

SOUTHERN DELIVERY SYSTEM

MONTHLY REPORT



The Southern Delivery System (SDS) is a regional project to bring water from Pueblo Reservoir on the Arkansas River to Colorado Springs, the City of Fountain, Security Water District, and 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 April 2016. This report summarizes accomplishments from the start of construction through November 2015, plans for December 2015, and key performance details for Phase 1.

Water Treatment Plant & Finished Water Pump Station

Accomplishments: Continued running plant at various flow rates to test additional systems for automation; completed connection of water treatment plant sewer into Colorado Springs Utilities' (CSU) sewer system on west side of Highway 24; continued quality inspections at chemical storage locations in the plant; finished process mechanical piping systems to focus on non-process systems such as heating, water, and natural gas lines; continued painting and sealing external doors and fittings and painting inside of building; progressed installation of permanent and emergency lighting; continued work on permanent perimeter fence; and completed installation of landscape irrigation system. **Upcoming:** Continue running plant at various flow rates for automation testing; continue chemical deliveries; progress work on hot water and gas piping for heating, ventilating, and air conditioning (HVAC) systems; advance installation of the pipe labeling systems; continue quality inspections focusing on electrical items; complete paving; and continue installation of seeding and tree planting.



Construction work at the water treatment plant

Raw Water Pump Stations



Entrance to Juniper Road at Juniper Pump Station

Accomplishments: Completed asphalt paving at entrance of Juniper Road and Juniper Pump Station, continued seeding and placement of boulders for landscaping, and began installation of lights in pump room at Juniper Pump Station; completed installation of exterior metal wall panels, began installation of sliding entrance gate, and completed sidewalk on south side of Williams Creek Pump Station; and completed final configuration and testing of control system, continued installation of fire alarm and security system, and progressed final grading activities at Bradley Pump Station. Preparations ongoing for 7-day performance testing of all three pump stations. **Upcoming:** Begin installation of security cameras and complete backfill of suction valve vault (water flow stop point) at Juniper Pump Station; continue installation of light fixtures in pump room and begin placing top soil, seeding, and mulch at Williams Creek Pump Station; and complete installation of exterior lighting and demobilize trailers from the site at Bradley Pump Station.

Commissioning & Startup

In November, several planning and coordination meetings were held with Archer Western Construction, construction contractor for all three pump stations, and CSU operations staff to prepare for the raw water pump station 7-day performance testing. The 7-day performance test requires Archer Western to operate all three pump stations continuously for 24 hours a day for 7 days. The purpose of the test is to demonstrate system performance and test the various safety interlocks in the system software. Training also continued for several groups within CSU, including four equipment training sessions; three for the water treatment plant and one for the raw water pump stations. This training involved CSU Water Distribution Operators at Juniper Pump Station (see photo to the right). The 7-day performance test is planned for early December.

