A Comprehensive Approach to Water Stewardship

White River Alliance

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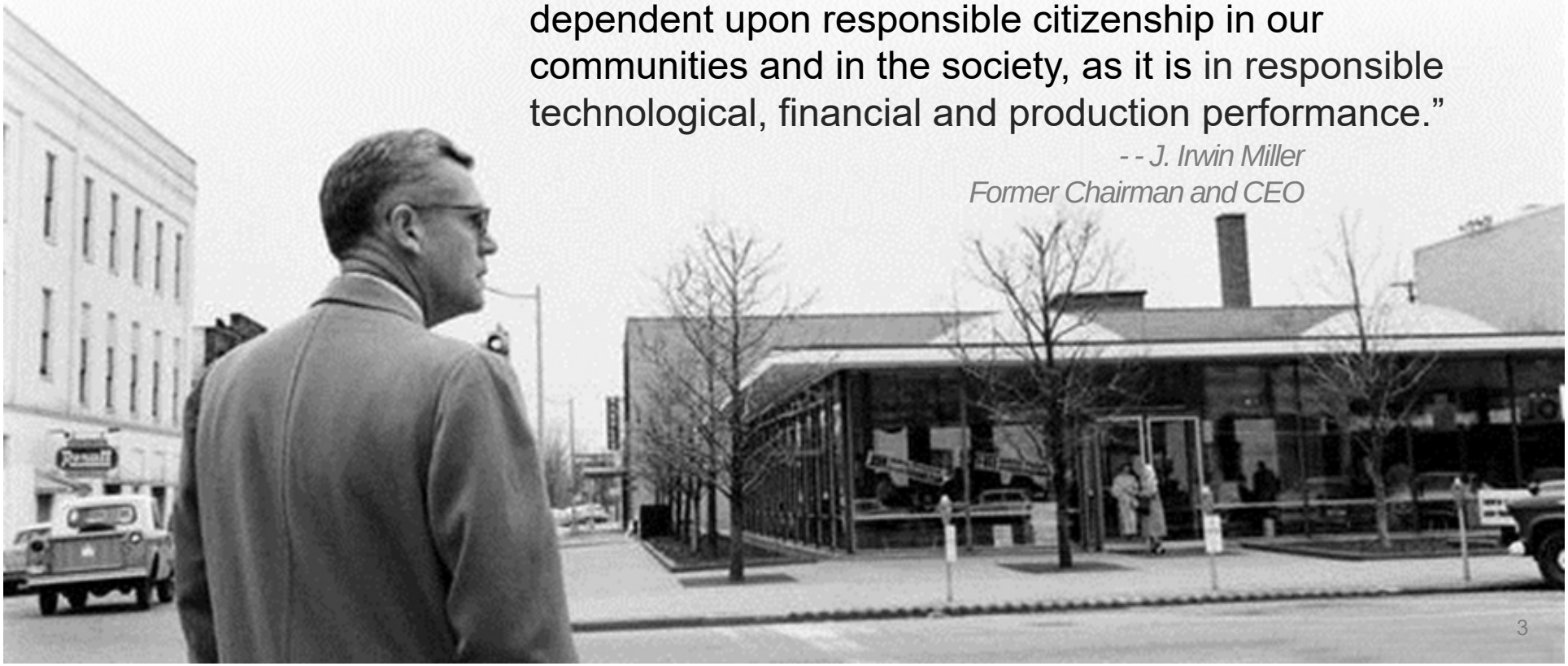
Agenda

- Cummins Inc.
- Overview of Global Water Risk
- CMI Goals and Strategy
- Water Management and Conservation
- Water Neutrality
- Summary
- Questions

Cummins Legacy and Core Values

"…*we believe that our survival in the very long run* is as dependent upon responsible citizenship in our communities and in the society, as it is in responsible technological, financial and production performance."

