

SUSTAINNOVATE:

**WATER IN THE
WEST**

**As Population Increases and
Climate Change Affects Colorado,
What are Colorado Strategies for
Conserving and Protecting our
Water?**

Taryn Finnessey

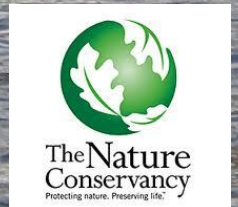
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Colorado River Program, The Nature Conservancy

Nancy Smith

Colorado Water Program Director, The Nature Conservancy





AGENDA

1. Population, Climate Change, and the Colorado Water Plan
2. Strategies for Conserving and Protecting Colorado's Water -- A Framework for Solutions
3. Strategies in Partnership With Municipalities
4. Strategies in Partnership With Agriculture



THE FINAL
PLAN IS
HERE.

THANK YOU!



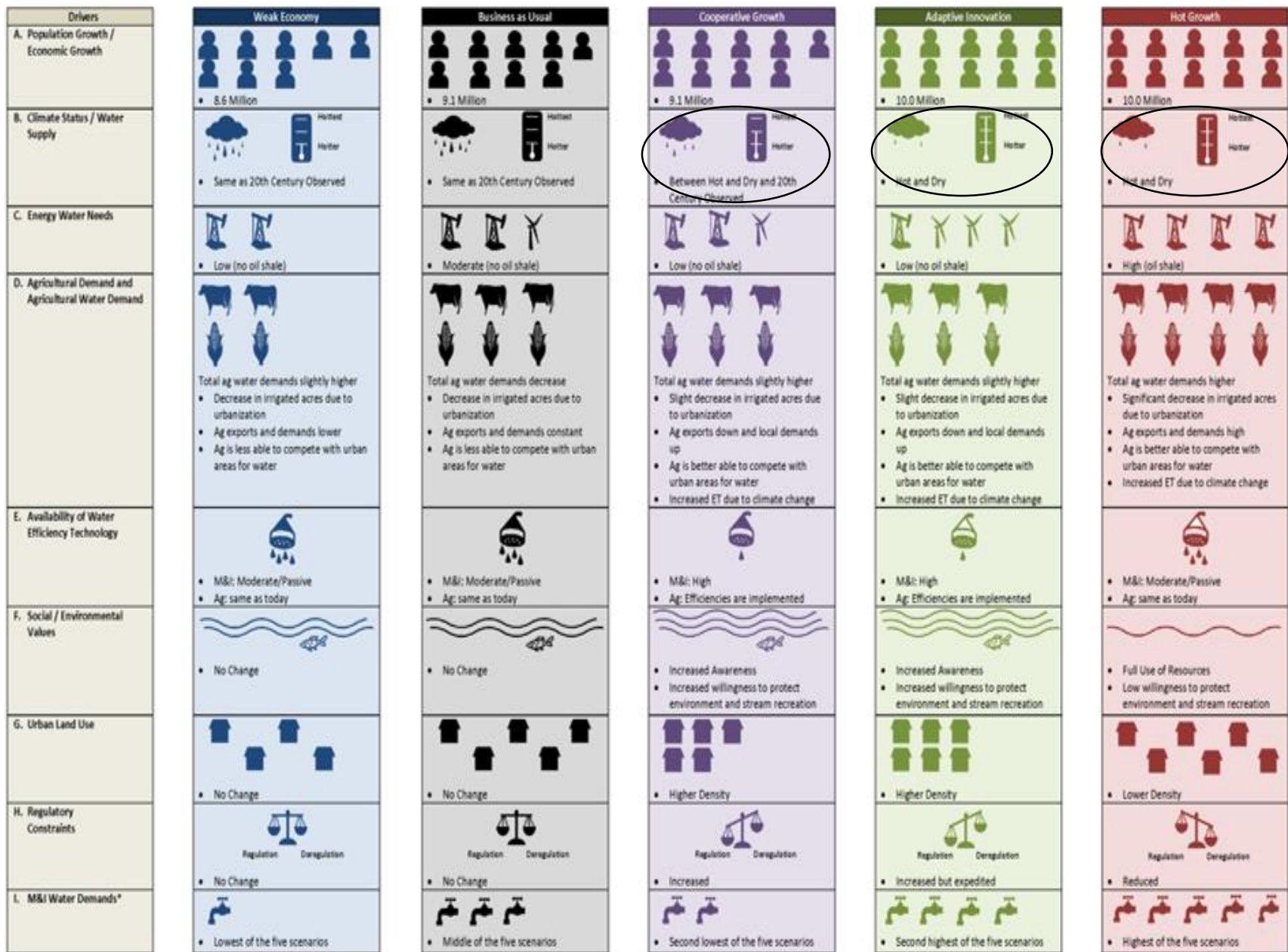


Figure 1. State of Colorado Future Water Supply Scenarios

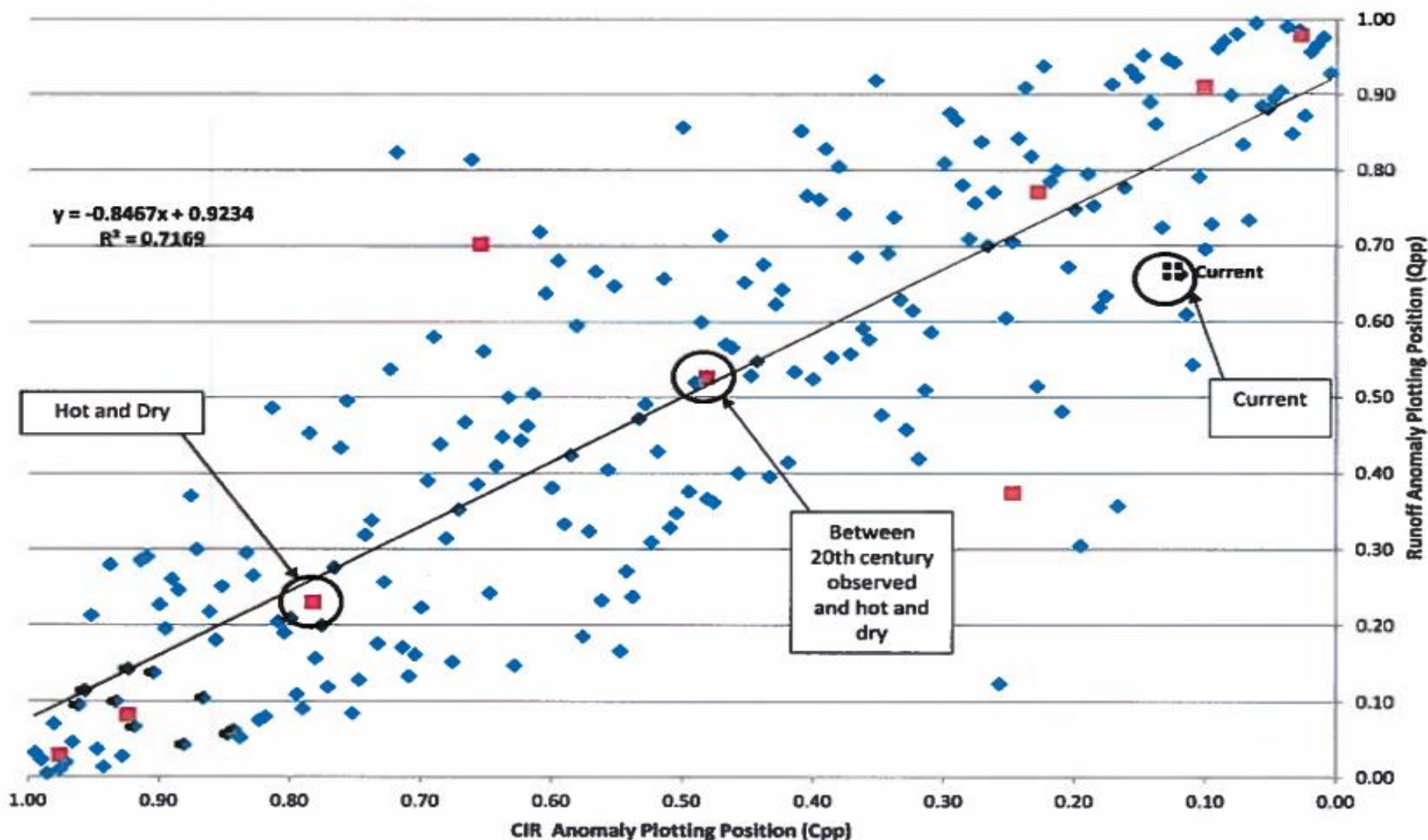
FIGURE 4-9

PLOT OF RUNOFF CROP IRRIGATION REQUIREMENTS USING THE BUREAU OF RECLAMATION ARCHIVE

9-Region Scheme

Runoff vs CIR Plotting Position CMIP5+CMIP3, 2050

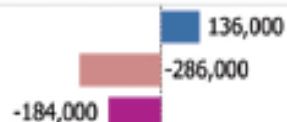
Based on 10 neighbors



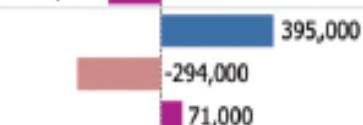
"Hot and dry" is defined as the 75th percentile of climate projections for crop irrigation requirements (water use), and the 25th percentile for natural flows. In other words, only 25 percent of projections have lower natural flows and 25 percent of projections have higher crop irrigation requirements. "Between 20th century-observed and hot and dry" is defined as the 50th percentile for both natural flows and crop irrigation requirements. This scenario represents the middle of the range in terms of severity. Historical or current conditions, which represents no change in runoff or in crop irrigation requirements, fall at roughly the 9th and 67th percentiles; this means that 91 percent of runs show increases in crop irrigation requirements and about two-thirds show reductions in runoff.

