

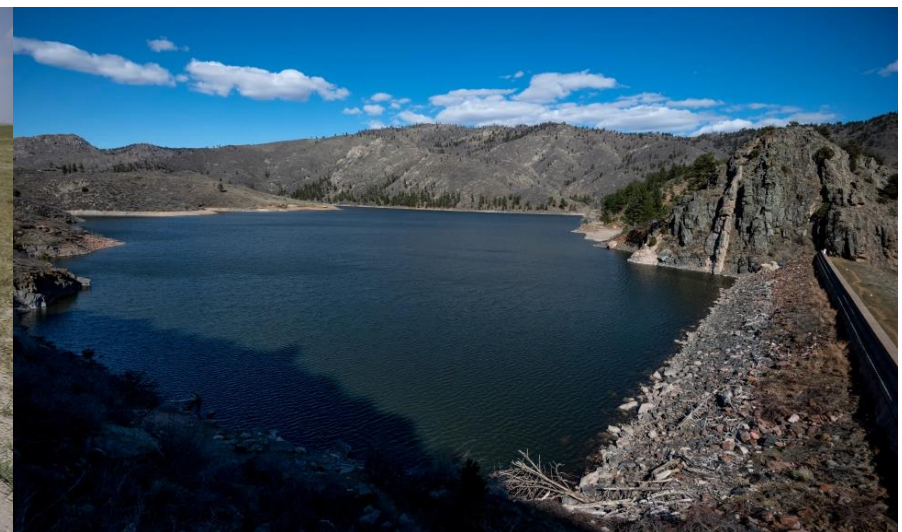
# Terry Ranch Project

## Water Literate Leaders

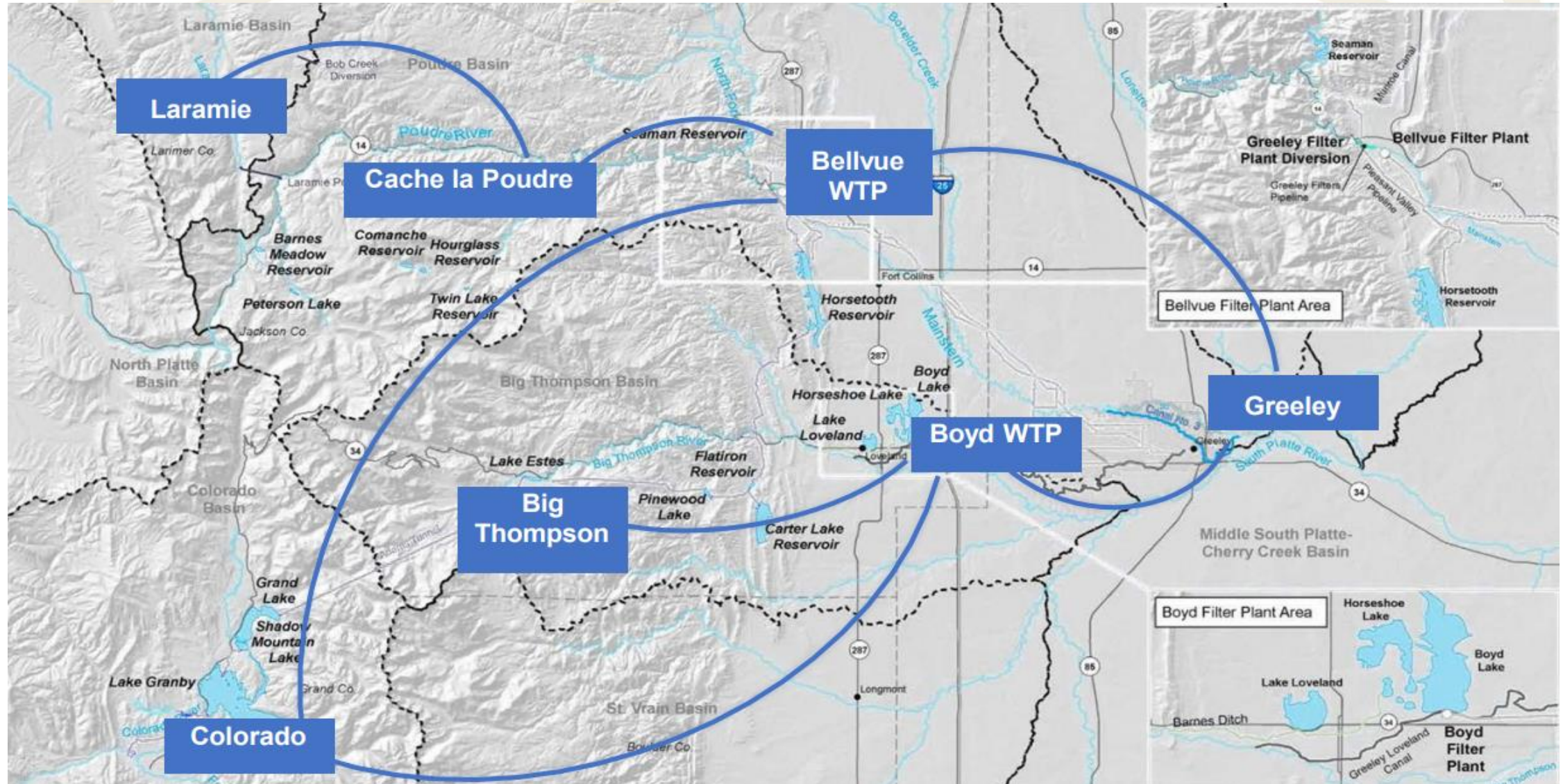
December 8, 2022



# Legacy of Planning in Water Supply Security



# Greeley's Water Supply System



# The Big Picture

- ✓ **Growing regional population**
  - ✓ Fastest growing region in state
  - ✓ Expected to double by 2050
- ✓ **Major agricultural economy**
  - ✓ Dependent on irrigation
  - ✓ Important to Greeley – over 10,000 direct agricultural jobs
- ✓ **Water supply challenges**
  - ✓ Impacts of climate change – more frequent and severe droughts
  - ✓ Colorado River supply uncertainties
  - ✓ Impaired water quality from forest fires
  - ✓ Increased competition for water



