

# 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 two-phase project includes all of the components necessary to begin delivering water to the partner communities by April 2016. This report summarizes accomplishments for the past month, plans for the next month, and key performance details for Phase 1. In November, construction continued on Bradley Pump Station Power Supply, South Pipeline 1, and South Pipeline 4A West, and pre-construction activities continued on South Pipeline 4A East and North Pipeline 1C/2A (refer to the map on page 4). Upcoming work includes progressing construction, advancing design of the remaining pipeline sections and facilities, and continuing land acquisition.

### Key Accomplishments in November

- **Subcontractor Bids Received for Water Treatment Plant and Finished Water Pump Station.** McCarthy Building Companies received and reviewed numerous subcontractor bids to determine the cost of construction. Interviews were conducted with several bid respondents to verify completeness of bids. Contractual documents for the construction phase are currently being finalized. Construction is expected to begin in early 2013.
- **Construction Continued on Bradley Pump Station Power Supply.** Colorado Springs Utilities continued construction of the power supply for Bradley Pump Station with work spanning 3.6 miles along Powers Boulevard and Bradley Road. Crews installed 8,500 feet of conduit, 7,000 feet of wire, and completed overhead work for the first phase of installation. Estimated construction cost at completion is approximately \$3 million.
- **Construction Continued for Raw Water Pipelines.**
  - South Pipeline 1.** HCP Constructors continued construction of South Pipeline 1 – a 4.3-mile raw water pipeline section from the Juniper Pump Station site near Pueblo Dam north and northeast, almost to Highway 50. HCP completed all pipe laying activities and continued welding and backfilling the pipeline. Estimated construction cost at completion is approximately \$20 million.
  - South Pipeline 4A East and West.** Garney Construction continued activities on South Pipeline 4A East and West – a 7.5-mile raw water pipeline section that starts at the El Paso/Pueblo County line and extends north to just west of Interstate 25 and from Hanover Road north to the south end of South Pipeline 4B. Activities on the west included mobilizing equipment, receiving pipe deliveries, and installing pipe, while pre-construction activities continued on the east. Estimated construction cost at completion is approximately \$26 million.

### Upcoming Work & Challenges

- **Continue Construction of Bradley Pump Station Power Supply.** Colorado Springs Utilities will continue construction of the power supply for Bradley Pump Station, with revegetation planned to begin on disturbed land west of Marksheffel Road. Final completion of the first phase of installation is estimated to occur January 2013.

- **Continue Construction of South Pipeline 1.** HCP



Last pipe installed at South Pipeline 1

Constructors will continue construction of South Pipeline 1, anticipating the completion of welding and backfill, commencing a hydrostatic (pressure) test, and completing the installation of access and valve vaults. Final completion of

the pipeline is estimated to occur in early 2013 with revegetation to follow.

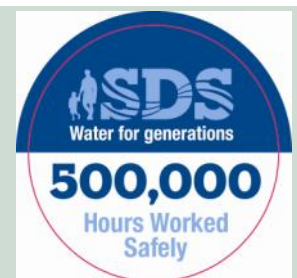
- **Continue Construction of South Pipeline 4A East and West.** Garney Construction will continue construction of the west section of South Pipeline 4A – installing blowoffs and pipe and crossing Hill Valley Road. Final completion of the west and east portions of the pipeline is estimated to occur September 2013.
- **Continue Pipeline and Facilities Design.** Design efforts will continue for North Pipeline 2B, Finished Water Pipeline 3, and the Raw Water Pump Stations. The SDS team will continue the procurement process to select a Design/Build contractor for South Pipeline 4A Central.

### SPOTLIGHT

#### SDS Surpasses Major Safety Milestone

“Colorado Springs Utilities and the SDS team are committed to a culture of safety, as we construct this historic regional water project. We appreciate our contractors taking such an active role in helping us to maintain this high standard of safety.” This milestone is particularly impressive considering the potentially hazardous nature of the construction work, such as trench excavation and installation of pipe in difficult urban and open areas and construction work in wet conditions at Pueblo Dam. SDS Program staff are committed to carrying the outstanding record into 2013, installing another 15 miles of pipeline and beginning construction on the above ground facilities.

