

# 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 April 2015, plans for May 2015, and key performance details for Phase 1.

### Water Treatment Plant & Finished Water Pump Station



Aerial view of water treatment plant

**Accomplishments:** Started roof installation at the filter and ozone areas of the plant; completed installation of transformers, switches, and wiring and continued electrical equipment testing; completed installation of potable (drinking) water supply to the main process building and installation of sanitary sewer pipe; began filling the raw water storage tank for testing - it has a capacity of 10-million-gallons, enough to fill 64 million large (20 oz) cups of coffee; approximately 82 percent of construction is complete through April at the water treatment plant. **Upcoming:** Continue filling the raw water storage tank for testing - anticipate more than 50 percent filled in May, complete electrical equipment testing, continue installation and testing of process and chemical piping, and hold safety awareness activities to support National Safety Week May 4-9.

### Raw Water Pump Stations

**Accomplishments:** Completed installation of two of four pumps and continued brick work on west side of pump station building at Juniper Pump Station, finished roofing activities and continued installing equipment in the electrical room at Williams Creek Pump Station, and completed all hydrostatic (pressure) testing of large diameter steel piping and completed installation of two out of three pumps at Bradley Pump Station; approximately 83 percent of construction is complete through April for all three raw water pump stations.

**Upcoming:** Continue installation of masonry brick and finish brick work on lower west side to enable installation of transformer at Juniper Pump Station, begin installation of electrical cable and complete drywall installation in select areas at Williams Creek Pump Station, and continue installation of conduit in pump and electrical rooms and begin connection activities to North Pipeline 1C at Bradley Pump Station; anticipate that 10 out of 11 total pumps will be installed in the month of May at all three construction sites.



Installation of pumps and motors at Juniper Pump Station

### South Pipeline 4A Central

**Accomplishments:** Completed installation of pipe, connected South Pipeline 4A Central to South Pipeline 4A East/West, completed hydrostatic (pressure) test, finished pipeline and shaft backfill, and continued coordinating revegetation activities at the pipe east of the tunneling retrieval shaft. **Upcoming:** Continue cleanup of site, progress closeout of administrative tasks, and prepare for the revegetation maintenance phase of the project.



