

# Regional Water Supply Resiliency Program

Colorado River District:  
State of the River  
*(Gunnison & Uncompahgre)*

March 20, 2023



WHO WE ARE: A unique cooperative effort among seven water entities to provide high-quality potable water to the municipalities and rural areas of the Uncompahgre River Valley.

The six entities that represent Project 7 Water Authority (P7WA) are:

- City of Montrose
- City of Delta
- Town of Olathe
- Tri-County Water Conservancy District
- Chipeta Water District
- Menoken Water District

# Project 7 Water Authority



OUR HISTORY: Formed in response to regional water shortages and infrastructure challenges.

#### 40-Years of Cooperation:

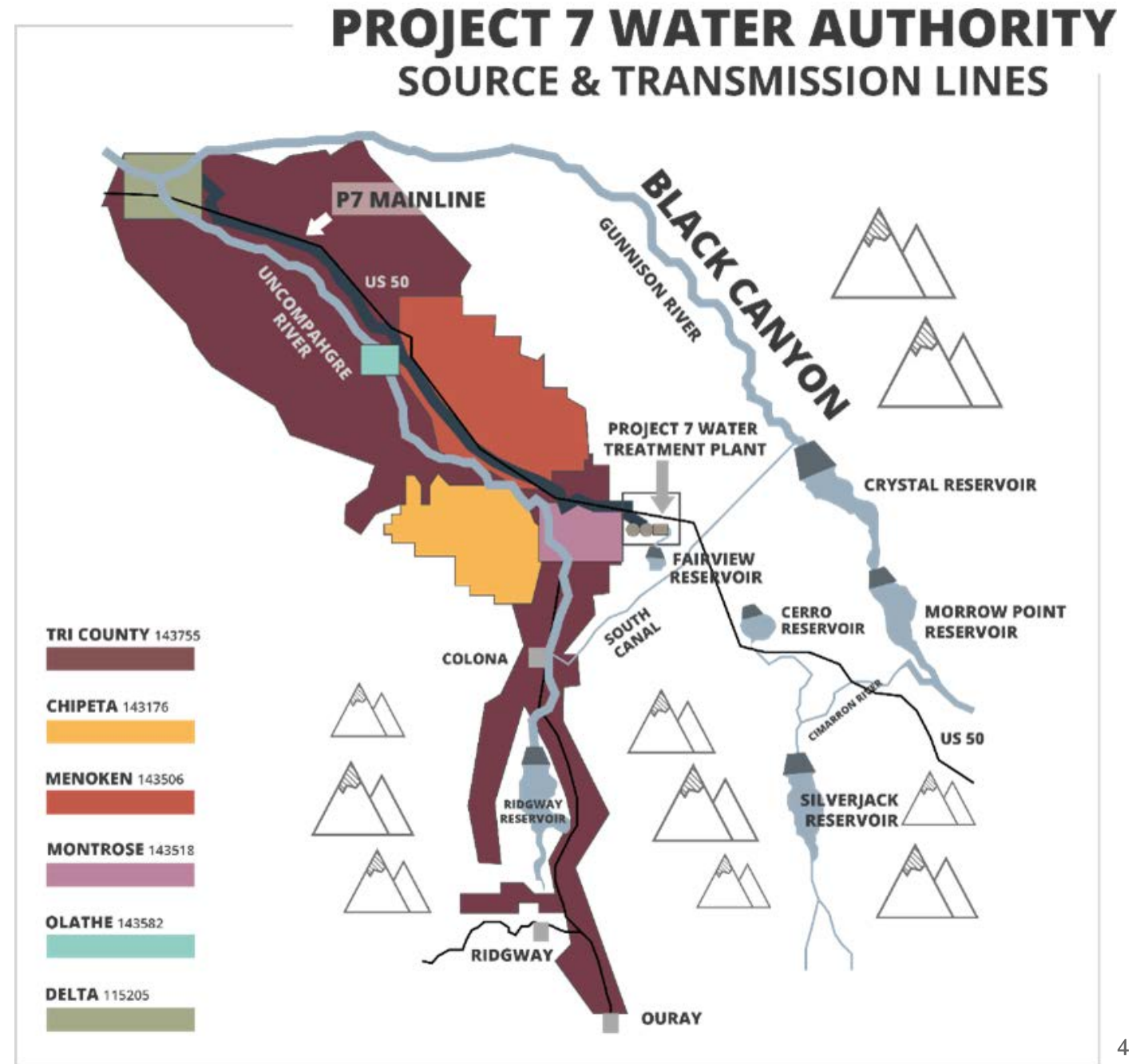
- 1909: Gunnison Tunnel begins delivery of irrigation and raw drinking water supplies
- 1973: Regional water shortages as a result of undersized and outdated treatment facilities
- 1977: Project 7 established as a governmental entity
- 1980: Regional water system goes online to treat and distribute drinking water
- 1995: Significant treatment and storage improvements
- 2000's: Resiliency planning for direct access to Ridgway Reservoir water rights
- 2019: Regional Water Supply Program initiated

