

SOUTHERN DELIVERY SYSTEM

MONTHLY REPORT



The Southern Delivery System (SDS) is a regional project to bring water from the Arkansas River to Colorado Springs, the City of Fountain, the Security Water District, and the Pueblo West Metropolitan District. Phase 1 of this multi-phase project includes all of the components necessary to begin delivering water to the partner communities by 2016. This report summarizes accomplishments from the start of construction to March 2015, plans for April 2015, and key performance details for Phase 1.

Water Treatment Plant & Finished Water Pump Station



Testing electrical equipment



Roofing operations

Accomplishments: Progressed erection of structural roof decking in the filter and ozone areas of the plant and completed roofing at the finished water pump station building; continued installation of electrical transformers, switches, and cables and testing electrical equipment; completed installation of large diameter piping and valves in the filter area; and continued installation of mechanical equipment and piping in the chemical area; 80 percent of construction is complete through March at the water

treatment plant. **Upcoming:** Begin filling the raw water storage tank for testing, continue roofing activities, complete installation of transformers, switches, and wiring, and continue installation and testing of process and chemical piping.

Raw Water Pump Stations

Accomplishments: Finished roofing and installation of drywall in the electrical room and began masonry work at Juniper Pump Station, connected to the North Pipeline 1B pipeline and assembled the first pump at Williams Creek Pump Station, and completed structural steel activities and finished welding and grouting the 66-inch diameter inlet piping at Bradley Pump Station; nearly 80 percent of construction is complete through March for all three raw water pump stations. **Upcoming:** Continue brick work on west side of pump station building and complete backfill at transformer area at Juniper Pump Station, finish roofing and complete installation of variable frequency drives (VFDs - controls speed, torque, and horsepower) in the electrical room at Williams Creek Pump Station, and begin installation of external brick on the pump station building and continue installation of pumps at Bradley Pump Station.



Bradley Pump Station Building

South Pipeline 4A Central



Delivery of final pipe



Retrieval shaft

Accomplishments: Completed welding the grout ports, progressed grouting the welded joints in the pipe, completed grout inspections, continued backfill activities, and held final pipe ceremony at the construction site. More than 95 percent of construction is complete through March for this challenging portion of construction on the SDS Program. **Upcoming:** Complete installation of pipe, connect South Pipeline 4A Central to South Pipeline 4A East/West, complete hydrostatic (pressure) test, finish pipeline and shaft backfill, and continue coordinating revegetation activities at the pipe east of the tunneling retrieval shaft.

SPOTLIGHT

SDS Concluding 50 Miles of Pipeline Construction

Community leaders, contractors, and partner communities celebrated the end of pipeline construction on March 18 at a site adjacent to a recently completed pipe-tunneling project. [See pipeline event video.](#)

Approximately 7,000 sections of mostly 66-inch diameter, welded-steel blue pipe were installed over the past 3.5 years in El Paso and Pueblo counties. Extensive revegetation has been done throughout the project to restore land disturbed by construction. The conclusion of pipeline construction brings this \$835 million project – including \$204 million of that spent on pipe and installation – one step closer to delivering water next year. “The pipe is the main artery for this water project and we are extremely pleased with how the pipeline construction went,” said John Fredell, SDS Program Director. “This is our final year of construction after almost two decades of planning,”

Denver-based Northwest Pipe manufactured most of the SDS pipe. Three prime contractors selected through competitive bid processes managed the installation of different sections through Pueblo and El Paso counties. Garney Construction installed 23 miles of SDS pipeline in various areas, including work at Lake Pueblo State

