Securing Greeley's Water Future:

Terry Ranch Project

Water Literate Leaders

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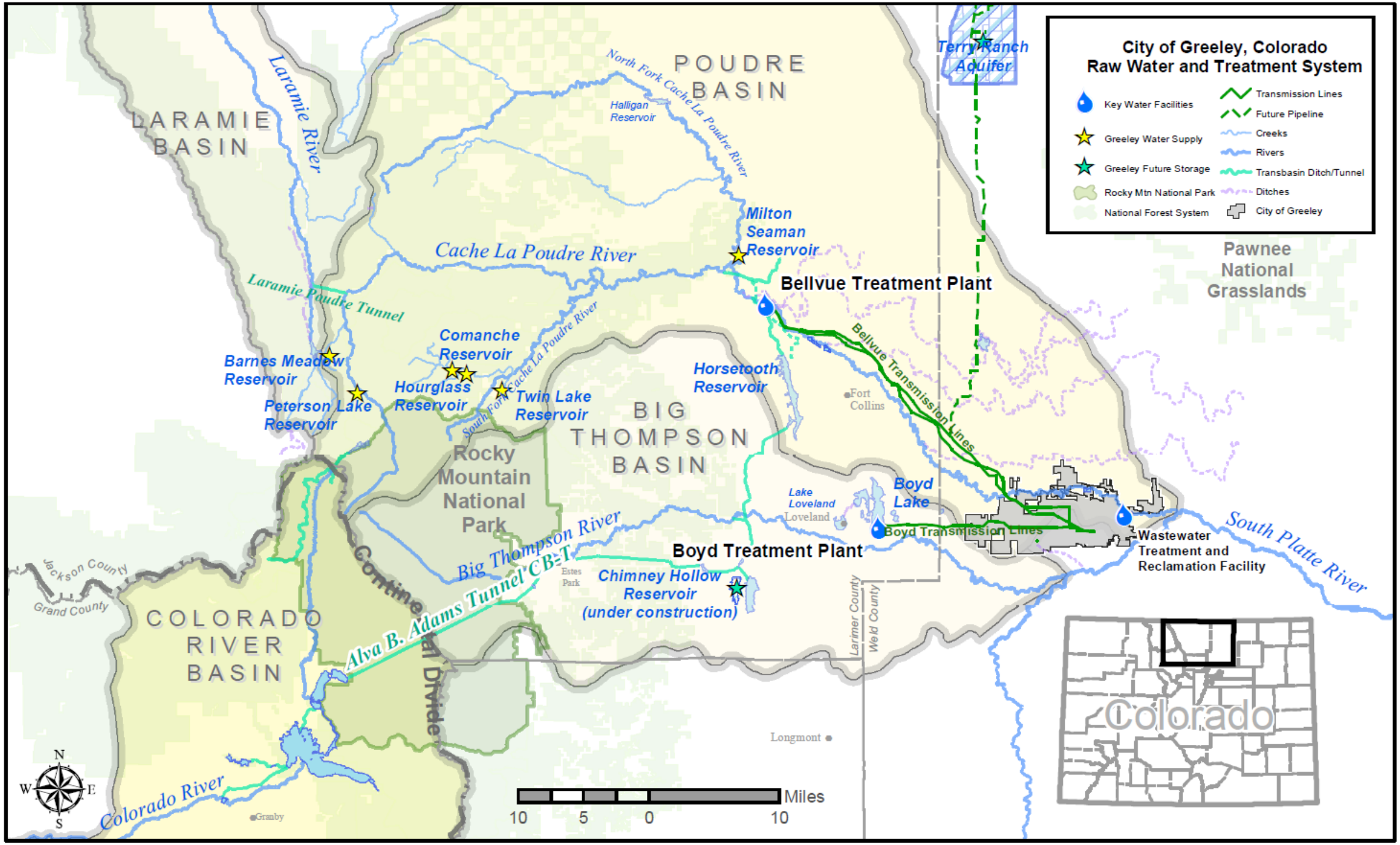
City of Greeley, Colorado
Raw Water and Treatment System
Key Water Facilities
Greeley Water Supply
Greeley Future Storage
Rocky Mtn National Park
National Forest System
Transmission Lines
Future Pipeline
Creeks
Rivers
Transbasin Ditch/Tunnel
Ditches
City of Greeley
LARAMIE BASIN
POUDRE BASIN
BIG THOMPSON BASIN
COLORADO RIVER BASIN
Rocky Mountain National Park
Pawnee National Grasslands
Laramie River
North Fork Cache La Poudre River
Halligan Reservoir
Terry Ranch Aquifer
Milton Seaman Reservoir
Cache La Poudre River
