

Global Sustainability Summit

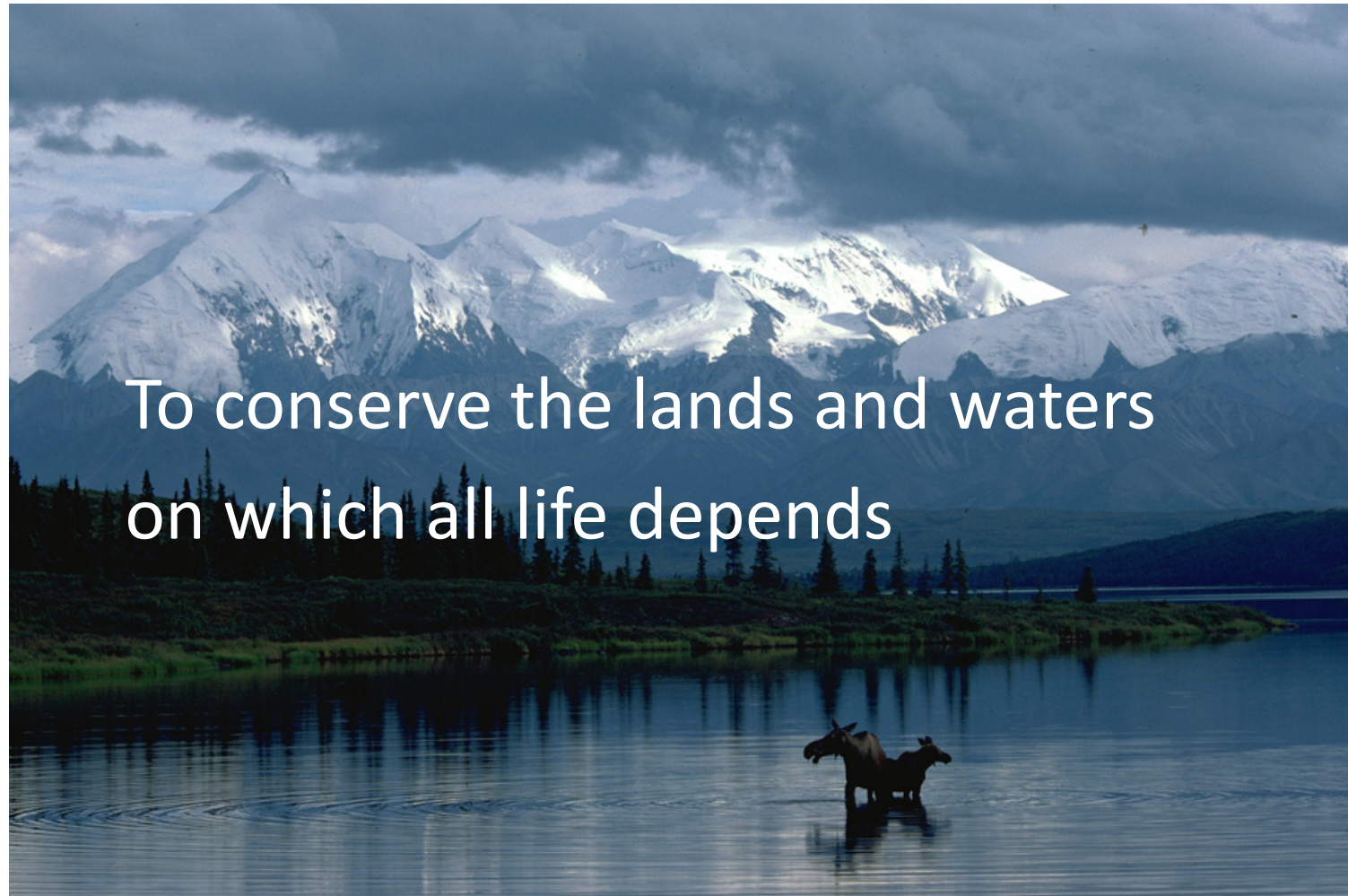
UNCOVER THE POSSIBILITIES



Corporate Freshwater Stewardship

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Nearly 3 billion people experience recurring water shortages today – most will soon.

