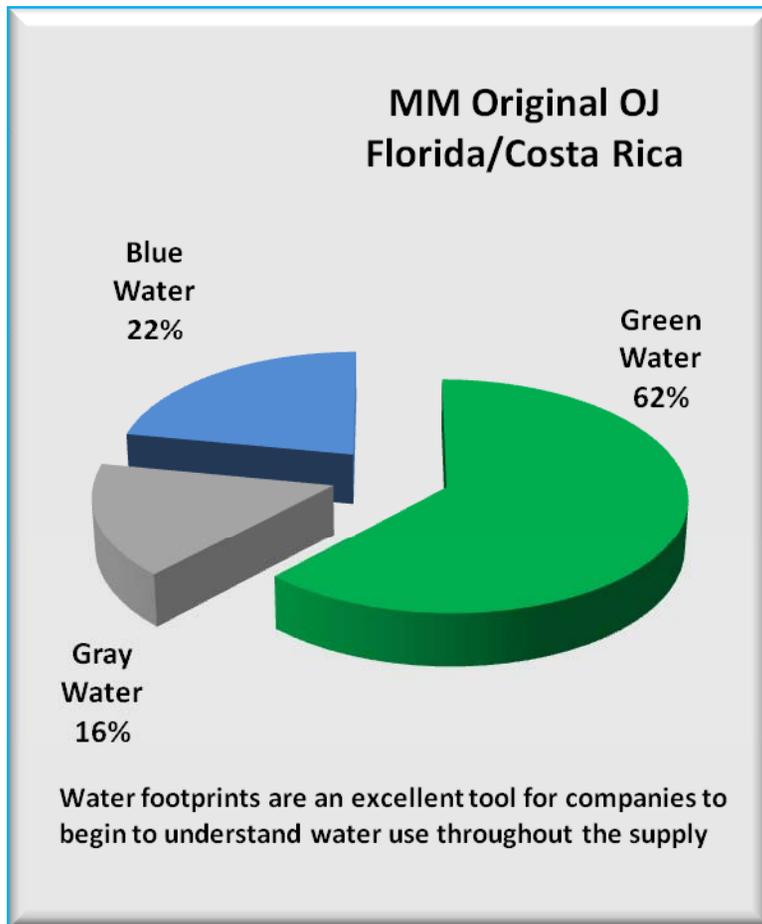
## *Example*

### Flint River Basin partnership with The Nature Conservancy



- Funded by the TCCC Foundation
- Variable rate irrigation
- Reducing farm water use by 17%
- Project saves hundreds of millions of gallons of water per year

# Water Footprinting Methods Development



## Product Water Footprint Assessments

- 3 Pilot Studies conducted
  - Broad Collaboration with The Nature Conservancy and others
  - Participation in Water Footprint Network
- **Ability to disaggregate water use by component and location**
  - **The largest portion of the product water footprints assessed came from the field, not the factory**
  - **Businesses must manage their direct/operational impacts on local water resources;**
  - **Water consumption must be considered in the context of the local watershed and with the cumulative effect of all uses of the shared water resource;**

# Water Stewardship

- Continued focus on managing water efficiency in – plant
- Continued innovation on ways to re-use water streams in non-product applications in plant processes
  - leads to reduced consumption of potable water
- Water sustainability is embodied in work that takes place outside of operations...
  - in local watersheds
  - Source Water Vulnerability Assessments
  - Projects that replenish water in communities
  - Community Watershed Partnerships
  - Development of water footprinting methodologies
  - Sustainable Agriculture