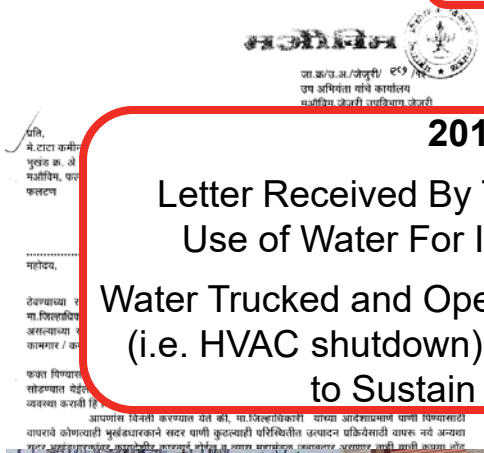
- - J. Irwin Miller
Former Chairman and CEO




Making Lives Better by Powering a More Prosperous World
Economies
Planet
Communities
Natural Resources
Natural Resources
Financial Stability & Well-being
Climate, Biodiversity & Ecosystem Well-being
Health & Well-being
Results matter because our existence depends on meeting the needs of our stakeholders
Communities Customers Employees Partners Shareholders Suppliers

Global Water Risk

Water Risk is Real for Cummins



2012

Letter Received By TCL-2 Prohibiting Use of Water For Industrial Purposes

Water Trucked and Operational Adjustments (i.e. HVAC shutdown) Required for 25 days to Sustain Production

2007 – Rocky Mount, NC (RMEP)

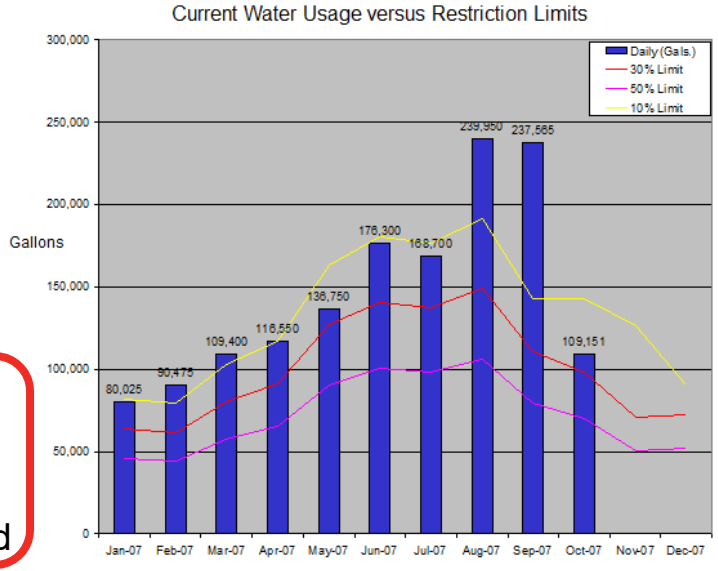
Faced 30 – 50% Mandatory Water Reductions That Would Have Impacted Production if Drought Continued