Source: United Nations FAO

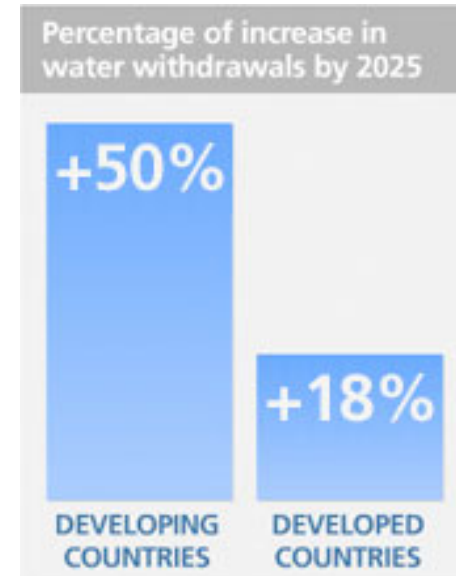
Water scarcity growth




In 2030, **47%** of world population will be living in areas of high water stress



Water consumption is growing faster than population...by 2030 global demand could outstrip current, accessible supply by 40%.





Some of the world's largest river basins
run dry before reaching the ocean.

Colorado
Rio Grande
Indus
Yellow
Murray Darling



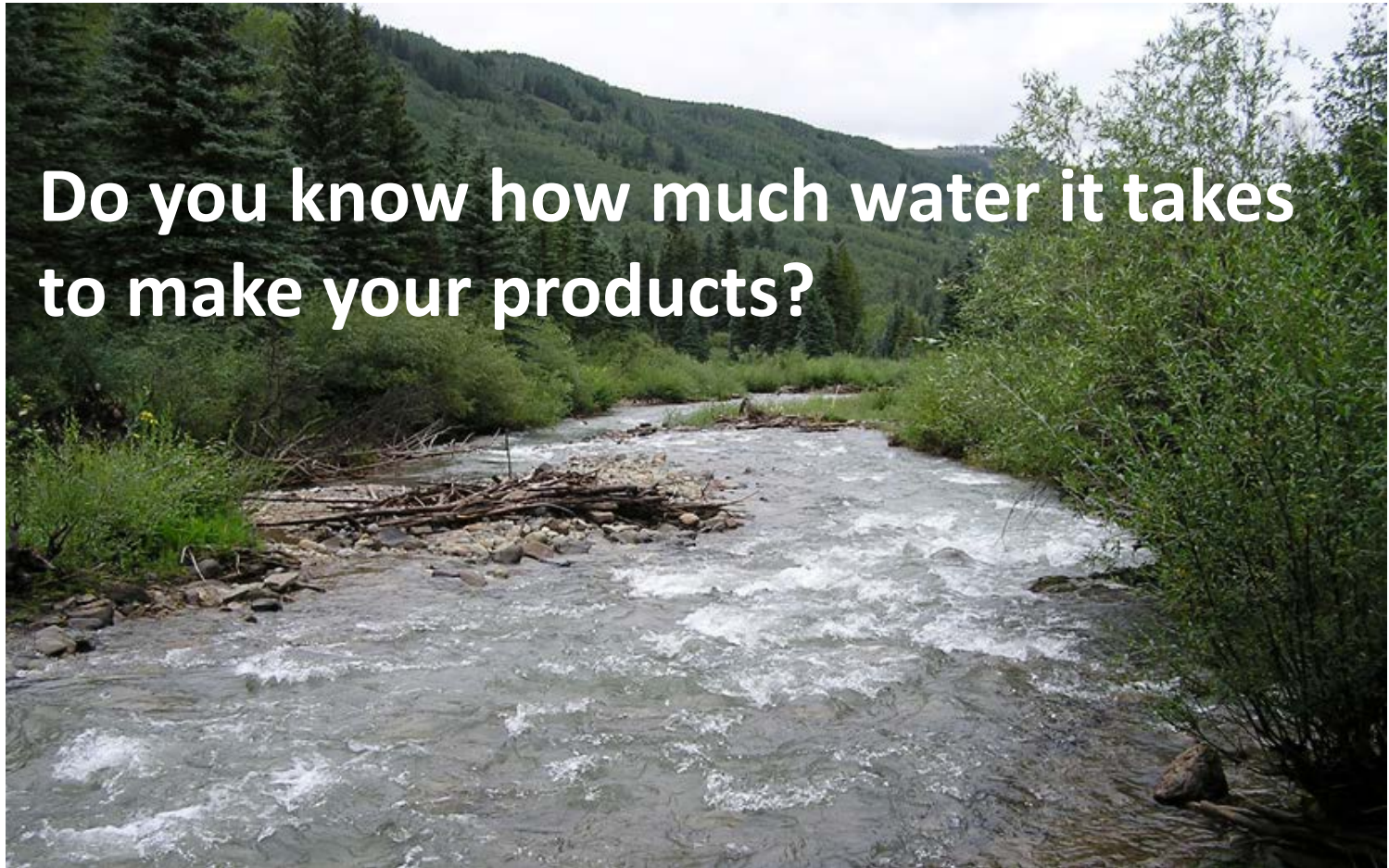
Water is the medium of climate change...

“The only uncertainty about
our warming world is how bad
the changes will get, and how soon.”

