

Regional Water Supply Resiliency Program

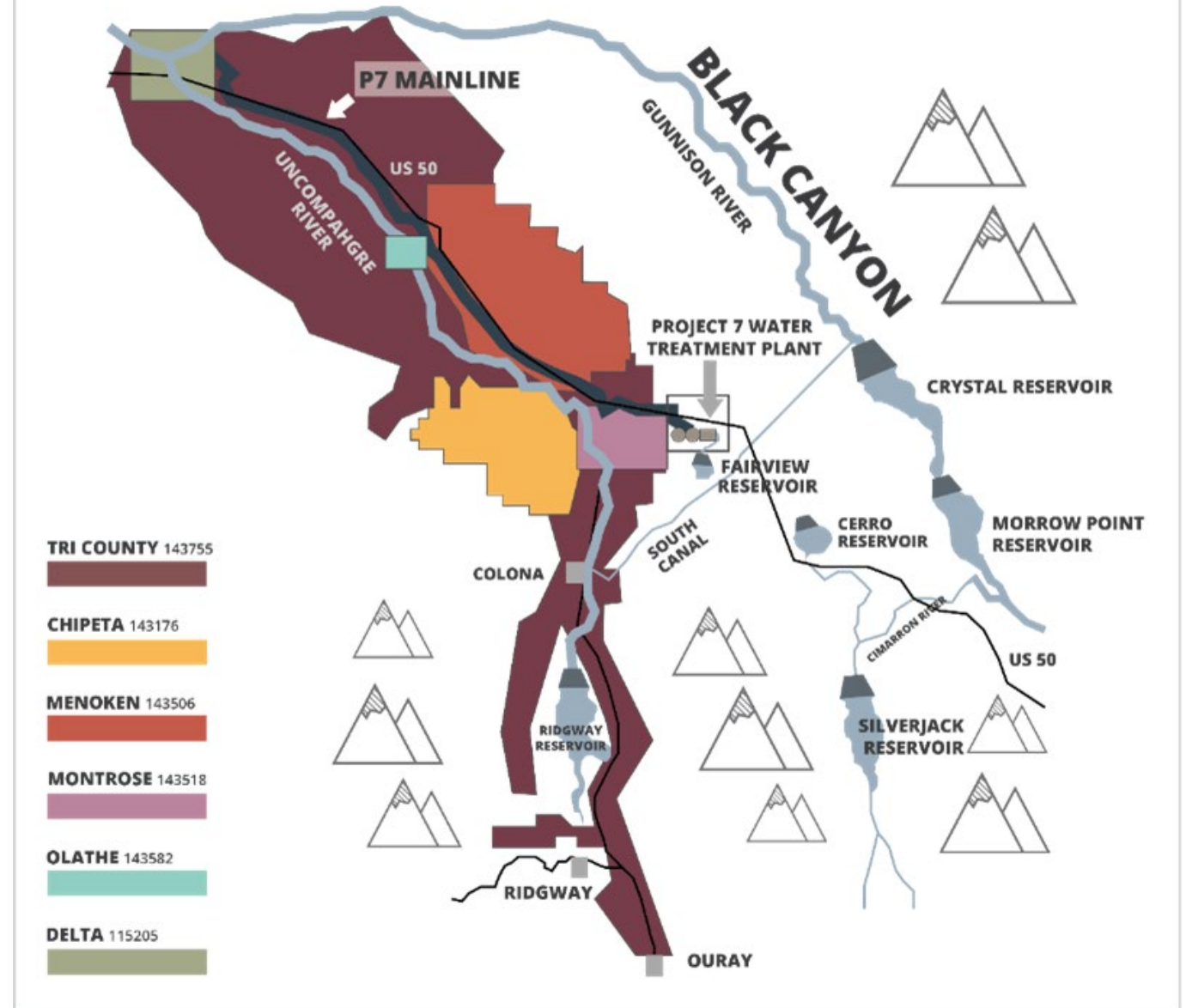
Update: Project 7 Governing Entities

Spring 2024

Meeting Purpose:

1. What The Regional Water Resiliency Program Is...And Why It Is Needed
2. Where We Are In The Process
3. Potential Implications To Water Rates And Our Customers

PROJECT 7 WATER AUTHORITY SOURCE & TRANSMISSION LINES



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- **1973:** Regional water shortages as a result of undersized and outdated treatment facilities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