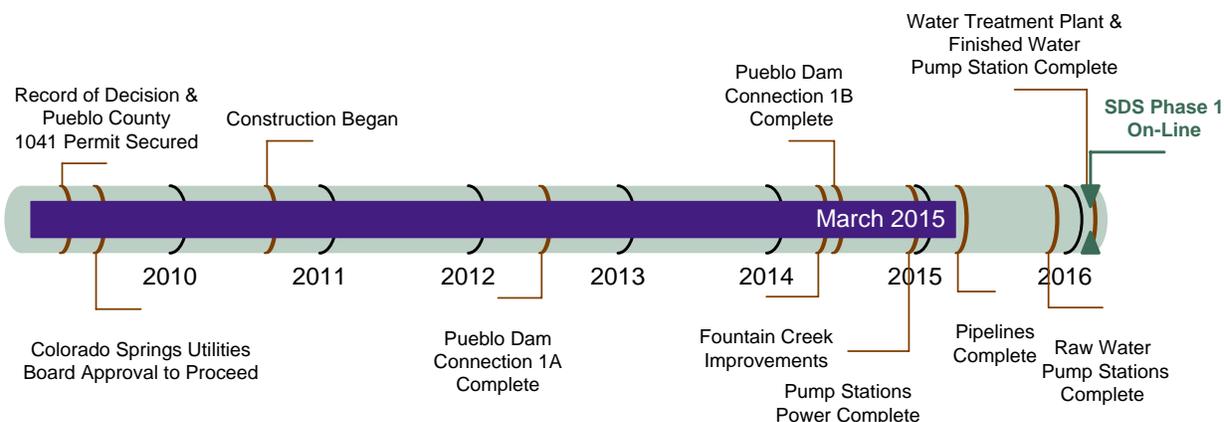


Park, Pueblo West, at the tunnel location, and in Colorado Springs. Pueblo County-based ASI/HCP Constructors built the Pueblo Dam Connection and installed nearly five miles of pipe through Lake Pueblo State Park and about nine miles of pipe in southern El Paso County east of Fountain; and Layne Heavy Civil put in about eight miles of pipe in Pueblo County and six miles in El Paso County. “Over the last three years, the sight of blue pipe on semi-trucks heading south meant prosperity for local businesses and a more secure water future for Colorado Springs and its partners’ communities,” said Fredell.

Schedule Summary

The timeline below summarizes the schedule for completing Phase 1 of the SDS. Colorado Springs Utilities anticipates completing Phase 1 as planned, with full operation beginning by 2016.

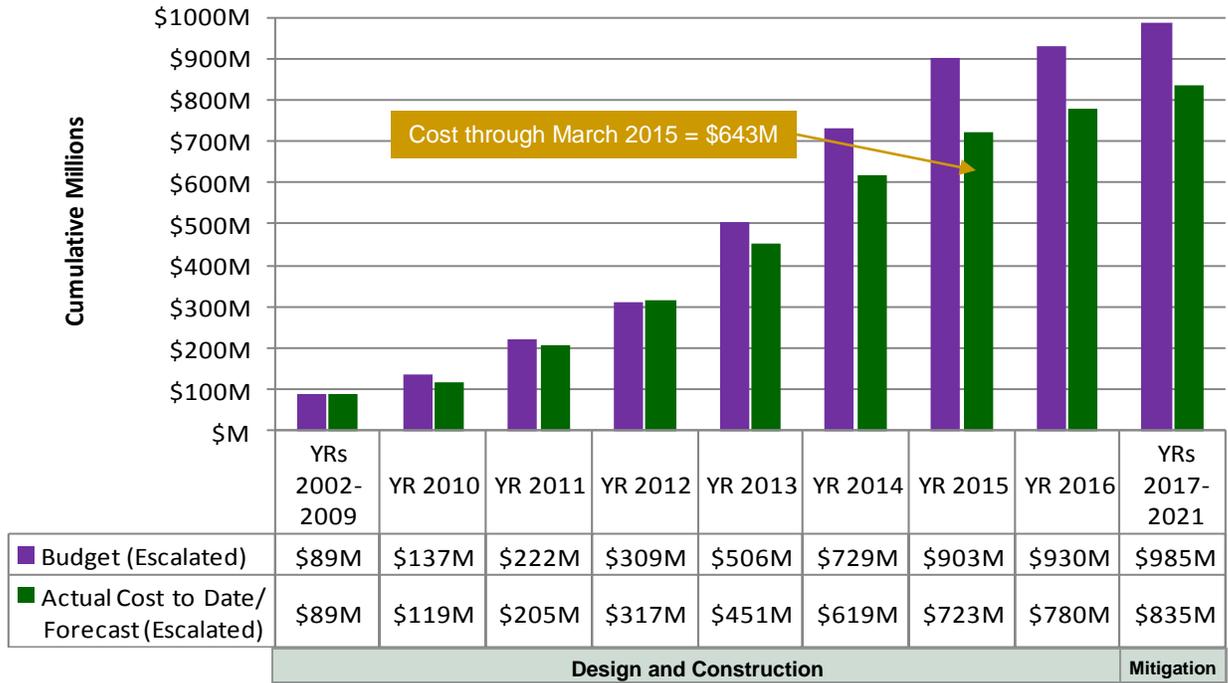
Figure 1 – Schedule Progress for Major SDS Phase 1 Projects