*Former EPA administrators:
William Ruckelshaus, Lee Thomas,
William Reilly and Christine Todd Whitman*



**Do you know how much water it takes
to make your products?**

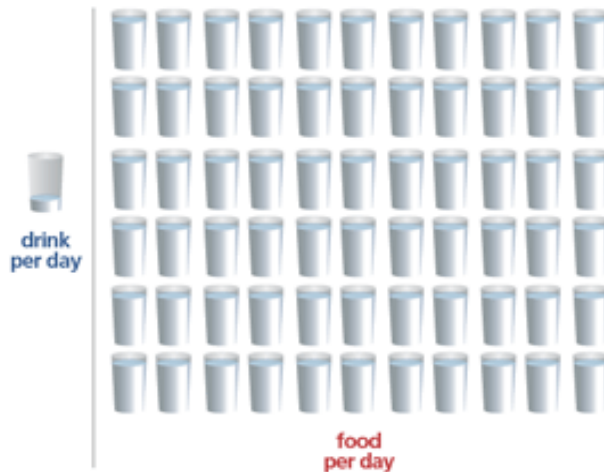




Water Footprints

Much more water required to produce food

The daily drinking water requirement per person is 2-4 litres, but it takes 2,000 to 5,000 litres of water to produce one person's daily food.



- 1 gallon Land O' Lakes milk = 880 gallons
- 1 lb. Smithfield's pork = 576 gallons
- 1 Hershey's chocolate bar = 307 gallons
- 1 half-liter of Coca-Cola = 35 liters



“Alone, five food and beverage companies – Nestle, Danone, Unilever, Anheuser Busch, and Coca-Cola – consume enough water to meet the daily domestic needs of every person on the planet.”

Steven Solomon, Water



Nestlé



Coca-Cola

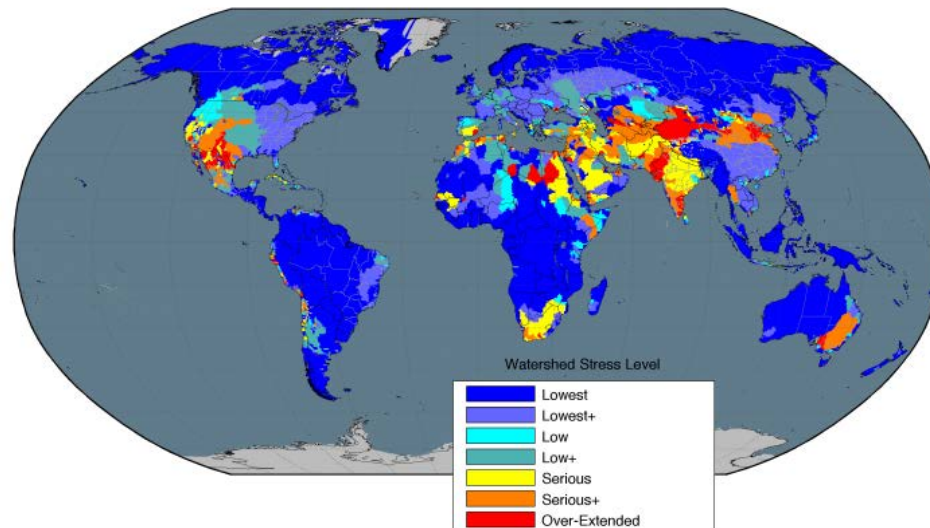


**Do you have facilities or growing regions
in threatened watersheds?**



15% of watersheds are threatened.
But half of cities with populations over
100,000 are located in these watersheds.

Source: The Nature Conservancy





**Does your company have
a freshwater strategy?**





Corporate Freshwater Risks:

1. Will there be a dependable supply for operations and growing regions?
2. Will regulation restrict use or increase costs?
3. Will inaction threaten your reputation and “license to operate?”



Agriculture accounts for 70% of water use



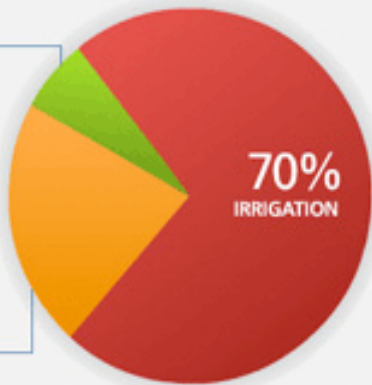
Breakdown of freshwater use

10%

DOMESTIC
USE

20%

INDUSTRY





Agriculture is the leading cause of impaired water quality.

