

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 December 2014, plans for January 2015, and key performance details for Phase 1.

Water Treatment Plant & Finished Water Pump Station

Accomplishments: Removed east tower crane; began installation of heating, ventilation, and air conditioning (HVAC) duct work; started roof construction of finished water pump station electrical building; finished paving operations at Space Village Ave.; and completed installation and began hydrostatic (pressure) testing the 84-inch diameter raw water pipe from the raw water tank to the connection point of North Pipeline 2B. **Upcoming:** Complete installation of all raw water storage tank appurtenances (accessories); receive and install backup generators; finish hydrostatic test of 84-inch diameter raw water pipe; and continue erecting structural steel at several buildings.



Paving at Space Village Ave.



Construction at water treatment plant

Raw Water Pump Stations

Accomplishments: Continued installing rebar in the suction valve vault (water flow stop point) and testing electrical work at Juniper Pump Station; progressed erection of structural steel and continued backfilling the surge tank at Williams Creek Pump Station; and continued installation of electrical duct bank and completed concrete placement of the discharge valve vault lid (regulates flow of water) at Bradley Pump Station. The pump stations received variable frequency drives (VFDs - controls speed, torque, and horsepower) motors, and pumps — critical components to operating the raw water pump stations. **Upcoming:** Prepare for installation of 66-inch diameter pipe and complete several concrete deck pours at Juniper Pump Station; install bridge crane and continue erecting structural steel to complete columns and beams at Williams Creek Pump Station; and set VFDs in electrical room and continue installing 66-inch raw water pipe near the forebay tank at Bradley Pump Station.



Aerial view of Williams Creek Pump Station

South Pipeline 4A Central & North Pipeline 2B

South Pipeline 4A Central Accomplishments: A total of 85 percent of construction is complete and finished installing more than 60 sticks of pipe within the tunnel through December.

Upcoming: Continue installation of carrier pipe within the tunnel and coordinate final grading and revegetation activities at the pipe east of the tunneling retrieval shaft. **North Pipeline 2B Accomplishments:** Completed pipe installation, welding, and placing CLSM (controlled low-strength material used for backfill) and began cleanup activities. **Upcoming:** Continue cleanup of site, begin hydrostatic test, and complete final backfill of excavated areas.



Installation of pipe at South Pipeline 4A Central



Installation of pipe at North Pipeline 2B

SPOTLIGHT

SDS 2014 Year in Review

The SDS made tremendous progress in 2014. To date, more than 48 miles of the 50-mile pipeline was installed and the Program remains on schedule and under budget. As the team starts 2015, here’s a recap of achievements this year.

On Oct. 7, the SDS team celebrated completion of the Fountain Creek Improvement Project. The \$4.2 million project – covering 28 acres on Clear Spring Ranch, south of Fountain – is designed to minimize future erosion and sedimentation on the creek. As part of this required mitigation, crews restored the creek banks to a more natural pattern, helping slow water flow through this stretch during storms and reducing erosion and sediment being carried downstream. This project could serve as a model for future improvements to other areas along the creek, and it represents one of many regional commitments that Colorado Springs Utilities has fulfilled as we construct SDS.

On Nov. 8, crews tunneling under I-25, two nearby railroad tracks, and Fountain Creek completed the mile-long tunnel across the area. The 105-inch-diameter boring machine drilled the tunnel through rock approximately 85 feet below the surface. This construction method avoids traffic impacts to area roads, protects environmentally sensitive areas along Fountain Creek, and limits disturbances to area property owners. The tunnel completion marked a significant milestone for SDS, as it connects the pipeline across the project’s most challenging terrain.

The SDS water treatment plant and three pump stations achieved significant progress through 2014 as the buildings at the sites take shape. One of the most visible elements at the sites was construction of the massive concrete storage tanks. The largest tank is part of the new water treatment plant and will be able to hold 10 million gallons of water.



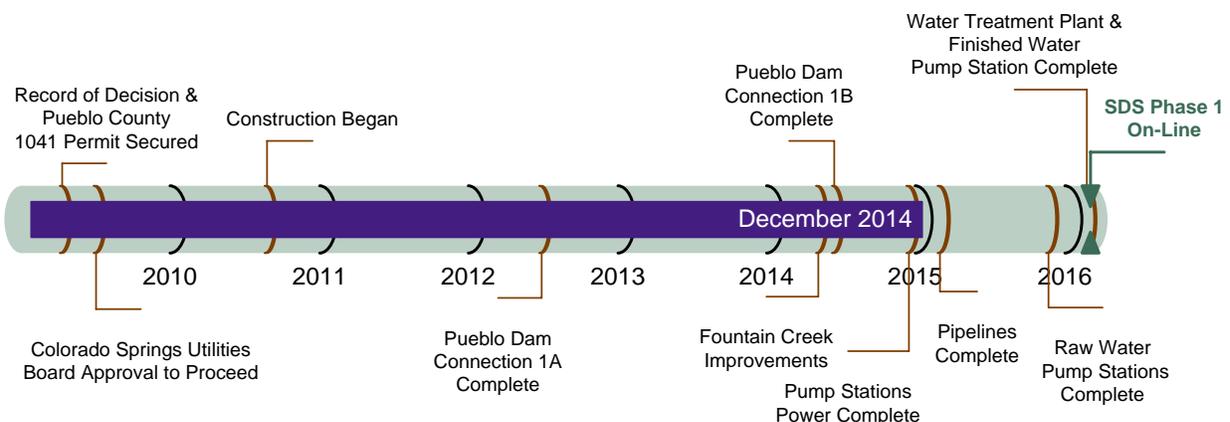
The treatment plant is more than 65 percent complete, and the pump stations are more than 52 percent complete. A key focus in 2015 will be completion of these facilities and preparation for testing, start-up, and commissioning.