Arkansas River

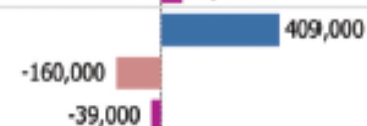
at Lamar

**South Platte**

at South Julesburg

**Rio Grande**

near Lobatos



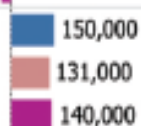
Historical

Hot & Dry

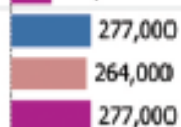
Between 20th Century Observed & Hot/Dry

Los Pinos River

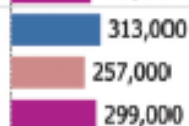
at La Boca

**Dolores River**

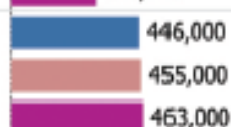
near Bedrock

**North Platte**

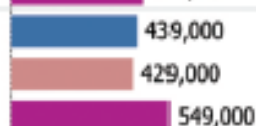
near Northgate

**San Juan River**

near Carracas

**White River**

near Meeker

**Yampa River**

near Maybell

**Gunnison River**

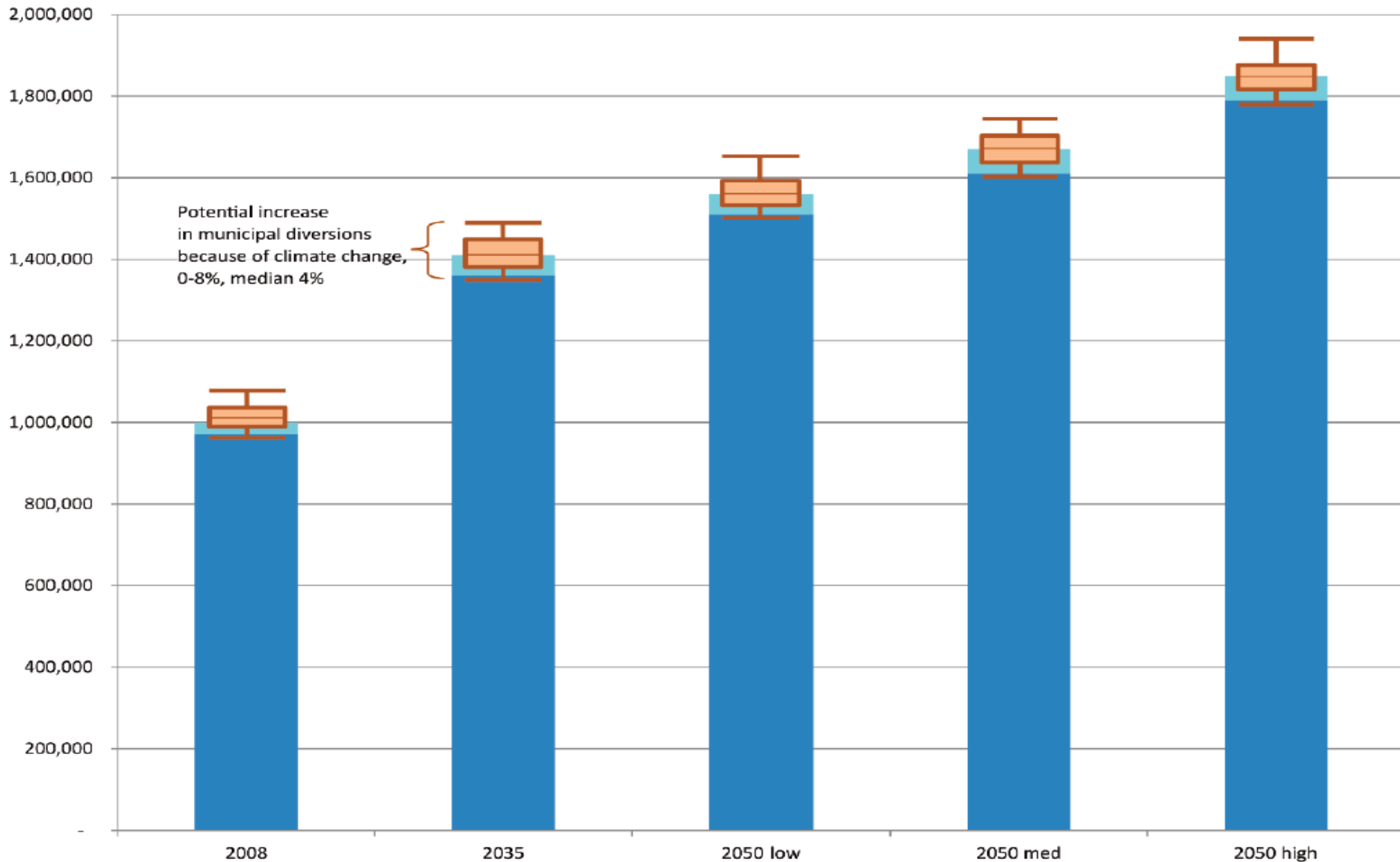
near Grand Junction

**Colorado River**

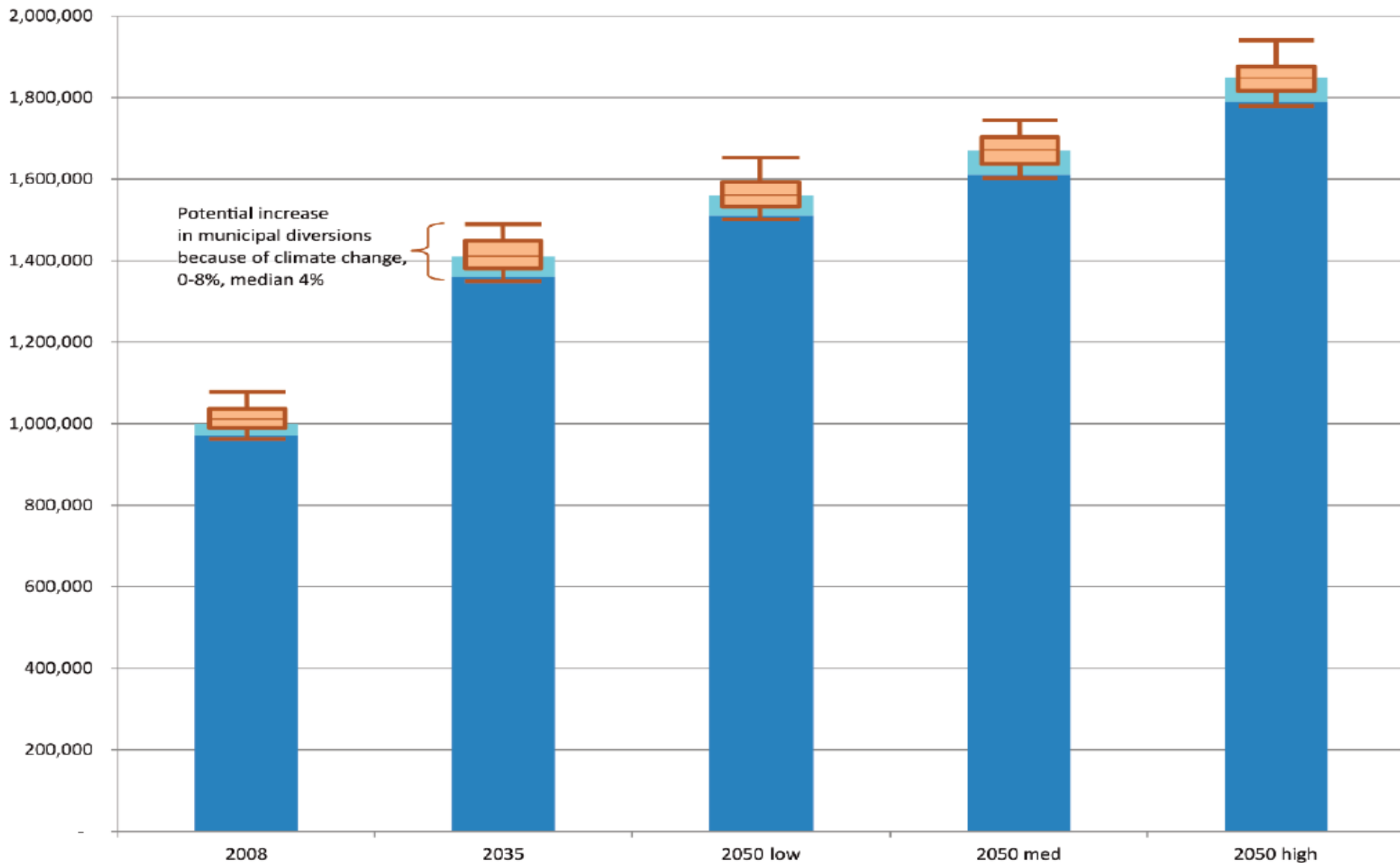
near State Line



Projected change in municipal water diversions(AF) with range of climate change increases



Projected change in municipal water diversions(AF) with range of climate change increases



Strategies for Conserving and Protecting Colorado's Water: A Framework for Solutions



Our Mission is to protect
the lands and waters
upon which all life
depends.



Strategies for Conserving and Protecting Colorado's Water: A Framework for Solutions



The Nature Conservancy envisions a future:

- with enough water – at the right times and places –
- to support functioning and resilient ecosystems
- while at the same time providing water to sustain our agricultural systems, cities, and industry.

Strategies in Partnership With Municipalities



The Nature
Conservancy
Protecting nature. Preserving life.