Backfill of east shaft



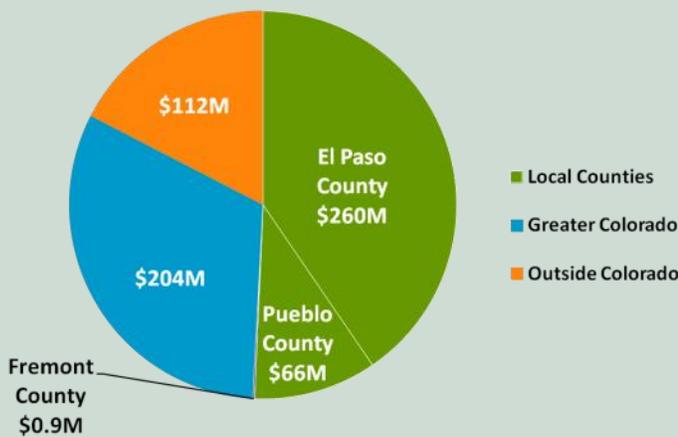
Installation of last piece of pipe

# SPOTLIGHT

## SDS Local Spending and Business Involvement through March 2015

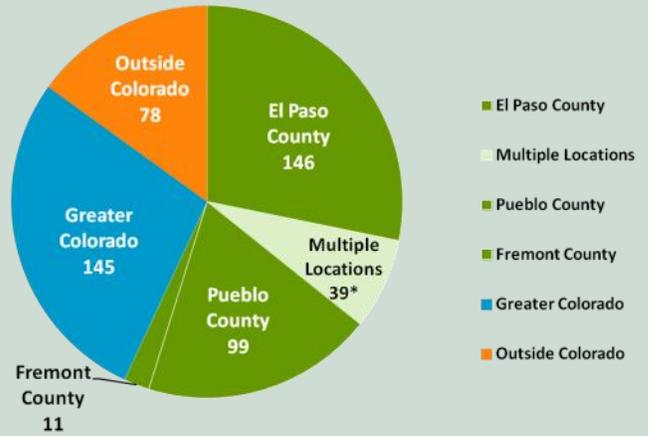
The charts below summarize some of the economic benefits of SDS to the region. Of the \$643 million spent through March 2015, \$531 million benefitted Colorado and \$327 million benefitted the local counties of Pueblo, El Paso, and Fremont. An additional \$204 million benefitted other counties within Colorado. To date, approximately 479 businesses and organizations have supported work on SDS, with 256 coming from local counties and 145 coming from other counties within Colorado. Of those, about 39 businesses and organizations were active in multiple locations that primarily benefit Pueblo and El Paso counties.

### Distribution of SDS Expenditures



[Link to Local Businesses Supporting SDS](#)