Bellvue Treatment Plant
Laramie Poudre Tunnel
Comanche Reservoir
Barnes Meadow Reservoir
Hourglass Reservoir
Peterson Lake Reservoir
South Fork Cache La Poudre River
Twin Lake Reservoir
Horsetooth Reservoir
Bellvue Transmission Lines
Fort Collins
Lake Loveland
Loveland
Boyd Lake
Boyd Transmission Lines
Wastewater Treatment and Reclamation Facility
South Platte River
Big Thompson River
Boyd Treatment Plant
Chimney Hollow Reservoir (under construction)
Estes Park
Alva B. Adams Tunnel/C-B-T
Continental Divide
Jackson County
Grand County
Larimer County
Weld County
Longmont
Colorado River
Granby
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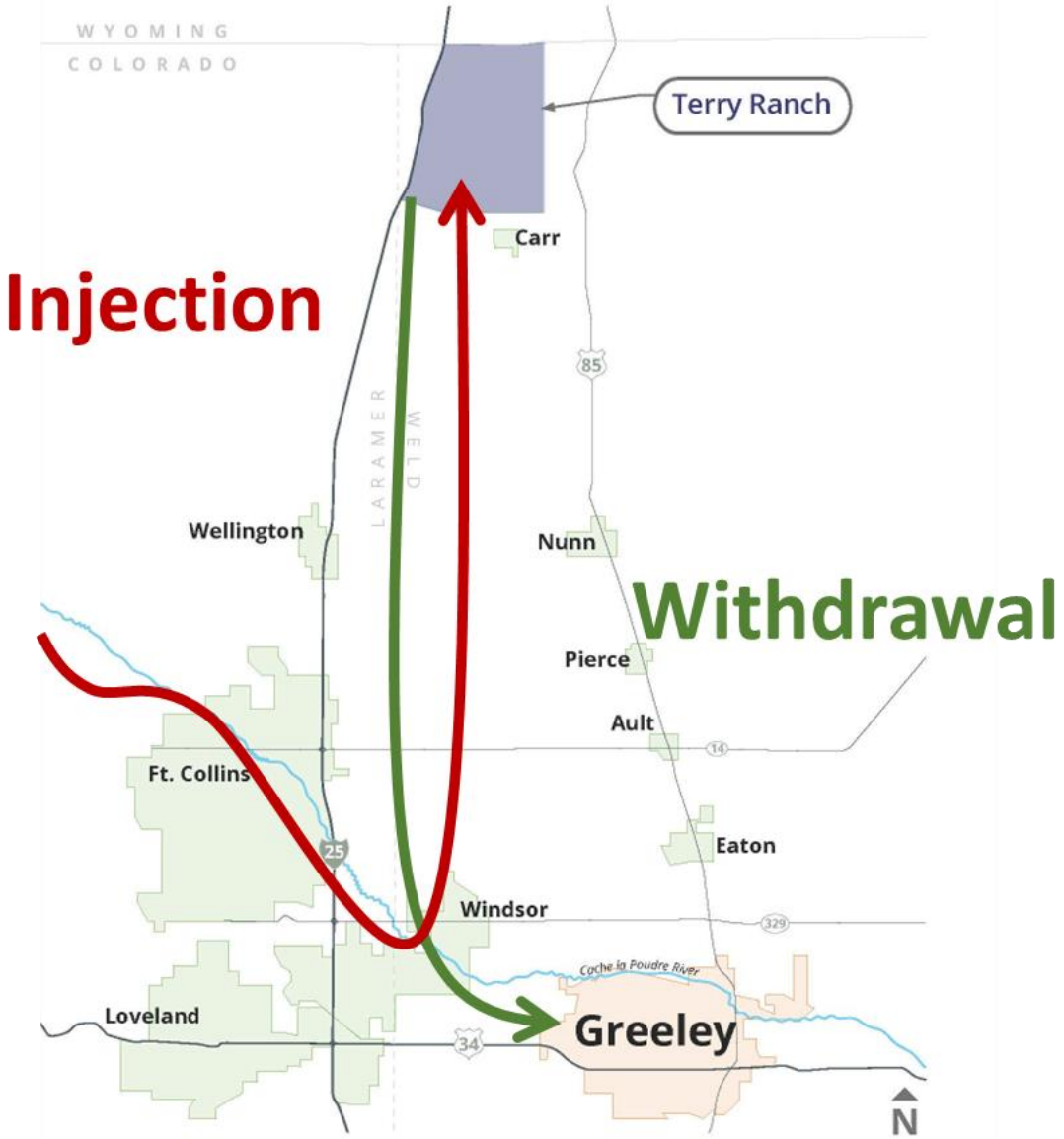
Miles
Colorado