- Conservation
- Reuse Technologies
- Water Source Protection

Strategies in Partnership With Agriculture

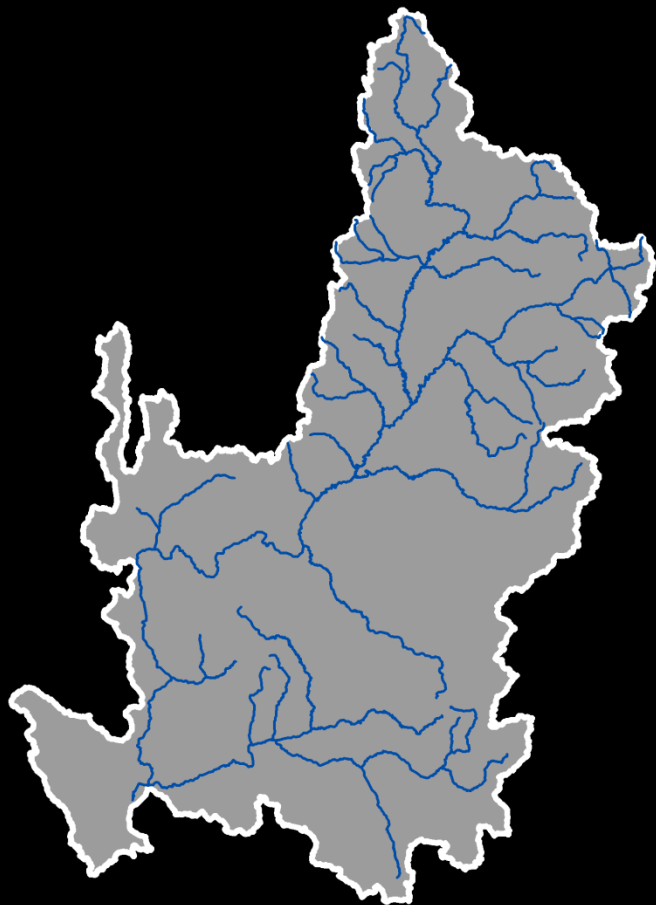


