

# 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 (refer to the map on page 4) by April 2016. This report summarizes accomplishments for the past month, plans for the next month, and key performance details for Phase 1. In July concrete work began at Pueblo Dam, trench excavation commenced on 8.6 miles of the raw water pipeline, and pre-construction activities continued on other raw and finished water pipeline segments. Construction contractors were procured or solicited for South Pipeline 3 and South Pipeline 1, respectively.

### Key Accomplishments in July

- **Concrete Placement Begins for Pueblo Dam Connection.**

ASI Constructors continued construction of Pueblo Dam Connection 1A – an SDS connection to the Pueblo Dam North Outlet Works. ASI completed an excavation within the river channel and began pouring a concrete foundation. This placement of 430 cubic yards of concrete is the first of several concrete placements planned for the next two months.



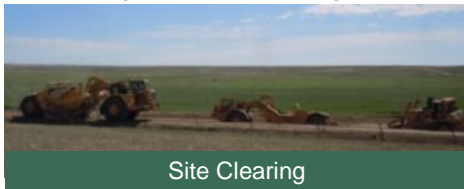
Concrete Placement

- **South Pipeline 3 Construction Contractor Procured.**

Reynolds, Inc. was selected from among pre-qualified contractors that submitted proposals to construct South Pipeline 3 – a 7.6-mile pipeline in northern Pueblo County. Reynolds will collaborate initially with the final designer and commence materials acquisitions, which will allow construction to advance quickly once the design is completed.

- **Construction Continues for South Pipeline 4B and North Pipelines 1A and 1B.**

HCP Constructors continued construction of an 8.6-mile segment of SDS through southeastern El Paso County from south of Squirrel Creek Road to Peaceful Valley Road east of Security. Site



Site Clearing

clearing continued and 4.5 miles of pipe was fabricated by Northwest Pipe of Denver as of the end of July.

- **South Pipeline 1 Design Completed and Construction Contractor Solicited.** CH2M HILL completed final design documents for South Pipeline 1 – a 4.3-mile raw water pipeline segment from the Juniper Pump Station site near Pueblo Dam north and northeast almost to Highway 50 in southeastern Pueblo West. Those documents were used to solicit bids from pre-qualified contractors to construct this pipeline. Bids are due August 25.

### Upcoming Work & Challenges

- **Commence Raw Water Pump Stations Design-Build Procurement.** The SDS team will solicit proposals for design and construction of the SDS raw water pump stations, which will pump water from Pueblo Dam through the raw water pipeline to the water treatment plant. The team will release a Request for Proposal to interested firms on August 11, and proposals will be due September 13. These proposals will describe each respondent's plan for delivering the facilities through a "Progressive Design-Build" approach.
- **Commence Final Design of South Pipeline 3.** CH2M HILL will begin preparation of final design documents for South Pipeline 3. The designer will start a technical evaluation of options for constructing a crossing of Steele Hollow and prepare information to support procurement of steel for pipeline fabrication.
- **Continue Pre-construction of South Pipeline 2 and Finished Water Pipeline 1B.** Garney Construction will continue pre-construction activities for South Pipeline 2 – a 6.4-mile pipeline extending north from Highway 50 to the northern boundary of Pueblo West – and Finished Water Pipeline 1B – a 0.4-mile segment of two parallel finished water pipelines originating at the water treatment plant site and crossing beneath Highway 24. Near-term activities will include permitting, planning, and pipe fabrication.
- **Prepare for Final Design Procurement for Finished Water Pipeline 3.** Using preliminary design documents from Dewberry-Integra, the SDS team will prepare to solicit proposals from engineering firms to develop a final design for Finished Water Pipeline 3. This 2.1-mile segment of finished water pipeline will extend along Constitution Avenue between Marksheffel Road and Powers Boulevard in eastern Colorado Springs. Release of a Request for Proposal is anticipated in early September.
- **Continue Land Acquisition.** The SDS team will continue to secure the properties needed for SDS Phase 1. Properties along the South pipelines in Pueblo County will remain the primary focus. Eminent domain hearings will continue for the few properties where agreements with the owners could not be reached. This court process will allow a neutral third party to resolve differences regarding the final amount of compensation for SDS easements.