SDS Program staff and contractors are celebrating the success of surpassing 500,000 hours worked without a lost time incident. SDS Program Director John Fredell stated,



## Schedule Summary

**Figure 1** summarizes the schedule for completing Phase 1 of the SDS. This timeline shows the planned sequence for completing each of the core projects within Phase 1 and highlights major activities for the next 12 months. Colorado Springs Utilities anticipates completing Phase 1 as planned, with full operation beginning by April 2016.

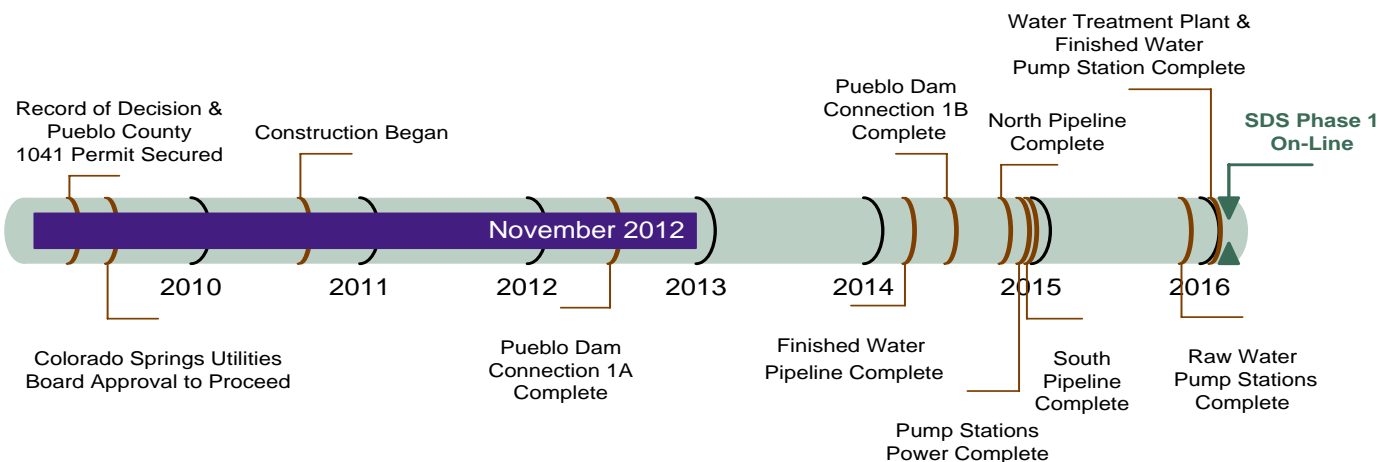
Routine permitting, land acquisition, and final design of selected projects advanced after major permits and approvals were secured in 2009. Construction of the first pipeline project began in 2010 and is now complete.

Nine construction projects are under way or scheduled to commence during the next 12 months. Continued design of six projects also is planned.

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

### Major Activities: November 2012 – October 2013

- Pueblo Dam Connection 1B – Construction
- South Pipeline 1 – Construction
- South Pipeline 1 Revegetation – Procurement and Implementation
- South Pipelines 2 & 3 Revegetation – Monitoring and Maintenance
- South Pipeline 4A East/West – Construction
- South Pipeline 4A Central – Final Design
- North Pipeline 1C/2A – Construction
- North Pipeline 2B – Final Design
- Bradley Pump Station Power Supply – Construction
- Williams Creek Pump Station Power Supply – Final Design and Construction
- Juniper Pump Station Power Supply – Final Design
- Water Treatment Plant/Finished Water Pump Station – Construction
- Raw Water Pump Stations – Final Design and Construction
- Finished Water Pipeline 3 – Final Design and Construction



### Upcoming SDS Procurements

We anticipate commencing the following procurements in the near future:

- **South Pipeline 4A Central Design-Build Contractor** – Q1 2013
- **Raw Water Pump Stations Construction Contractor** – Q1 2013
- **Raw Water Pump Stations Pumps, Motors, and Drives Selection Package** – Q1 2013
- **Finished Water 3 Pipeline Construction Contractor** – Q1 2013

Interested parties are encouraged to monitor the Rocky Mountain E-Purchasing System website ([www.RockyMountainBidSystem.com](http://www.RockyMountainBidSystem.com)) for these or other opportunities with Colorado Springs Utilities. Some opportunities are open only to pre-qualified companies.

