



# ARKANSAS VALLEY CONDUIT MONTHLY REPORT

Thursday, August 15, 2024

*This monthly newsletter summarizes activities related to the Arkansas Valley Conduit and is made available to the Southeastern Colorado Water Conservancy District Board of Directors and Arkansas Valley Conduit stakeholders. To request a subscription to the Report, please contact [info@secwcd.com](mailto:info@secwcd.com) or view it at <https://www.secwcd.org/>*



## A Tricky Turn in the Heat

With a little more than a year of construction under their belts, the crews from WCA Construction ran into some of their toughest challenges approaching the PuebloPlex interchange on U.S. Highway 50.

The route of the Arkansas Valley Conduit (AVC) Trunk Line will curve around the interchange as it heads toward Boone along Colorado Highway 96.

A heavy rainstorm in June led to heavy flows down the normally dry Chico Creek near the interchange, washing out trenches where pipe was being placed. Overcoming that, the crews worked through a stretch of pipeline that twists and turns as it begins its route around the interchange.

On July 29, 2024, the crews were working on with the flexible high-density polyethylene (HDPE) pipe in 100-degree heat with some of the most complicated tasks to date for the Reclamation Sub-Project.

**Continued on Next Page...**

# Having a Hot Time Down in the Trenches with AVC

...From Previous Page

- Tricky part one: The plastic pipe needed to be welded in place within the trench, with the welding machine operating in the trench itself.
- Tricky part two: An air valve on this section of pipeline has to be at a 90-degree angle when the pipe is welded in place.
- Tricky part three: There is a miter bend in the pipe as the Trunk Line begins its circuitous route around the interchange.
- Tricky part four: HDPE pipe expands or contracts at a rate of about 1 inch per 100 feet for each change in temperature of 10 degrees Fahrenheit.

“This is the trickiest part they’ve dealt with so far,” said Randy Griffis, Bureau of Reclamation inspector. His hands moved like a gyroscope as he explained how the heavy pipeline — maybe 10 tons of weight — was being manipulated in the trench by two excavators using heavy belts.

“Come a quarter of an inch this way,” one of the workers instructed the excavators.

“Clamp it down,” he hollered at the workers at the welder.

The pipe plunked loudly but didn’t move much. It was lifted again and shifted too far.

“Let it go.”

Finally, everything was just right.

“Grab it!”

The clamps on the machine clicked into place, ready for the approximately one-hour weld that fuses two sections of the pipe. An umbrella was used to provide some shade as the day heated up.

Once the job was complete, the trickiest part of all came: Rolling the welding machine out of the trench and getting it ready for its next assignment.

“They’ve done it before, so they’ve got that part down pat,” Griffis said.

Just another day on the job with the AVC.



Photos by Sam Ebersole and Chris Woodka



# BUREAU OF RECLAMATION AVC SUB-PROJECT



## Federal AVC Construction Activity

Above: Colorado Highway 96 will remain closed until the summer of 2025 as Pate Construction continues its work on Boone Reach 2 further up the road. Right: WCA has welded about 1 mile of HDPE 30" pipe which will be installed by Global Underground on Boone Reach 1.

### Construction at a Glance

#### Boone Reach 1:

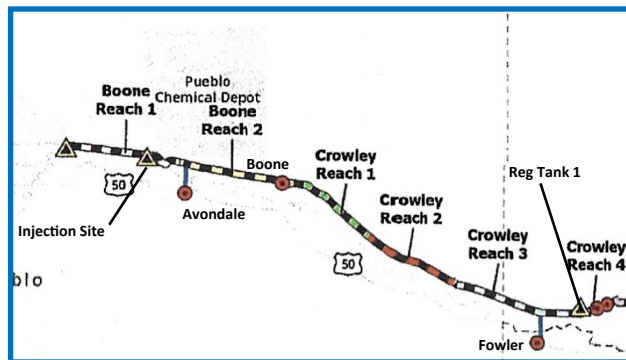
WCA Construction LLC  
 Amount: \$42.98 million  
 Contract date: 9/2022  
 Progress: 3.26 miles of trenched 30" pipe, 1 mile of directional bore installed.

#### Boone Reach 2:

Pate Construction Co.  
 Amount: \$27.2 million  
 Contract Date: 9/2023  
 Progress: 1 mile of trenched 30" pipe installed.