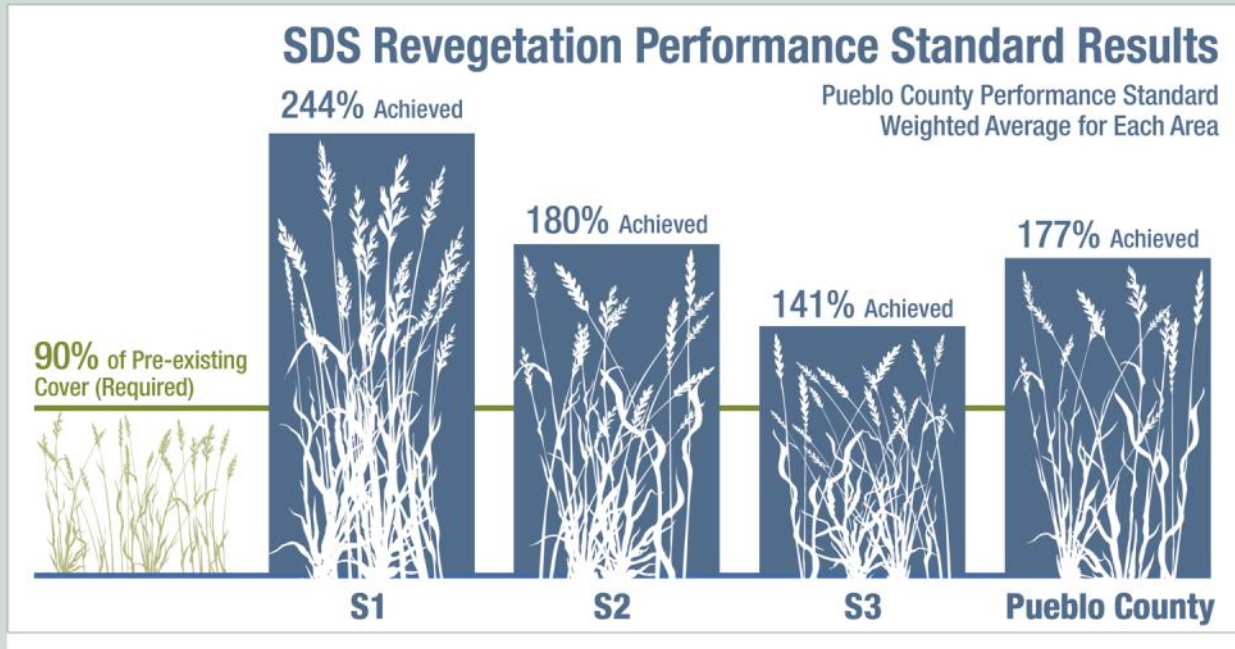


CSU Water Distribution Operator equipment training

SPOTLIGHT

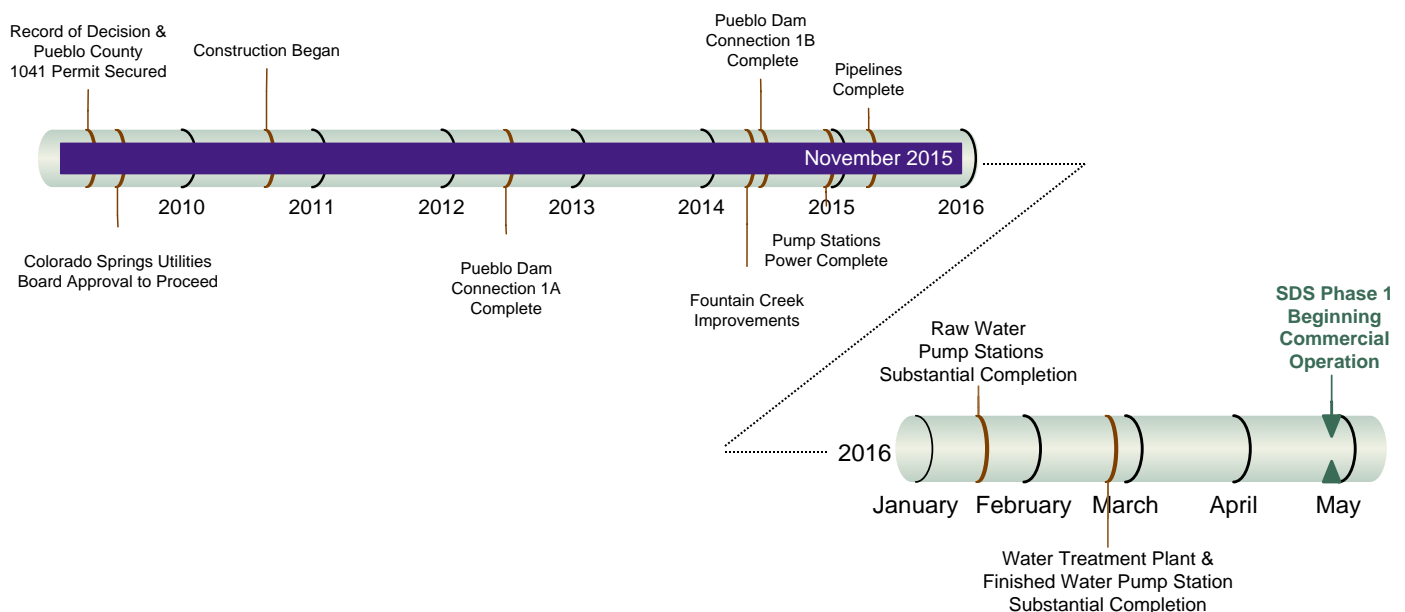
SDS Far Surpasses Revegetation Requirements