Source: US EPA



**About 2/3 of agricultural production
moves through corporate supply chains.**





Corporate Freshwater Responsibility

- **Understand the condition of the watersheds you depend on**
- **Identify strategies to improve at-risk watersheds**
- **Lead by sharing learning and taking action**

I. Understand the condition of the watersheds you depend on



I. Understand the condition of the watersheds you depend on

Where do we start?

- Start with a high level assessment of all sites
- Use the results to prioritize sites to look at more closely

What is important?

- Think about risk: physical, regulatory, reputational
- Look for limiting factors

How do we do the assessment?

- Take advantage of existing tools and information
- Hire experts
- Talk with your facility managers, farmers, and others who are aware of water issues

II. Identify strategies to improve those that are threatened



- Engage other stakeholders
- Clarify major water-related challenges
- Identify existing water stewardship efforts
- Select a suite of strategies that:
 - Address the key challenges
 - Build on existing efforts
 - Provide multiple benefits



III. Lead by sharing learning and taking action



Corporate Water Stewardship



Average annual and monthly Water Scarcity

Descri

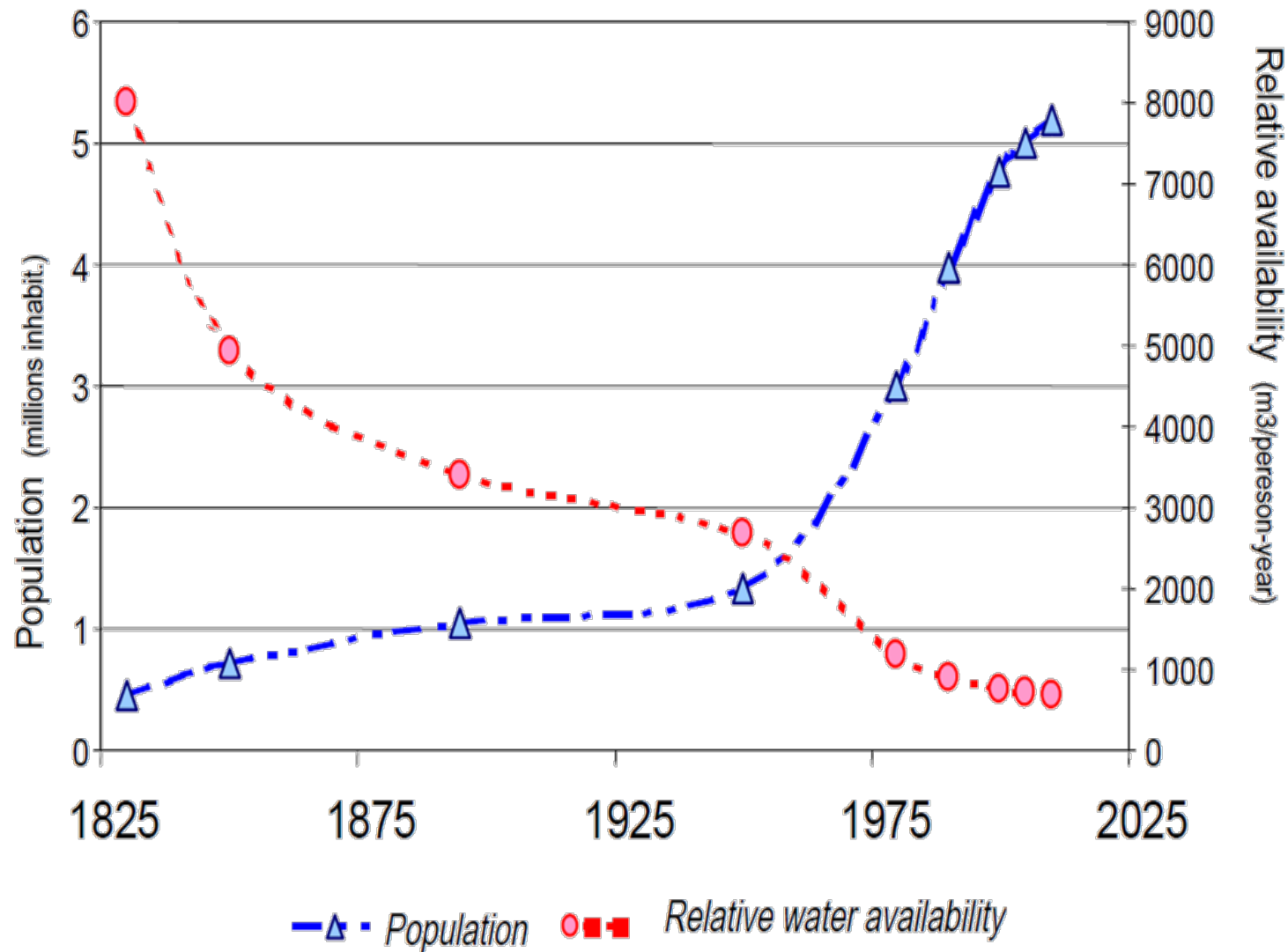


The borders of this map do not necessarily represent views of WWF

El Bajío Growing Region



The Challenge: Growth and Aquifer Depletion



Source: Guanajuato State Water Commission

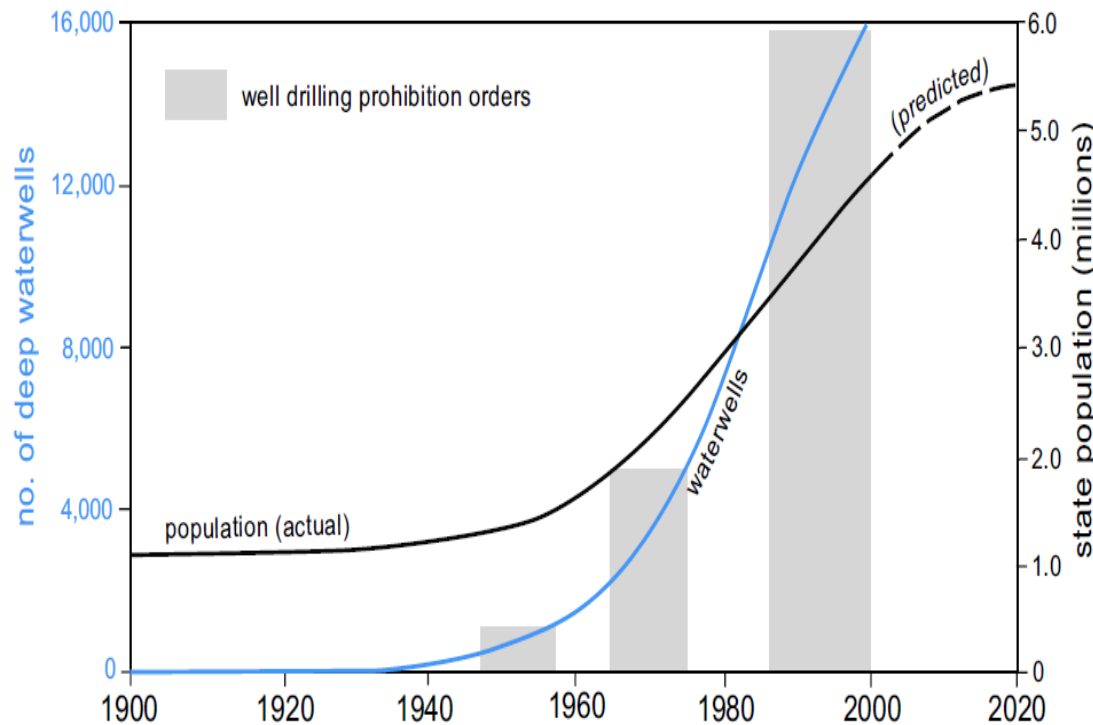
The Challenge: Growth and Aquifer Depletion

Aquifer	Average annual fall of static levels (m)
Laguna Seca	2.50
Laja-San Felipe	1.20
Silao-Romita	3.00
Valle de León	1.50
Valle del Río Turbio	2.00
Valle de Celaya	3.00
La Cueva	0.50
Valle de Acámbaro	2.00
Salvatierra	1.50
Irapuato-Valle de Santiago	2.00
Pénjamo-Abasolo	3.00
Lago de Cuitzeo	1.00
Moroleón-Cienega Prieta	1.25
Apaseos	3.50
State Average	2.03

