

# 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 April 2016. This report summarizes accomplishments from the start of construction to April 2014, plans for May 2014, and key performance details for Phase 1.

### Water Treatment Plant & Finished Water Pump Station

**Accomplishments:** Received final delivery of 36-inch and 60-inch finished water transmission main pipe, completed last external wall of the main process building, and continued installing conduit at the finished water pump station electrical building. To date, crews have installed 57 percent of the rebar, poured 55 percent of the concrete, and placed 10 percent of the pipe. **Upcoming:** Planning first concrete pour at the raw water tank - anticipated to be the largest concrete pour of the Program (approximately 975 cubic yards). Begin filling the flocculation/sedimentation basins with water in preparation of hydro-testing. Preparing for masonry work at the process building and delivery of concrete blocks.



Installation of rebar at the water treatment plant



Pipe encasement at the water treatment plant

### Raw Water Pump Stations



Installation of forebay tank piping at Bradley Pump Station



Site progress at Juniper Pump Station

**Accomplishments:** Completed backfilling and compaction of pump cans (support and protection for pumping equipment) at Juniper Pump Station, continued placement and concrete encasement of forebay tank piping at Williams Creek Pump Station and Bradley Pump Station, and continued drilling and placing foundation piers at the forebay tank at Bradley Pump Station. **Upcoming:** Begin hydro-testing 72-inch pipe and valves in the valve vault in preparation for PDC1B tie-in at Juniper Pump Station and complete concrete encasement of forebay tank piping at Williams Creek Pump Station and Bradley Pump Station.

### Pueblo Dam Connection & Finished Water Pipeline 3



Tie-in between Pueblo Dam Connection 1A and 1B

**Pueblo Dam Connection Accomplishments:** Completed tie-in of Pueblo Dam Connection 1A and 1B, performed hydrostatic (pressure) test, completed backfill of meter vault and deck concrete pour, and continued site grading. **Upcoming:** Continue mechanical and electrical work, complete concrete curb placement for hatches and removable lids, and finish roadway grading and inspection. Final Completion is estimated to occur by the end of the summer. **Finished Water 3 Accomplishments:** Installation of pipe and backfill complete from Marksheffel Road to Leoti Drive; construction complete across west of Hanna Ridge to west of Shawnee Drive and Canada Drive; and preparing for paving operations from Hanna Ridge to Canada Drive. **Upcoming:** Complete tunneling under Sand Creek and continue construction from Piros Drive to the Sand Creek tunnel. Final Completion is estimated to occur by the end of 2014.