# Project 7 Water Authority



Member entities contract with P7WA for water treatment services instead of operating their own water treatment plants.

This allows each member to share costs, benefit from economies of scale and enjoy region-wide water security, all while retaining ownership of their water rights.







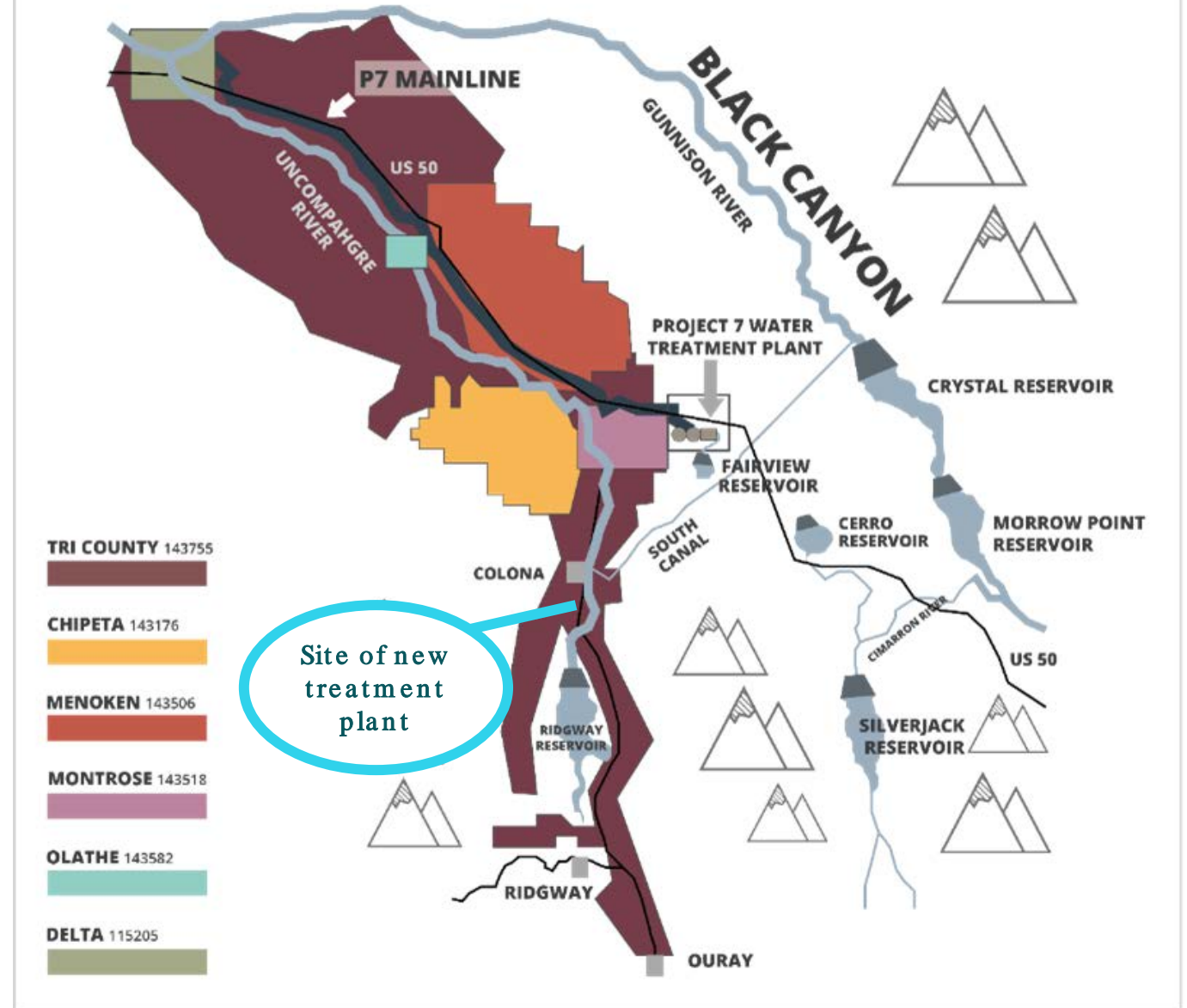
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The Water Resiliency Program  
& Why It's Important