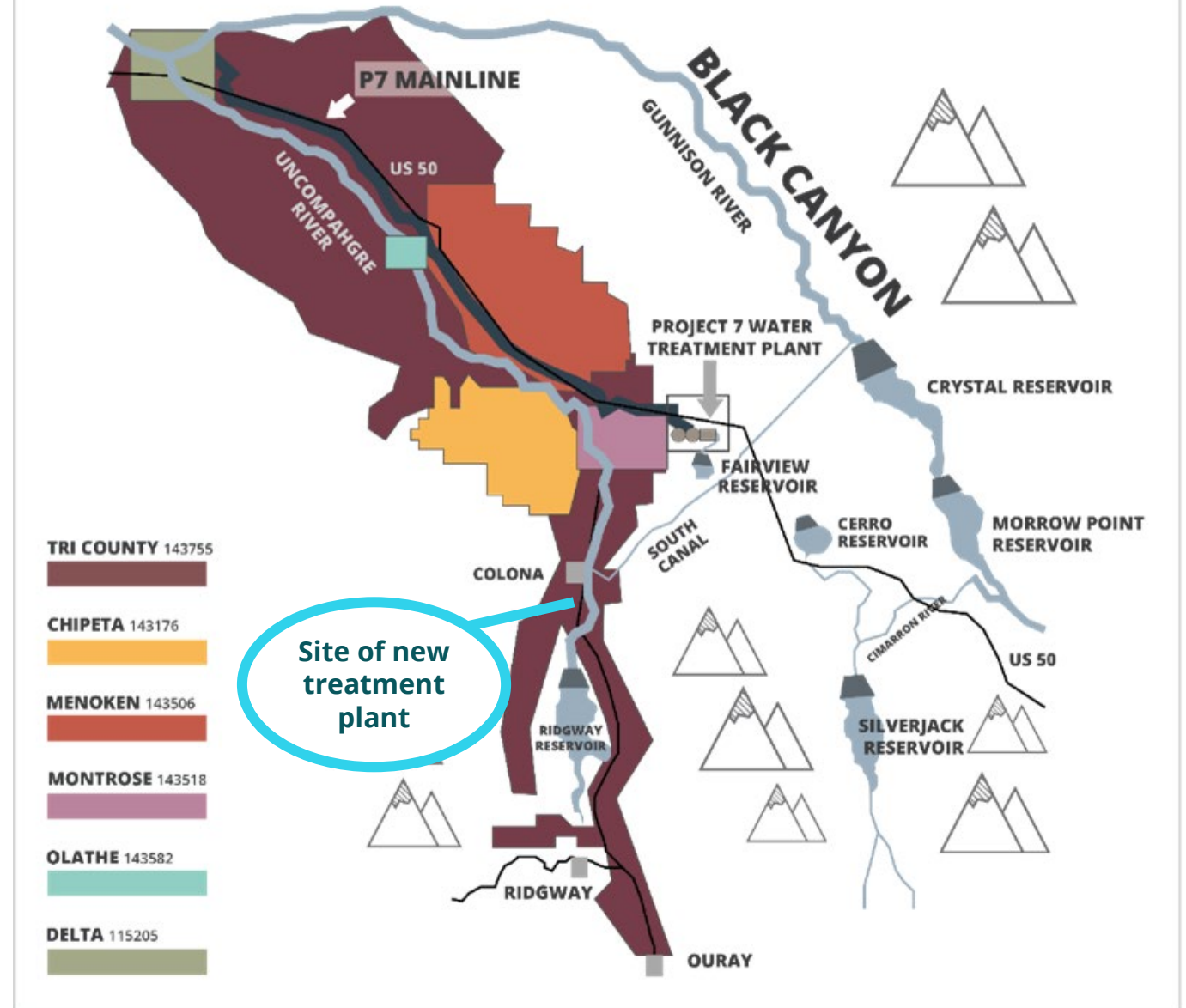
Project 7 Water Authority



The Regional Water Resiliency Program & Why It's Important

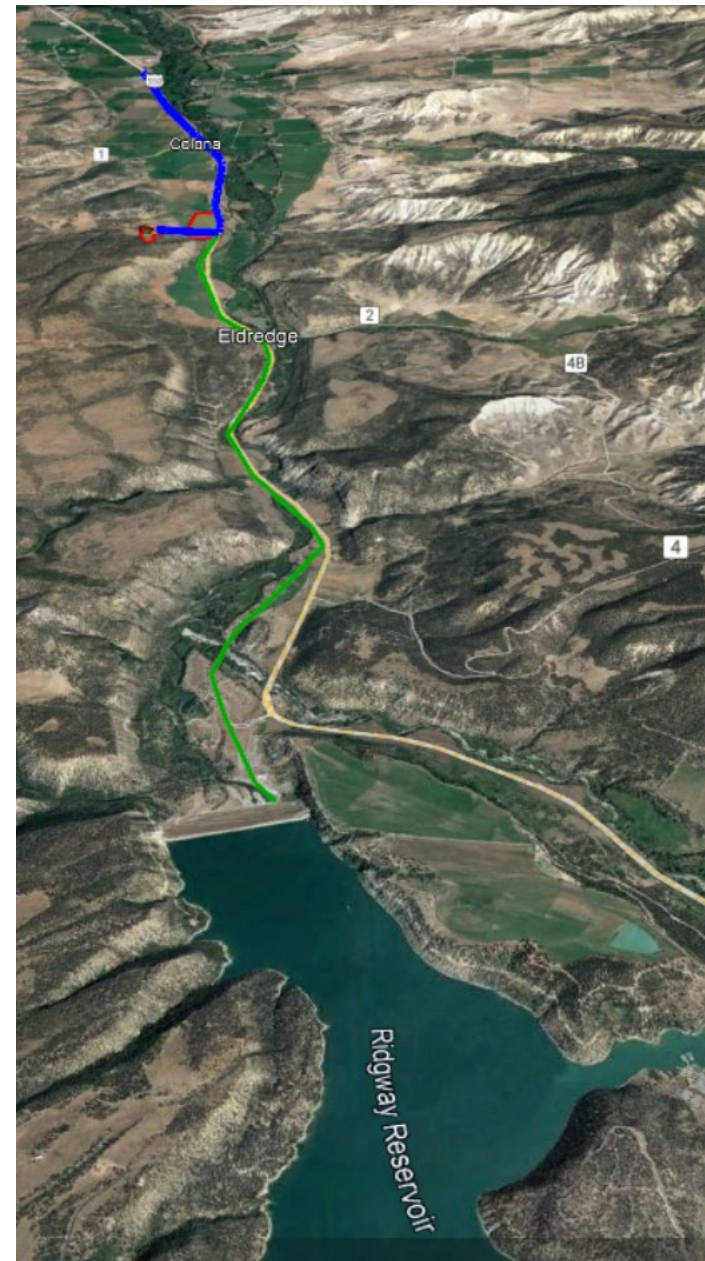
Adding a second treatment facility and water source to our existing single source system will reduce risk to our regional drinking water supply from wildfire, drought and infrastructure failure.

PROJECT 7 WATER AUTHORITY SOURCE & TRANSMISSION LINES



Elements of the Resiliency Program:

- **A new raw water transmission line** installed between Ridgway Reservoir and the new facility (approximately 5.5 miles of 24" 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 5.5 miles of 24" pipe)
- **A new water treatment facility** located at:
35679 US-550, Montrose, Colorado 81403
 - Approximately **6 million gallons per day** (6MGD) of surface water treatment (filtration) and softening
 - Hydroelectric generation from raw water line