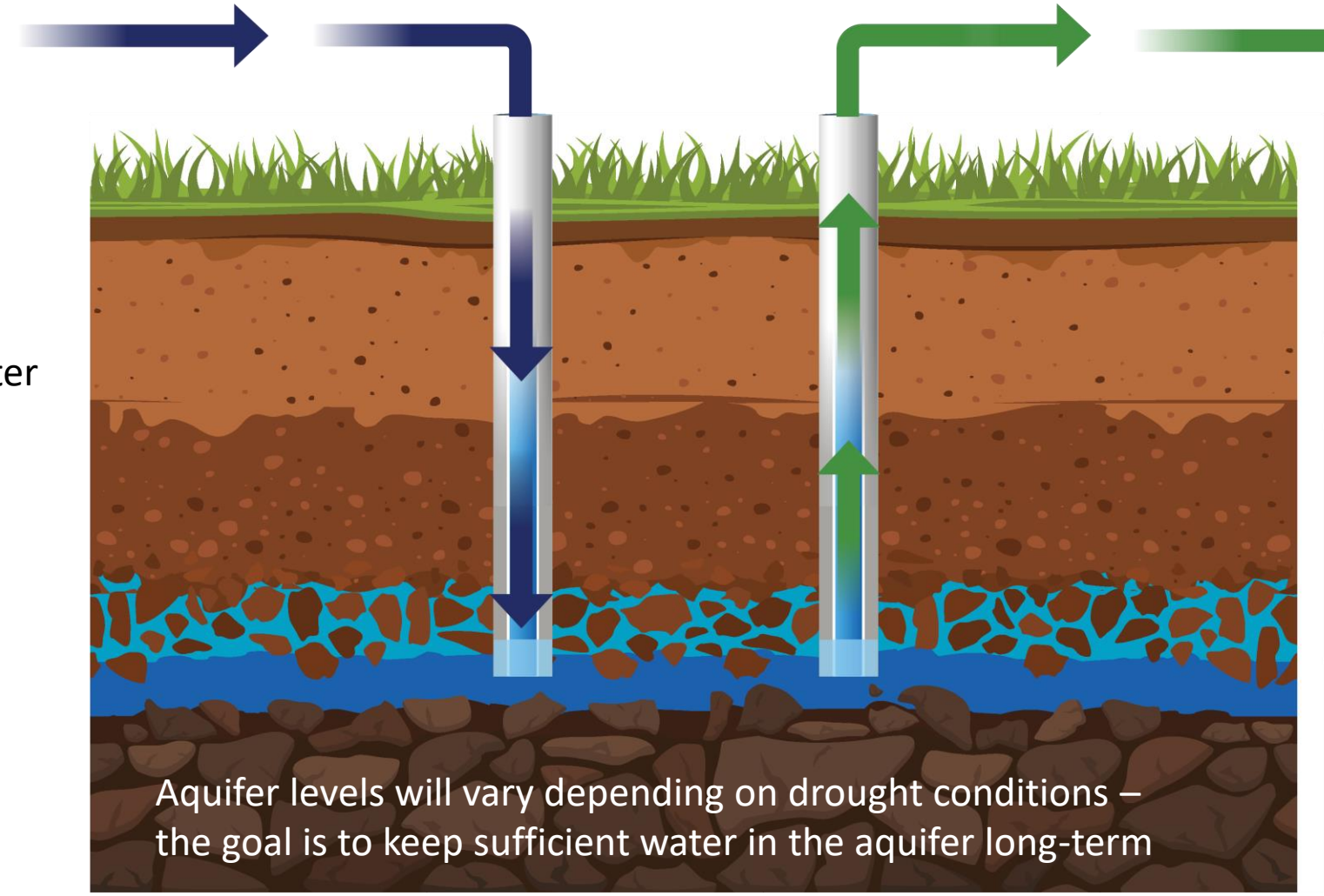
Terry Ranch



Terry Ranch is a non-tributary aquifer decreed with 1,200,000 acre-feet of native water