San Luis Potosi Aquifer Deficits

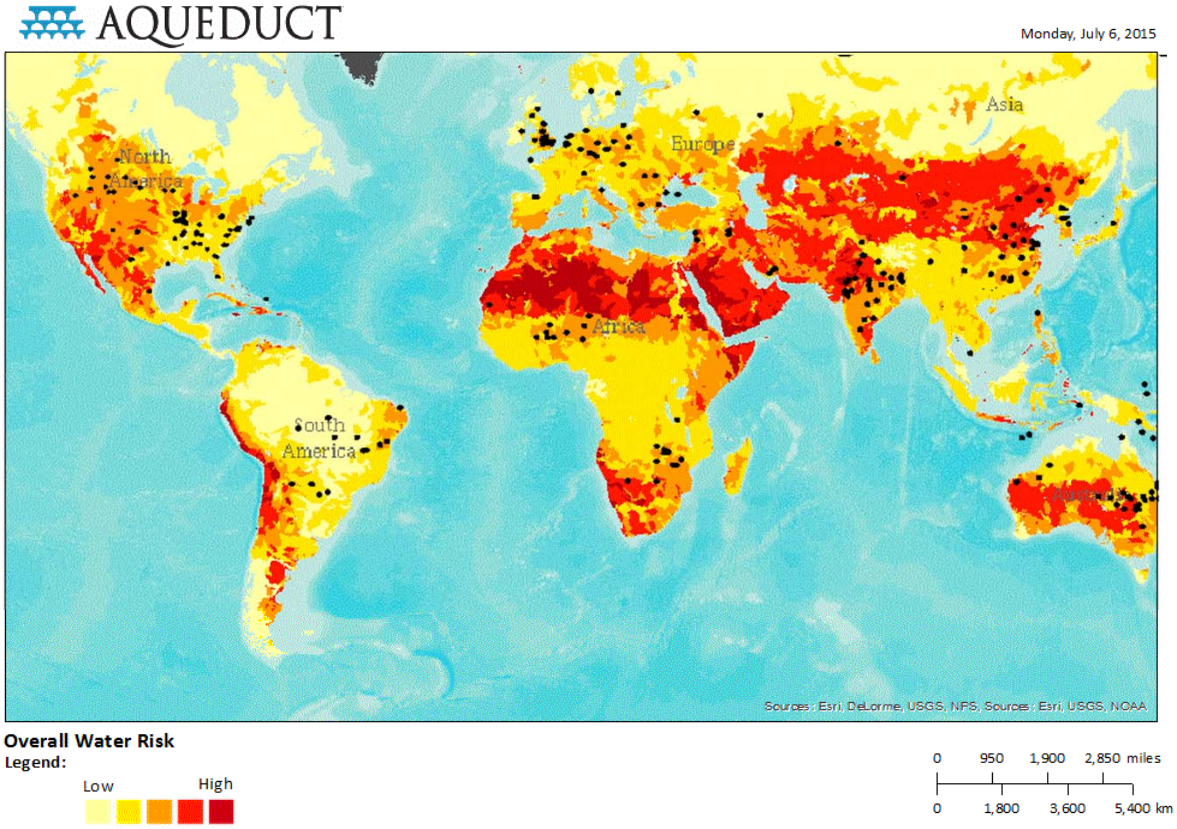
Groundwater Declining 1 to 2 meters per Year

Source: Own illustration based on CAN, 2002; ref. in COTAS 2002

Withdrawal	120.6	Millions m^3/year
Recharge	78.1	Millions m^3/year
Deficit	-42.5	Millions m^3/year