By adding a second treatment facility to our existing single source system, the effort will reduce risk to our regional drinking water supply from wild fire, drought and infrastructure failure.

## PROJECT 7 WATER AUTHORITY SOURCE & TRANSMISSION LINES



# Management Team

The Resiliency Program is Led by Project 7 Water Authority.

Project 7 has built a Program Management Team comprised of Engineers, Scientists, Planners and Financial Advisors.

# Program Values



# The P7WA Water Supply Resiliency Program will:

Mitigate the risk of being dependent on a single drinking water source and treatment facility

## MAJOR RISK FACTORS:

A wild fire, pipe line, tunnel failure, or treatment plant outage could impact drinking water that over 50,000 people depend on.



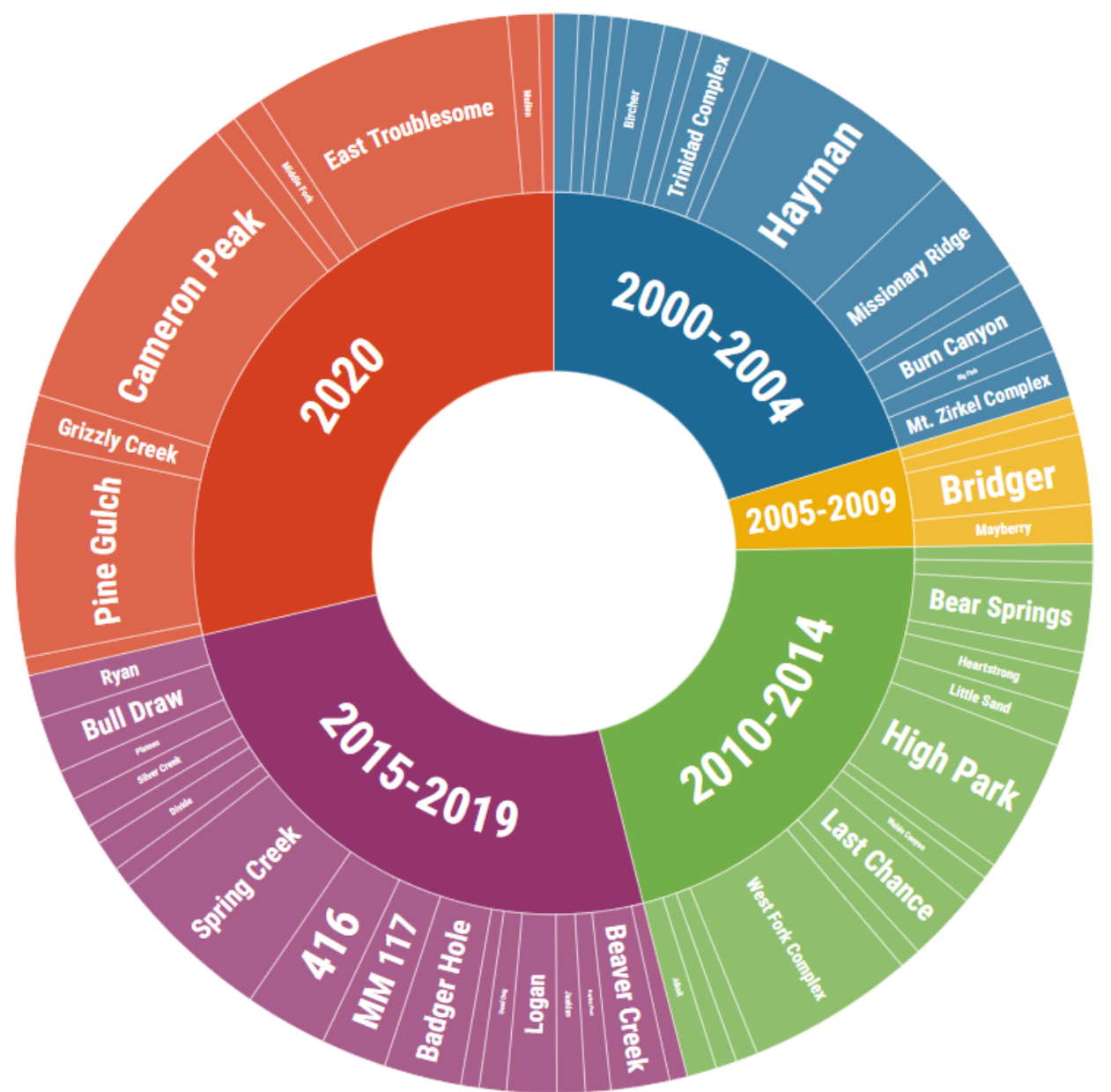


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Source: [Rocky Mountain Area Coordination Center](#)

Acreage totals for 2020 fires are current as of Oct. 19. This chart includes the more than 20,000 acres that the Mullen Fire, which started in Wyoming, has burned so far in Colorado.



## PROJECT NEED:

Mitigate the risk of being dependent on a single drinking water source and treatment facility

## MAJOR RISK FACTORS:

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- 50,000+ individuals served safe drinking water by Project 7 Water Authority
- 2 Cities, 1 Town, 3 Districts
- Only one water treatment plant and only one drinking water transmission line running the length of the valley.



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- For contrast, the Grand Valley is served by 4 water treatment plants
  - Grand Junction
  - Ute Water Conservancy District
  - Clifton Water District
  - Town of Palisade
- All entities within the Grand Valley have interconnections between their water distribution system, allowing them to help each other during periods of hardship or equipment malfunction.

# Key Program Benefits:



**Investing in the Future:** Realize Project 7's founding vision of a resilient and reliable water supply for more than 50,000 people in the Uncompahgre River Valley.



**Dependability:** Reduce the need to pump water around the valley, which lowers operations/maintenance costs, reduces energy use and benefits the environment.



**System Strength:** Develop a new treatment facility and water source to reduce the risk of a single source system from wildfire or drought in the Gunnison watershed, or a failure in the Gunnison Tunnel.



**Direct Access:** Provide member entities with direct access to their existing water rights in Ridgway Reservoir, currently accessed through trades and exchanges.