#### Injection Site:

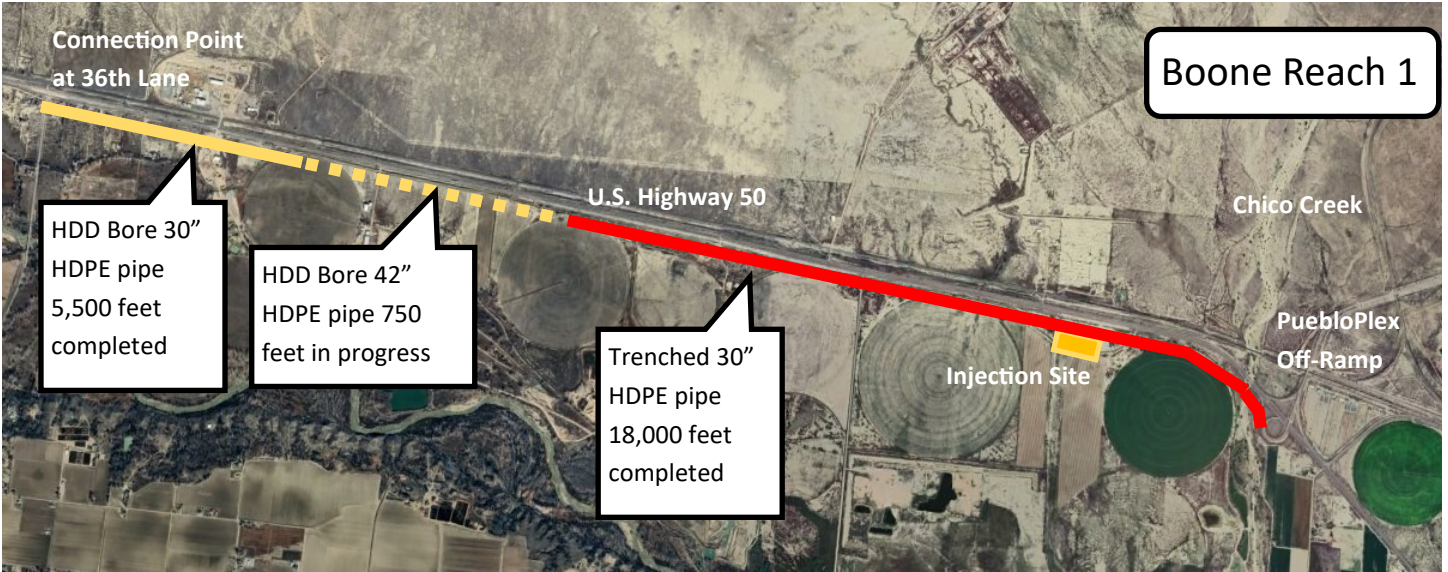
Thalle Construction  
 Amount: \$28.7 million  
 Contract date: 2/2024  
 Progress: Notice to proceed issued, work will begin when pipe stored on site is gone.



Federal Sub-Project	Design	Construction Contract	Construction	Completion Estimate
Boone Reach 1	✓	✓	In Progress	4/17/25
Boone Reach 2	✓	✓	In Progress	8/25/25
Injection Site	✓	✓	NTP issued	3/11/26
Reg Tank 1	In Progress			11/19/27
Design to Lamar	In Progress			11/5/31



