

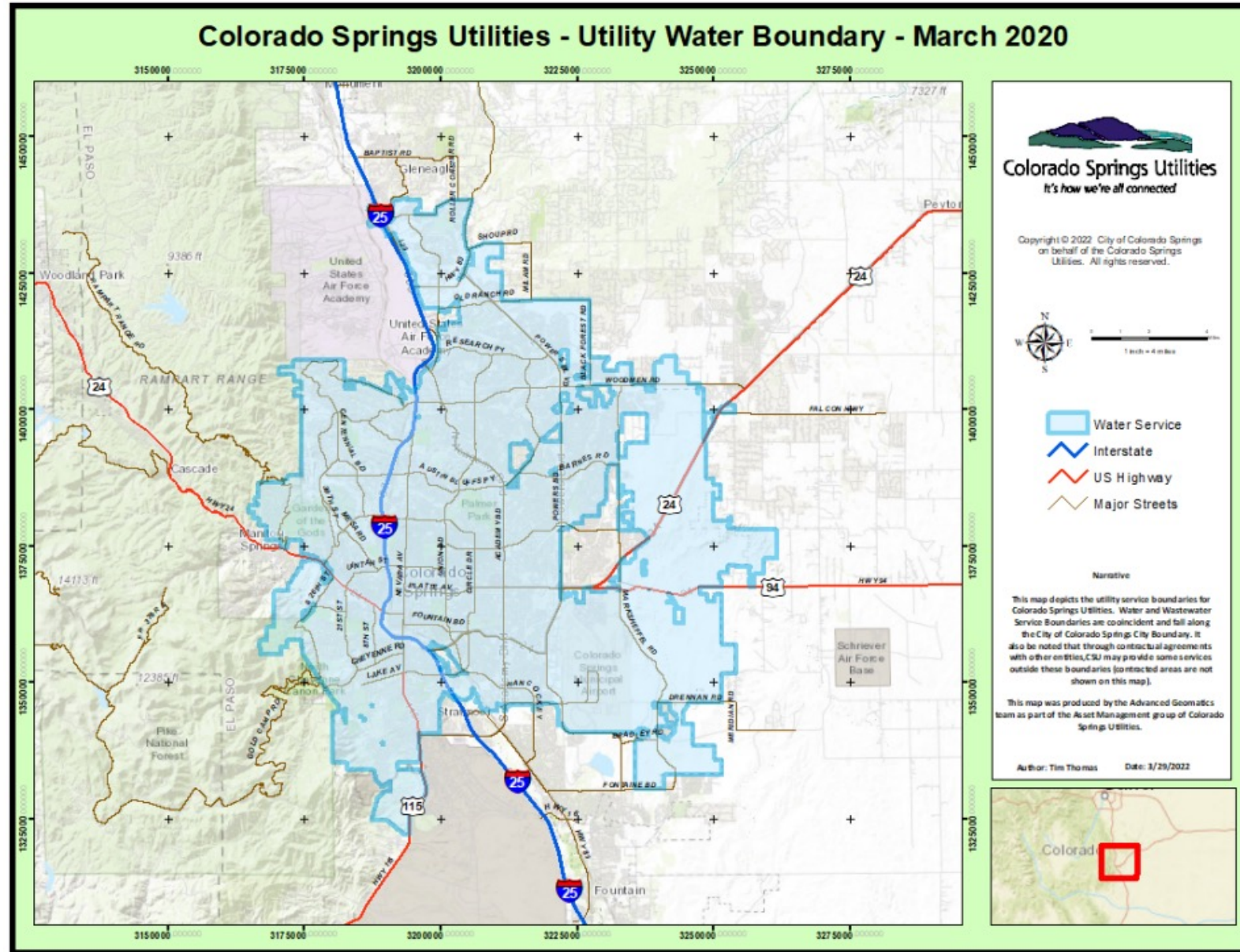
Colorado Springs Water System

- Water Collection
- Water Treatment
- Water Use
- Water Resource Recovery
- Future Planning



Our Customers

- Service Territory – 195 square miles
- Serve a population of 520,000 (estimated 2021)
- City residents
- Ute Pass communities
- Military bases
- Other suburban areas outside the City limits