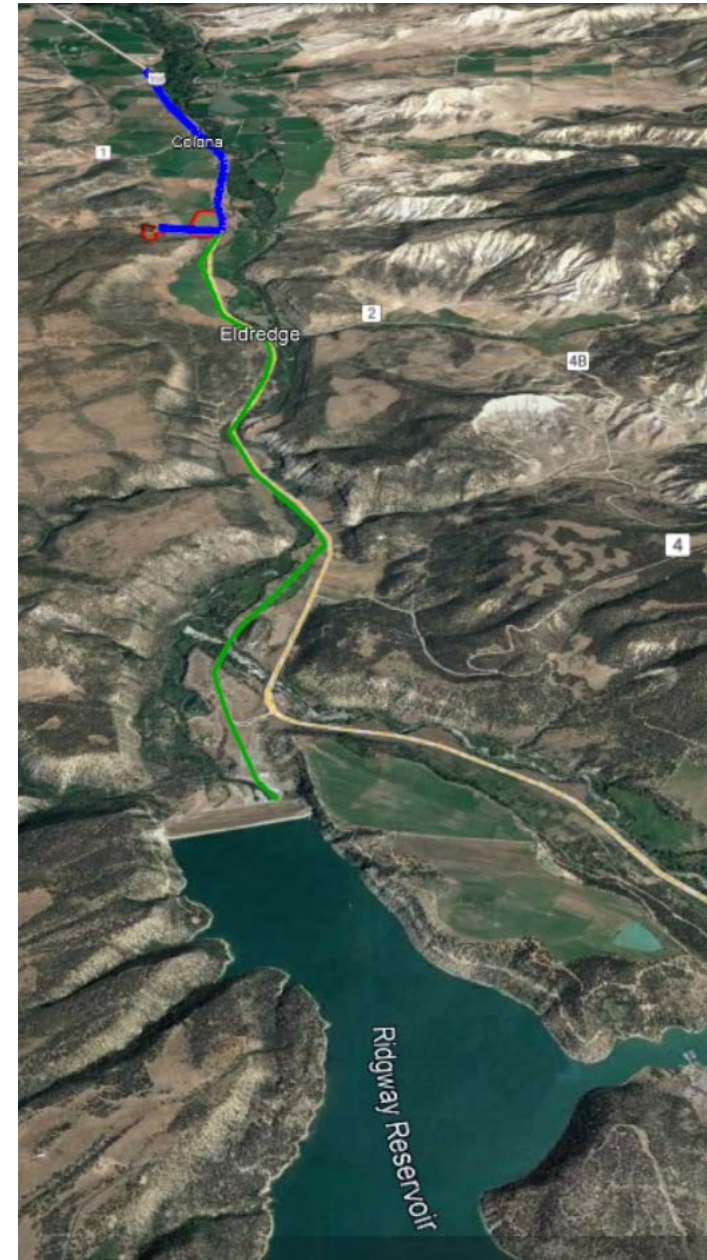


What Will the Proposed WTP  
Look Like?



# Elements of the Resiliency Program:

- A new raw water transmission line installed between Ridgway Reservoir and the new facility (approximately 5.5 miles of pipe)
- A new drinking water transmission line from the WTP site to serve all members via an adequately sized tie in point within Tri-County WCD (approximately 3.25 miles of pipe)
- A new water treatment facility located at:  
35679 US-550, Montrose, Colorado 81403
  - Surface water treatment (filtration) and softening
  - Hydroelectric generation from raw water line





In spring 2022, the U.S. Bureau of Reclamation awarded \$612,059 to Project 7 from the Desalination and Water Purification Research Program to test different technologies for the new treatment facility.





# The Proposed Location:

- 50 Acre site
- Proposed building site located off the HWY-550 corridor but with dedicated access
- Fractured sandstone at back of property allows a firm foundation and is excavatable
- Topography offers the ability to reduce costs associated with pumping







The Ridgway WTP would be set back from HWY 550 to protect the area's scenic and agricultural character.