### SDS Raw Water Pump Stations Contractor Outreach

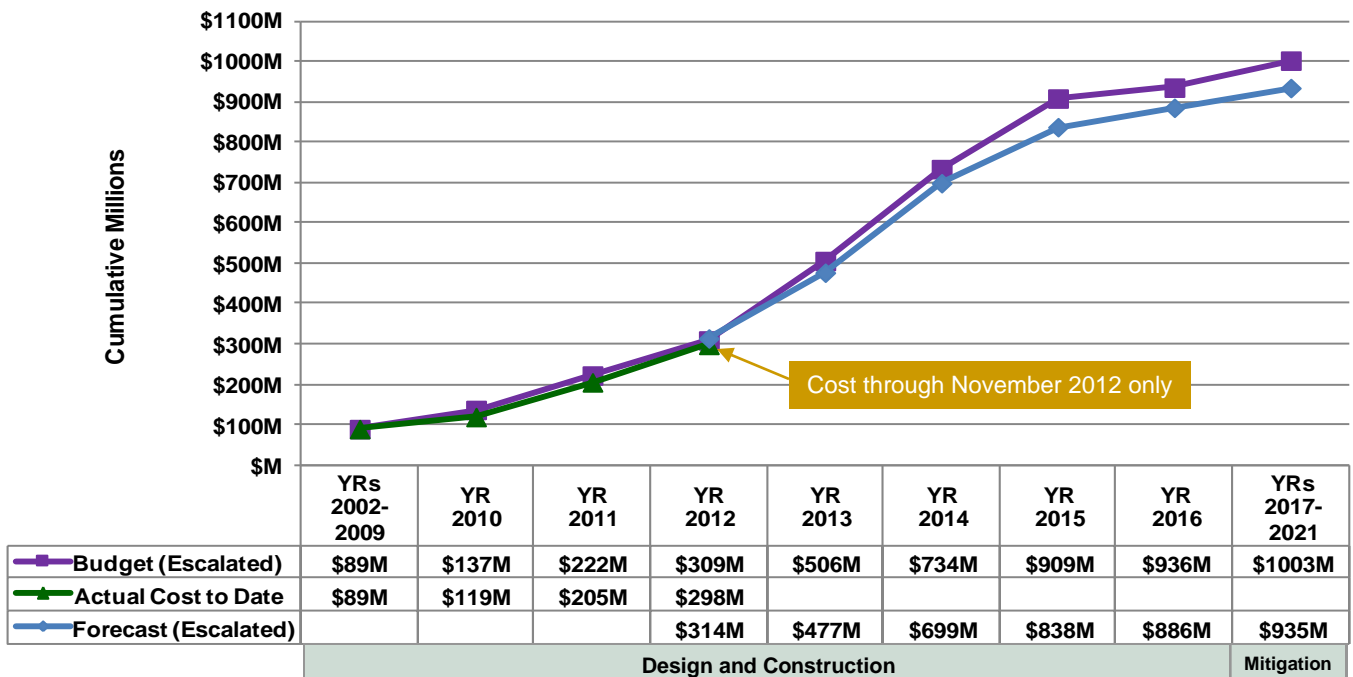
An open house was held on December 4, 2012, with over 50 local and small businesses meeting with the pre-qualified prime contractors to discuss future business opportunities. Pre-qualified firms will be asked to provide bids in Q1 of 2013 to construct the three SDS raw water pump stations. For the list of pre-qualified contractors, follow the link below:

<http://www.sdswater.org/JobBusinessOpportunities/PrimeContractsAwarded.aspx>

## Cost Summary

**Figure 2** shows the budget for Phase 1, actual costs through November 2012, and forecasted costs for Phase 1. **Figure 3** shows the distribution of the actual costs. Key financial details are summarized below. The budget that is 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 \$1.003 billion after all direct project costs (including mitigation) are paid through 2021. The approved and previously estimated water rate increases to pay for SDS Phase 1 already include these anticipated costs.