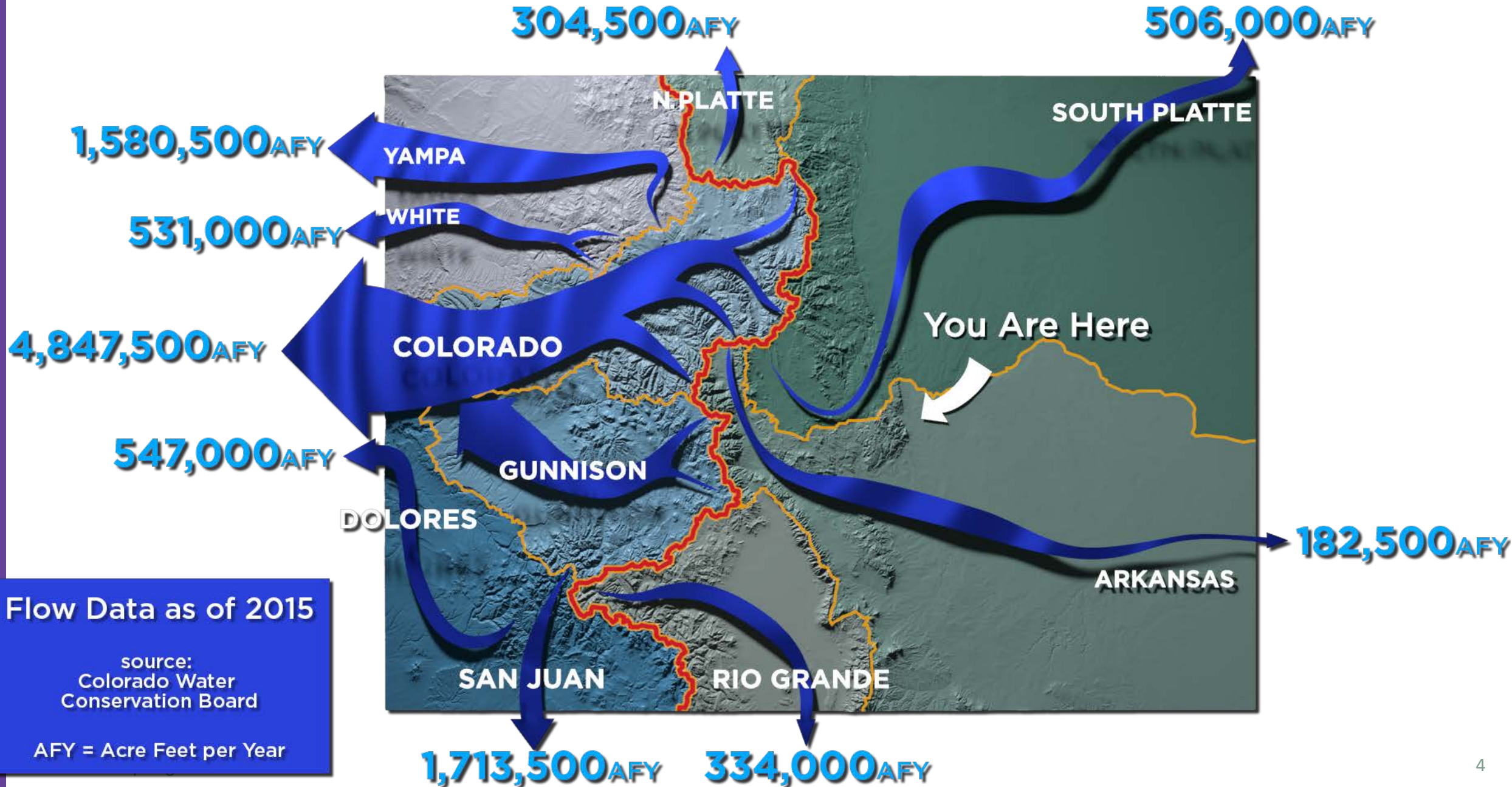


Water Collection

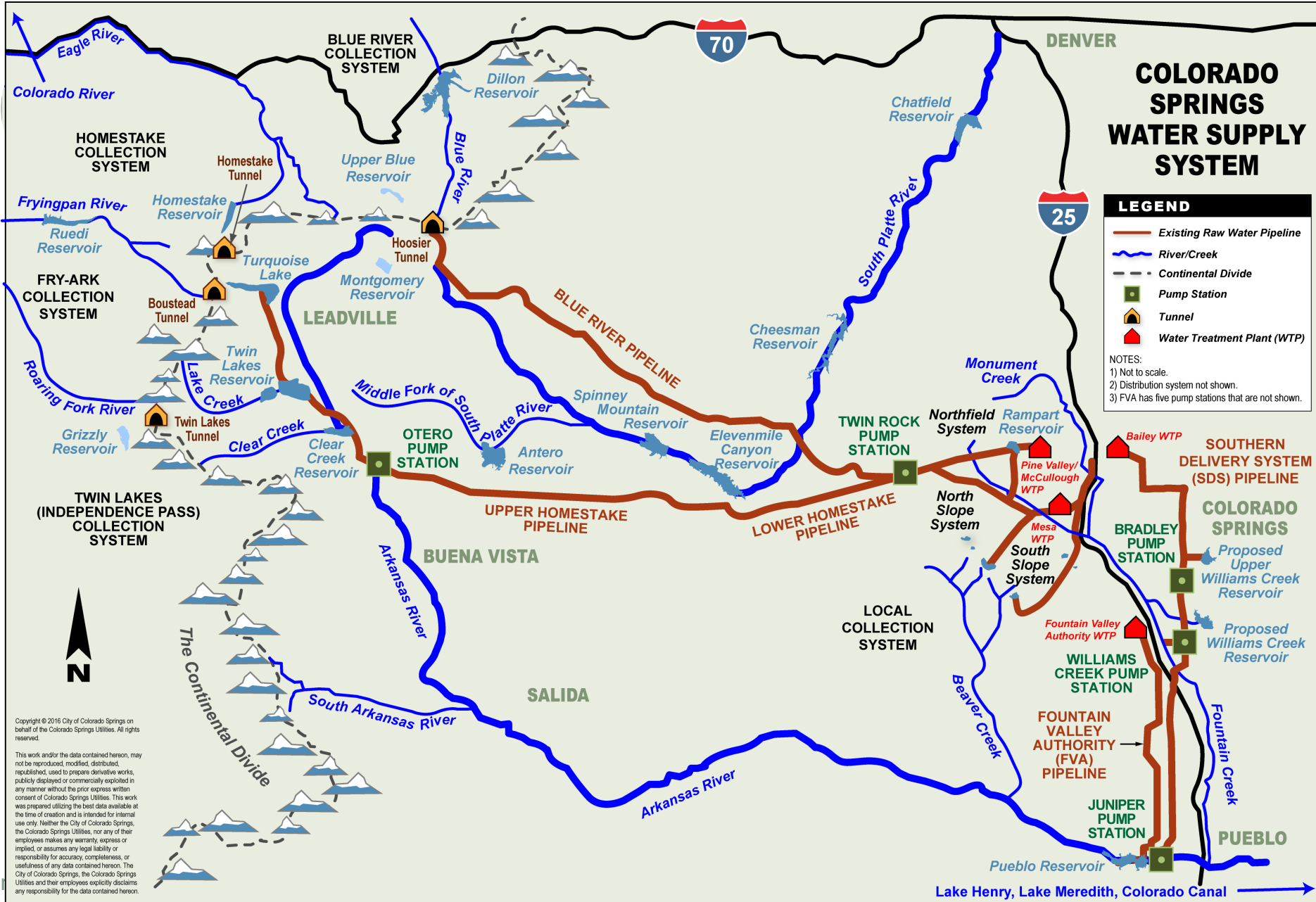
- Seven collection systems
- Water transported from 100 miles away
- 25 Reservoirs to store three years of supply



Colorado Watersheds



Colorado Springs Water System



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Water Treatment

- Treatment started in 1942
- Traditional treatment process
- High quality water – no violations
- Over 2,200 miles of distribution pipe
- Serve a population of 520,000