Source: Jaime D. Hoogesteger van Dijk, 2004

Identify the Major Challenges

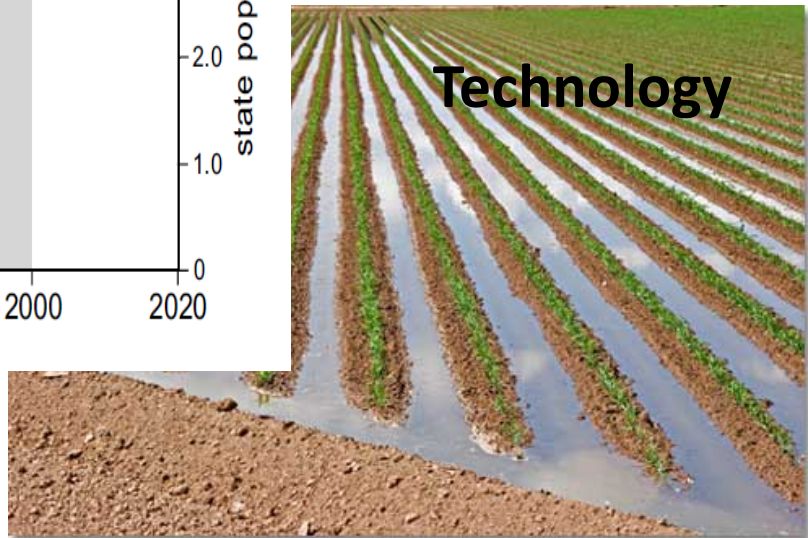
Governance



Economics



Technology





Potential Strategies

Drip Irrigation



Reforestation



Advanced Technology



Strategic Planting



Convene Other Users and Take Action

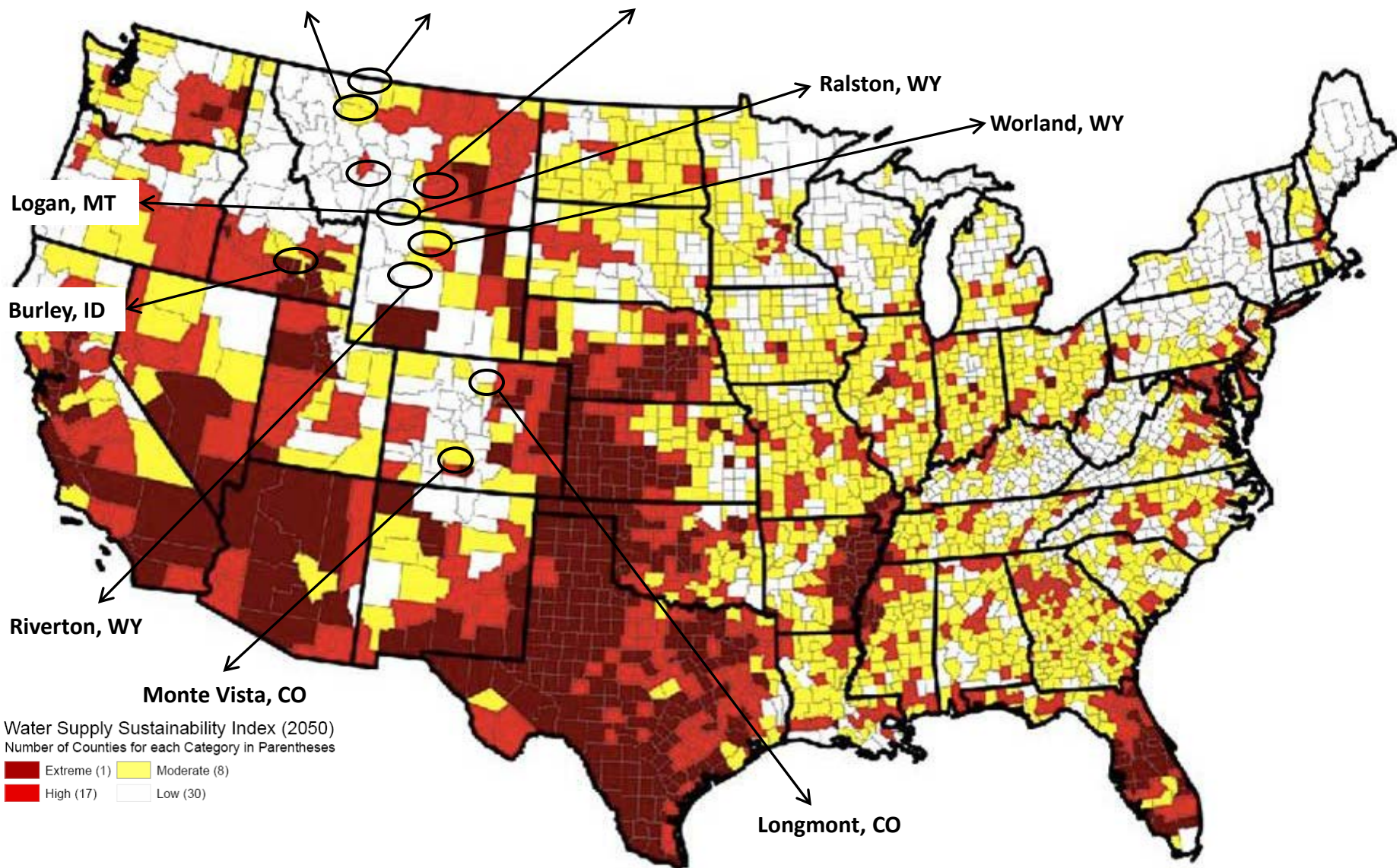


- Implement proven practices
- Expand drip irrigation program
- Prioritize and partner on reforestation
- Improve governance

Corporate Water Stewardship



2050 Water Supply Sustainability



Silver Creek Preserve & Idaho Barley Growers

Beautiful but threatened. . .