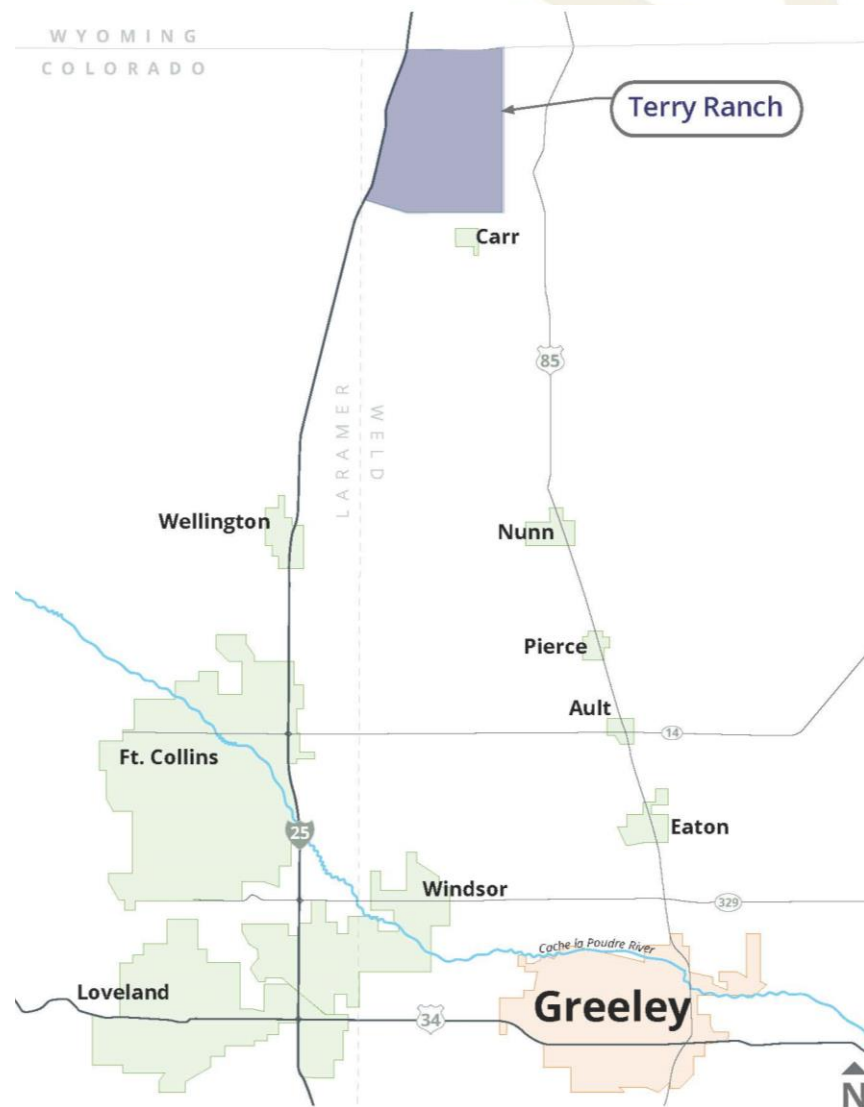
# Milton Seaman Enlargement

- ✓ Long been Greeley's preferred storage project, however:
  - ✓ Large environmental impacts
  - ✓ Inundation of Forest Service, Larimer County, and Fort Collins lands
  - ✓ Many federal, state, & local permits needed - 15 years and \$19M to date
    - ✓ Highly possible that Greeley would never receive necessary permits
  - ✓ Rapidly rising construction costs



# Terry Ranch Project

- ✓ Non-tributary Aquifer
- ✓ 1,200,000 acre-feet
- ✓ Underground water storage
- ✓ Generational investment