The Pueblo County 1041 Land Use Permit requires that SDS mitigate construction and operation impacts, including 90 percent achievement of pre-disturbance cover (revegetation) within two years. The graphic below demonstrates that SDS has far exceeded that requirement. Based on evaluations by four independent experts, including Pueblo County’s expert, SDS achieved, in total, 177 percent revegetation cover on disturbed areas in Pueblo County. SDS is in the process of requesting a finding of compliance and revegetation bond release on all pipeline segments within Pueblo County.



Schedule Summary

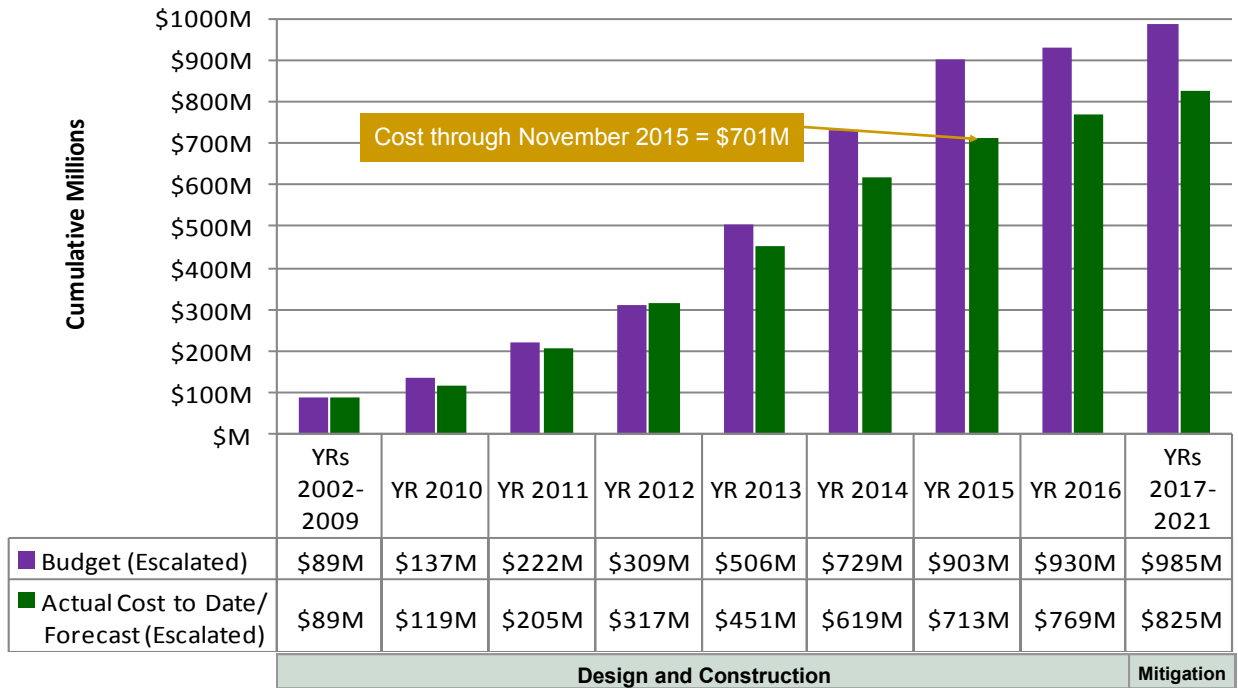
The timeline below summarizes the schedule for completing Phase 1 of the SDS. Colorado Springs Utilities anticipates completing Phase 1 as planned, with full operation in April 2016.