### Distribution of Businesses/Organizations Supporting SDS

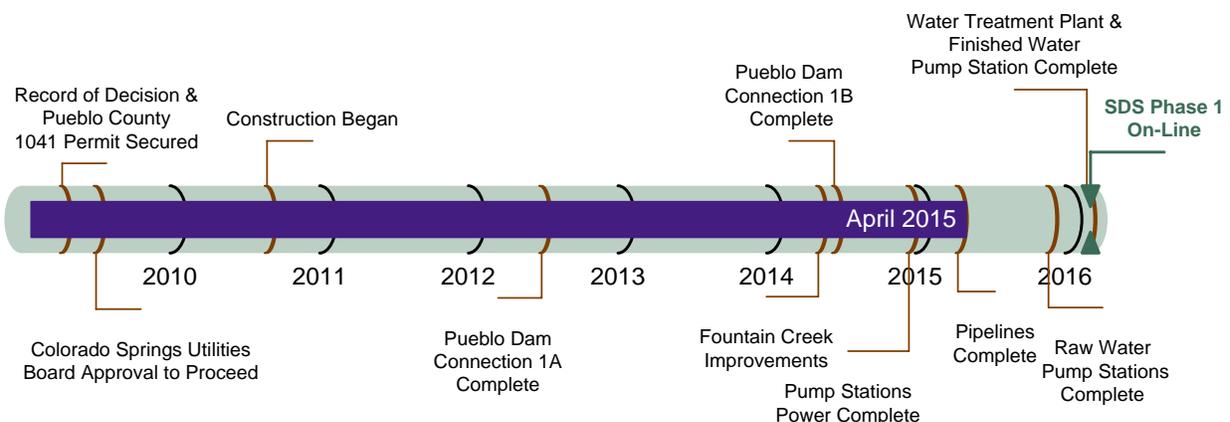


\*Pueblo/El Paso County & Other Businesses Operating in Multiple Locations

## 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.

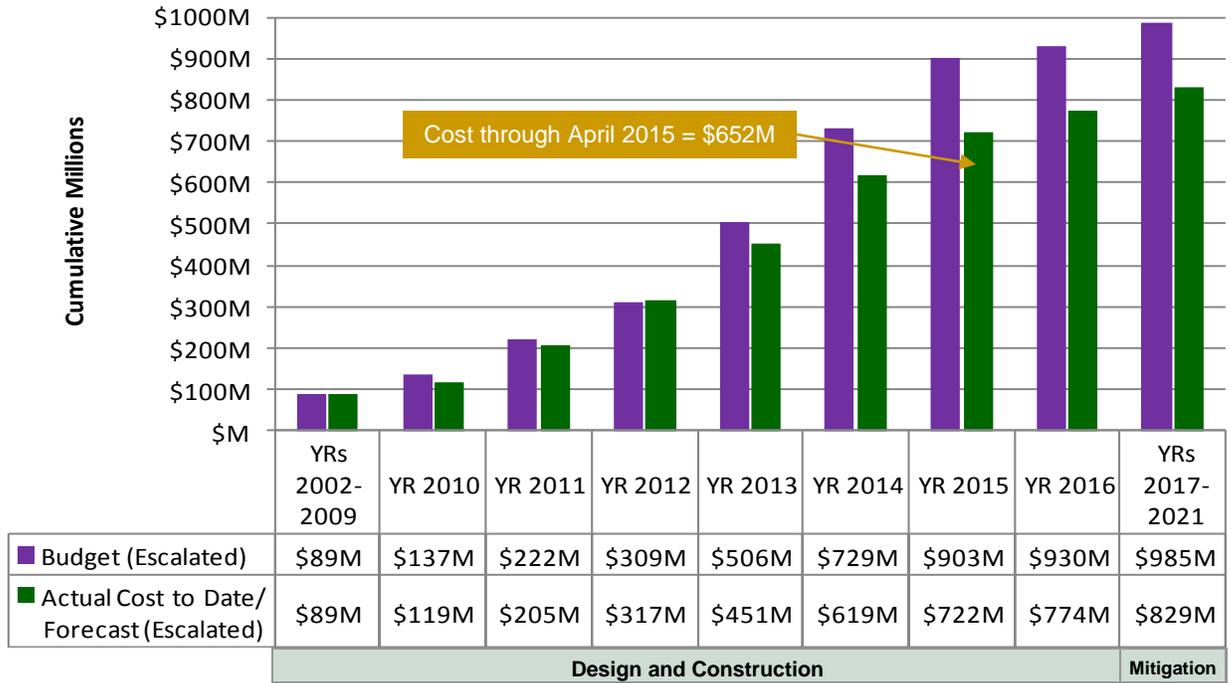
**Figure 1 – Schedule Progress for Major SDS Phase 1 Projects**



## Cost Summary

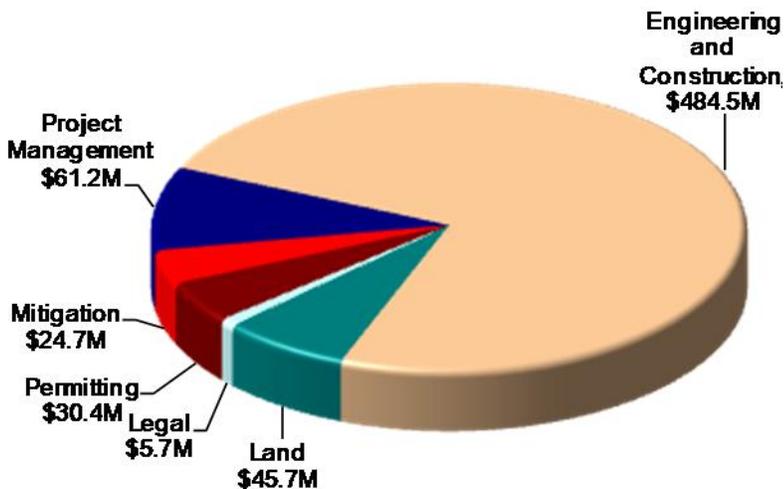
**Figure 2** shows the budget for Phase 1, actual costs through April 2015, and forecasted costs for Phase 1. **Figure 3** shows the distribution of the actual costs. Key financial details are summarized below. The budget used to measure progress was established by the Colorado Springs Utilities Board 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 April 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.