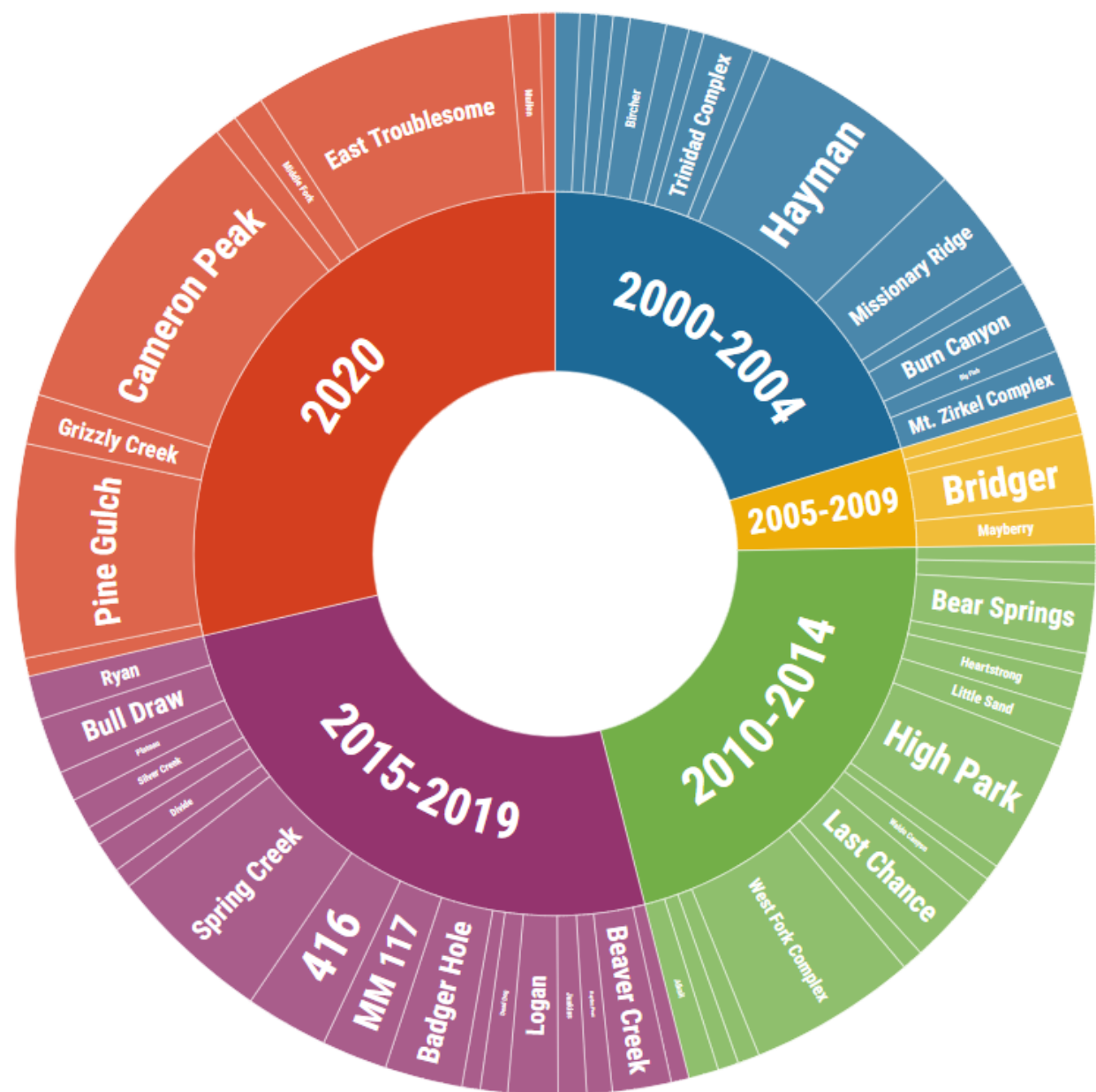


The P7WA Water Supply Resiliency Program will:

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

MAJOR RISK FACTORS:

A wildfire, pipeline, tunnel failure, or treatment plant outage could impact drinking water that over 50,000 people depend on.



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

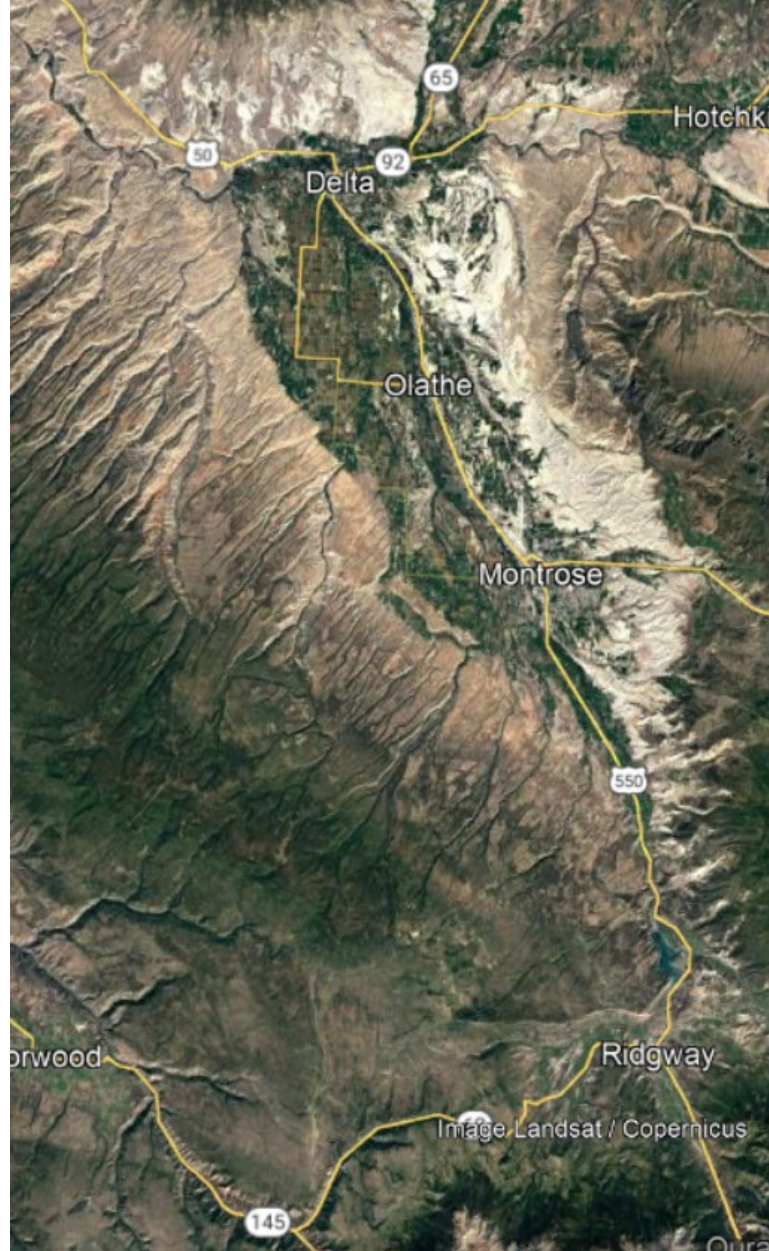
Acreage totals for 2020 fires are current as of Oct. 19. This chart includes the more than 20,000 acres that the Mullen Fire, which started in Wyoming, has burned so far in Colorado.

PROJECT NEED:

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

MAJOR RISK FACTORS:

A wildfire, pipeline, tunnel failure, or treatment plant outage could impact drinking water that over 50,000 people depend on.



- *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.*

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.