## Schedule Summary

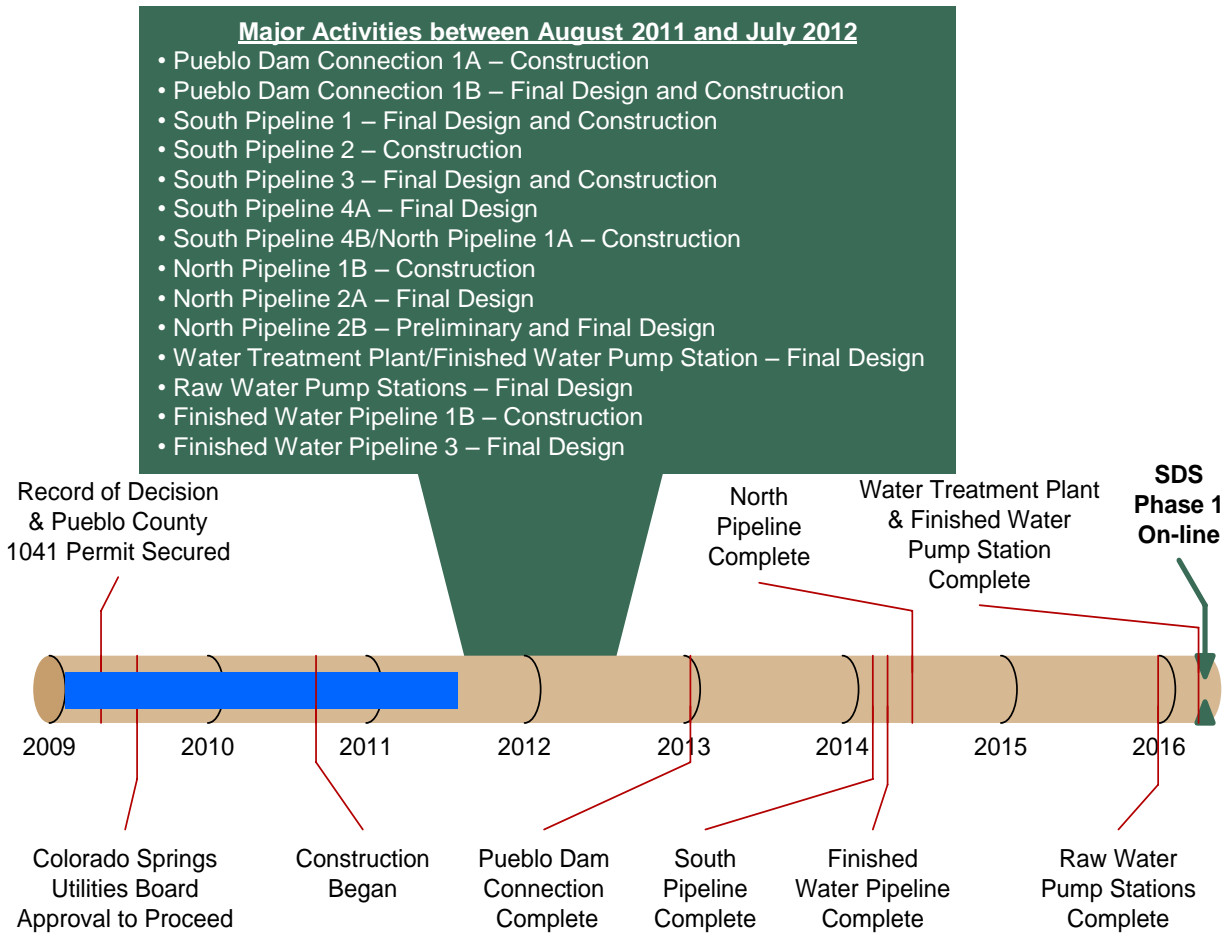
**Figure 1** summarizes the schedule for completing Phase 1 of the SDS. This timeline shows the planned sequence for completing each of the core projects within Phase 1. It also highlights the major activities for the next 12 months. Colorado Springs Utilities anticipates completing Phase 1 as planned, 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 complete. Construction of Pueblo Dam Connection 1A was rescheduled to begin in May 2011 due to extended contracting with the Bureau of Reclamation.

