

# 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 February 2016 and key performance details for Phase 1.

### Facility Construction

#### Water Treatment Plant:

In February, McCarthy Building Companies (construction contractor) continued flow testing and focused on remaining construction activities, including installation of the security system, cathodic protection system, fire system, and certification and documentation of operating systems. Operations training also continued in February covering operation of vertical turbine pumps, instrumentation and controls systems, and variable frequency drives (VFDs). The construction team continued to prepare the water treatment plant for meeting the Substantial Completion contract milestone.



Water treatment plant main process building

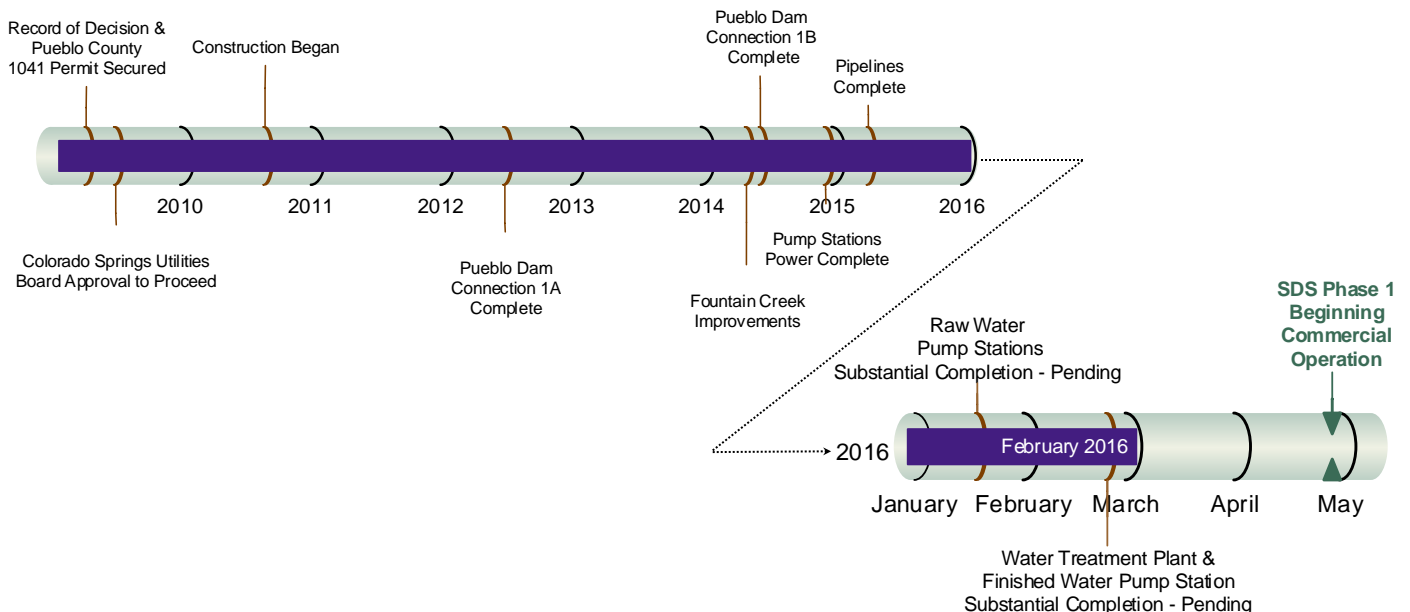
**Raw Water Pump Stations:** Construction activities continued in February, including painting, installation of handrails, demobilization of construction trailers, and soil preparation for seeding. Colorado Springs Utilities Water Operations staff completed pump assembly/disassembly training, and Archer Western Construction (construction contractor) continued quality walks through each pump station addressing punch list items for completion. The construction team continued to prepare all three pump station sites for Substantial Completion.