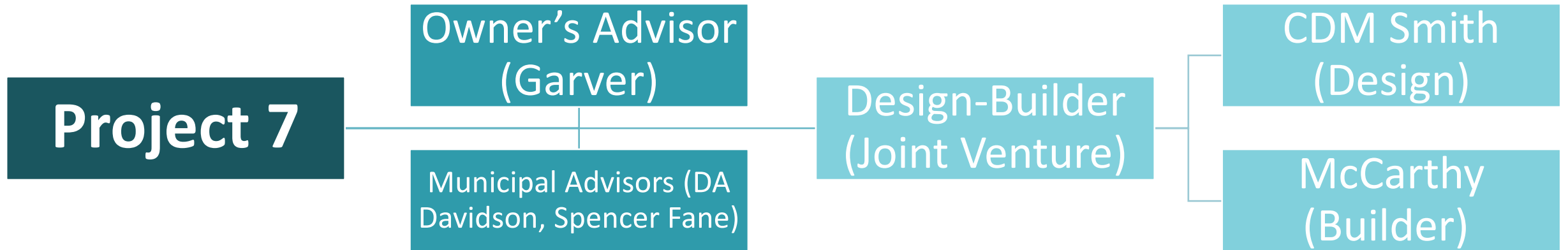
Direct Access: Provide member entities with direct access to their existing water rights in Ridgway Reservoir, currently accessed through trades and exchanges.

The Progressive Design Build Process

PROJECT 7 WATER SUPPLY RESILIENCY PROGRAM

Project 7 Water Authority
Board of Directors Meeting
March 28, 2024

Resiliency Program Organization Chart

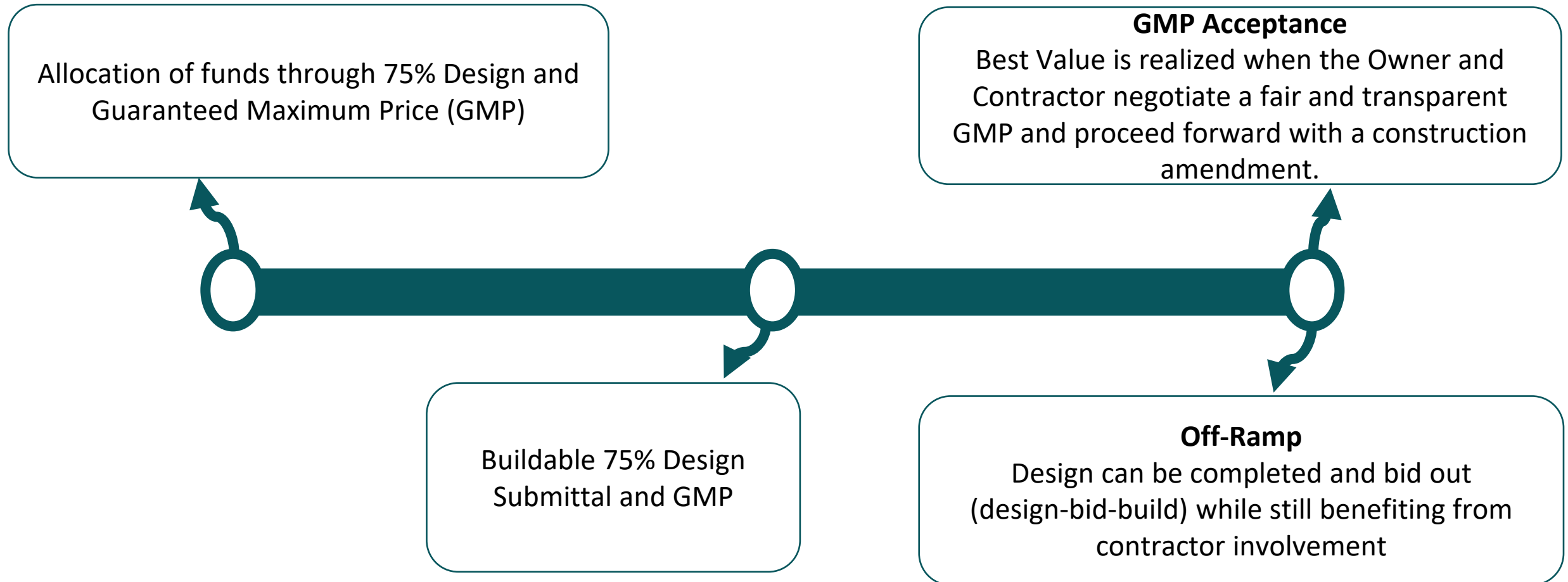


All design/build approaches provide benefit by involving the builder early

- Potential benefits of design/build:
 - Faster project delivery
 - Cost savings
 - Reduced risk
 - Early contractor engagement- more buildable design
 - More innovation fostered through collaboration
 - Price certainty
 - Quality and value management
 - Early mitigation of supply chain risks



Upcoming milestones and decision points





30% Design and Cost Model



Water Supply Resiliency Program



3/28/2024

Presenter(s)