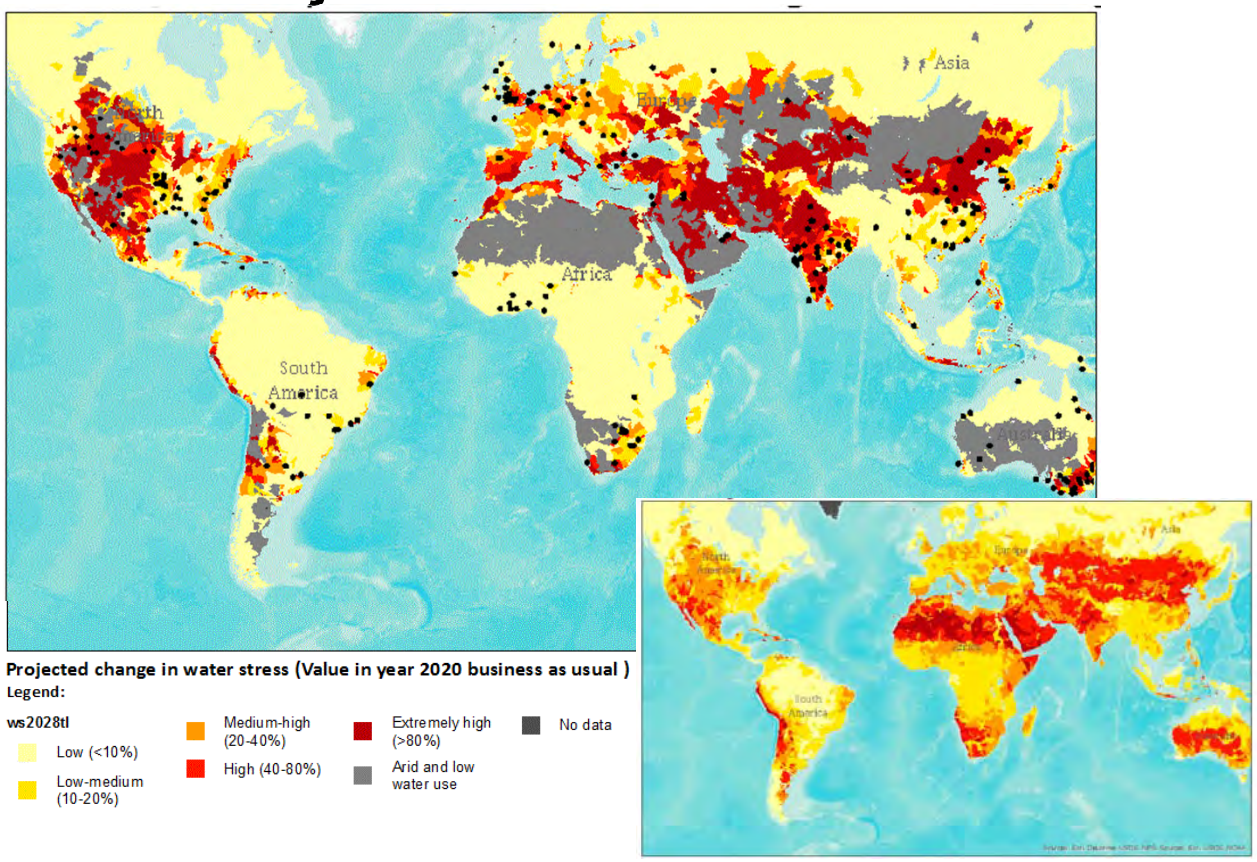


Current Water Stress (published 2014)



Sources: WRI Aqueduct 2014 http://www.wri.org/applications/maps/aqueduct-atlas/#x=8.00&y=0.30&s=ws!40!28!t&t=waterrisk&w=def&g=0&i=BWS-16!WSV-16!SV-2!HFO-4!DRO-4!STOR-8!GW-8!WRI-4!ECOS-2!MC-4!WCG-8!ECOV-2&tr=ind-1!prj-1&l=3&b=terrain&m=projected

2020 Projected Water Stress



Projected change in water stress (Value in year 2020 business as usual)

Legend:

ws2028tl

- Low (<10%)
- Low-medium (10-20%)
- Medium-high (20-40%)
- High (40-80%)
- Extremely high (>80%)
- Arid and low water use
- No data

(2014)

Sources: WRI Aqueduct 2014 http://www.wri.org/applications/maps/aqueduct-atlas/#x=8.00&y=0.30&s=ws!40!28!t&t=waterrisk&w=def&g=0&i=BWS-16!WSV-16!SV-2!HFO-4!DRO-4!STOR-8!GW-8!WRI-4!ECOS-2!MC-4!WCG-8!ECOV-2&tr=ind-1!prj-1&l=3&b=terrain&m=projected

Questions for you

Can your facility operate without water?

Does it feel responsible to consume water from your community when not all members have access to clean water?

Can you operate if your suppliers do not have water?

What if suppliers can't provide parts because they don't have water?

Have you identified water users that can be discontinued in the event of a restriction of water?

Goals & Strategy

Cummins Environmental Sustainability Plan

PRIORITY AREAS

Materials & Fuel Efficiency

Innovative design for efficient use of fuel and raw materials

Facilities / Operations

Reduce energy, water, and waste footprint

Transportation

Use most efficient method and mode to move goods across Cummins network

Products In-Use

Partner with customers to improve fuel efficiency of our products in use

3 GOALS

1

Reduce energy use and greenhouse gas emissions by 25% and 27%, respectively, by 2015 against a 2005 baseline

2

Reduce direct water use by 50% and achieve water neutrality at 15 sites by 2020

3

Increase recycling rate from 88% to 95% and achieve zero disposal at 30 sites by 2020

EMPLOYEE AND COMMUNITY ENGAGEMENT AND COMMUNICATE ACTIONS

Water stewardship at Cummins

Water Conservation

2020 Goal: *Reduce the water use intensity (normalized to labor hours worked) in our facilities by 50% as compared to a 2010 baseline.*