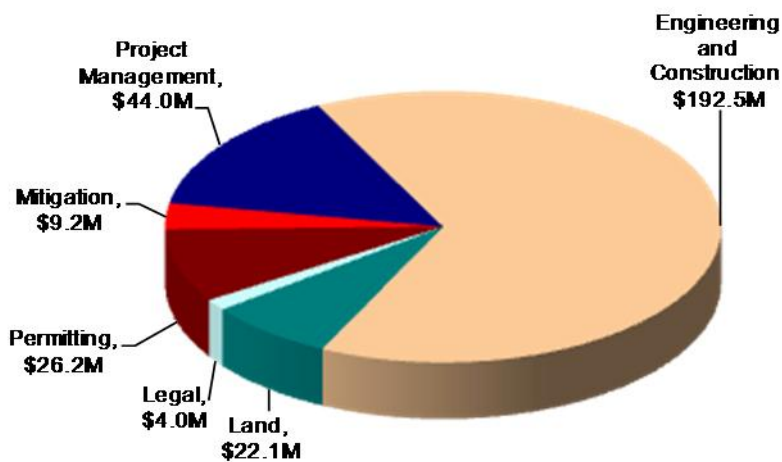
*Figure 2 – Phase 1 Budget Progress – Actual Costs through November 2012*



All \$ values in millions (M) and reflect direct project costs.

Budget and forecast \$ values include actual and projected cost escalation as measured by the Engineering News-Record's national Construction Cost Index and periodic forecasts by IHS Global Insight.

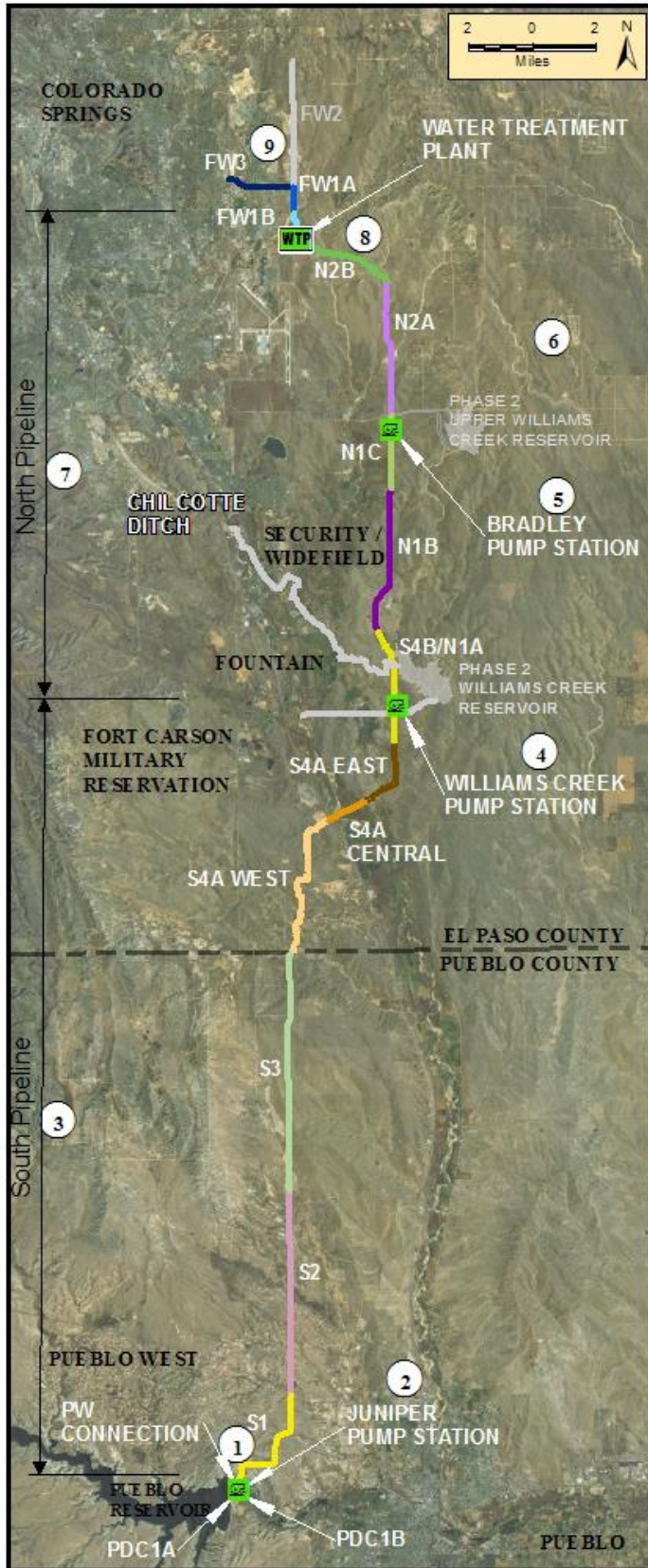
*Figure 3 – Distribution of Phase 1 Direct Costs through November 2012 (\$298M Total)*