As construction proceeds on SDS, it is exciting to see many local businesses and workers involved in making the project a reality. Of the \$575 million in SDS spending through Sept. 2014, \$489 million benefitted businesses in Colorado and more than \$300 million benefitted businesses in southern Colorado.

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.

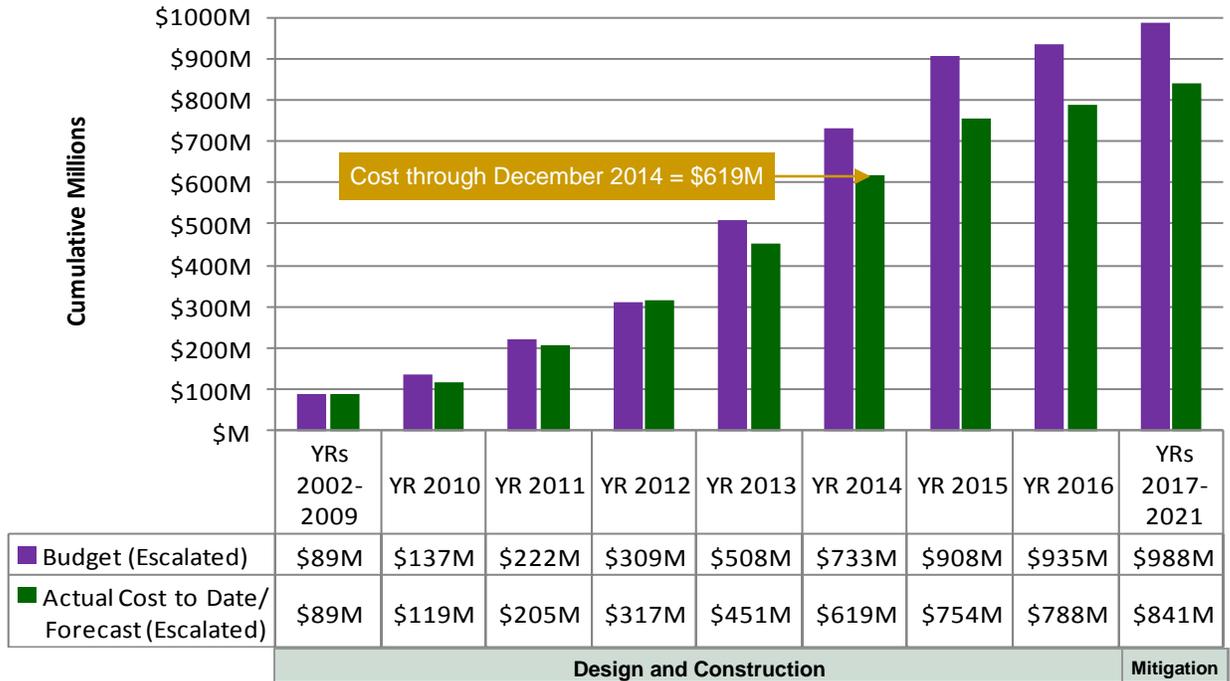
Figure 1 – Schedule Progress for Major SDS Phase 1 Projects



Cost Summary

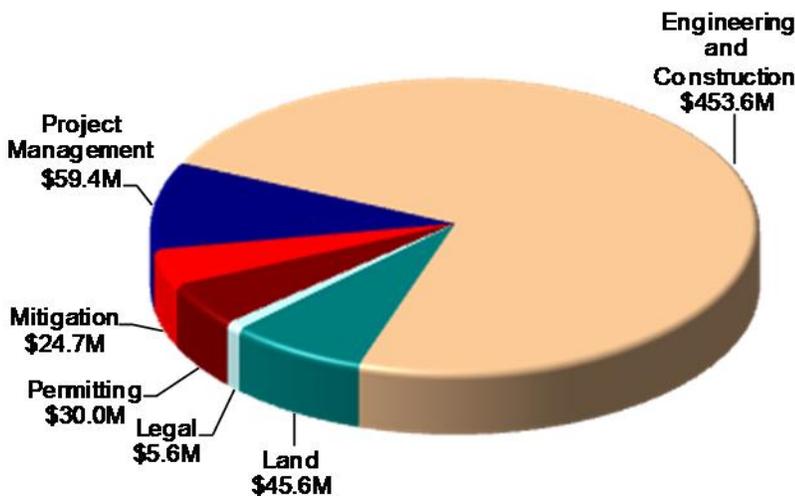
Figure 2 shows the budget for Phase 1, actual costs through December 2014, and forecasted costs for Phase 1. **Figure 3** shows the distribution of the actual costs. Key financial details are summarized below. The budget used to measure progress was established by the Colorado Springs Utilities Board 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 \$988 million after all direct project costs (including mitigation) are paid through 2021.