How can Greeley use the Terry Ranch Project?

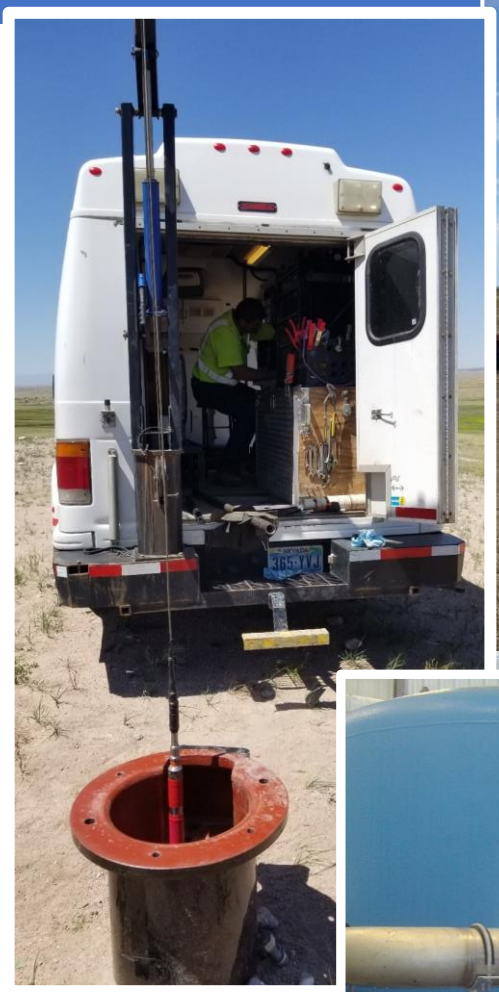
When available, treated surface water is injected into the aquifer



During droughts, water is extracted from the aquifer, treated, and delivered to Greeley

Inspection

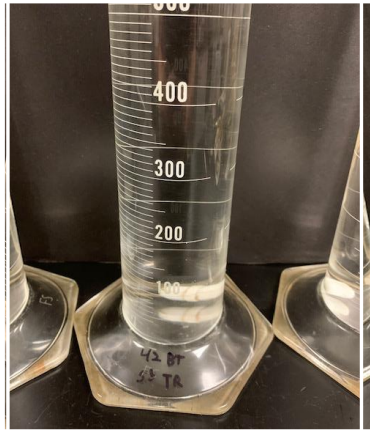
- ✓ **20 rigorous scientific and engineering analyses to confirm *safety, reliability, and affordability***
  1. Environmental
  2. Hydrogeology & Geochemistry
  3. Water Quality & Treatment
  4. Design & Cost Estimate
  5. **Peer Review of All Findings**



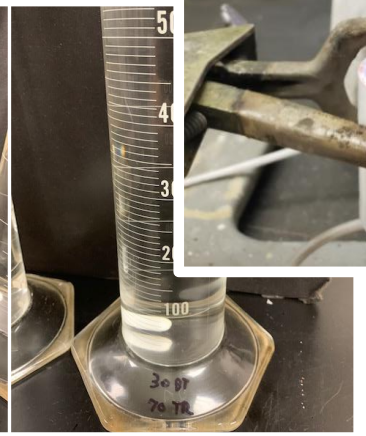
Water Quality

- ✓ Extensive study: over 7,000 data points & 575 compounds from 7 wells
- ✓ Overall water quality is excellent
- ✓ Uranium is present