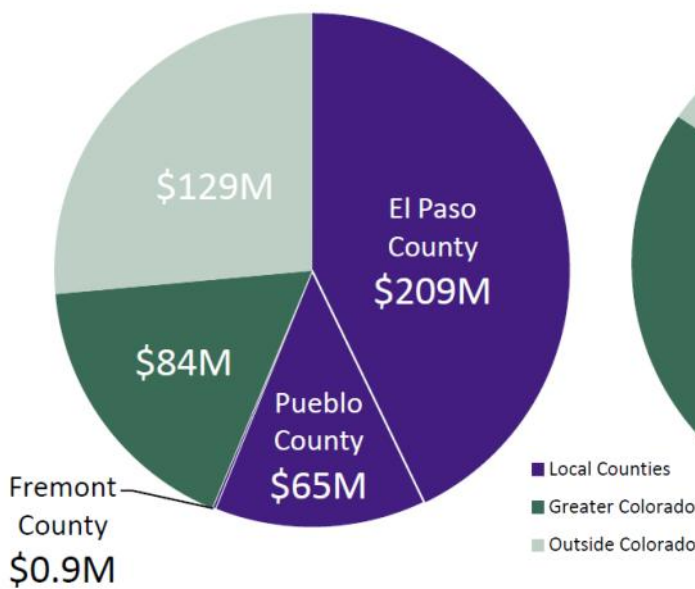
## SPOTLIGHT

### SDS Local Spending and Business Involvement through March 2014

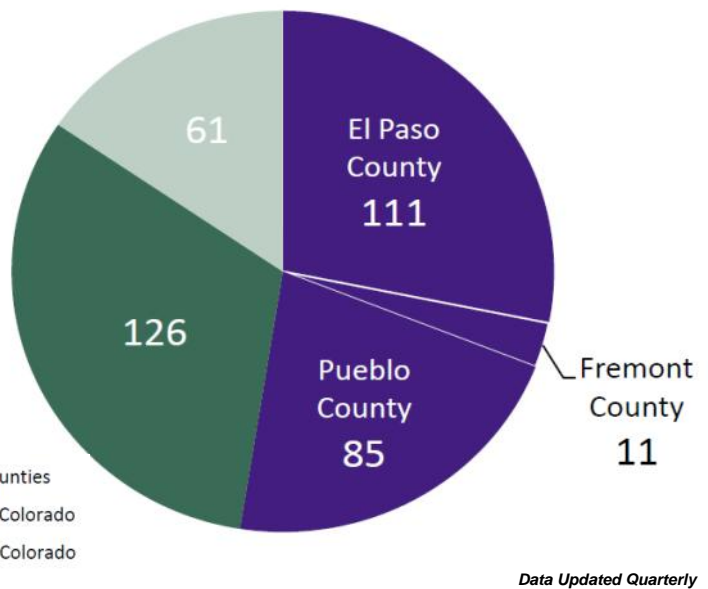
The charts below summarize the distribution of SDS spending and number of businesses and organizations involved since the SDS project began in 2002. This information is an indicator of the local economic impact of SDS. Of the \$488 million spent through March 2014, nearly \$275 million benefitted the local counties of Pueblo, El Paso, and Fremont. An additional \$84 million benefitted other counties within Colorado. Approximately 394 businesses and organizations have supported SDS to date, with 207 of those within the local counties and 126 within other parts of Colorado.

Click [here](#) for a list of businesses supporting SDS.