The project team is currently evaluating design concepts to optimize the site layout – both to reduce construction costs and to protect the scenic skyline as seen from US-550





One option is to build the new WTP into the side of a sandstone bench, which would require only a single level of visible construction at the top. We are currently evaluating whether a drinking water storage tank is necessary for the WTP.



The overall project schedule and cost will depend on engineering evaluations, pilot testing and decisions to be made in 2023



For planning purposes, we are anticipating a \$70-90M project and are actively working to refine cost estimates as the project moves forward



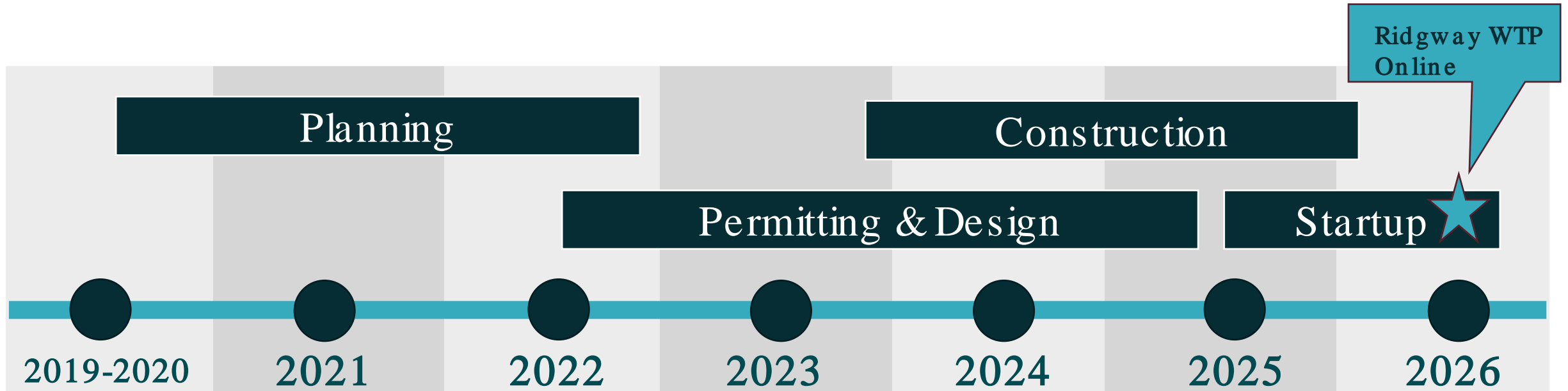


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Timeline & Next Steps



The Regional Water Supply Program is expected to produce water for the Uncompahgre Valley by 2026.



The new water treatment plant will be designed so additional capacity can be added in the future, which would result in a design capacity of around 10 million gallons per day – a more than 30% increase in drinking water supply for the region.



# Funding Plan & Value of Water

- Maximize outside funding to multiply every dollar contributed locally
- Strong candidate for federal/state grants; however, a local match is required by increasing the price of wholesale water
- Match the inflation adjusted value of water; 40+ years of efficient management has allowed us to keep rates below inflation adjusted levels
- Fund the region's future water needs, while simultaneously keeping rates low by correcting for deferred inflation
- Bottom Line: Now is the time to reinvest in a secure regional water supply for future generations...so next 40-years are as strong as the past 40



## DEFINING SUCCESS:

Program leadership  
regularly meets with all  
Project 7 voting  
members to track  
progress towards  
common definitions of  
success.

System Strength: “We are part of the whole and we want the whole system to be strong.”

Predictable Budgeting: Transparent cost sharing agreements must be established. “We need real numbers and specifics on how this is going to work.”

Return on Investment: “What size is the right size to provide maximum value on day one.”

Long-Term: “Twenty years from now this will be a bump in the road, but a water shortage is remembered forever.”

Value of Water: “The founding investment in Project 7 yielded huge regional benefits. Now is the time to reinvest. No one wants to be the generation that drops the ball.”







Questions ?

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