<u>Uranium can be removed by treatment</u>



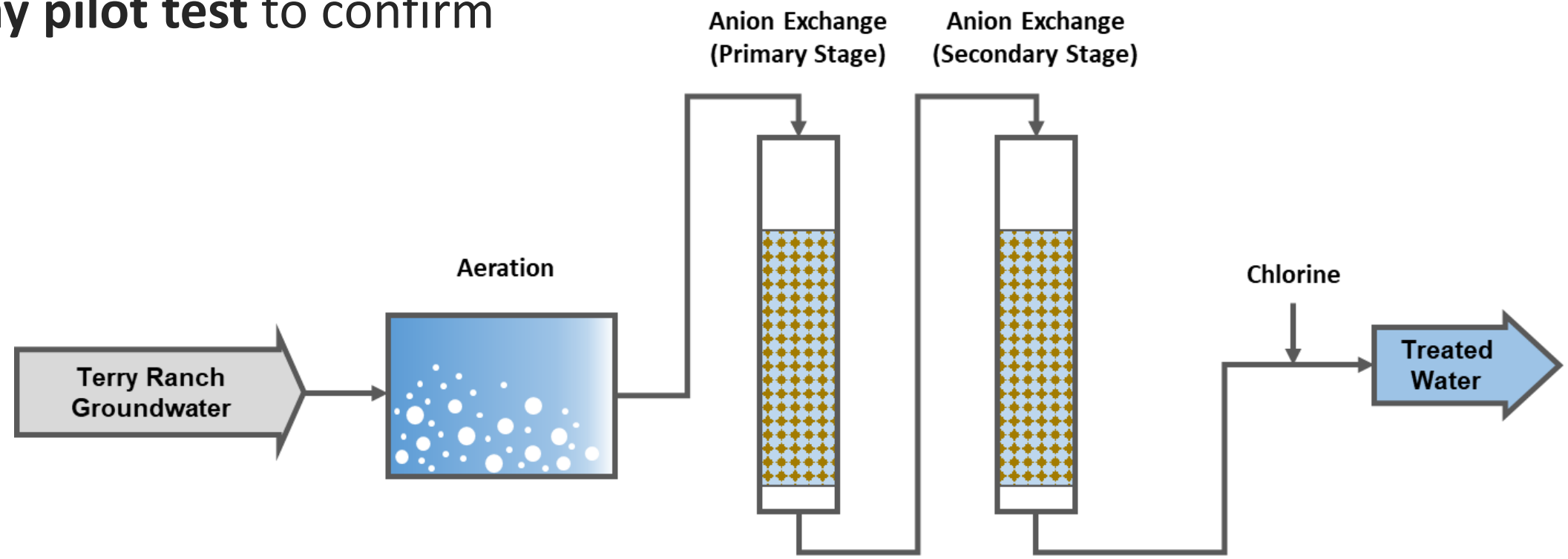
42% Bellvue
58% Terry Ranch



30% Bellvue
70% Terry Ranch

Uranium Removal

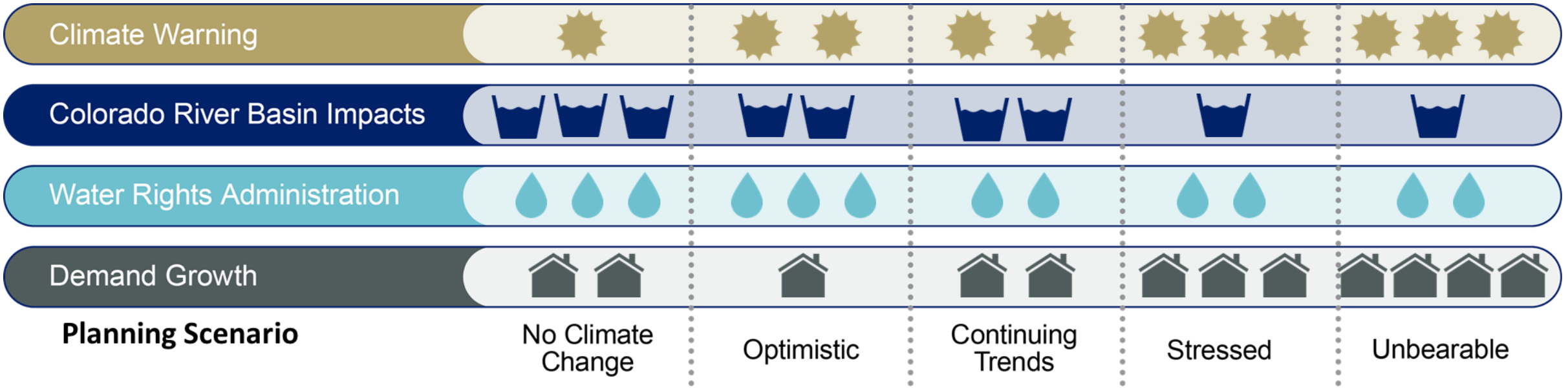
- ✓Ion Exchange Treatment - common and proven
- ✓Will remove below detection
- ✓**30-day pilot test** to confirm