Cost Summary

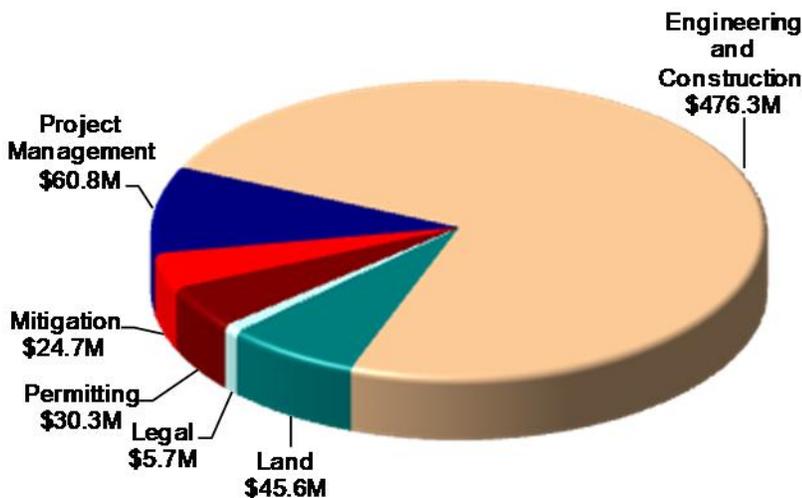
Figure 2 shows the budget for Phase 1, actual costs through March 2015, and forecasted costs for Phase 1. **Figure 3** shows the distribution of the actual costs. Key financial details are summarized below. The budget used to measure progress was established by the Colorado Springs Utilities Board in July 2009 and is \$880 million in April 2009 dollars. Accounting for actual and currently projected escalation in the cost of labor, materials, and equipment, the same 2009 budget equates to \$985 million after all direct project costs (including mitigation) are paid through 2021.

Figure 2 – Phase 1 Budget Progress – Actual Costs through March 2015



Design and construction \$ values include actual and projected cost escalation as measured by Engineering News-Record's national Construction Cost Index. Monetary mitigation payment \$ values (2017 through 2021) include cost escalation as measured by the U.S. Bureau of Labor Statistics Producer Price Index for finished goods. Periodic index forecasts by IHS Global Insight applied.

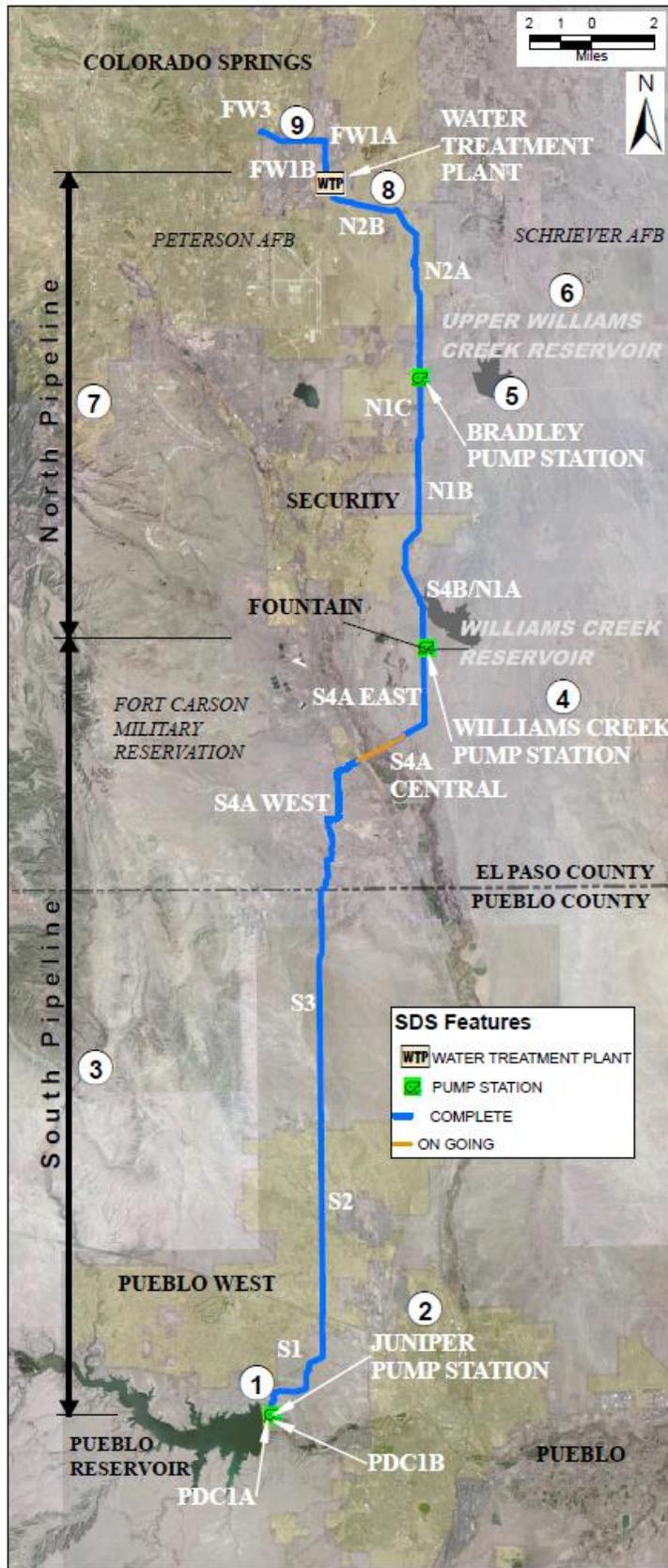
Figure 3 – Distribution of Phase 1 Direct Costs through March 2015 (\$643M Total)