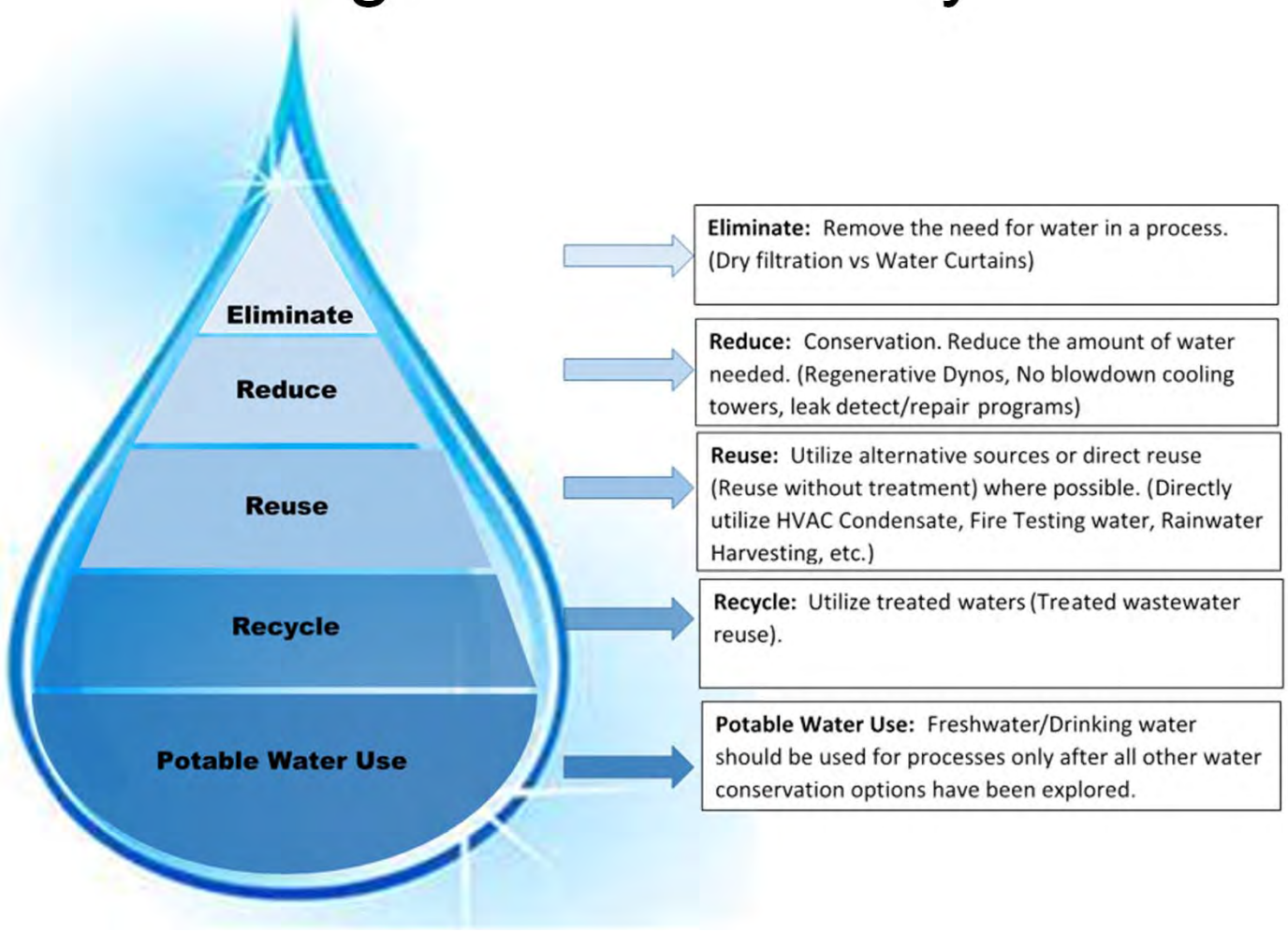
Community Water Engagement

2020 Goal: Achieve water neutrality (off-set the water we use) for 15 facilities in India, China, Brazil, South Africa, and Mexico by doing water projects (water quality, conservation, sustainable supplies) with our communities.