Planning for Terry Ranch- Integrated Water Resources Plan

Accounts for the uncertain future conditions

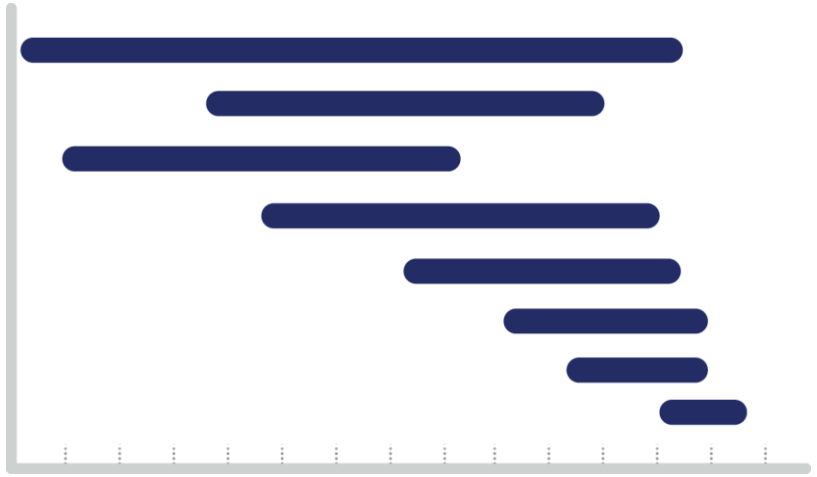
IWRP: Planning Scenarios



Planning for Terry Ranch- Integrated Water Resources Plan

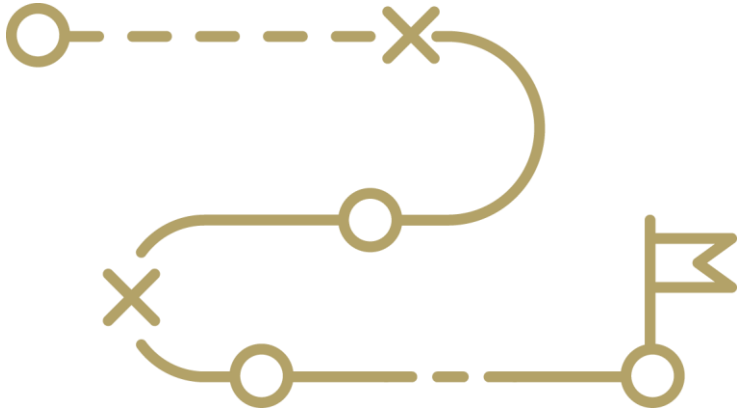
1

Detailed 10-year plan for the water supply system



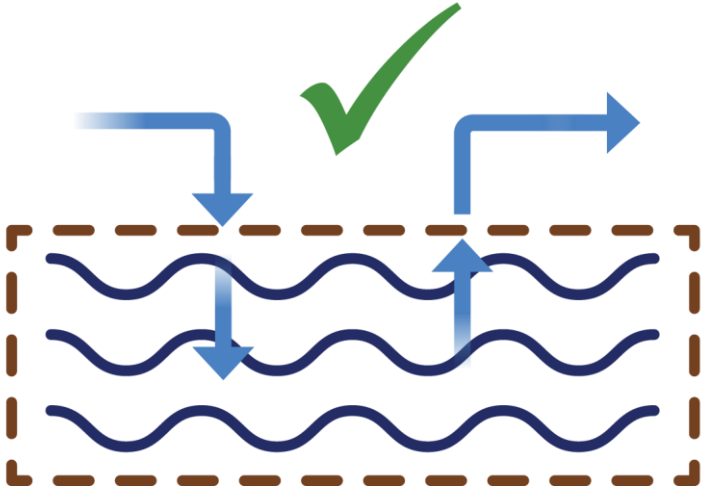
2

Process to trigger implementation of the Terry Ranch Project



3

Establish long-term Terry Ranch use and if that use is sustainable



What will Terry Ranch implementation look like?