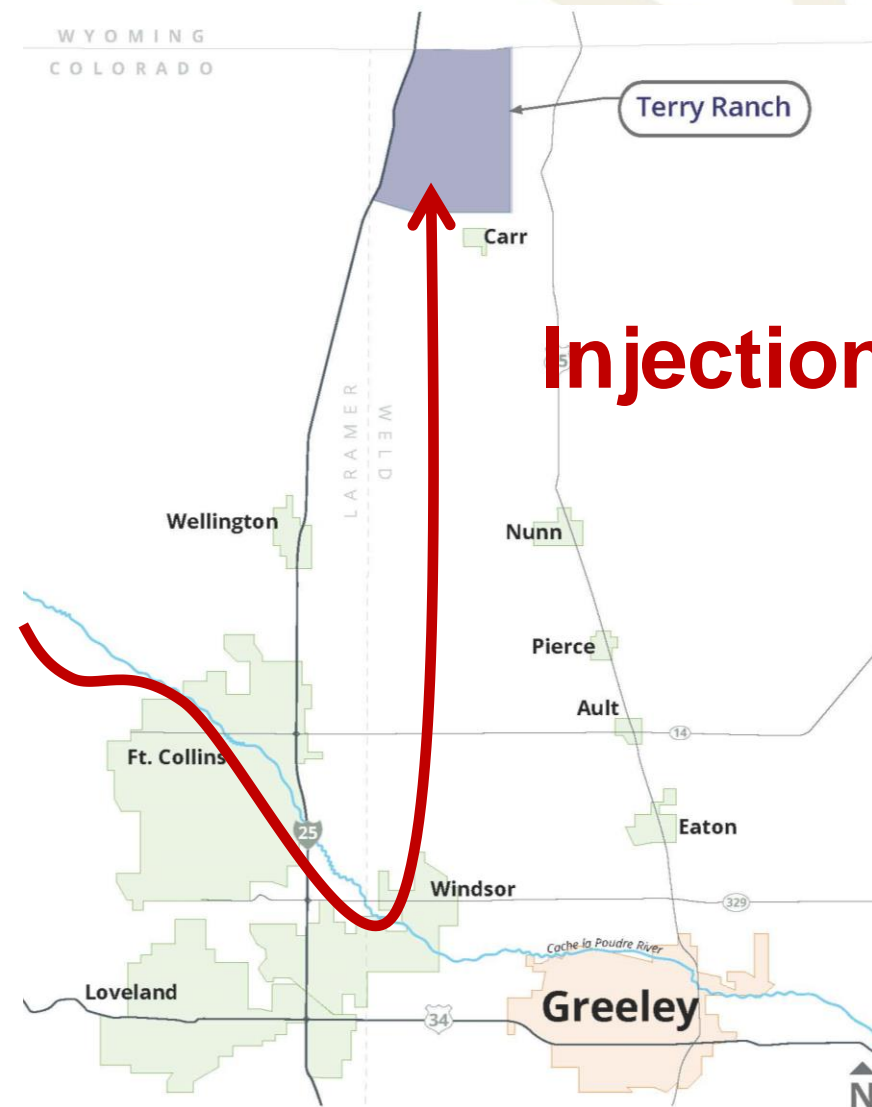
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