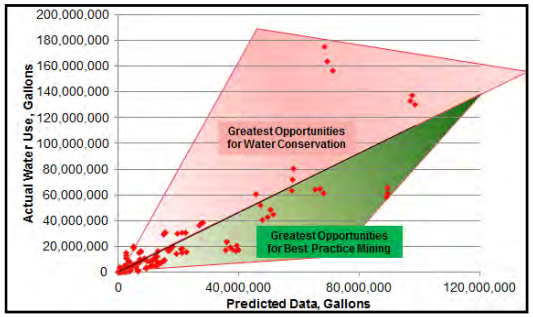
A Complete Approach

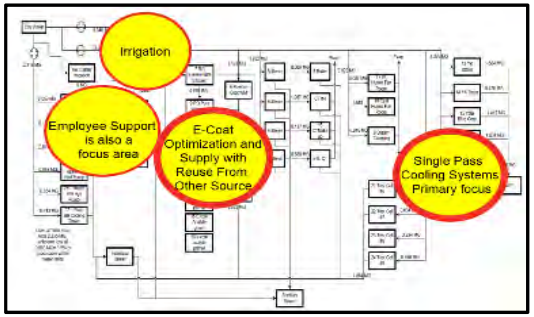
Water Management & Conservation

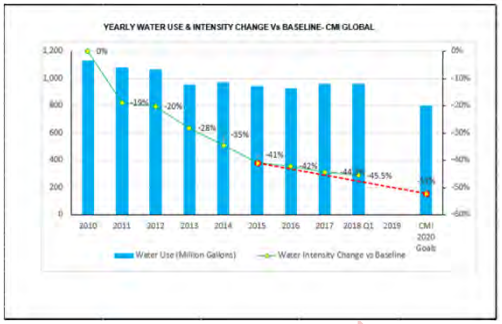
Water Management Hierarchy



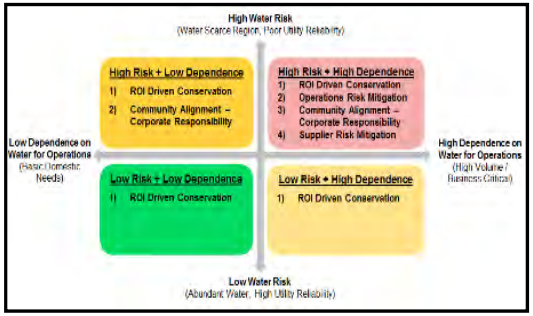
Conservation: Make the Complex Simple

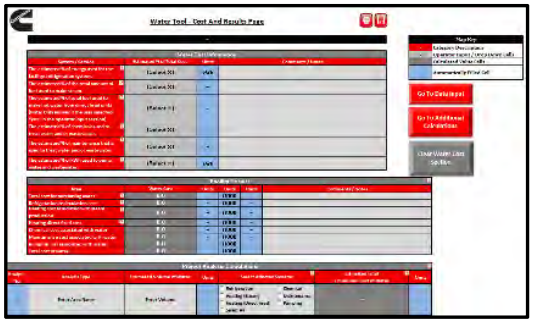


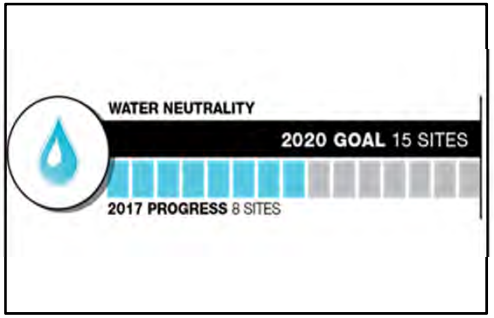




Prioritize → **Consult** → **Achieve**

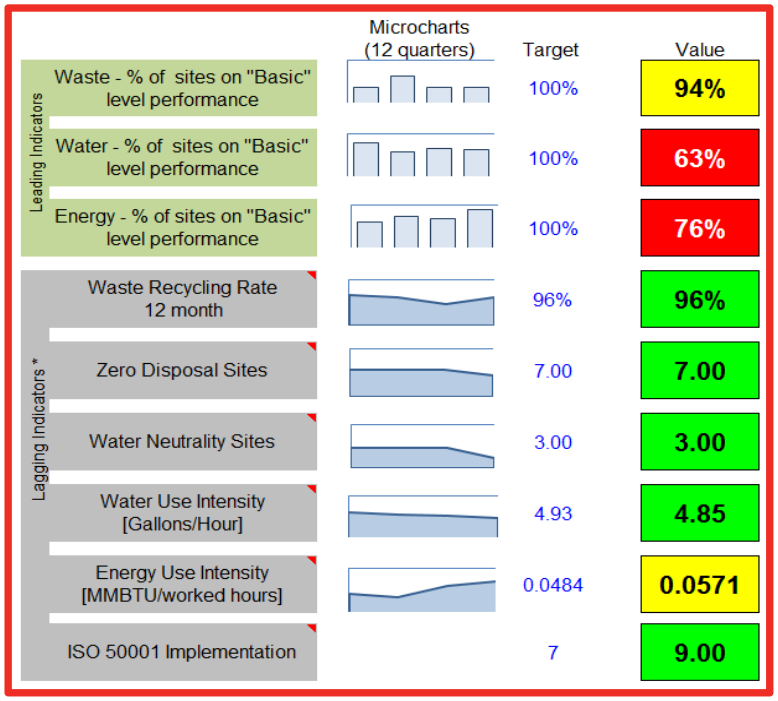




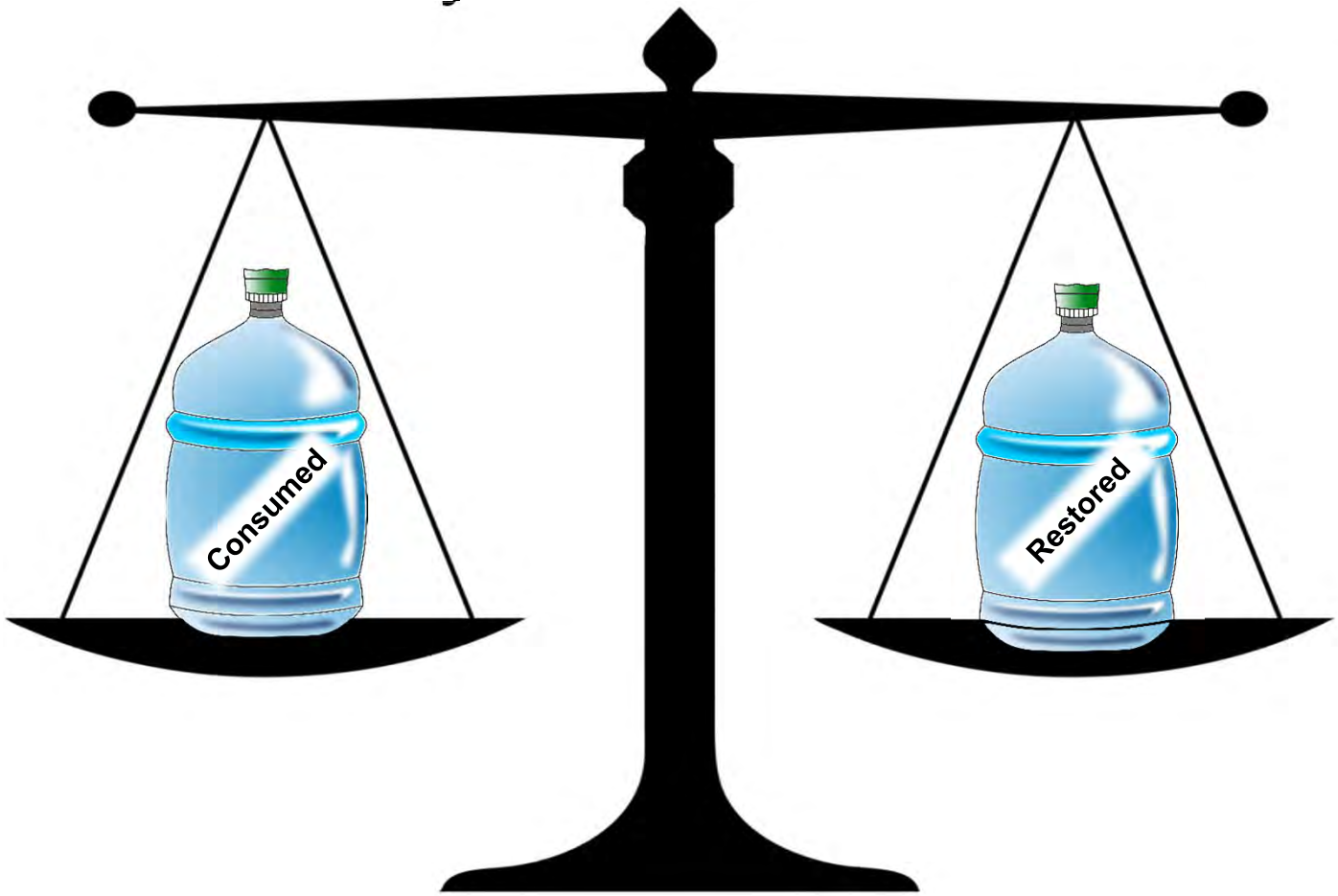


Water Performance Roadmap

- Integrate water requirements into Management System (ISO 14001 and 50001)
  - PDCA approach
  - Energy Champion program morphed into Environmental Champions
  - Tools are similar for each media (Metering, Mass Balances, Tool Kits)
  - Water related procedures, engineering and administrative controls become sustainable and auditable
  - Media roadmaps included in Objectives and Targets
  - Water/ Energy nexus
  - Holistic approach balances impacts (positive and negative)
- Media roadmaps describing controls requirements
  - Basic Level
  - Standard Level
  - Benchmark Level
- Capital management process
  - Hopper approach including all media
  - Drives campaigns (metering, leaks, etc.)
  - Supports environmental impact not depending on ROI
- Scorecards shared to ensure progress
- Internally and externally audited



Water Neutrality



What is Water Neutral?