Cost Summary

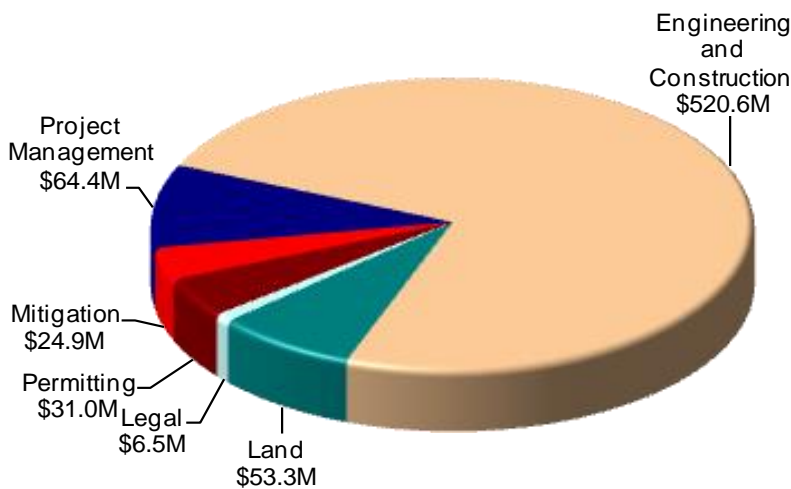
Figure 1 shows the budget for Phase 1, actual costs through November 2015, and forecasted costs for Phase 1. **Figure 2** shows the distribution of the actual costs. Key financial details are summarized below. The budget used to measure progress was established by the Colorado Springs Utilities Board 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 1 – Phase 1 Budget Progress – Actual Costs through November 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 2 – Distribution of Phase 1 Direct Costs through November 2015 (\$701M Total)



Key Financial Details

- The budget for Phase 1 is \$985 million, including actual and projected escalation, while the current cost forecast is \$825 million. The project is currently forecasting completion approximately \$160 million below budget. These anticipated savings are reflected in current water rates and plans for bond issuance.
- Cumulative actual costs to date are \$701 million, with a majority expended on engineering and construction, permitting, land, and management activities.
- Forecasted costs for 2015 are \$94 million with a cumulative expenditure of \$713 million by the end of 2015.

Figure 4 – Phase 1 Projects Status Map



- 9 Finished Water Pipeline (FW)**
Complete: FW1A, FW1B, FW3 (Garney Construction)
Focus: Maintenance
- 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 flows through plant for testing, progressing paving work, installing pipe labeling system, and installing permanent lighting, emergency lighting, and small power
- 7 North Pipeline (N)**
Complete: S4B/N1A/N1B (HCP Constructors), N1C/N2A (Layne Heavy Civil, Inc.), N2B (Garney Construction)
Focus: Maintenance
- 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 SDS Phase 2 and will be located near Bradley Pump Station.
Focus: Acquiring remaining land parcels; conceptual engineering
- 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: Placing pump shaft storage rack, preparing for quality inspections, and configuring control system; preparing for 7-day performance text
- 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: Pulling wire for fire and security systems, installing secondary transformer, and placing CCTV cameras at forebay; preparing for 7-day performance text
- 3 South Pipeline (S)**
Complete: S1 (HCP Constructors), S2 (Garney Construction), S3 (Layne Heavy Civil, Inc.), S4A East/West and S4A Central (Garney Construction)
Focus: Maintenance
- 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: Progressing site work including grading and backfill around pump station, suction valve vault, and roadways; preparing for 7-day performance text
- 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: Performing final testing and inspections and completing administrative closeout activities

Visit www.SDSwater.org for additional information.