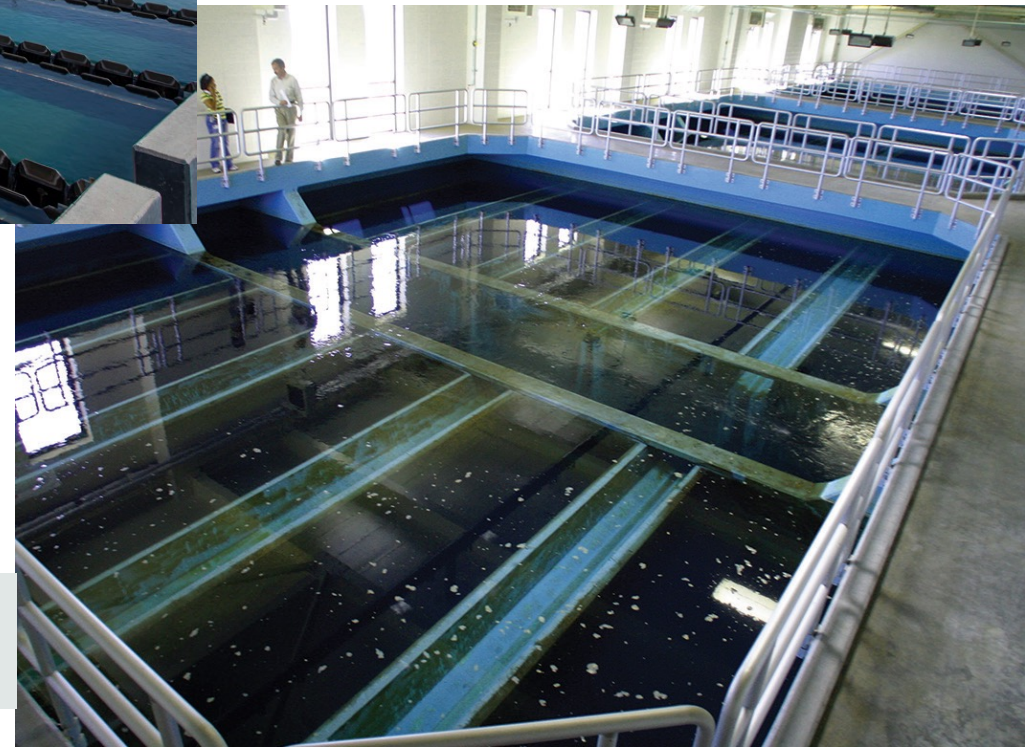


Water Treatment



Tollefson Water Treatment
Plant Sedimentation Basins

- Water Treatment Steps:**
1. Coagulation and Flocculation
 2. Sedimentation
 3. Filtration
 4. Disinfection