Carl Lundin

Sagrado Sparks

Tim Rynders

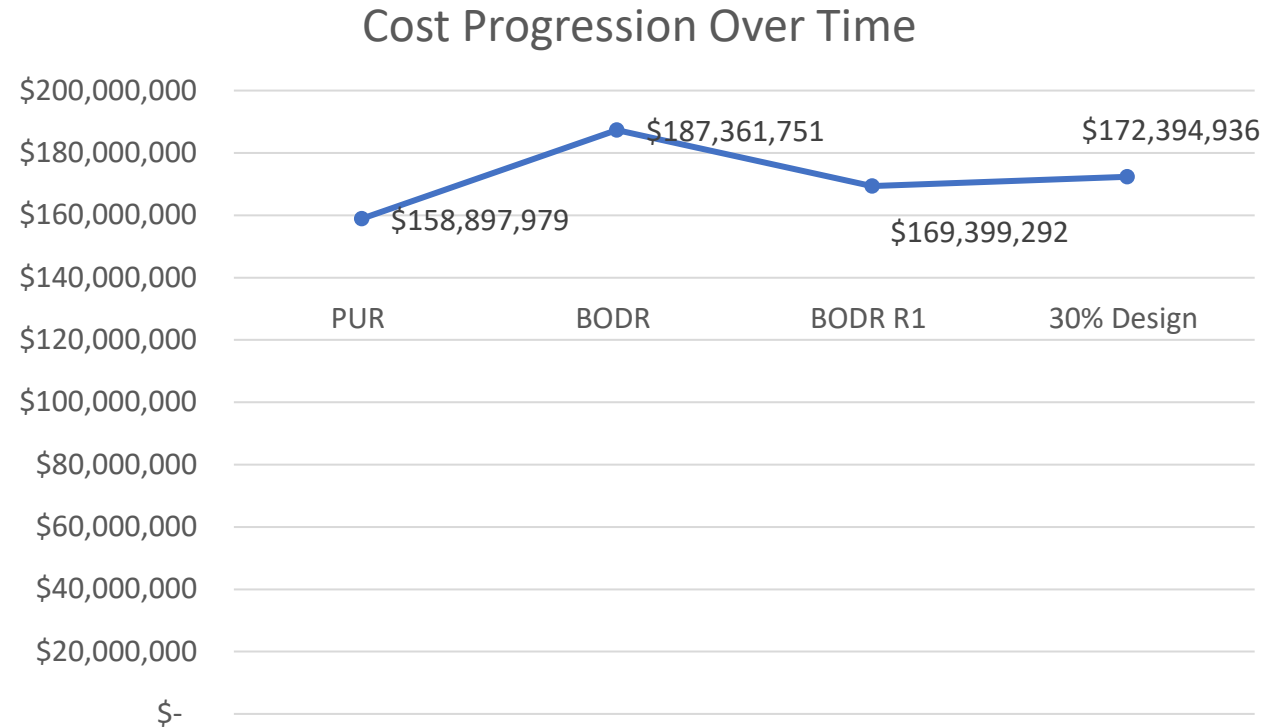
Callie Nottingham

Overall Schedule

	2023				2024				2025				2026				2027				2028			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Project Understanding Report	■	■																						
Basis of Design Report		■	■	■																				
30% Design				■	■																			
Preselection (UF and PSR)					■	■																		
75% Design					■	■	■																	
GMP/Negotiation/NTP							■	■																
100% Design									■	■														
Procurement									■	■	■	■												
Construction									■	■	■	■	■	■	■	■	■	■						
Startup and Closeout																	■	■	■					
Performance Warranty																			■	■	■	■	■	■

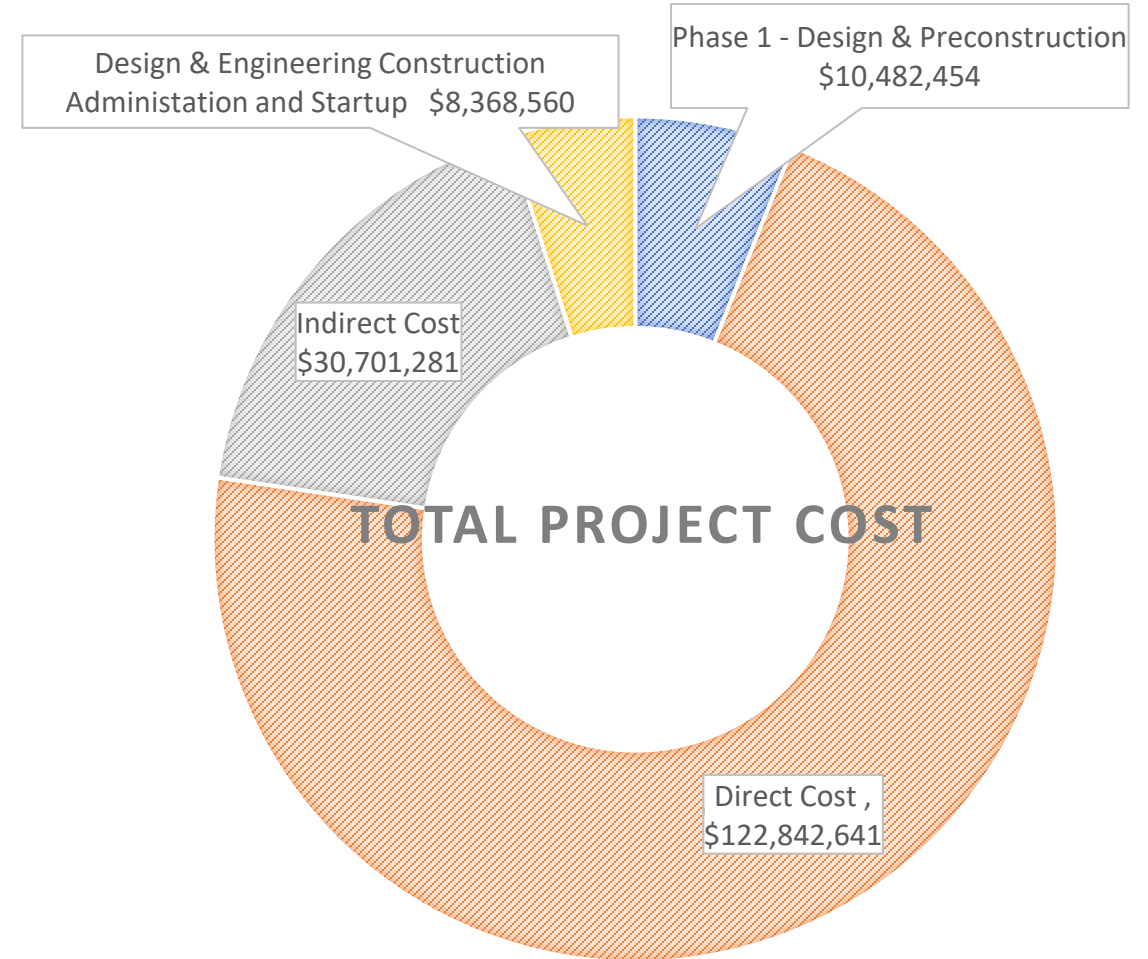
Cost Estimate Progression

Phase/Milestone	Estimated Cost
Project Understanding Report	\$158,897,979
Draft Basis of Design Report - Opinion of Probable Construction Cost	\$187,361,751
Basis of Design Report – Revision 1 – Opinion of Probable Construction Cost	\$169,399,292
30% Cost Model	\$172,394,936



30% Cost Model Overview

Category	Cost
Phase 1 - Design & Preconstruction	\$10,482,454
Category	Estimated Cost
Phase 2 - Design Completion & Construction	
Direct Cost	\$122,842,641
Indirect Cost	\$30,701,281
Design & Construction Administration and Startup	\$8,368,560
Phase 2 Totals	\$161,912,482
TOTAL	\$172,394,936



Value Engineering: Targeting cost control throughout the project

Water Treatment Plant

- Reducing earthwork
- Reducing building footprints
- Reducing equipment as possible
- Consolidating interconnections
- Evaluating materials of construction

Pipelines

- Maintaining material flexibility
- Optimizing constructability of alignment
- Customizing trench sections
- Optimizing appurtenances