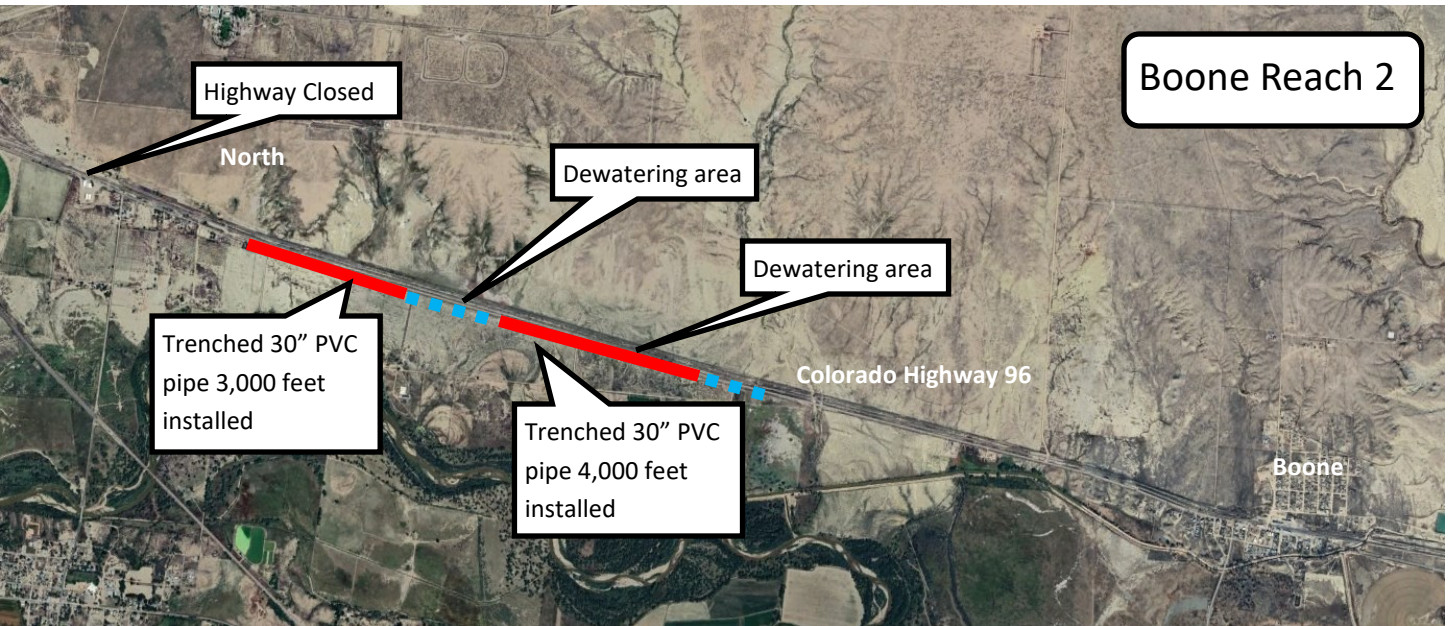
Federal AVC Construction Details



Boone Reach 1

The second leg of the horizontal directional drilling (HDD) is continuing. The pilot hole is complete and 750 feet of 5,500 feet for the 42-inch ream pass is complete. The entire length of 30-inch HDPE pipe for the second leg has been fused and is being

prepared for testing. About 18,000 feet (3.4 miles) of trenched 30-inch pipe has been installed. WCA replaced HDPE pipe in Chico Creek because of washouts as a result of recent thunderstorms and has started trenching and fusing pipe for the section around the PuebloPlex off-ramp.



Boone Reach 2

As of August 8, 2024, Pate Construction has laid more than 7,000 linear feet of 30-inch PVC pipe in two areas along Colorado Highway 96 and is installing additional dewatering wells. The Colorado Department of Transportation has approved a full road closure on Highway 96 until the summer of 2025 as work continues.

Injection Site

Reclamation anticipates that Thalle Construction Company will be onsite in the September 2024 time frame to start site work.

Design

Reclamation and Enterprise staff did site reconnaissance on the Reg Tank 1 site in August.



### Understanding the Permission to Enter Form

Have you received a large manila envelope from the Bureau of Reclamation in the last one to nine months? If you have set it aside, please open it and read through the contents.

If you did open it, and found it overwhelming, it is understandable. The Permission to Enter (PTE) form can be intimidating. Reclamation staff are available to talk with you on the phone or meet in person to discuss the PTE form. They will do their best to answer any questions that you may have about what it means for you property.

Why is it important? The PTE form helps Reclamation keep the pre-construction planning and design process moving forward. The faster we complete planning and design, the sooner we can get more pipe in the ground. Reclamation prefers to work ahead of construction and to uncover any issues ahead of time and wants to work with landowners to resolve possible problems and also inform the contractors of things that they should know.

If you have questions about the PTE form or need Reclamation to re-send the packet, contact Jeff Bollman, Realty Specialist, at [jbollman@usbr.gov](mailto:jbollman@usbr.gov) or 970-939-1228.



A Bureau of Reclamation team from the Denver Technical Services Center does some field investigation for the AVC in 2022, prior to construction.



### Federal AVC Funding

The AVC received \$90 million in Bipartisan Infrastructure Law (BIL) funding on May 30, 2024. Total federal funding since 2020 totals \$321.23 million.

The AVC annual allocation in the President's FY2025 budget increased to \$13.06 million, which was approved earlier this month by the U.S. Senate.

The updated cost estimate for the Reclamation AVC Sub-Project was updated to \$1.3 billion in June.



### Watch It!

Reclamation has produced a video about the impact the Arkansas Valley Conduit will have on Manzanola. Hear Mayor Shirley Adams and other town officials explain the value of the AVC at the link below.