- Development
- Decreased stream flows
- High water temperatures
- Increased sediment

**Easement protecting
320 acres**



Variable rate irrigation

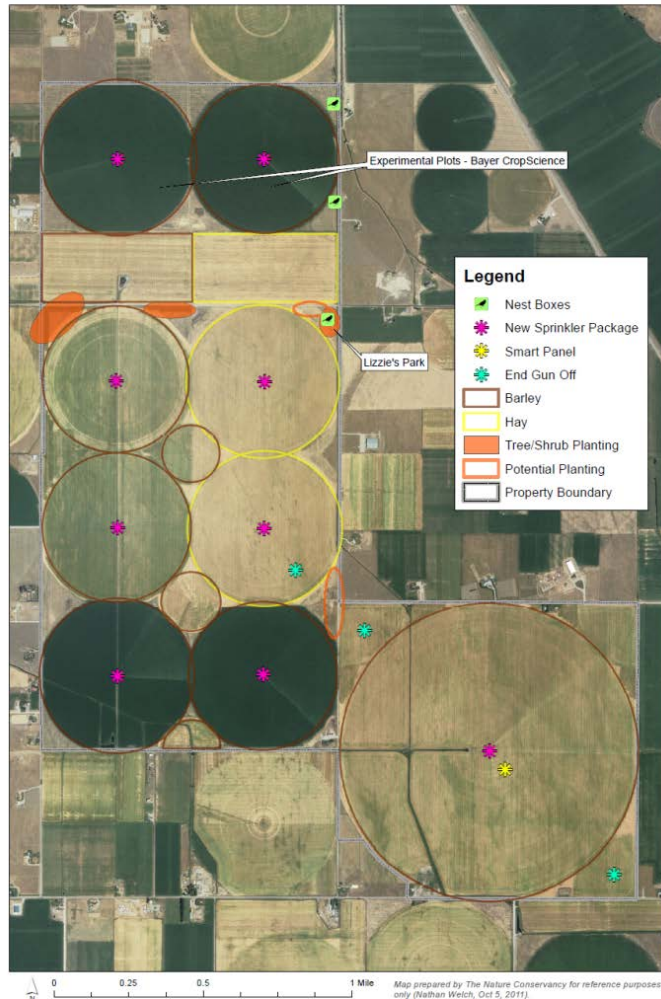


**Streamside habitat
improvements**

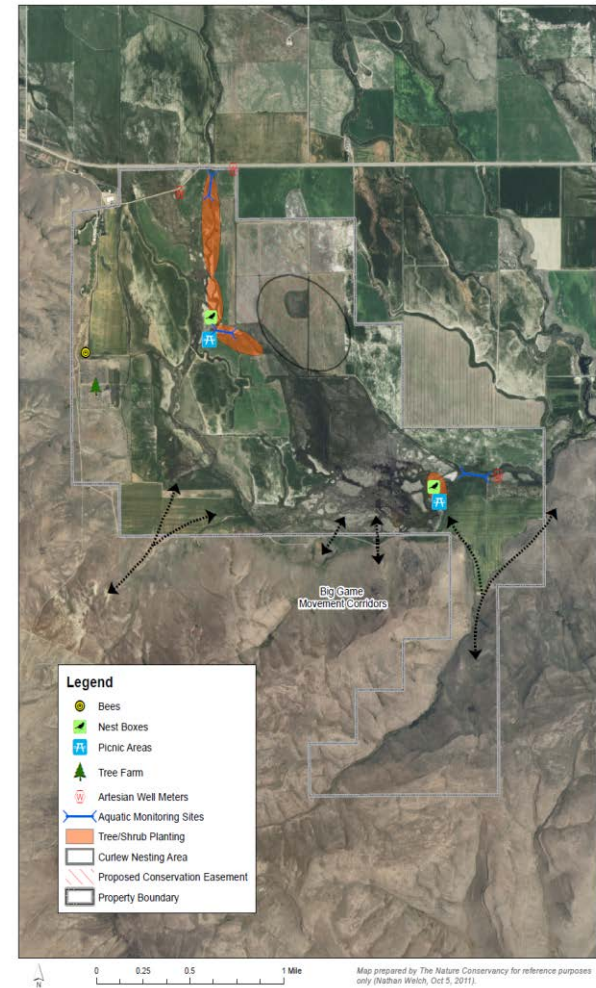


Demonstration Barley Farm

Stevenson Family Farm - North



Stevenson Family Farm - South



A suite of best management practices...