Six pipeline construction projects are scheduled to commence during the next 12 months. Design of nine projects – pipelines, pump stations, and water treatment plant – also is planned. Major procurements to support some of these activities are identified below.

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



## Upcoming SDS Procurements

We anticipate commencing the following procurements in the near future:

- **South Pipeline 1 Construction Contractor** – In progress
- **Raw Water Pump Stations Design-Build Contractor** – Q3 2011
- **Finished Water Pipeline 3 Designer** – Q3 2011
- **North Pipeline 2B Designer** – Q1 or Q2 2012

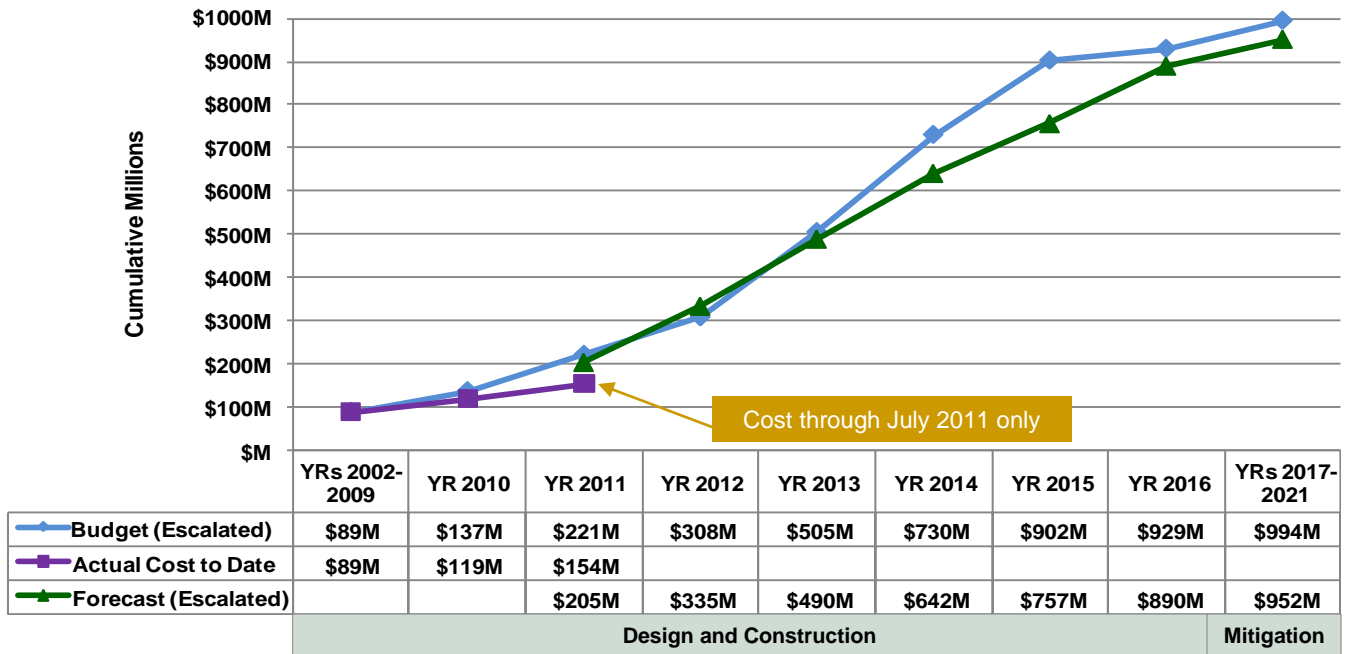
- **Pueblo Dam Connection 1B Construction Contractor** – Q2 2012

*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.*

## Cost Summary

**Figure 2** shows the budget for Phase 1, actual cost through July 2011, 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 \$994 million after all direct project costs (including mitigation) are paid through 2021. The approved and anticipated water rate increases to pay for SDS Phase 1 already include these anticipated costs.