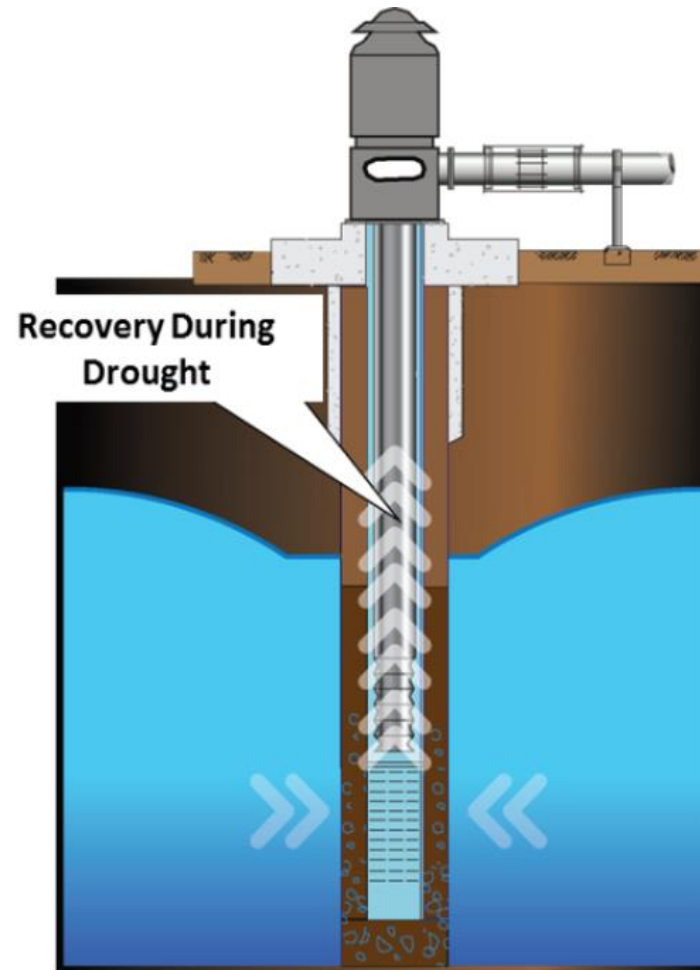
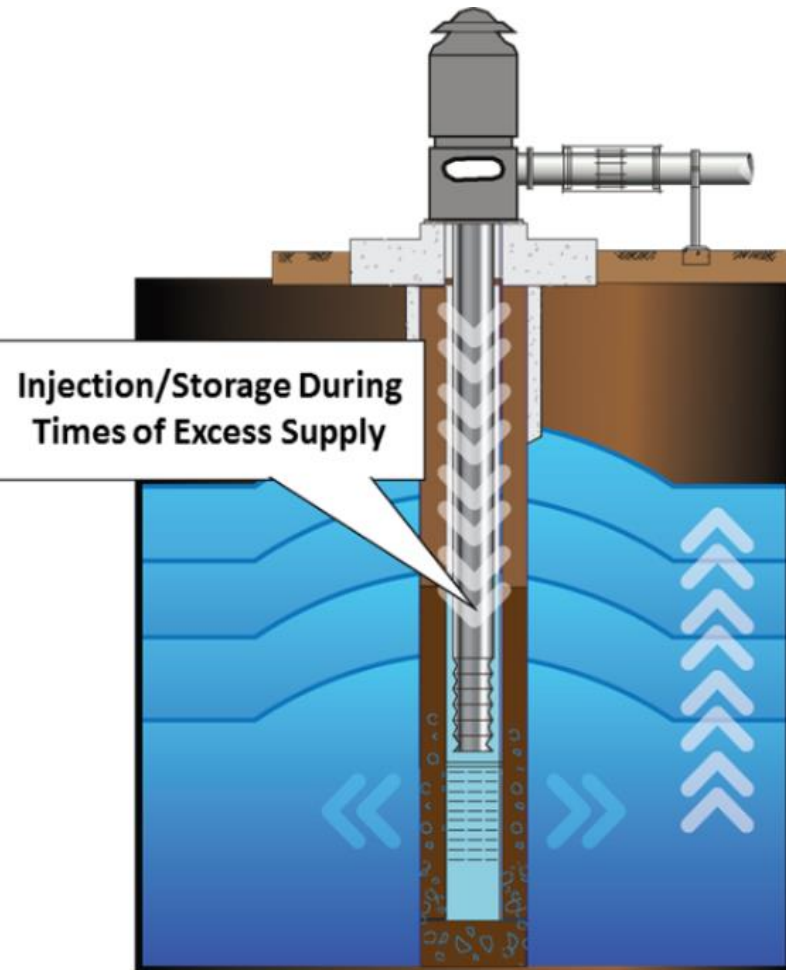
# Terry Ranch Project