Bradley Pump Station pump room

### Schedule Summary

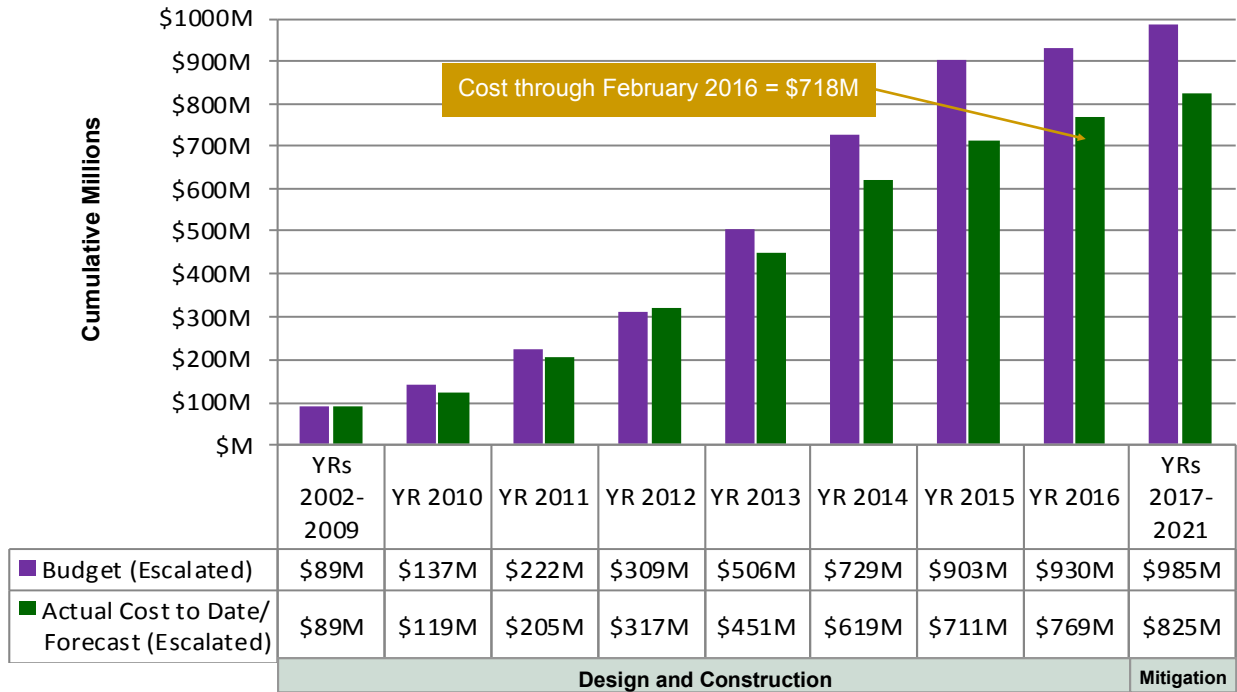
The timeline below summarizes the schedule for completing Phase 1 of the SDS. Colorado Springs Utilities anticipates completing Phase 1 as planned, with full operation in April 2016.



## Cost Summary

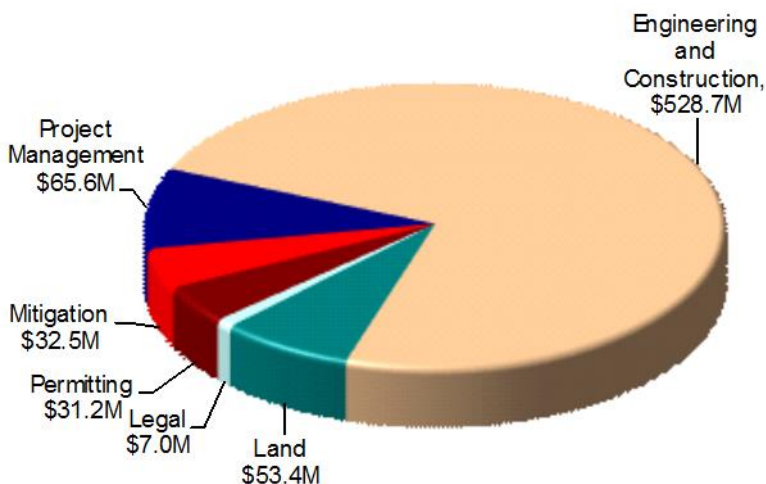
**Figure 1** shows the budget for Phase 1, actual costs through February 2016, and forecasted costs for Phase 1. **Figure 2** shows the distribution of the actual costs. Key financial details are summarized below. The budget used to measure progress was established by the Colorado Springs Utilities Board 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 February 2016**



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.