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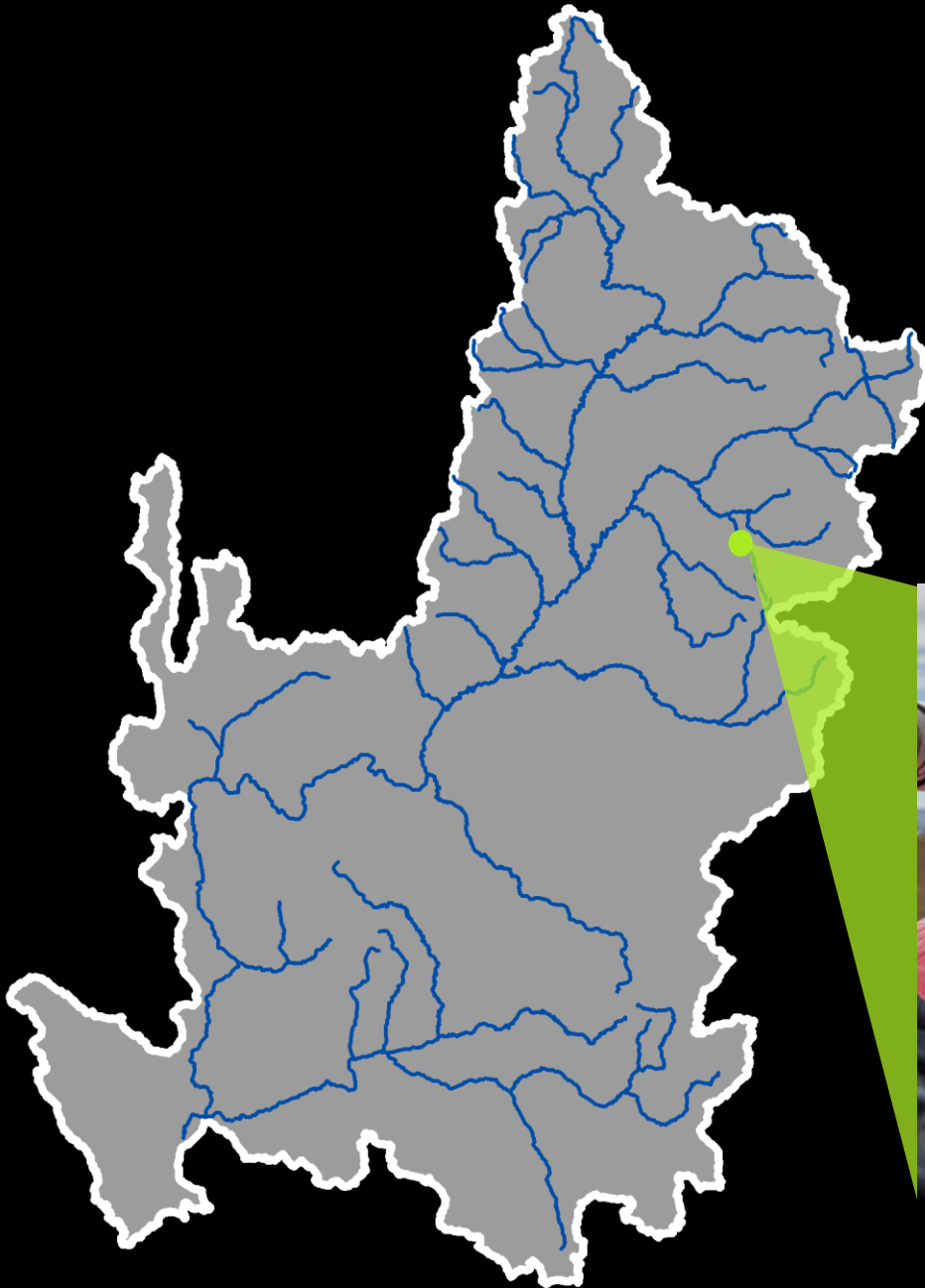
[Aaron – insert your preferred intro title for your water bank presentation]



