

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 October 2014, plans for November 2014, and key performance details for Phase 1.

Water Treatment Plant & Finished Water Pump Station



Installation of structural steel at the finished water pump station



Aerial view of the main process building at the water treatment plant station

Accomplishments: Completed removal of dome shoring (construction support) from inside the 10-million-gallon raw water storage tank and began painting the exterior walls, progressed installation of structural steel at several buildings, continued installation of mechanical and electrical work, and completed the placement of two surge tanks. **Upcoming:** Complete exterior painting and begin dome painting at the raw water storage tank, start masonry work at the finished water pump station, and continue finished water pipeline work across Space Village Ave.

Raw Water Pump Stations

Accomplishments: Completed pouring all building foundations and began forming and reinforcing the pump station building walls at Juniper Pump Station; began erecting structural steel and continued installation of 72-inch-diameter pipe from the flow meter vault (measures flow rate of water) to the forebay tank (regulates fluctuation of water) at Williams Creek Pump Station; and continued installation of 66-inch and 78-inch-diameter pipe and received and set the standby generator at Bradley Pump Station. **Upcoming:** Continue erecting structural steel and installing electrical work at Juniper Pump Station; begin installing internal pipe inside the pump station building and complete placement of the concrete lid for the flow meter vault at Williams Creek Pump Station; and begin installing piping for the surge tank and continue pouring concrete and forming beams at the pump station building at Bradley Pump Station.



Surveying installation of structural steel at Williams Creek Pump Station

South Pipeline 4A Central & North Pipeline 2B

South Pipeline 4A Central Accomplishments: Achieved more than 90 percent of the total tunnel excavation, completed successful hydrostatic (pressure) testing of the pipe east of the tunneling retrieval shaft, and finished the tie-in to South Pipeline 4A East.

Upcoming: Complete tunnel excavation and begin cleanup and continue installing fiber optic cable, grading, and revegetation activities at the pipe east of the tunneling retrieval shaft. **North Pipeline 2B Central Accomplishments:** Completed 75 percent of total pipe installation, welding, and placing CLSM (controlled low-strength material used for backfill) and began tunneling underneath U.S. Highway 94. **Upcoming:** Finish tunneling activities underneath U.S. Highway 94 and complete up to 90 percent of total pipe installation through November.



Tunneling activities at North Pipeline 2B



Tie-in at South Pipeline 4A East

SPOTLIGHT

SDS Supports Local Jobs

The SDS came at an opportune time for Israel Alarcon and Marc Sprague. Before the SDS project began, employment prospects looked bleak. Then, Israel and Marc’s fortunes turned around as they started to learn about opportunities with SDS and soon joined the team working on Juniper Pump Station at Pueblo Dam.

Marc, a Colorado Springs resident, was out of work and searching for employment prospects. Israel, a Pueblo native, was between jobs and hopeful he could find something soon to support his family. Both local workers found positions with Archer Western, the prime contractor building the three pump stations for SDS.

“Every morning I wake up and I am happy to come to work,” Israel said. He performs various construction duties at the site such as work on pipe installation, foundations, and concrete. He said employment with the project gives him and his family a sense of security and a hopeful future.

“I am thankful for SDS,” Marc added. He has been busy as a machine operator at the site. His proudest moments include helping with rock trenching and placing pipe into the ground running from Pueblo Dam to the pump station. He said the steady employment with Archer Western on SDS provides his family with the health insurance they needed.

Construction on SDS is more than a temporary job to hold them over for a couple years, the two said. The opportunity is helping Marc and Israel secure future employment, as the two plan to continue employment with Archer Western after SDS construction is complete.

The SDS project is the largest construction project underway in the West and is a benefit to the local economy and workers. More than 420 workers are currently active on SDS construction sites, and SDS has provided Colorado companies nearly \$489 million in business from the project.



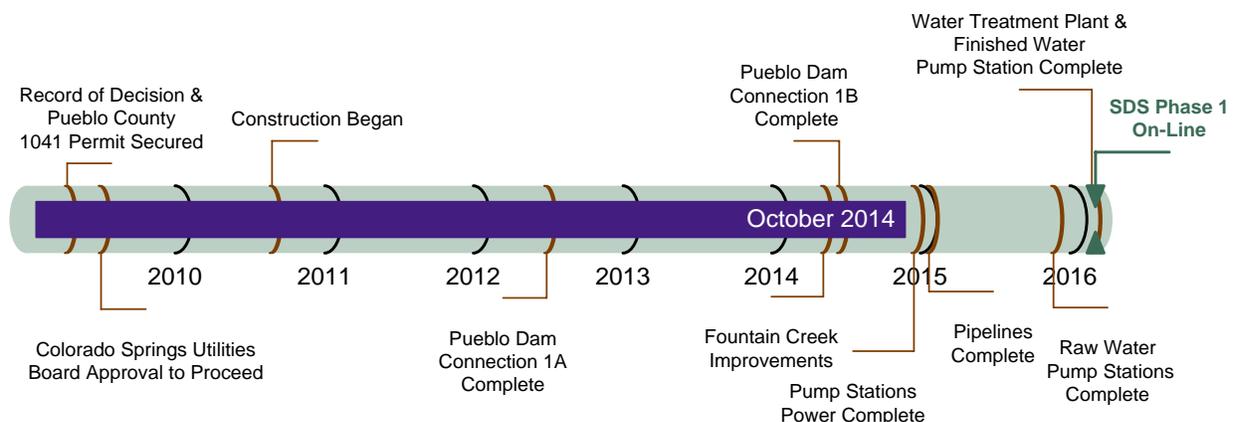
Israel Alarcon from Archer Western working at Juniper Pump Station



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.