- **Installed more efficient irrigation technology**
- **Planted over 1800 trees and plants**
- **Seeded for erosion control and habitat**
- **Restored 700 wetland acres**
- **Enrolled in Idaho Power energy saving program**
- **Cross planted barley for weed control**
- **Established monitoring program**

The Business Case:

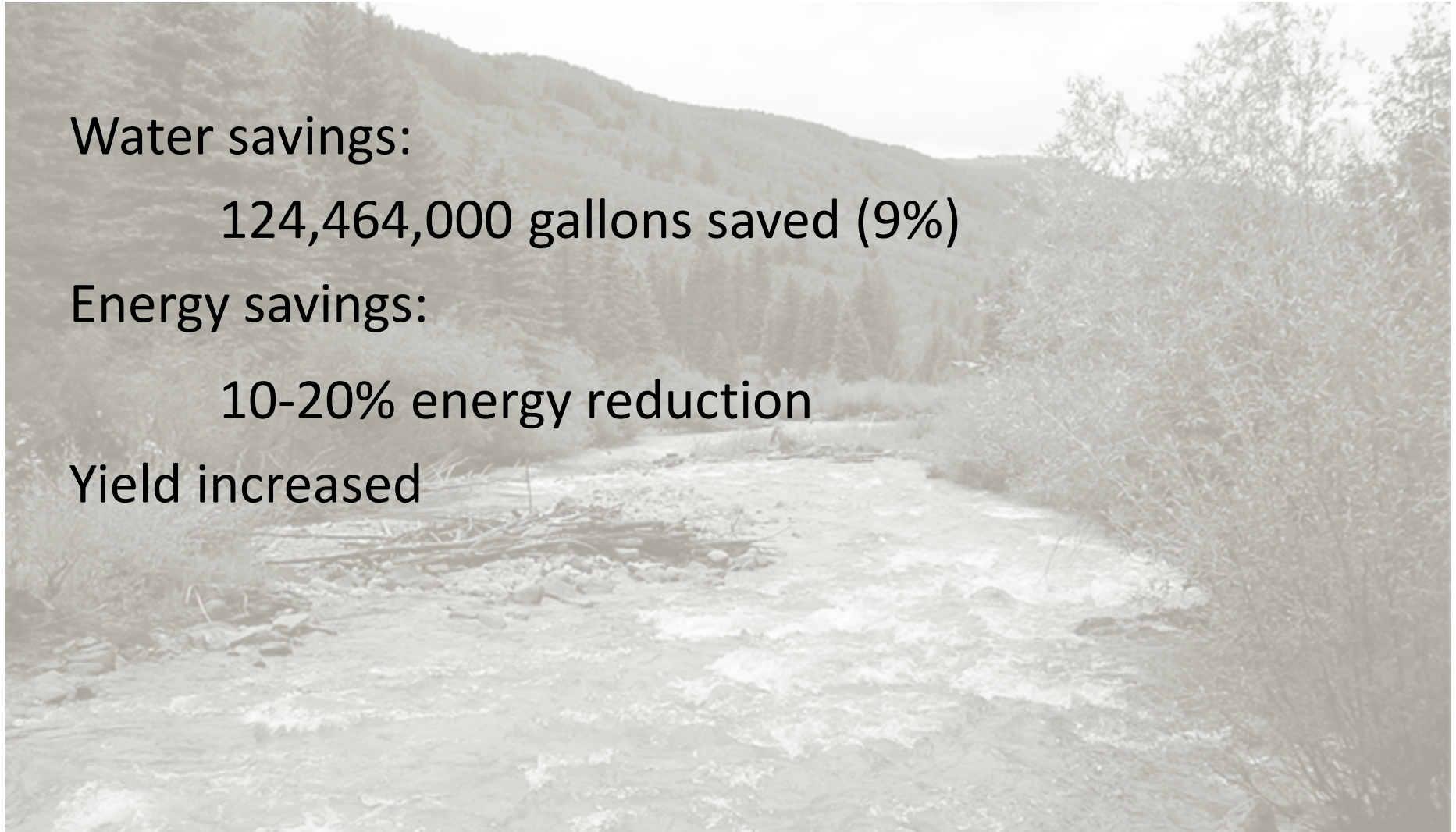
Water savings:

124,464,000 gallons saved (9%)

Energy savings:

10-20% energy reduction

Yield increased





Scaling it Up

- Continuing Silver Creek work – sharing the learning and expanding the reach
- Taking lessons learned to other geographies
 - Assess
 - Engage
 - Develop and implement strategies
- Developing learning network, best management guides and other system-wide tools

Your turn!

- Now is the time to solve the critical water issues we will face in the coming decades
- Longevity of your business depends on it
- The tools and expertise exist
- Corporate leadership can solve this problem

Let's go to work!

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