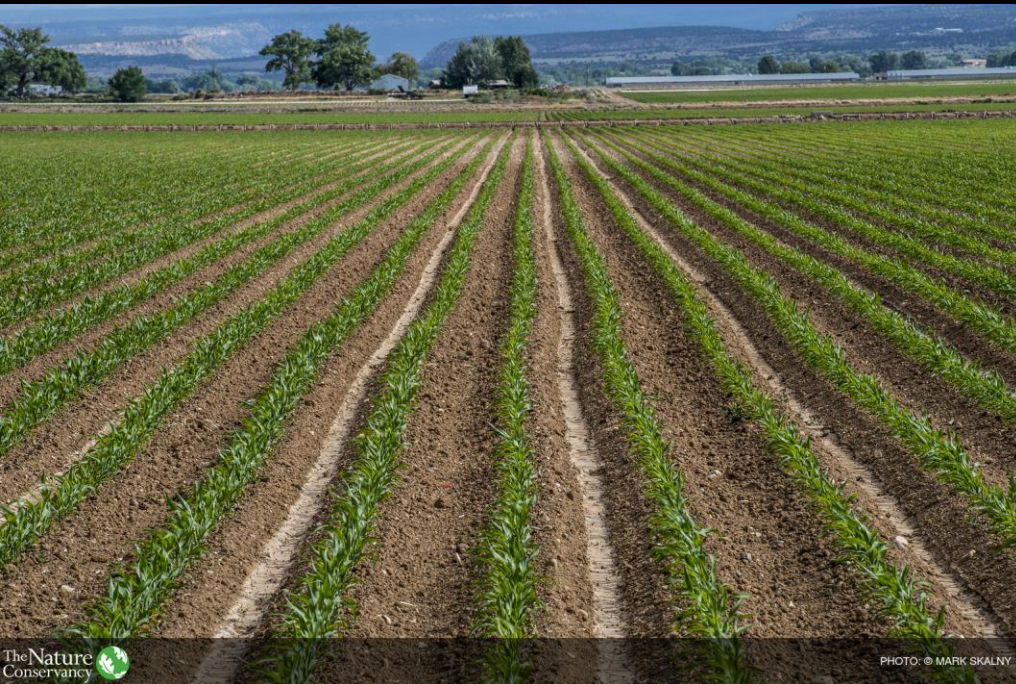
The Nature Conservancy



On Farm

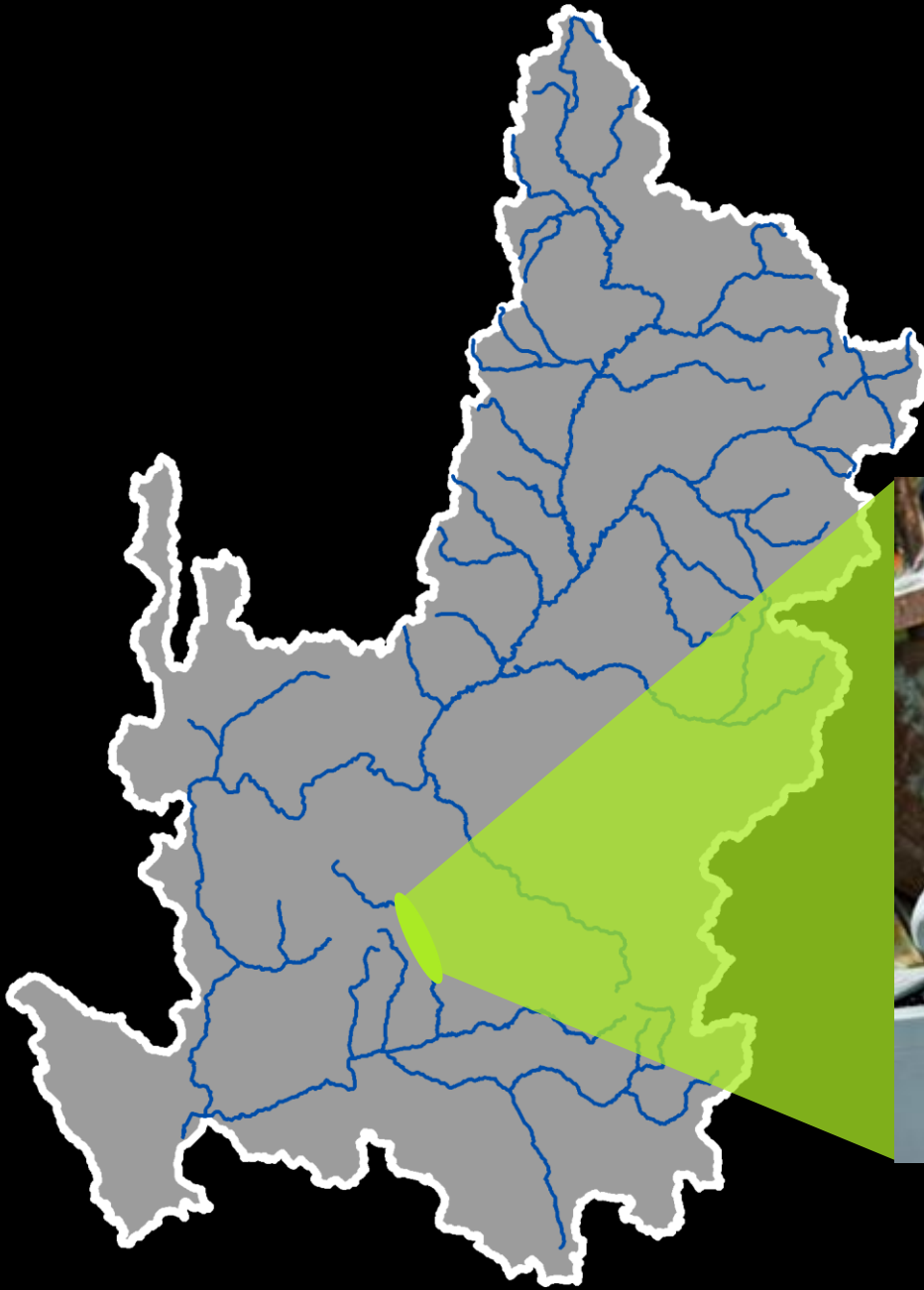


Tools



Partners

Irrigation District



Tools



Partners

Community & Basin





Questions?

Contact: Aaron Derwingson, aderwingson@tnc.org
www.nature.org/coloradoriver