Value Engineering Opportunities

- Recent Decisions (not in 30% Cost)
 - Optimized Chemical Bldg Layout
 - -\$1.35M
 - Optimized Softening Bldg Layout
 - Minor savings
 - Separate DCB and FNW structure
 - -\$108k
 - Continue with Cl₂ Gas
 - No change
 - Assume 1.35 MG Finished Water Tank (confirm for 75%)
 - +\$825k (prelim)

Total Program Costs	\$172,394,936
Value Engineering Options	
#15: Defer Finished Water Pipeline Section D	-\$2,591,000
#35: Finished Water Tank Alternates	
#35.11: No Finished Water Tank w/ External DCB	-\$2,055,000
#35.3: 0.6MG D110 Prestressed Concrete Tank w/ External DCB	-\$108,000
#35.5: 0.6MG D115 Post-Tensioned Concrete Tank w/ External DCB	\$862,000
#35.8: 0.6 MG Traditionally Reinforced Concrete Tank w/ External DCB	\$1,174,000
#35.2: 1.5MG D110 Prestressed Concrete Tank w/ External DCB	\$824,000
#35.1: 1.5MG D110 Prestressed Concrete Tank w/ Internal DCB	\$1,101,000
#35.7: 1.5 MG D115 Post-Tensioned Concrete Tank w/ External DCB	\$2,640,000
#35.9: 1.5 MG Traditionally Reinforced Concrete Tank w/ External DCB	\$4,086,000
#36: Sodium Hypochlorite In Lieu of Chlorine Gas	\$2,046,000
#37: Remove Admin Space	
#37.1: Stacked Pipe Layout	-\$1,338,000
#37.2: Non-Stacked Pipe Layout	-\$1,277,000
#38: Precast Finished Water Vault In Lieu of Cast-In-Place	\$26,000
#39: Butterfly Valves on Raw Waterline In Lieu of Gate Valves	-\$304,000
#41: Reduced Chem Bldg Footprint	-\$1,348,000
Total Deduct Value of Items 15, 35.11, 39, and 41	-\$6,298,000
Total Program Costs With Items 15, 35.3, 39, and 41 Accepted	\$166,096,936



Independent Cost Estimation

PROJECT 7 WATER SUPPLY RESILIENCY PROGRAM

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Our Independent Cost Estimate highlights some differences in approach that have cost implications

The estimated cost is still high relative to what we think it will be

We are working with McCDM and our Independent Cost Estimator to **align** the estimates.

Continuing to move uncertainties and unknowns to a **risk-based contract document** (risk register)

We are evaluating **scheduling assumptions** and winter work

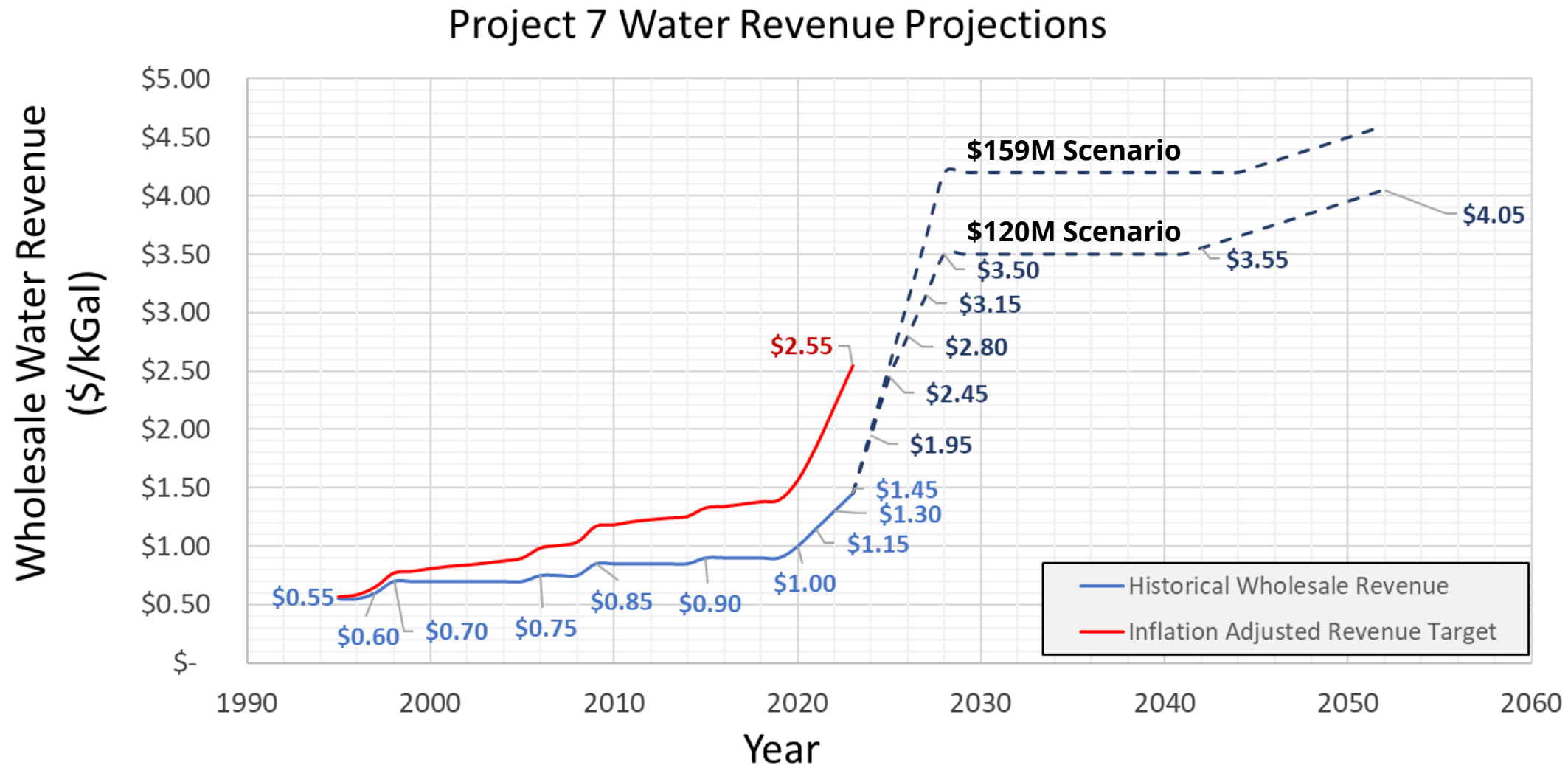
We are working on the **GMP plan out ahead of GMP submittal** to ensure **complete alignment** before GMP