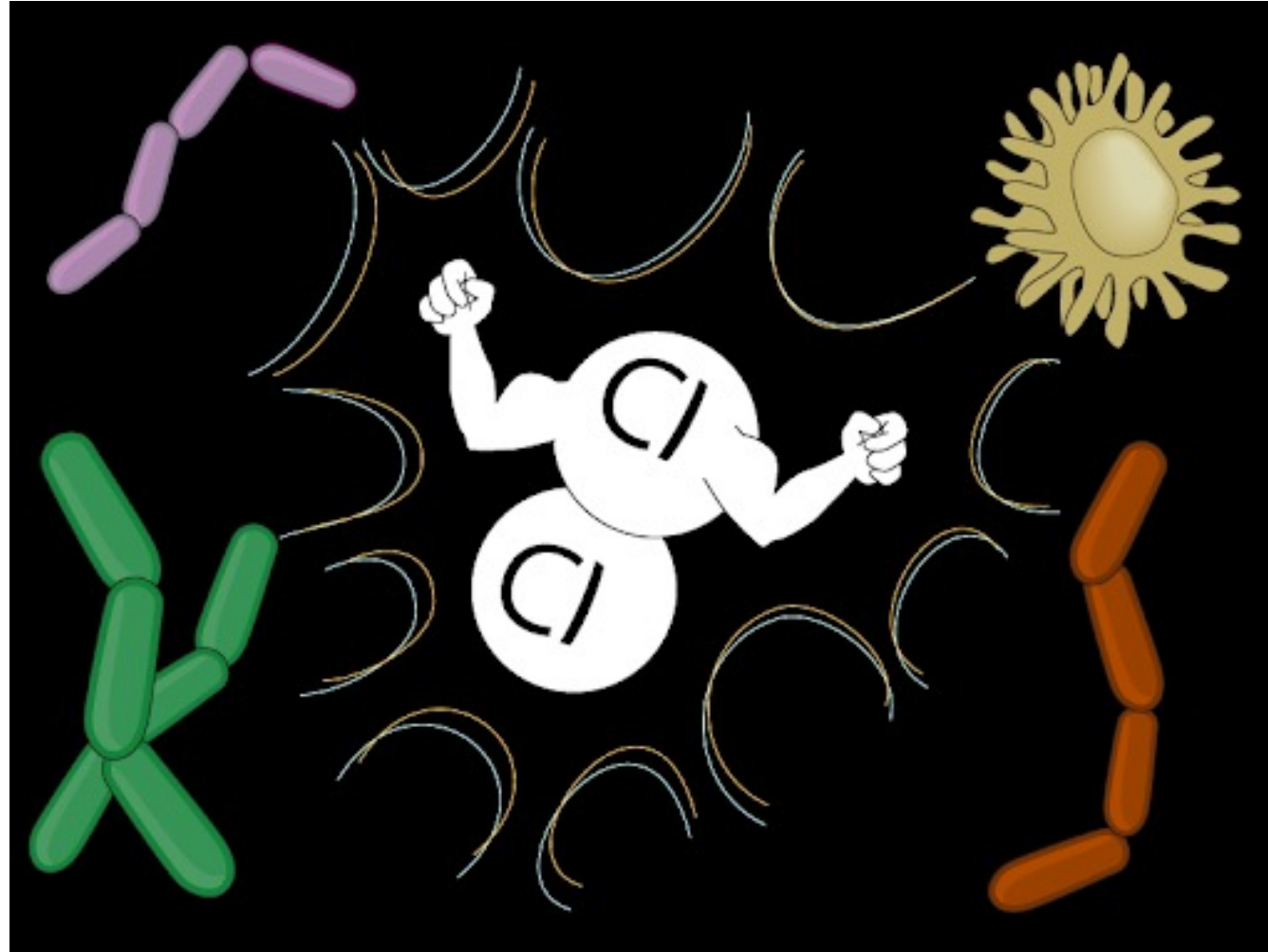


McCullough Water
Treatment Plant Filter Beds

Water Filter Materials



Drinking Water Disinfection



Water Testing