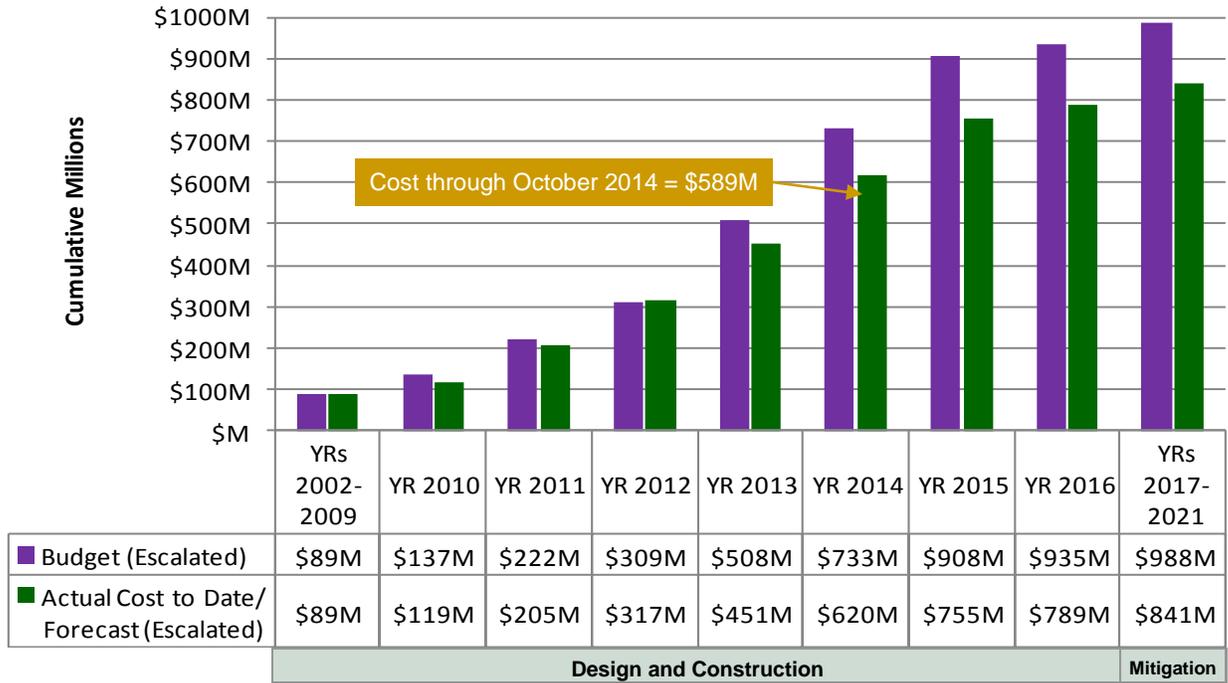
Figure 1 – Schedule Progress for Major SDS Phase 1 Projects



Cost Summary

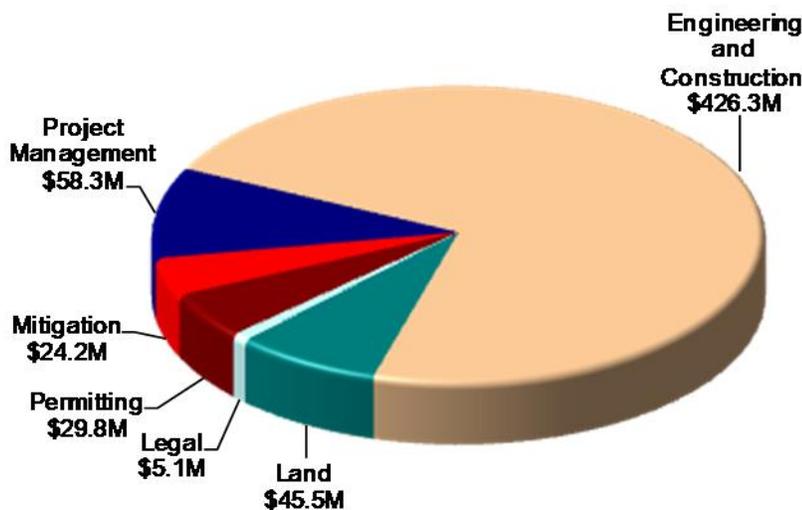
Figure 2 shows the budget for Phase 1, actual costs through October 2014, and forecasted costs for Phase 1. **Figure 3** shows the distribution of the actual costs. Key financial details are summarized below. The budget used to measure progress was established by the Colorado Springs Utilities Board 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 October 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 October 2014 (\$589M 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 \$589 million, with a majority expended on engineering and construction, permitting, land, and management activities.
- Forecasted costs for 2014 are \$169 million with a cumulative expenditure of \$620 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 constructing 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 site restoration
- 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: Began painting raw water storage tank and continued installation of structural steel and masonry
- 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: Installing pipe and tunneling underneath U.S. Highway 94
- 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: Procuring engineer for preliminary design services
- 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: Installing discharge pipe and forebay tank appurtenances
- 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: Began erecting structural steel and continuing pouring concrete for the floors of the pump station building
- 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: Progressing tunnel operations and completing tie-in from South Pipeline 4A East to 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: Continuing rock excavation at stormwater pond, installing 72-inch-diameter pipe, and erecting structural steel
- 1 Pueblo Dam Connection (PDC)**
Complete: PDC1A (ASI Constructors)
Ongoing: Garney Construction is constructing PDC1B – a 0.3-mile pipeline that will connect the new outlet works (PDC1A) at Pueblo Dam to JPS and the Pueblo West Pump Station.
Focus: Completing site restoration