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# Aquifer Storage and Recovery



- ✓ New to Greeley but common throughout U.S.
- ✓ PRO: few environmental impacts, no evaporation
- ✓ CON: requires treatment & pumping

# Terry Ranch Purchase

- ✓ Privately developed water source (Wingfoot Water Resources)
  - ✓ Non-tributary decree
  - ✓ Right to aquifer storage
  - ✓ Surface easement
  - ✓ State water lease
  - ✓ Existing wells
- ✓ Public entity unlikely to have tested and encumbered unknown source



# Unique Transaction

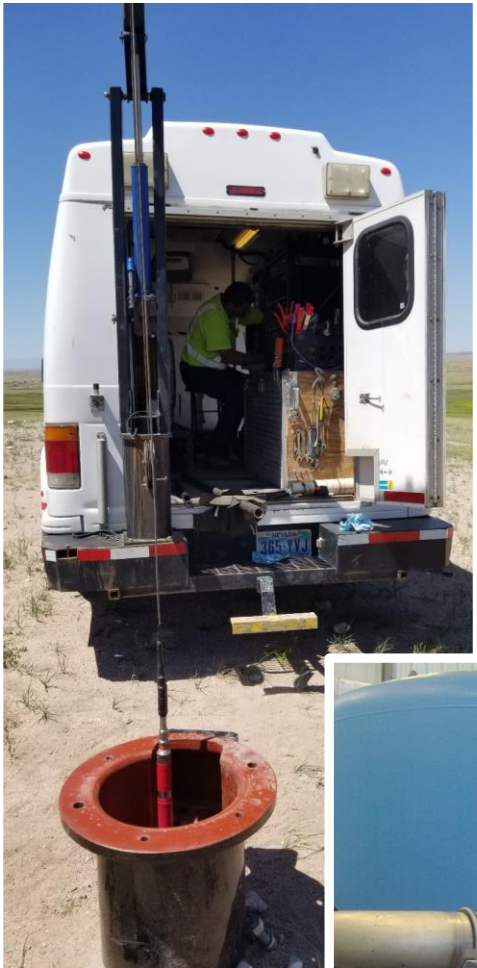
- ✓ Purchase with “**raw water credits**” rather than cash
  - ✓ Redeemable to meet Greeley’s **raw water dedication requirements**
  - ✓ 12,121 credits, 1 acre-foot per credit
  - ✓ Wingfoot sells credits to developers and home builders
  - ✓ Greeley sets price-ceiling
  - ✓ Greeley foregoes future revenue (would have been spent on a water project)
  - ✓ **Seller pays Greeley \$125 million**



# Inspection

✓ **20 rigorous scientific and engineering analyses to confirm *safety, reliability, and affordability***

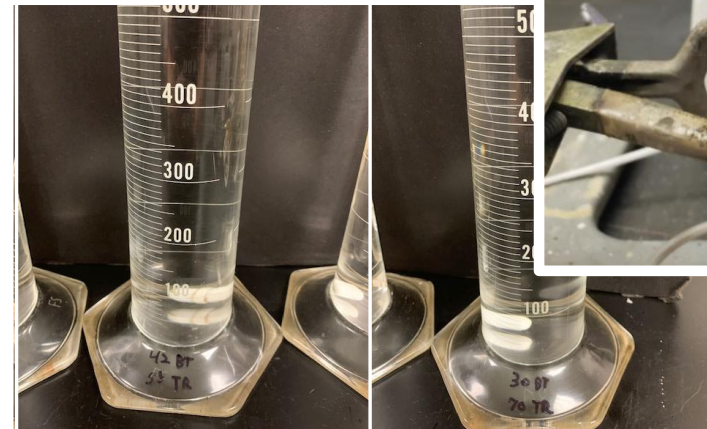
1. Environmental
2. Hydrogeology & Geochemistry
3. Water Quality & Treatment
4. Design & Cost Estimate
5. **Peer Review of All Findings**