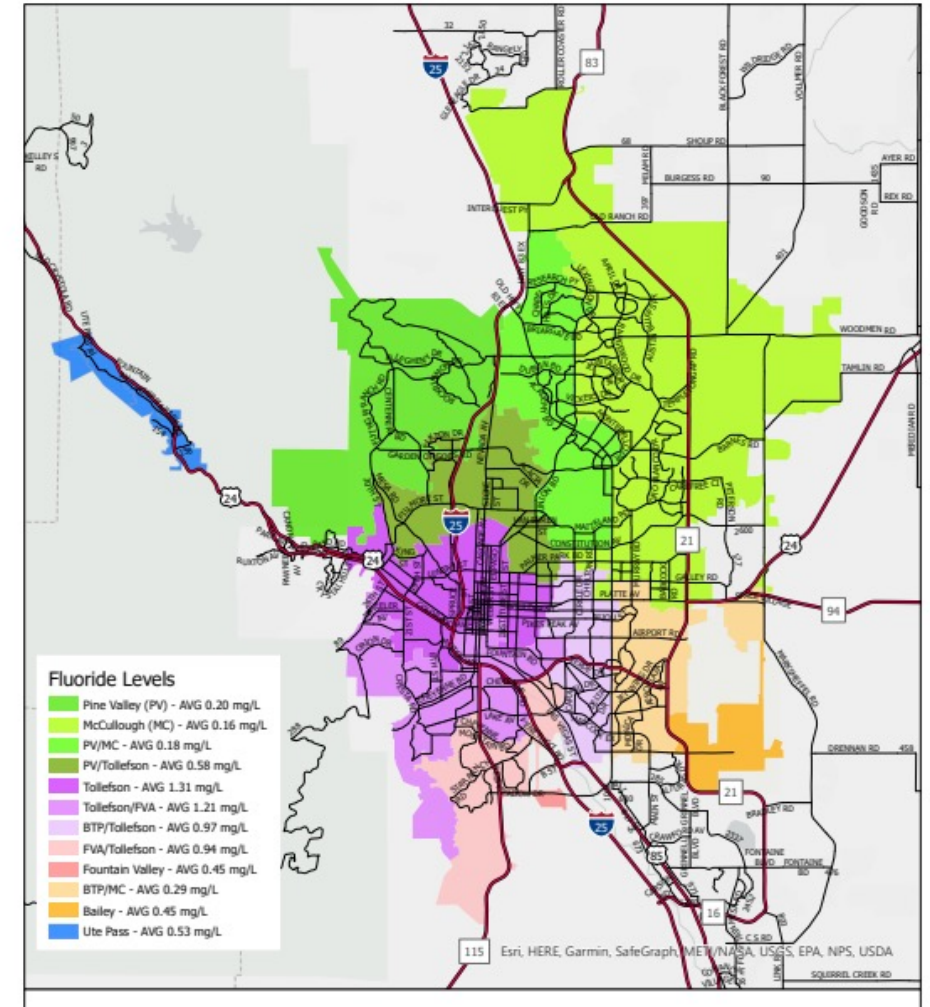


>1,000
Monthly
Samples
Testing for:

Bacteria
Turbidity
pH
Organics
Alkalinity
Metals
Calcium
Chloride
Chlorine
Sulfate
Nitrate
Nitrite
Color
Others