Figure 2 – Phase 1 Budget Progress – Actual Costs through December 2014



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.

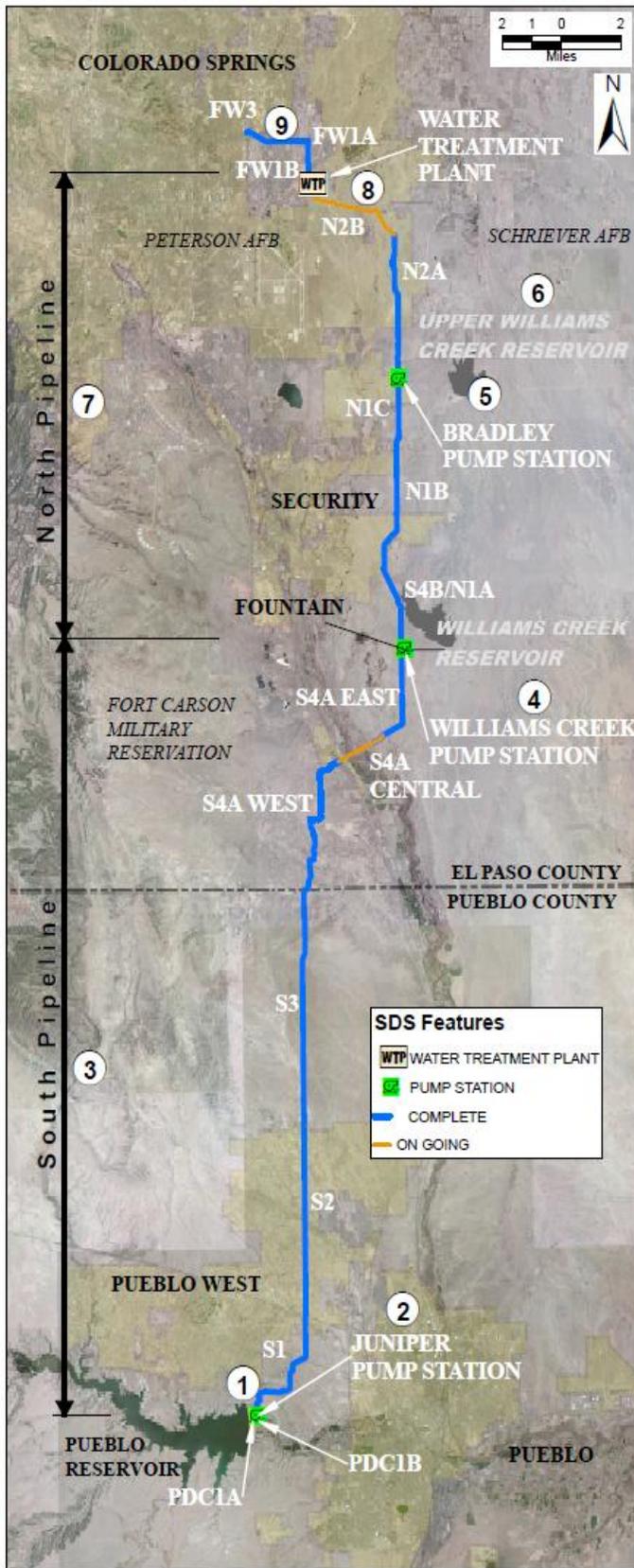
Figure 3 – Distribution of Phase 1 Direct Costs through December 2014 (\$619M Total)



Key Financial Details

- The budget for Phase 1 is \$988 million, including actual and projected escalation, while the current cost forecast is \$841 million. The project is currently forecasting completion approximately \$147 million below budget. These anticipated savings are accounted for in current water rates and plans for bond issuance.
- Cumulative actual costs to date are \$619 million, with a majority expended on engineering and construction, permitting, land, and management activities.
- Actual costs for 2014 are \$168 million with a cumulative expenditure of \$619 million by the end of 2014.

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: Progressing masonry work, installation of mechanical and electrical work, and erecting structural steel

7 North Pipeline (N)

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

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

Focus: Completing installation of pipe

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 land

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: Completing placement of flow meter vault lid and continuing installation of pipe and electrical work

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: Erecting structural steel and backfilling surge tank

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: Installing pipe in the tunnel and final grading and revegetation at the pipe east of the tunneling retrieval shaft

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: Setting generator and continuing construction of pump station building

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