# Water Quality

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

**Uranium can be removed by treatment**

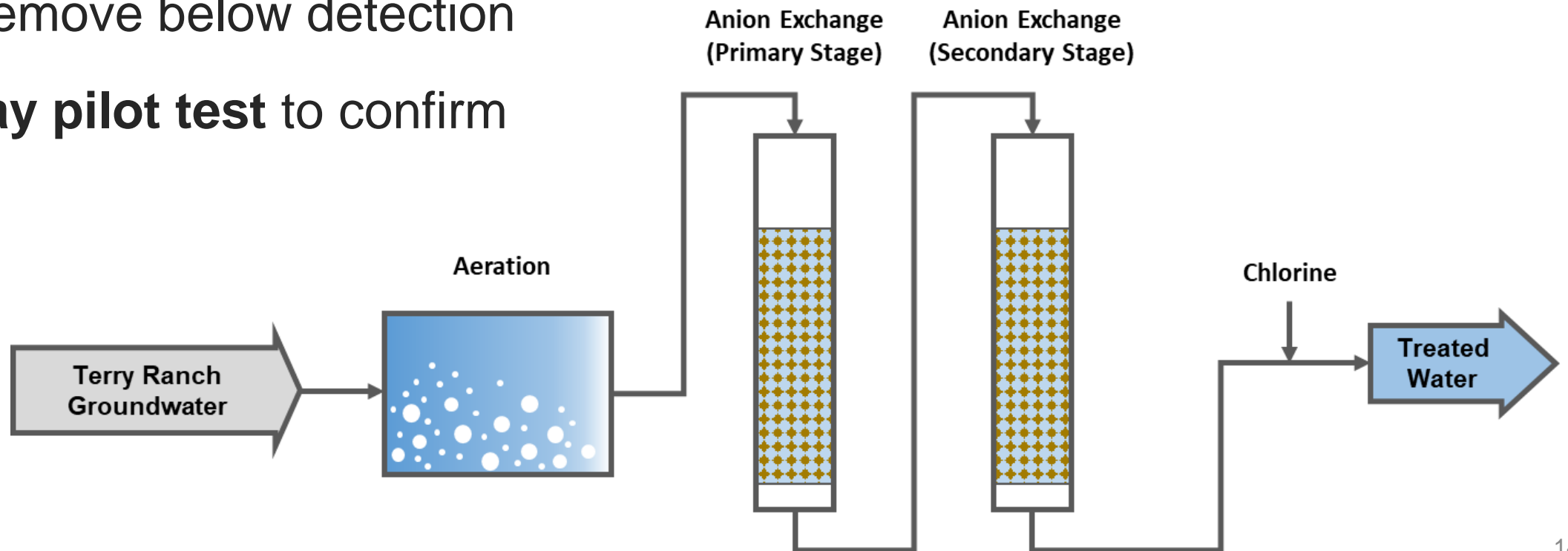


42% Bellvue  
58% Terry Ranch

30% Bellvue  
70% Terry Ranch

# Uranium Removal

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



# Challenges

- ✓ “Save Greeley’s Water” opposed project
- ✓ April 2021: sought referendum to overturn purchase (insufficient signatures)
- ✓ November 2021: proposed two amendments to City Charter
  - ✓ Special elections to make routine water decisions
  - ✓ Require approval of majority of register electors
  - ✓ **Amendments voted down ~80% to 20%**

**VOTE NO**  
**ON 2G&2H**  
**DEFENDGREELEYWATER.COM**

**COSTLY, UNNECESSARY, RISKY**

Paid for by Citizens for Securing Greeley's Charter, Tony Miller Treasurer

# Project Status

- ✓ Credit system is functioning well
  - ✓ 120+ credits sold
- ✓ Design and construction underway for first 6 miles of pipeline
  - ✓ Construction south to north
  - ✓ Easement acquisition
  - ✓ Groundbreaking in early 2023
  - ✓ **80% of cost** for first phase paid by Wingfoot
- ✓ State Land Board decree





# Preliminary Pipeline Route



# Why Terry Ranch?



- ✓ **Diversifies Greeley's water sources and provides redundancy** – groundwater is immune to drought and wildfires



- ✓ **\$250 million less expensive than next best option and construction can be phased, which maintains affordable water rates**



- ✓ **Proven to meet or exceed all Greeley's high water quality standards**



More information at:  
[www.greeleygov.com/terryranch](http://www.greeleygov.com/terryranch)

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