Fluoride Levels In Drinking Water



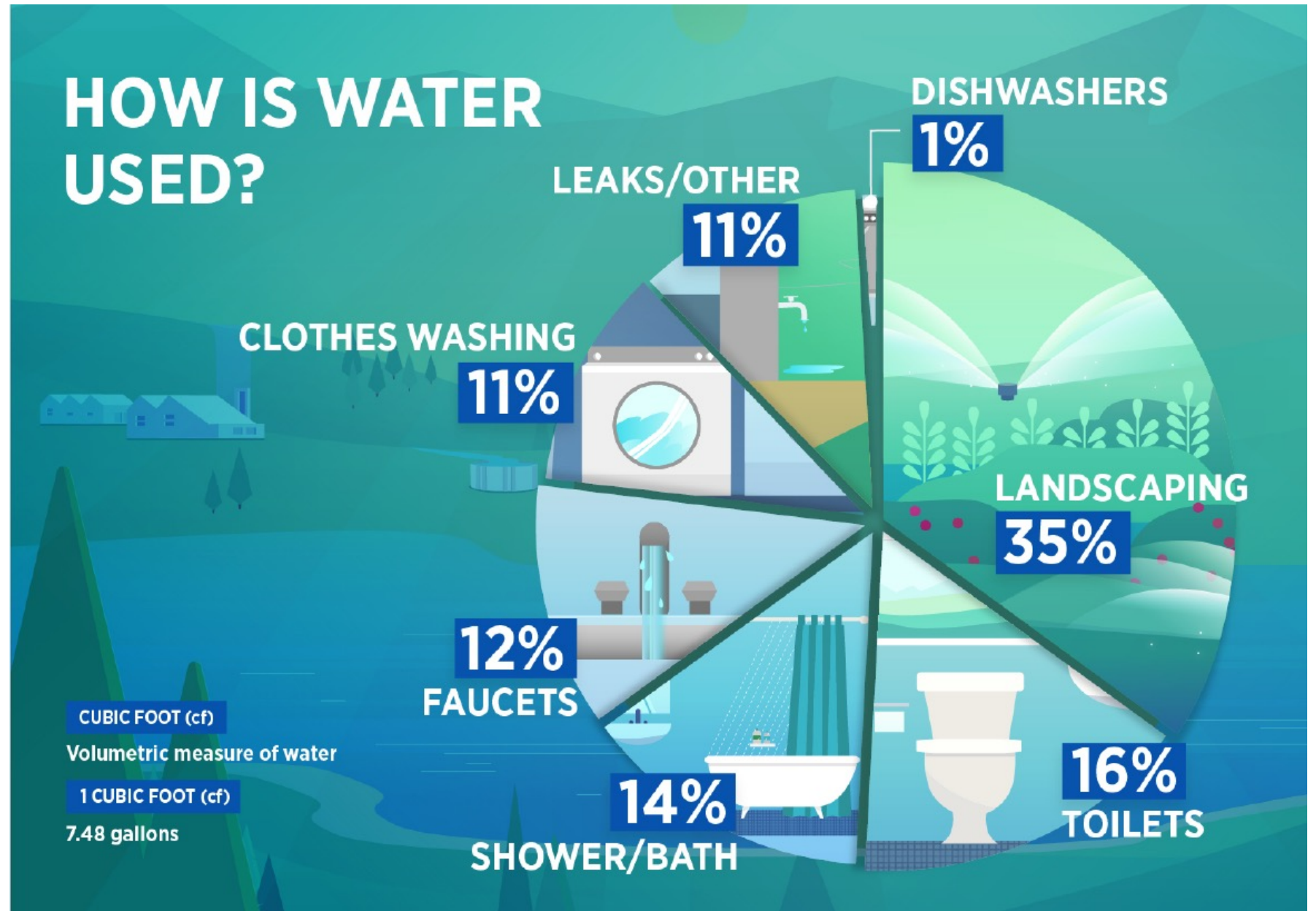
Water Use

- 68 million gallons of water served daily (averaged)
- 80 gallons per person per day
- 45% commercial use/
55% residential use



Water Use in the Home

A Colorado Springs Resident uses an average of 80 gallons of water a day



Water Resource Recovery

- 3 Water Resource Recovery Facilities
- 38 million gallons water reclaimed daily



Waste Management

- Organic Solids Composting
- Bio Gas
- Porcelain Recycling



Activated Sludge

Microbes
clean waste
out of the
water.



Disinfection

Inactivates or destroys pathogenic bacteria, viruses, and amoebic cysts commonly found in wastewater.

**Ultra-violet (UV) light
used for disinfection**



Reclaimed Water



90% released to Fountain Creek
for Exchange Credit



10% reused in Non-potable system

Future Planning

- Expected population of 720,000 in 2070
- Expected water use demand at buildout is 136,000 AFY
- Need additional 25,000 AFY to meet buildout demand

10,000 to
15,000
AF/yr

Finish Colorado
River Projects
(New Supply)

15,000 to
25,000
AF/yr

Agricultural
Transfers
(New Supply)

11,000 to
13,000
AF/yr

Demand Management
(Savings)

90,000 to
120,000
AF

Storage
(New or Enlarged)

1,200 to
2,500 AF
expansion

Reuse



Colorado River Projects



Agricultural Water Sharing



Demand Management



Storage

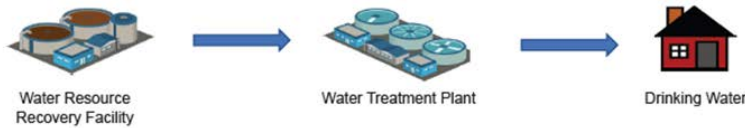


REUSE

- Exchanges
- Nonpotable
- Indirect Potable
- Direct Potable



WHAT IS DIRECT POTABLE REUSE?



Direct Potable Reuse (DPR): cleaning recycled water to a level that meets or exceeds all drinking water standards.

HOW DIRECT POTABLE REUSE COULD HELP OUR CUSTOMERS:

- Clean, safe future water source
- Reliable, locally controlled
- Sustainable
- Environmentally friendly
- Cost effective
- Resistant to climate effects



How to Get Involved

- **Read our Sustainable Water Plan:**
<https://www.csu.org/Documents/IWRP.pdf>
- **Provide input on our Water Efficiency Plan (comments due by May 30, 2022):** <https://www.csu.org/Pages/2022WaterEfficiencyPlan.aspx>
- **Take advantage of our classes, tours and rebates:**
 - <https://www.csu.org/Pages/EfficiencyClasses.aspx>
 - <https://www.csu.org/Pages/FacilityTours.aspx>
 - <https://www.csu.org/Pages/ResidentialRebates.aspx>
- **Explore the water system interactive map:**
<https://storymaps.arcgis.com/stories/27e6a3b997a74be181b9e06022f478f1>

Questions?