Key Financial Details

- The budget for Phase 1 is \$985 million, including actual and projected escalation, while the current cost forecast is \$835 million. The project is currently forecasting completion approximately \$150 million below budget. These anticipated savings are accounted for in current water rates and plans for bond issuance.
- Cumulative actual costs to date are \$643 million, with a majority expended on engineering and construction, permitting, land, and management activities.
- Forecasted costs for 2015 are \$104 million with a cumulative expenditure of \$723 million by the end of 2015.

Figure 4 – Phase 1 Projects Status Map



Visit www.SDSwater.org for additional information.

9 Finished Water Pipeline (FW)

Complete: FW1A, FW1B (Garney Construction)

Ongoing: Garney Construction is finalizing closeout of FW3 – a 2.2-mile pipeline from FW1A into the existing Colorado Springs Utilities water distribution system near Constitution Ave. and Powers Blvd.

Focus: Completing administrative closeout activities

8 SDS Water Treatment Plant (WTP) and Finished Water Pump Station (FWPS)

Ongoing: McCarthy Building Companies, Inc. is constructing the WTP and FWPS located at Marksheffel Rd. and U.S. Highway 24.

Focus: Continuing roof activities, installation of electrical and mechanical equipment, and coating concrete floors

7 North Pipeline (N)

Complete: S4B/N1A/N1B (HCP Constructors), N1C/N2A (Layne Heavy Civil, Inc.)

Ongoing: Garney Construction is finalizing closeout of N2B – a 3.2-mile pipeline connecting N2A to the WTP.

Focus: Completing administrative closeout activities

6 Upper Williams Creek Reservoir (UWCR)

Ongoing: UWCR is a 30,500 acre-foot raw water storage reservoir that will be developed as part of a future SDS phase and will be located near Bradley Pump Station.

Focus: Acquiring remaining land parcels

5 Bradley Pump Station (BPS)

Ongoing: Archer Western Construction, LLC is constructing BPS located in the city of Colorado Springs approximately ¼ mile south of Bradley Rd. and 1.5 miles east of Marksheffel Rd.

Focus: Erecting structural steel, pouring concrete, and completing inspections

4 Williams Creek Pump Station (WCPS)

Ongoing: Archer Western Construction, LLC is constructing WCPS located in El Paso County 6 miles south of Squirrel Creek Rd. and 5 miles east of Interstate 25.

Focus: Installing drywall, putting up brick veneer, and progressing roof activities

3 South Pipeline (S)

Complete: S1 (HCP Constructors), S2 (Garney Construction), S3 (Layne Heavy Civil, Inc.), S4A East/West (Garney Construction)

Ongoing: Garney Construction is constructing S4A Central – a 1.4-mile pipeline that tunnels under Interstate 25, two railroads, and Fountain Creek and extends from west of Interstate 25 to east Hanover Rd.

Focus: Completing pipe installation and backfill

2 Juniper Pump Station (JPS)

Ongoing: Archer Western Construction, LLC is constructing JPS located in Lake Pueblo State Park near the base of Pueblo Dam.

Focus: Completing excavation of discharge valve vault and continued masonry work

1 Pueblo Dam Connection (PDC)

Complete: PDC1A (ASI Constructors)

Ongoing: Garney Construction is finalizing closeout of PDC1B – a 0.3-mile pipeline that connects the new outlet works (PDC1A) at Pueblo Dam to JPS and the Pueblo West Pump Station.

Focus: Completing administrative closeout activities