Updated Financial Projections

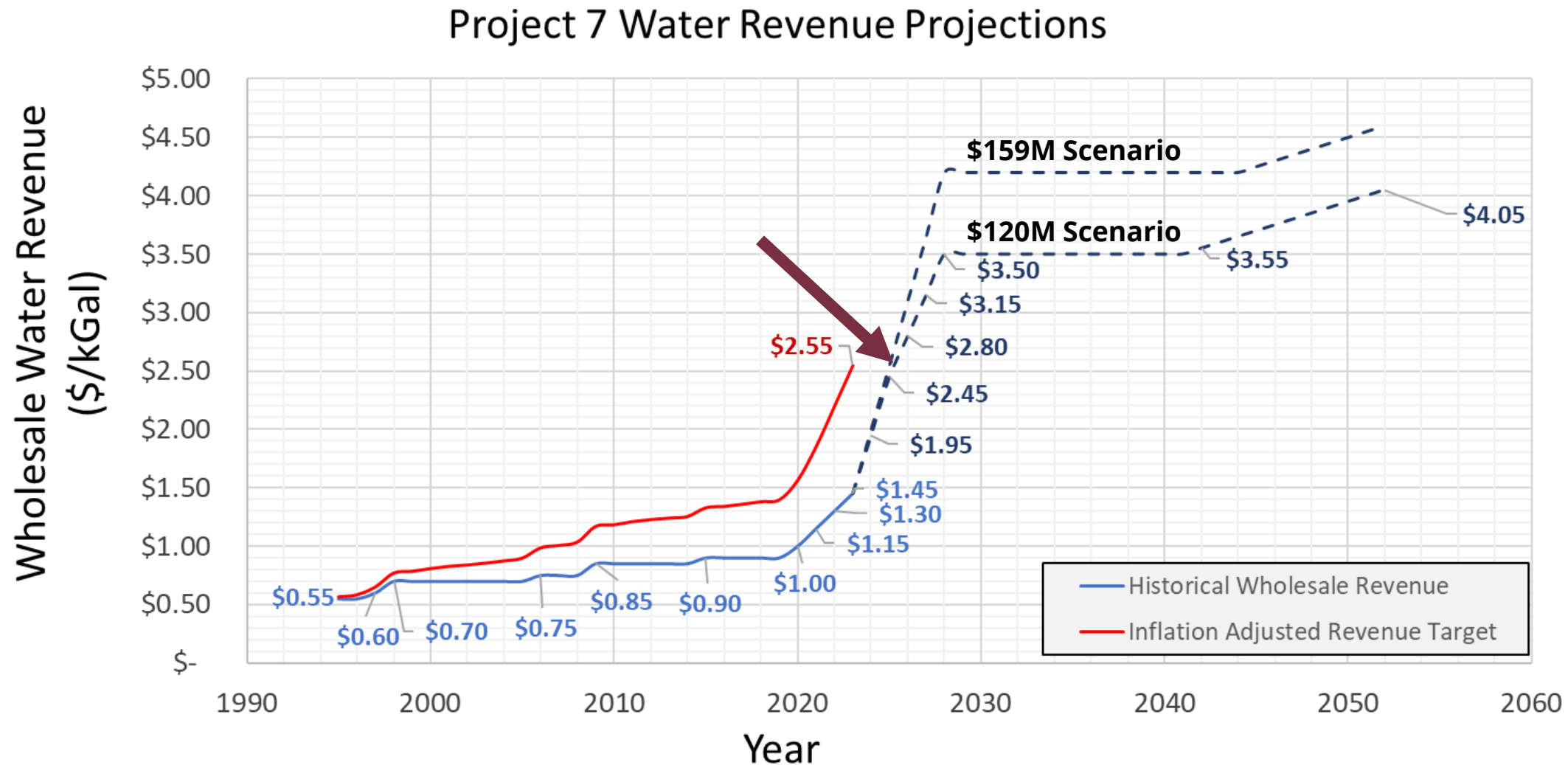
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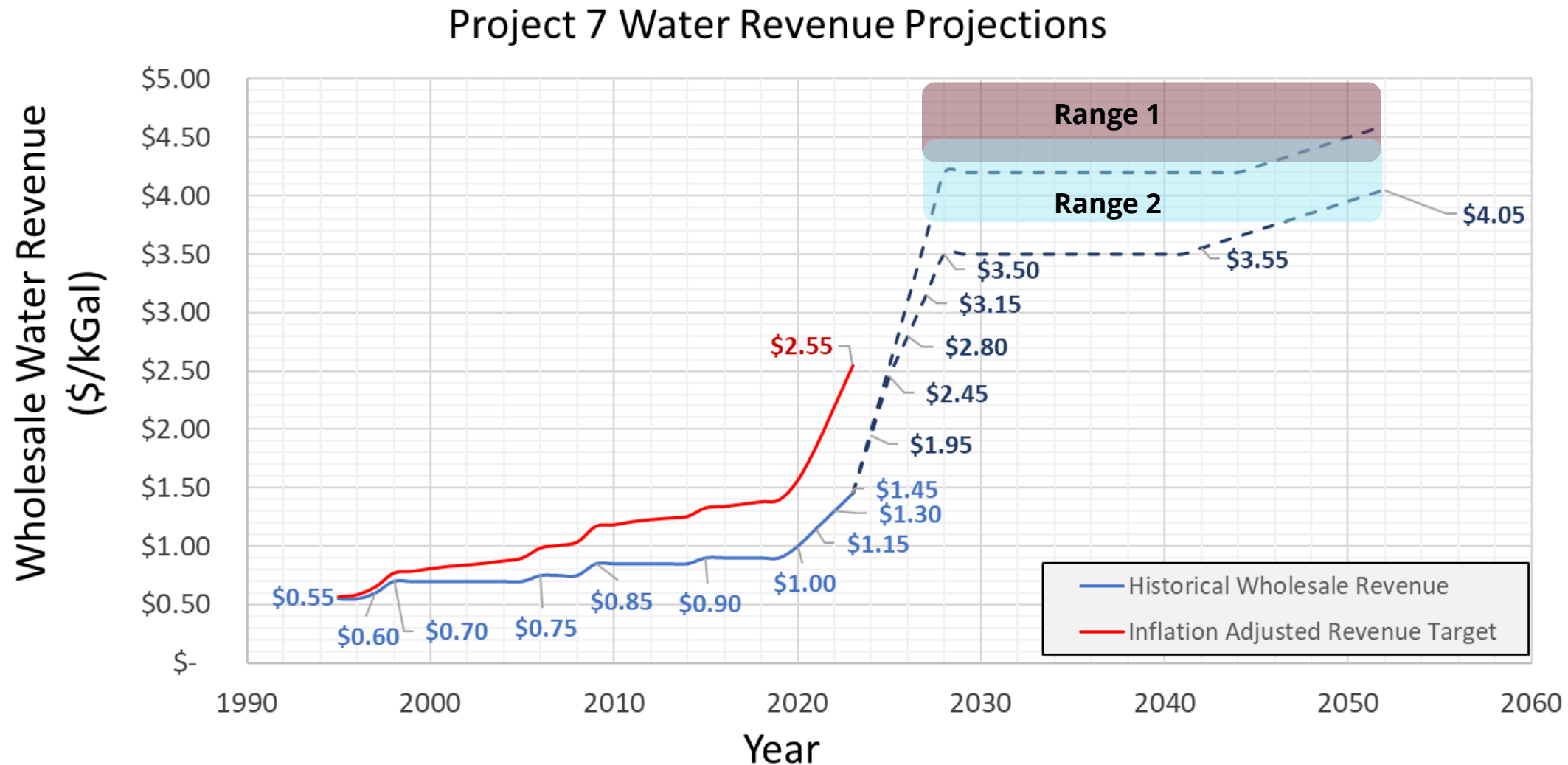
Last time the financial model was updated we considered planning level estimates