### Key Financial Details

- The budget for Phase 1 is \$1.003 billion, including actual and projected escalation, while the current cost forecast is \$935 million. The project is currently forecasting completion approximately \$68 million below budget.
- Cumulative actual costs to date are \$298 million, with a majority expended on engineering and construction, permitting, land, and management activities.
- Forecasted costs for 2012 are \$109 million with a cumulative expenditure of \$314 million by the end of 2012.

Figure 4 – Phase 1 Projects Status Map



- 9 Finished Water Pipeline (FW)**  
 Design: 90%  
 Land: 70% of properties secured  
 Focus: Preparing a final design for section 3
- 8 SDS Water Treatment Plant and Finished Water Pump Station**  
 Design: 100%  
 Land: 100% of properties secured  
 Focus: Preparing for construction
- 7 North Pipeline (N)**  
 Design: 90%  
 Land: 40% of properties secured  
 Focus: Concluding construction of sections 1A & 1B, continuing pre-construction activities for sections 1C & 2A, preparing a final design for section 2B
- 6 Upper Williams Creek Reservoir**  
 Design: 30% design complete; completion of design planned in SDS Phase 2  
 Land: Acquisition planning under way  
 Focus: Protecting availability of site location
- 5 Bradley Pump Station**  
 Design: 90%  
 Land: Acquisition planning under way  
 Focus: Preparing a final design, preparing to procure a construction contractor and major equipment, constructing power supply
- 4 Williams Creek Pump Station**  
 Design: 90%  
 Land: 100% of properties secured  
 Focus: Preparing a final design, preparing to procure a construction contractor and major equipment, preparing a final design for power supply
- 3 South Pipeline (S)**  
 Design: 90%  
 Land: 90% of properties secured  
 Focus: Constructing section 1, preparing to procure a design-build contractor for section 4A Central, constructing section 4A West, continuing pre-construction activities for 4A East, concluding construction of section 4B
- 2 Juniper Pump Station**  
 Design: 90%  
 Land: Coordinating land use authorization with the Bureau of Reclamation  
 Focus: Preparing a final design, preparing to procure a construction contractor and major equipment, assisting with power substation siting
- 1 Pueblo Dam Connection (PDC)**  
 Design: 100%  
 Land: Construction authorization secured  
 Focus: Concluding construction of 1A, procuring a construction contractor for 1B (pipeline)

**Schedule:** The Program is on schedule to begin operations in April 2016.

**Budget:** The Program is currently forecasting completion under budget by \$68 million.

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