**Distribution of SDS Expenditures (Total \$488M)**



**Distribution of Businesses/ Organizations Supporting SDS (Total 394)**

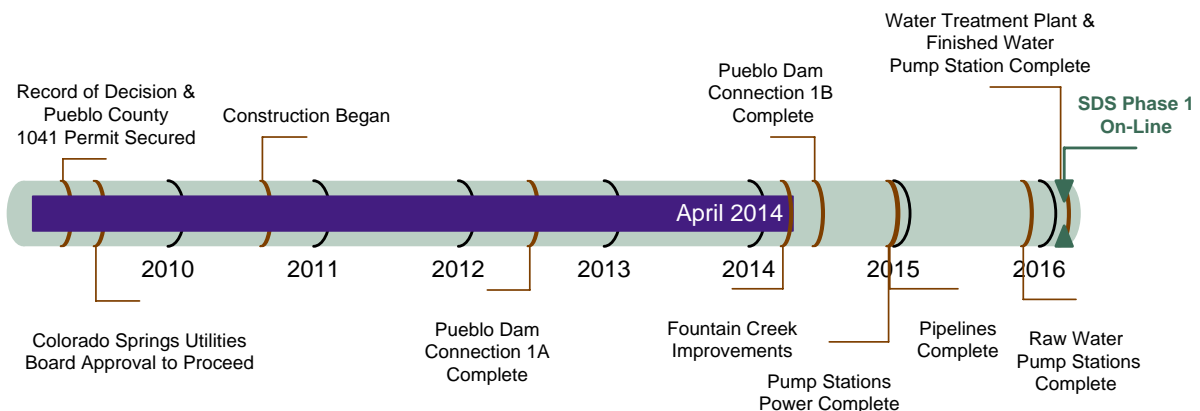


Data Updated Quarterly

## 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 April 2016.

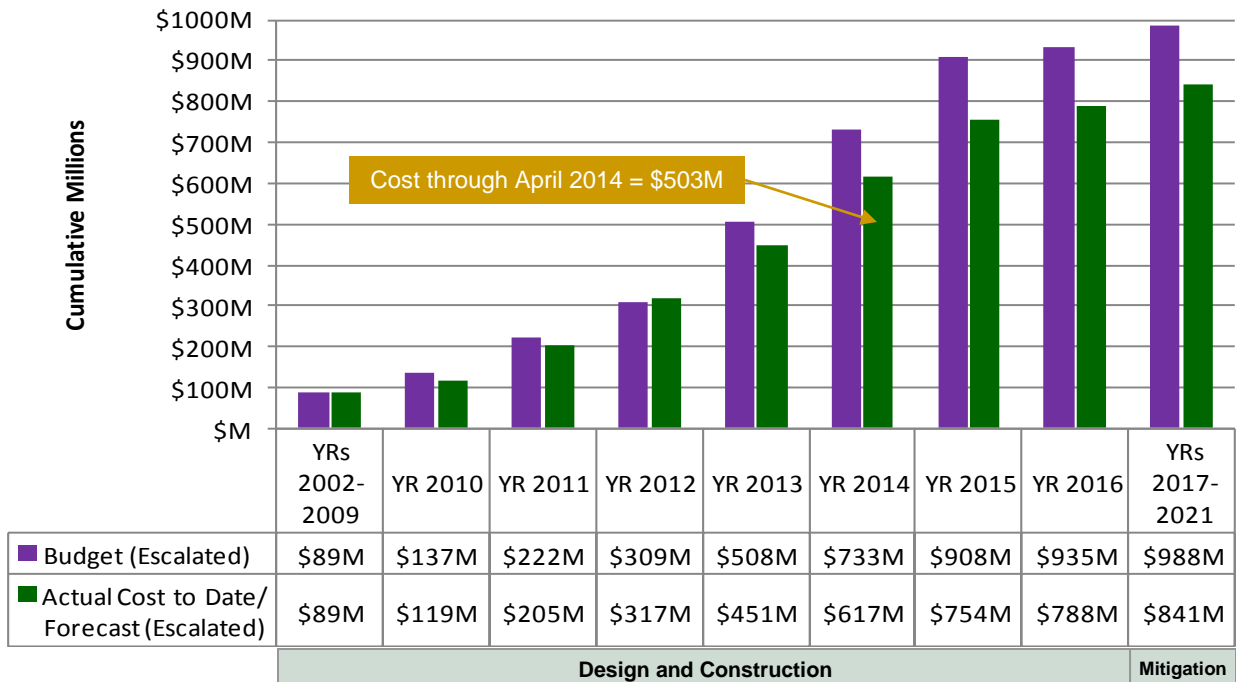
**Figure 1 – Schedule Progress for Major SDS Phase 1 Projects**



## Cost Summary

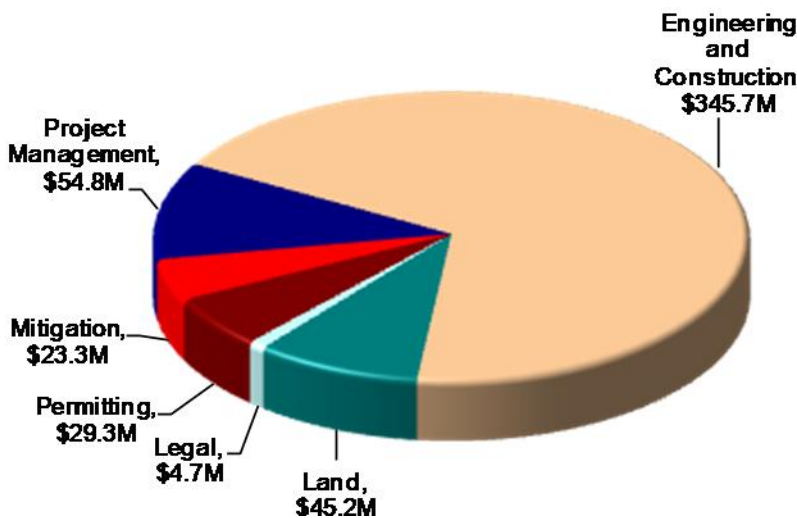
**Figure 2** shows the budget for Phase 1, actual costs through April 2014, and forecasted costs for Phase 1. **Figure 3** shows the distribution of the actual costs. Key financial details are summarized below. The budget used to measure progress was established by the Colorado Springs Utilities Board 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 April 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.