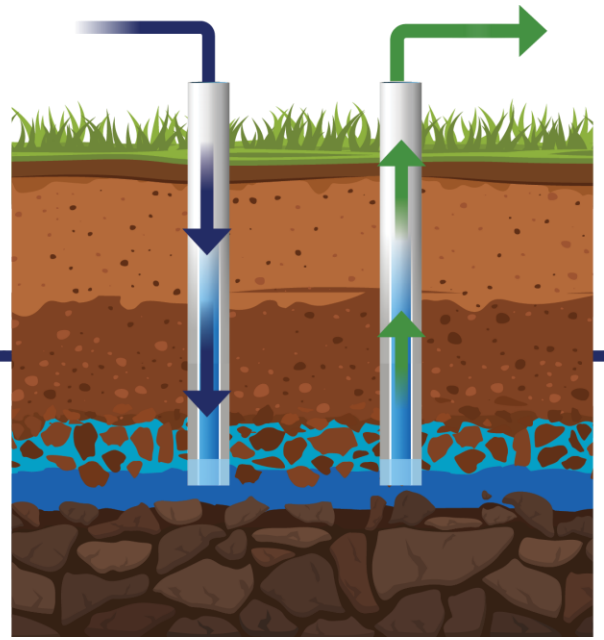
1. Continue completing high-priority pipeline
2. Construct treatment facility and remaining pipeline
3. Install initial wells with extraction capabilities
4. Upgrade existing wells with injection capabilities
5. Install additional wells as needed

Terry Ranch Integrated

What are the triggers for needing Terry Ranch?

- Terry Ranch is eventually required in all future conditions as a drought supply
- Triggering Terry Ranch will be influenced by demand growth and yield impacts

Terry Ranch Needed for Drought Supply



Present ⟵ **Future**

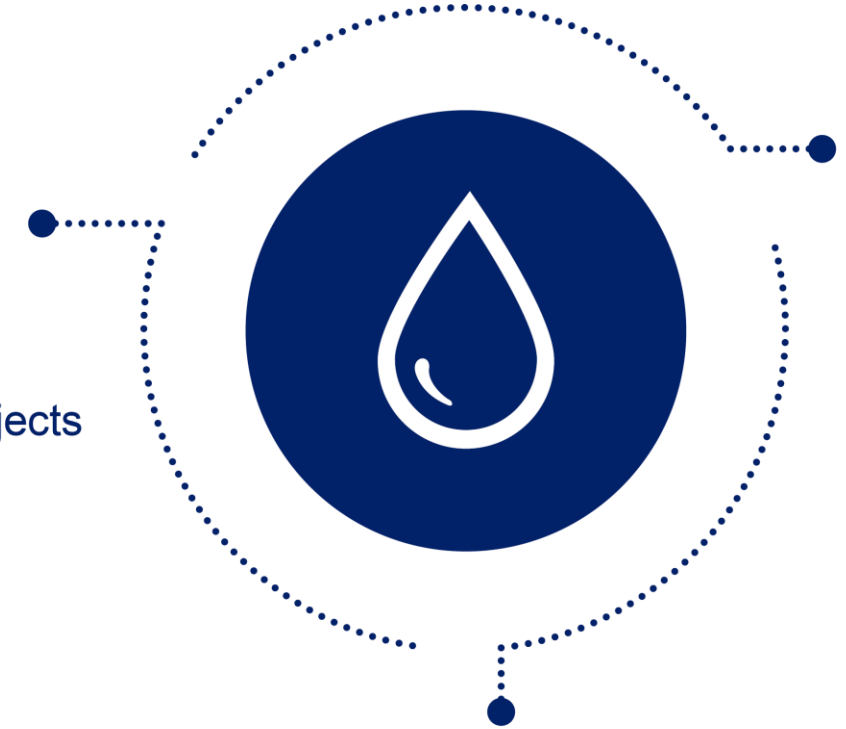
Factors that could trigger Terry Ranch **earlier**

- High demand growth
- Significant yield impacts

Factors that could trigger Terry Ranch **later**

- Lower demand growth

What is water supply system strategy?