<https://www.youtube.com/watch?v=xJ1lHNNZdiw>



# What’s happening with the AVC in August?

The Enterprise’s main focus in August will be to move the plan to partner with the Colorado Water Resources and Power Development Authority (CWRPDA) and Colorado Water Conservation Board (CWCB) to increase funding opportunities for the Arkansas Valley Conduit (AVC).

The Enterprise is responsible for designing and building the delivery lines and spurs (lines to multiple water systems) of the AVC. There are two major goals:

- 1) Have the lines in place in advance of the arrival of the trunk line.
- 2) Keep overall debt for AVC participants at a minimal level, because all of them have costs of their own to improve water systems.

The Enterprise has been in discussion with CWRPDA and CWCB staff for several months working out procedural details for the funding plan. Otero County, which is the Enterprise’s fiscal agent, has also been included in these talks.

The Enterprise also is keeping in mind the timing of construction, in light of the Updated Cost Estimates discussion in June. The goal is to keep pace with federal construction.

The Enterprise also is developing a plan to meet

with the remainder of participants on water resources and operation & maintenance costs, an oversight that was pointed out to the Enterprise at the June participant meeting. Meetings with the eight largest participants and 10 others were held before the end of 2023, and the goal is to complete meetings with the remaining 21 participants by the end of October 2024.

A meeting of the Enterprise Board’s AVC Committee is being planned for August 19, 2024, and will update the Committee on the past, present and future status of the following topics:

- The Communication Plan, which was introduced to the Enterprise Board in July.
- The water resources and O&M discussions.
- Formation of a governance authority, its structure and purpose.
- The Enterprise Sub-Project funding plan.
- The remaining Enterprise Sub-Project budget.
- The Enterprise Sub-Project fund balance and cash flow.
- Enterprise Sub-Project Design.
- Agreements and Policies between the Enterprise and other agencies.



Questions?  
Comments?  
Suggestions?

The Southeastern Colorado Water Activity Enterprise welcomes your feedback on this newsletter. Contact us and we’ll put you in touch with the people to get the answers you need.

Contact: [chris@secwcd.com](mailto:chris@secwcd.com)



# Enterprise, State Work Together on Radionuclide Response

The problem of radionuclides in Lower Arkansas Valley drinking water played a big role in reawakening interest in the Arkansas Valley Conduit, and the Southeastern Colorado Water Activity Enterprise continues to work with state health officials to find a solution.

In the quest for a better quality of water, some water systems in the Lower Arkansas Valley began drilling deeper wells in the mid-1900s.

This was done years before anyone could measure radioactivity in water, much less suspect that it would become a major headache for future generations.

By the year 2000, regulatory problems began to surface because those deeper wells are more likely to intercept pockets of water that include naturally occurring uranium, radium and other radioactive particles.

As early as 2007, when compliance enforcement began in Colorado, the AVC was seen as the remedy for the elevated levels of radionuclides in many water systems east of Pueblo.

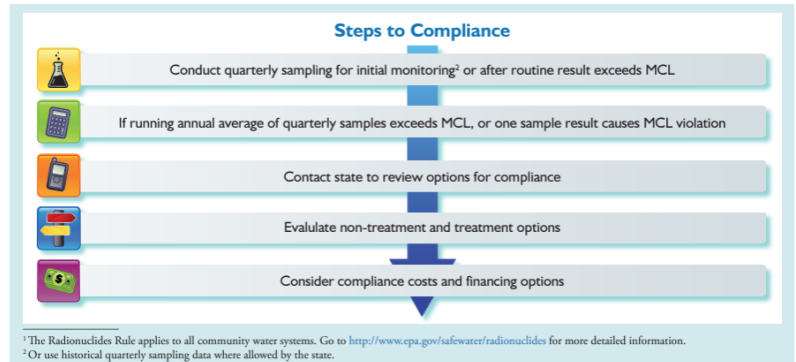
At a meeting in La Junta in March 2009, support for the AVC was galvanized when a state study revealed more expensive options.

Enterprise staff continues to meet with the Colorado Department of Public Health and Environment (CDPHE) on a quarterly basis to discuss the progress of the AVC. The regulators understand the need for the AVC, and are working with the Enterprise to find an answer to the radionuclide dilemma.

In 2023, compliance orders that had been in place for as long as a decade or more were rewritten based on updated information provided by the Enterprise at the time. Preliminary engineering reports prepared by the Enterprise were essential parts of responses to CDPHE in order to meet a May 2023 deadline.