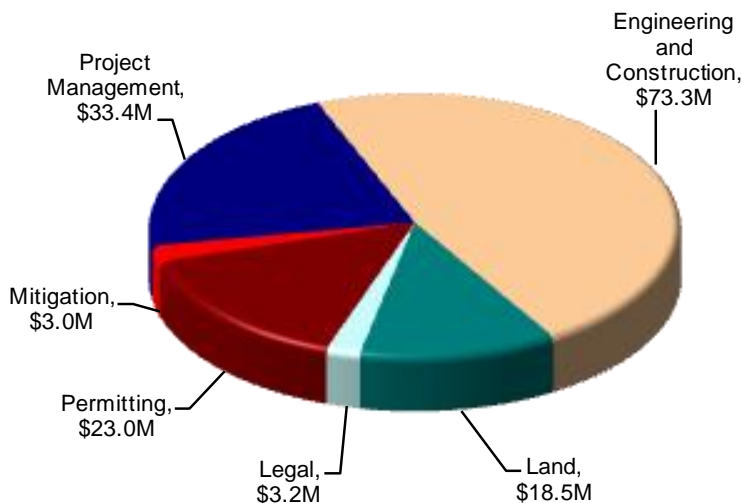
*Figure 2 – Phase 1 Budget Progress – Actual Costs through July 2011*



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.

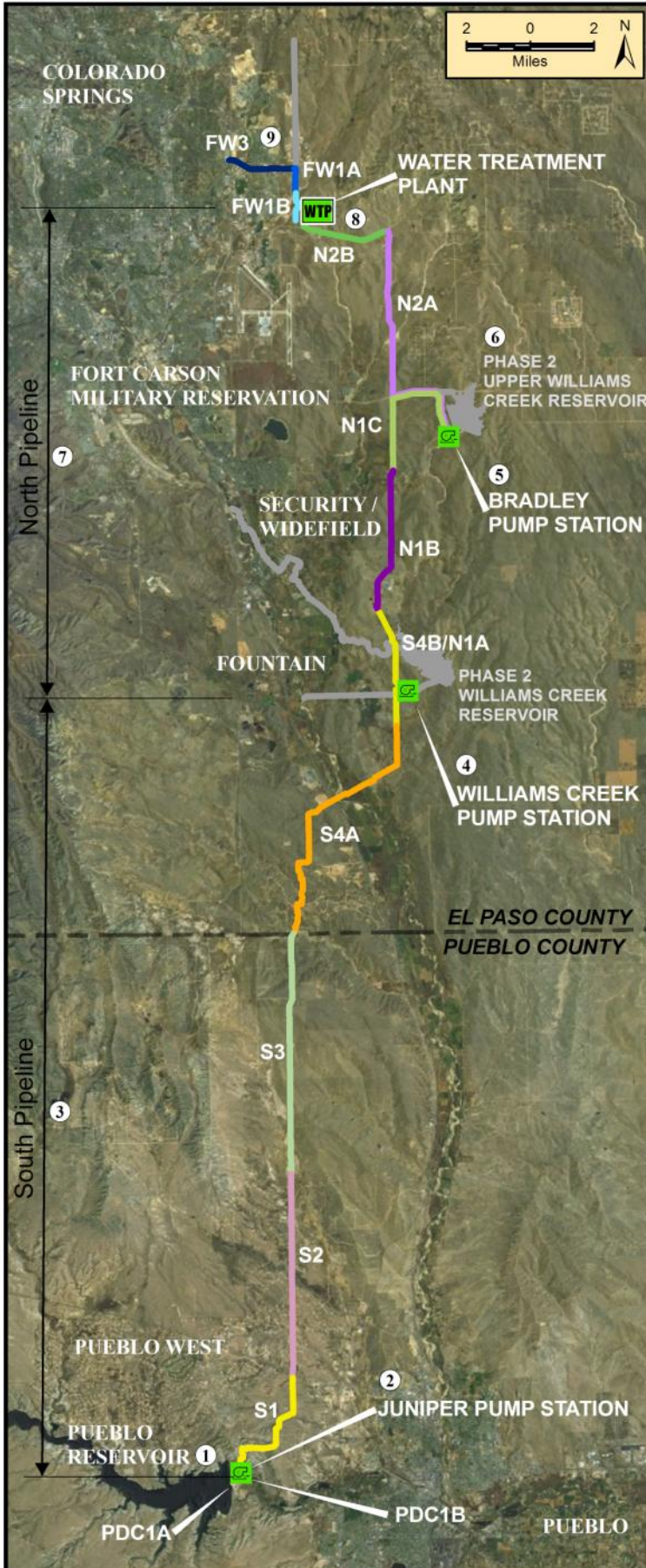
*Figure 3 – Distribution of Phase 1 Direct Costs through July 2011 (\$154M)*