Build Robust Water Portfolio

- Change agricultural water rights
- Continue strategic acquisitions
- Continue developing storage projects

Responsibly Develop Terry Ranch

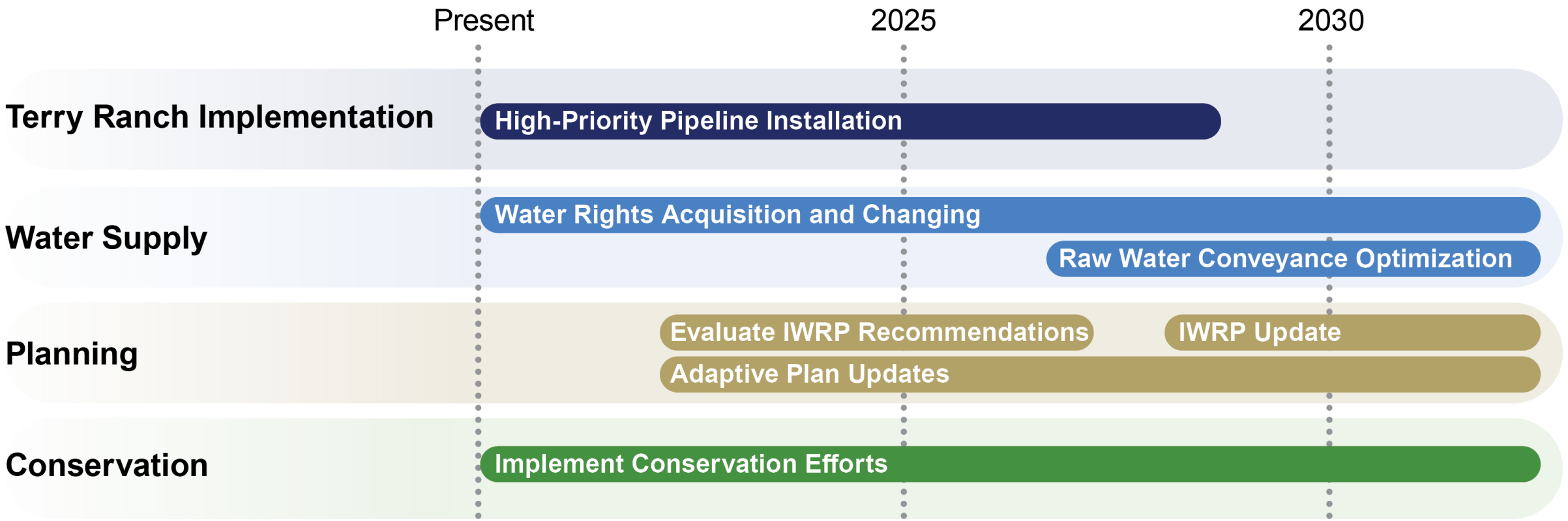
- Complete priority Terry Ranch infrastructure
- Balance phasing Terry Ranch with other needs
- Study IWRP-recommended projects

Ensure Sustainable and Affordable Water

- Continue implementing demand management
- Monitor demand growth and supply conditions
- Implement Adaptive Planning

What is Greeley's near-term Terry Ranch plan?

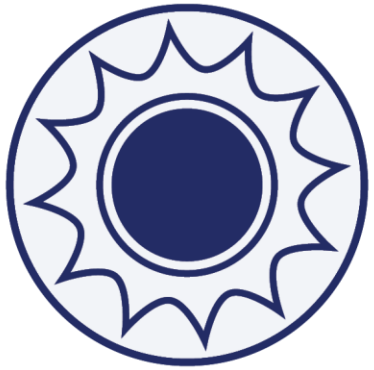
- Balance Terry Ranch investment with other needs



How will Greeley move forward?

- Adaptive Plan defines actions for Greeley to take each year

Monitor Demand Growth and Water Supply Conditions



Evaluate Terry Ranch Triggers

Update Terry Ranch Implementation Plan

Assess Water Rights Changes and Acquisitions

Review Other Water Supply Opportunities

Complete Adaptive Plan Actions Each Year

Questions?

Water Demand Projections