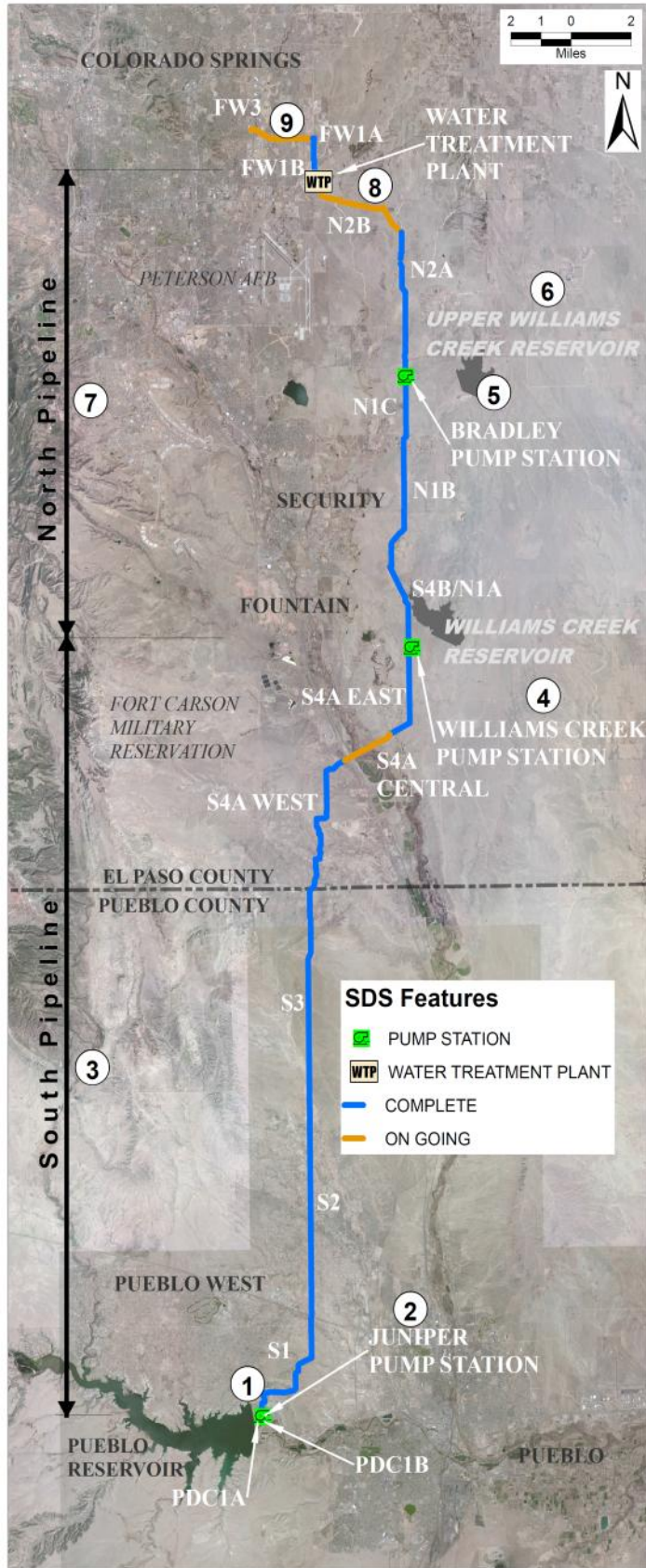
**Figure 3 – Distribution of Phase 1 Direct Costs through April 2014 (\$503M Total)**



### 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 \$503 million, with a majority expended on engineering and construction, permitting, land, and management activities.
- Forecasted costs for 2014 are \$166 million with a cumulative expenditure of \$617 million by the end of 2014.

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 (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 the intersection of Constitution Ave. and Powers Blvd.  
**Focus:** Excavating, installing, welding, and backfilling pipe

**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:** Setting reinforcements, placing concrete, and installing pipe and electrical conduit

**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:** Preparing for construction

**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:** Performing cultural resource survey and acquisition of 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:** Installing pipe and materials

**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 pipe and materials

**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

**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:** Completing backfill of pump cans and progressing rock excavation

**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 the Pueblo West Pump Station.  
**Focus:** Tie-in between Pueblo Dam Connection 1A & 1B