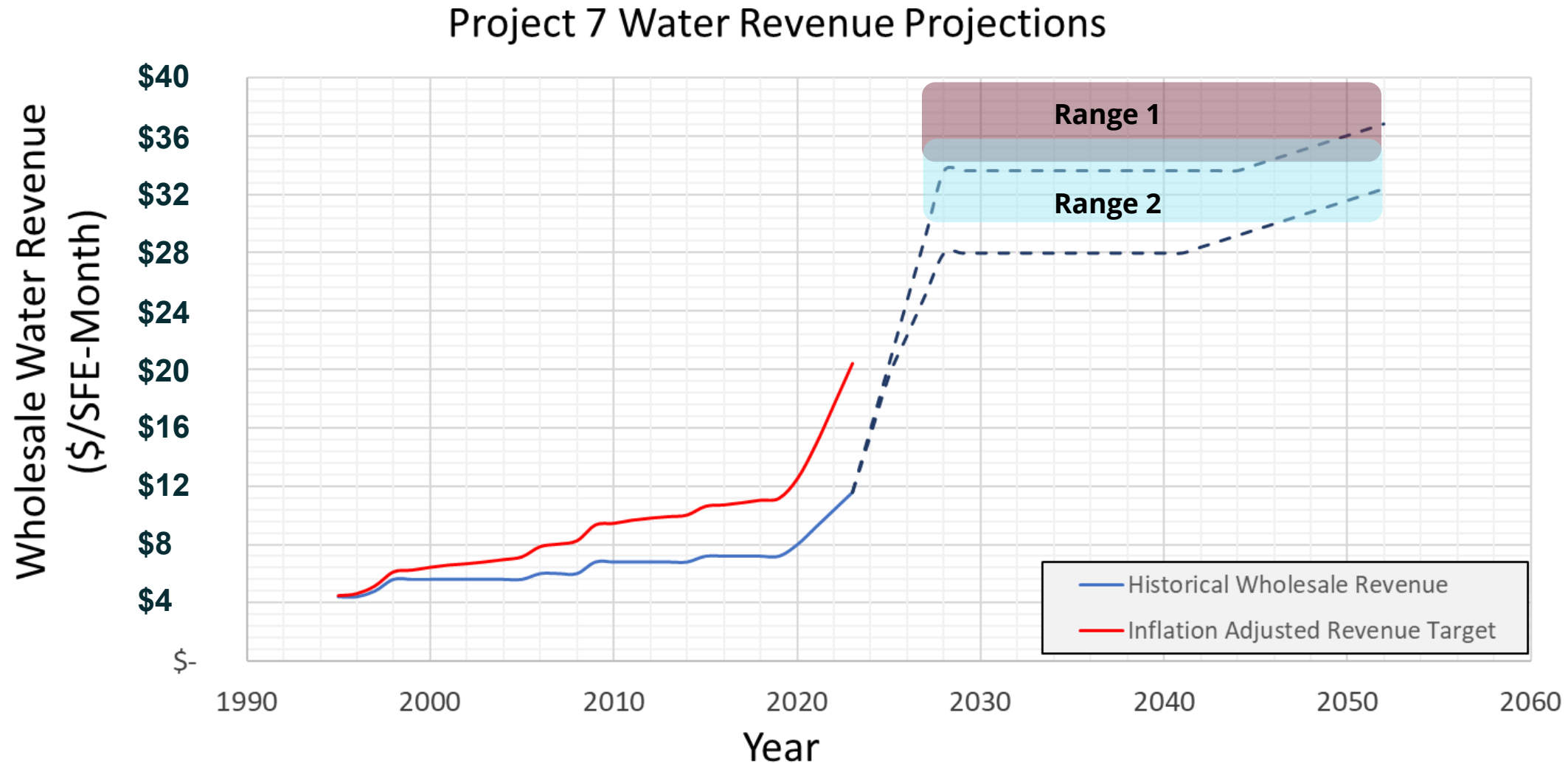
Project 7 committed to a minimum of two \$0.5/kGal revenue increases to get to the fork in the road



Updated financial projections show significant variability



Per household this is \$40 per month or less, all-in,
to provide safe drinking water to your community



Other Program Updates

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Grant Funding Update

- White House Brief on Water Infrastructure
- Congressionally Directed Spending (FY 2025)
- USBR Title XVI Program
- Other State/Local and Federal Programs
- Grant funding target: \$30-35M (roughly 20% of project)



THE WHITE HOUSE

FEBRUARY 20, 2024

FACT SHEET: Biden-Harris Administration Announces Nearly \$6 Billion for Clean Drinking Water and Wastewater Infrastructure as Part of Investing in America Tour

One community benefitting from this funding is Ridgway, Colorado, where over 50,000 people rely on a single water treatment plant that is vulnerable to failure, putting their drinking water supply at risk. Through a \$50 million investment from the Bipartisan Infrastructure Law, the community will be able to build an additional treatment plant and extend service to additional communities, helping to ensure safe, reliable drinking water for the region.

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: “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.”

Get Involved

1. **Community events:**
*Annual Town Hall
(Summer 2024)*
2. **Schedule a tour:**
Existing facility and/or new site
3. **Learn More:**
www.Project7water.org
4. **Contact Us:**
Project7@Montrose.net



Questions?

Project 7 
Water Authority