Water neutrality is simply defined as making ***"more water available through community water projects, than the net amount of water a Cummins' facility uses".*** Results are validated to ensure accurate reporting and complete transparency.

To achieve this goal, Cummins will:

- conserve water in our own operations;
- develop an understanding of our community's water opportunities and challenges;
- utilize the expertise from our water conservation efforts, to support our communities;
- help our communities identify, implement and sustain improved water supply and water management approaches;
- strive to make more water available in our water stressed communities than we use in our operations as an incremental target; and
- continue partnering with our communities until our aspirational goal of adequate, safe, and sustainable water supplies for everyone is achieved.

Water Neutrality Project Guidance

Guiding Principles for Community Water Projects

Our Projects and Approach to Community Water Engagement Will:

- ***Be Inclusive*** – we cannot act alone and must work collectively with key stakeholders in promoting sustainable water management with communities where we operate.
- ***Use a Watershed Perspective*** - social, cultural, and environmental linkages within a defined watershed must be a fundamental part of identifying and implementing sustainable projects.
- ***Be Locally Relevant*** – projects should adhere to a 'pull' strategy from the community based upon understanding local priorities, accepted practices, and key stakeholders.
- ***Have Measureable Impacts*** - pursue meaningful 'action' rather than 'words' which is demonstrated through measurable results and community benefits.
- ***Be Pursued with Passion and Determination*** – the manner in which we pursue projects will leave no doubt as to our commitment to long-term sustainability of water resources and being 'part of the solution'.
- ***Involve Education and Awareness*** – every engagement is an opportunity to learn, share, remove barriers, and advance understanding of how to effectively protect this precious resource at a community level.
- ***Be Sustainable*** – we will strive for long-term sustainability of projects by pursuing approaches (methods) that result in communities desiring greater ownership of the project.

Water Neutrality: Completed Projects

Ecosystem Recovery

Shanghai Houtan Park (2017)

Total benefit is **60 MG/yr.**

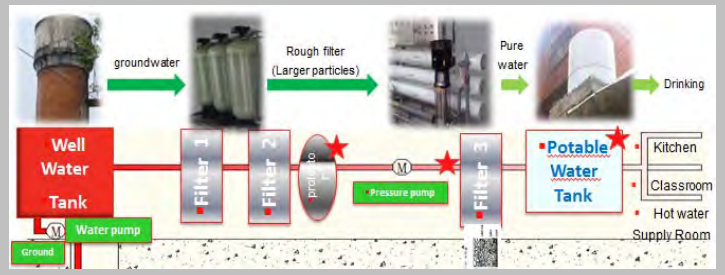
Tankers Not Needed First Time in 40 Years. 10,000,000 L Storage Added

Manjarsumbha, India Village Water Management Project (2012)

5,000,000 L Reservoir

Car & General /Cummins/Lions Club Water Pan Project (2012)

Kenya – East Africa



China Recon – Zhuji Middle School (2013)

Water purification systems to supply water to a middle school serving 2,982 students, an estimated 7.8 million liters.

In Summary: Success Requires a Complete Approach

Questions?