In addition, the disposal of radioactive materials, either through wastewater systems or dealing with filtered material, is costly and dangerous. AVC will help mitigate that process.

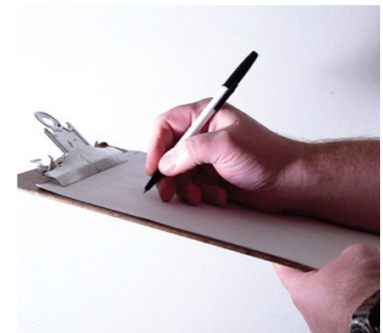
The Enterprise remains committed to completing the AVC to communities affected by radionuclides in their well water. Reaching the affected water systems as quickly as possible remains an overriding goal for the AVC project.



### Checklist of Recommended Considerations

Have you:

- Considered using a professional engineer?
- Coordinated with the appropriate state and local agencies?
- Reviewed or collected water quality data?
- Considered non-treatment options?
- Considered the use of existing treatment?
- Studied options for new treatment?
- Identified a method for waste disposal?
- Obtained necessary permits?



**Compliance with EPA regulations for radionuclides is a lengthy, expensive process. The AVC will provide source water that is free of such contaminants.**

### AVC Systems Facing Compliance Orders for Radionuclides

- Beehive Water Association
- Town of Cheraw
- East End Water Association
- Eureka Water Company
- Fayette Water Association
- Hasty Water Company
- Holbrook Center Soft Water Association
- Town of Manzanola
- May Valley Water Association
- McClave Water Association
- North Holbrook Water Company
- Patterson Valley Water Company
- Riverside Water Company
- South Side Water Association
- South Swink Water Company
- Valley Water Company
- Vroman Water Company
- West Grand Valley Water Incorporated



**Construction and Design**

**Construction**

Construction of Avondale and Boone delivery lines is completed. The Enterprise Board approved a bid of \$862,548 by K.R. Swerdfeger Construction, LLC for construction of the Boone and Avondale delivery lines on July 20, 2023. Construction of the Avondale and Boone lines is fully funded by American Rescue Plan Act (ARPA) funds approved by Pueblo County Commissioners.

**Design**

The design for spur and delivery lines began at the end of April 2023. Kennedy Jenks is performing the designs for Otero County, and AECOM for the remainder of AVC delivery lines outside of Pueblo County.

The design work is expected to be completed by the end of 2025. Funding sources include the ARPA funding committed by counties and Participants in 2022, as well as grant money from the Colorado Water Conservation Board (CWCB) and/or the State Revolving Funds. Total contracted design cost is \$7.3 million. The design schedule was paused in June 2024 until additional funding is secured for the project. However, this pause in design activities is not expected to adversely impact the overall project schedule and coordination with the Reclamation Sub-Project schedule.

**Enterprise Sub-Project Funding**

**Funding to Date**

The Enterprise has secured \$30 million in grants and \$90 million in loans through the Colorado Water Conservation Board (CWCB) for building the spur and delivery lines for AVC.

County commissioners and some municipalities in the AVC have contributed \$3 million through American Rescue Plan Act (ARPA) funds.

The Enterprise has contributed \$4.8 million through a fund balance established in 2020 using payments from the 2003 Aurora settlement after the Rocky Ford Ditch II purchase.

AVC Participant contributions total more than \$2 million since 2011.



**Funding Plan**

The Enterprise staff continues to discuss with CWCB and agencies that administer the State Revolving Fund (SRF) options to maximize the use of grants and forgivable loans.

Strategic aims include:

- ◆ Maximize the number of private water companies to reorganize as governmental agencies in order to increase eligibility for millions of dollars in forgivable loans (grants) in the SRF program, as opposed to interest-bearing loans. We are in contact with the Department of Local Affairs (DOLA) on this topic.
- ◆ Develop a funding agreement among state agencies and Otero County, which acts as the fiscal agent for the Enterprise.
- ◆ Continue to meet with the Colorado Department of Public Health and Environment (CDPHE) on the funding and schedule of the AVC. This is important because enforcement orders for radionuclides for 18 of the 39 participants list the AVC as the remedy.

**Construction at a Glance**

Enterprise Project	Sub-Project	Design	Construction Contract	Construction	Completion or Estimate
Avondale Delivery		✓	✓	✓	12/31/23
Boone Delivery		✓	✓	✓	12/31/23
Spurs and Delivery Design		In Progress, Paused			12/31/25