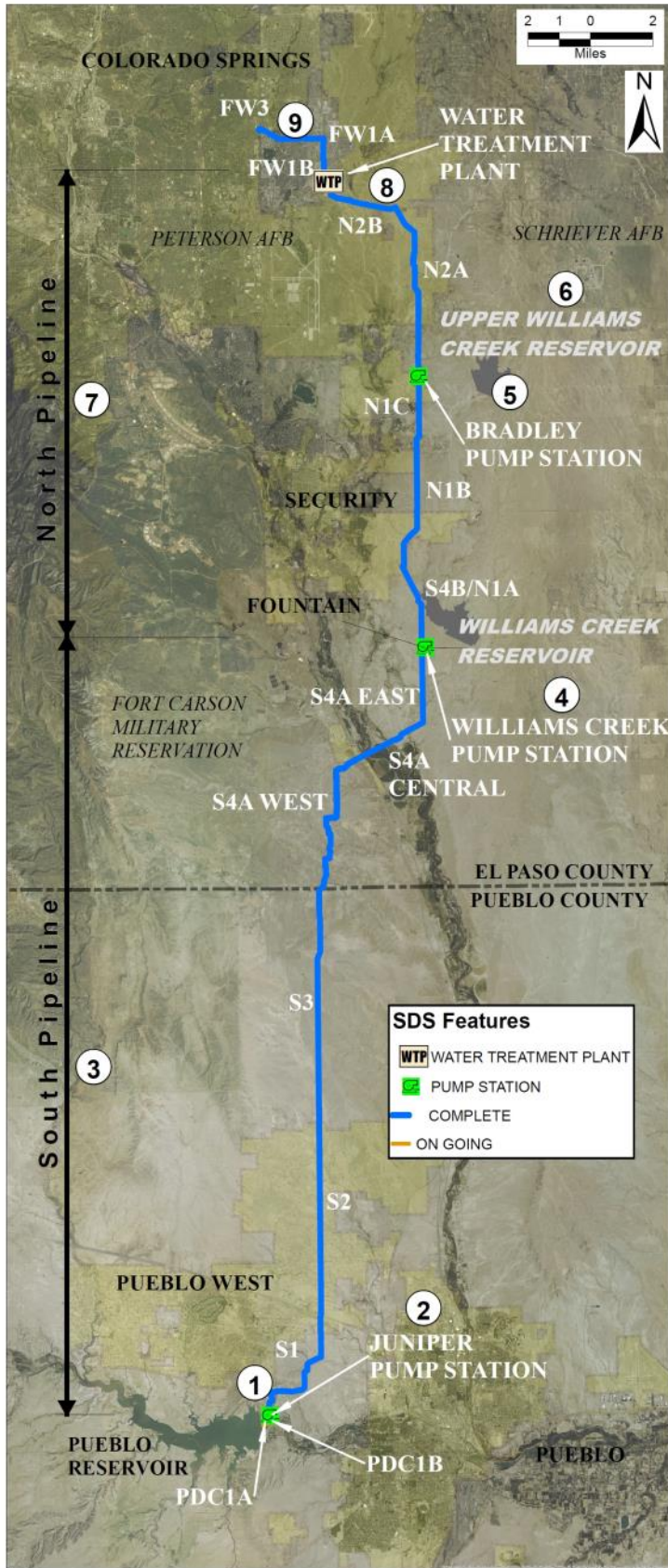
**Figure 2 – Distribution of Phase 1 Direct Costs through February 2016 (\$718M Total)**



## 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 \$718 million, with a majority expended on engineering and construction, permitting, land, and management activities.
- Forecasted costs for 2016 are \$58 million with a cumulative expenditure of \$769 million by the end of 2016.

Figure 4 – Phase 1 Projects Status Map



Visit [www.SDSwater.org](http://www.SDSwater.org) for additional information.

- 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 is constructing the WTP and FWPS located at Marksheffel Rd. and U.S. Highway 24.  
**Focus:** Flow testing, certification and documentation, training, and installation and testing plant systems (security, cathodic protection, fire alarms)
- 7 North Pipeline (N)**  
**Complete:** S4B/N1A/N1B (HCP Constructors), N1C/N2A (Layne Heavy Civil), 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
- 5 Bradley Pump Station (BPS)**  
**Ongoing:** Archer Western Construction 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:** Completion of outstanding work items on pump assemblies, addressing punch list items, and preparing for Substantial Completion
- 4 Williams Creek Pump Station (WCPS)**  
**Ongoing:** Archer Western Construction is constructing WCPS located in El Paso County 6 miles south of Squirrel Creek Rd. and 5 miles east of Interstate 25.  
**Focus:** Completion of outstanding work items on pump assemblies, addressing punch list items, and preparing for Substantial Completion
- 3 South Pipeline (S)**  
**Complete:** S1 (HCP Constructors), S2 (Garney Construction), S3 (Layne Heavy Civil), S4A East/West and S4A Central (Garney Construction)  
**Focus:** Maintenance
- 2 Juniper Pump Station (JPS)**  
**Ongoing:** Archer Western Construction is constructing JPS located in Lake Pueblo State Park near Pueblo Dam.  
**Focus:** Completion of outstanding work items on pump assemblies, addressing punch list items, and preparing for Substantial Completion
- 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 in preparation for transfer to US Bureau of Reclamation