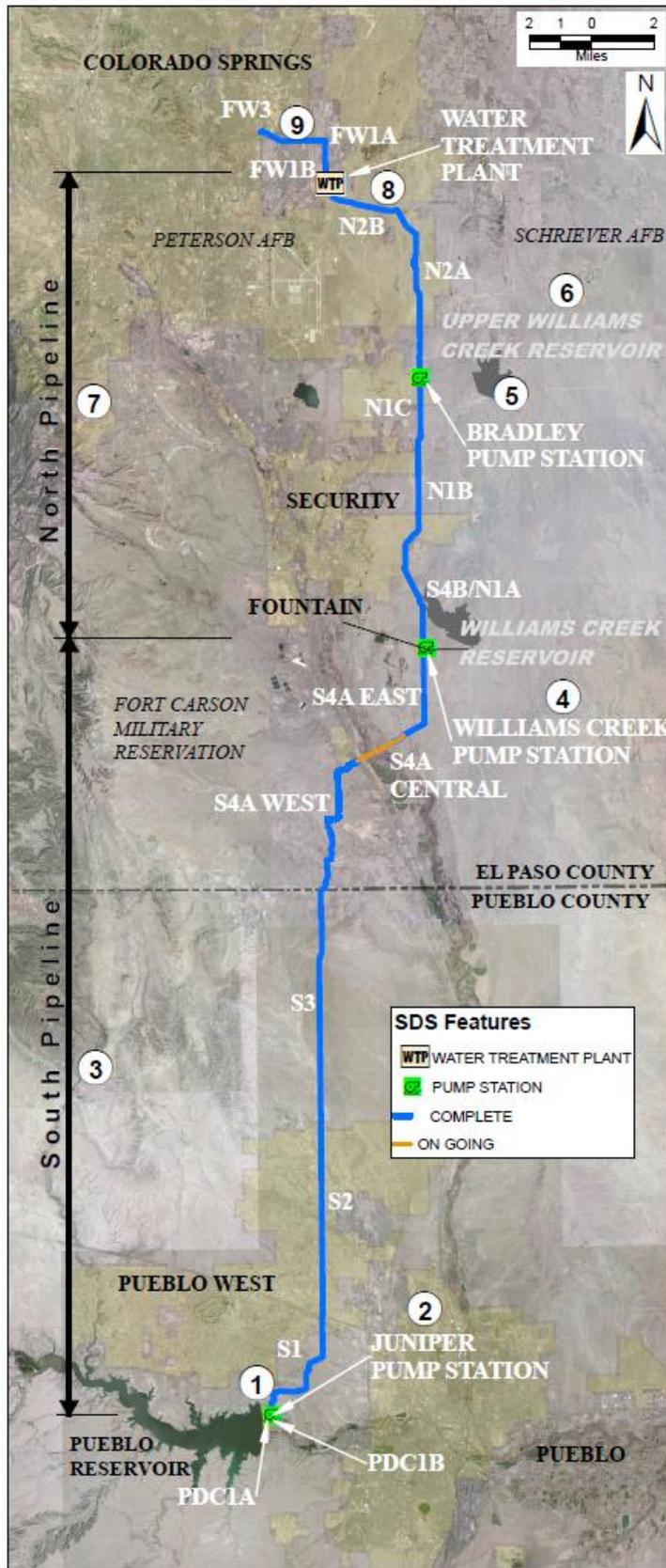
**Figure 3 – Distribution of Phase 1 Direct Costs through April 2015 (\$652M Total)**



### Key Financial Details

- The budget for Phase 1 is \$985 million, including actual and projected escalation, while the current cost forecast is \$829 million. The project is currently forecasting completion approximately \$156 million below budget. These anticipated savings are accounted for in current water rates and plans for bond issuance.
- Cumulative actual costs to date are \$652 million, with a majority expended on engineering and construction, permitting, land, and management activities.
- Forecasted costs for 2015 are \$103 million with a cumulative expenditure of \$722 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:** Filling the raw water storage tank, roofing activities, and installation of electrical and mechanical equipment
- 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:** Installing roof, electrical equipment, external brick, and pumps
- 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 variable frequency drives (VFDs - controls speed, torque, and horsepower) in electrical room and pumps and performing inspections of pipeline connections
- 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 site cleanup and progressing administrative closeout activities
- 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:** Backfilling transformer area, installing pumps, and continuing brick work on exterior
- 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

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