### Key Financial Details

- The budget for Phase 1 is \$994 million, including actual and projected escalation, and the current cost forecast is \$952 million. The project is currently forecasting completion about \$42 million below budget.
- Cumulative actual costs to date are \$154 million, with a majority expended on engineering and construction, permitting, land, and management activities.
- Forecasted costs for 2011 are \$86 million with a cumulative cost of \$205 million by the end of 2011.
- Forecasted costs slightly exceed the budget in 2012 due to potential acceleration of pipeline construction to take advantage of favorable market conditions without affecting the rate increase projections for Phase 1.

Figure 4 – Phase 1 Projects Status Map



	<u>Schedule</u>	<u>Cost</u>
<b>9 Finished Water Pipeline (FW)</b> Design: 40% Land: 70% of properties secured Focus: Continuing pre-construction activities for segment 1B, preparing to procure a designer for segment 3	●	●
<b>8 SDS Water Treatment Plant and Finished Water Pump Station</b> Design: 30% Land: 100% of properties secured Focus: Commencing preparation of a final design	●	●
<b>7 North Pipeline (N)</b> Design: 80% Land: 40% of properties secured Focus: Constructing segments 1A & 1B	●	●
<b>6 Upper Williams Creek Reservoir</b> Design: 30% design complete; completion of design planned in SDS Phase 2 Land: Acquisition planning under way Focus: No significant activities	●	●
<b>5 Bradley Pump Station</b> Design: 30% Land: Acquisition planning under way Focus: Preparing to procure a design-build contractor	●	●
<b>4 Williams Creek Pump Station</b> Design: 30% Land: 100% of properties secured Focus: Preparing to procure a design-build contractor	●	●
<b>3 South Pipeline (S)</b> Design: 60% Land: 80% of properties secured Focus: Acquiring land, procuring a construction contractor for segment 1, continuing pre-construction for segment 2, preparing a final design for segments 3 & 4A, constructing segment 4B	●	●
<b>2 Juniper Pump Station</b> Design: 30% Land: Coordinating land use authorization with the Bureau of Reclamation Focus: Preparing to procure a design-build contractor	●	●
<b>1 Pueblo Dam Connection (PDC)</b> Design: 50% Land: Not required Focus: Constructing 1A, preparing a final design for 1B (pipeline)	●	●

<u>Legend</u>	
<u>Schedule Status</u>	<u>Cost Status</u>
● More than 30 days behind	● More than 10% or \$100,000 over
● Between 15 and 30 days behind	● Between 0% and 10% over
● On schedule	● On budget

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