

# 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 September, extensive construction work continued at Pueblo Dam, pre-construction activities continued on South Pipeline 2, pre-construction activities concluded and construction began for Finished Water Pipeline 1B, and construction continued for the 8.6-mile segment composed of South 4B, North 1A, and North 1B pipelines.

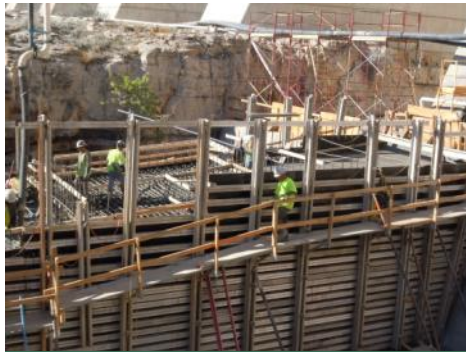
### Key Accomplishments in September

- **Construction Continued for Pueblo Dam Connection.** ASI

Constructors continued construction of Pueblo Dam Connection 1A – an SDS connection to the Pueblo Dam North Outlet Works. ASI

placed an additional 524 cubic yards of concrete for the connection, bringing the total amount of concrete placements to 2,584 cubic yards. ASI also continued preparatory work

within Pueblo Dam in anticipation of installing the steel liner.



Pueblo Dam Connection

- **Pre-construction Work for South Pipeline 2 Continued.**

Garney Construction continued pre-construction work for South Pipeline 2 – a 6.4-mile pipeline extending north from Highway 50 to the northern boundary of Pueblo West. Primary activities included permitting, planning, materials acquisition, and demolition of five structures that were purchased by the SDS Project. Prior to the demolition, several Pueblo area emergency response agencies conducted training exercises in some of the structures.

- **Construction Continued 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. Through the end of September, 39,475 feet of pipe were fabricated, 10,725 feet of trench were excavated, 10,608 feet of pipe were delivered, and 2,752 feet of pipe were installed.

- **Construction Commenced for Finished Water Pipeline 1B.**

Garney Construction completed pre-construction work and began construction for 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. Primary activities included planning, materials acquisition, equipment mobilization, and installation of environmental controls.

### Upcoming Work & Challenges

- **Begin Pre-construction Work for South Pipeline 1.**

HCP Constructors will begin pre-construction work for South Pipeline 1 – a 4.3-mile pipeline extending from the Juniper Pump Station site near Pueblo Dam and north and northeast almost to Highway 50 in southeastern Pueblo West. Primary activities will include permitting, planning, and materials acquisition.

- **Commence Construction of South Pipeline 2.**

Garney Construction will begin construction of South Pipeline 2 including equipment mobilization and installation of environmental controls. Major construction activity is anticipated to begin with tunneling beneath Highway 50 for a pipeline crossing followed by rock trenching in some areas then trench excavation and pipe installation.

- **Continue Construction of Finished Water Pipeline 1B.**

Garney Construction will continue construction of Finished Water Pipeline 1B. The first of two tunnels for installation of the parallel pipelines will be bored beneath Highway 24 in October.

- **Continue Raw Water Pump Stations Design-Build Procurement.**

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, were received in September. These proposals describe each respondent's plan for delivering the facilities. During October, the SDS team will conduct a rigorous evaluation of the proposals and hold interviews before selecting a finalist.

- **Continue Final Design Procurement for Finished Water Pipeline 3.**

Interested engineering firms will submit proposals for developing 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. Proposals are due October 6. The SDS team will commence a rigorous evaluation of the proposals before selecting a finalist.

- **Continue Land Acquisition.**

The SDS team will continue to secure the properties needed for SDS Phase 1. Properties along South pipelines 1 and 3 in Pueblo County will remain the primary focus.

## Schedule Summary

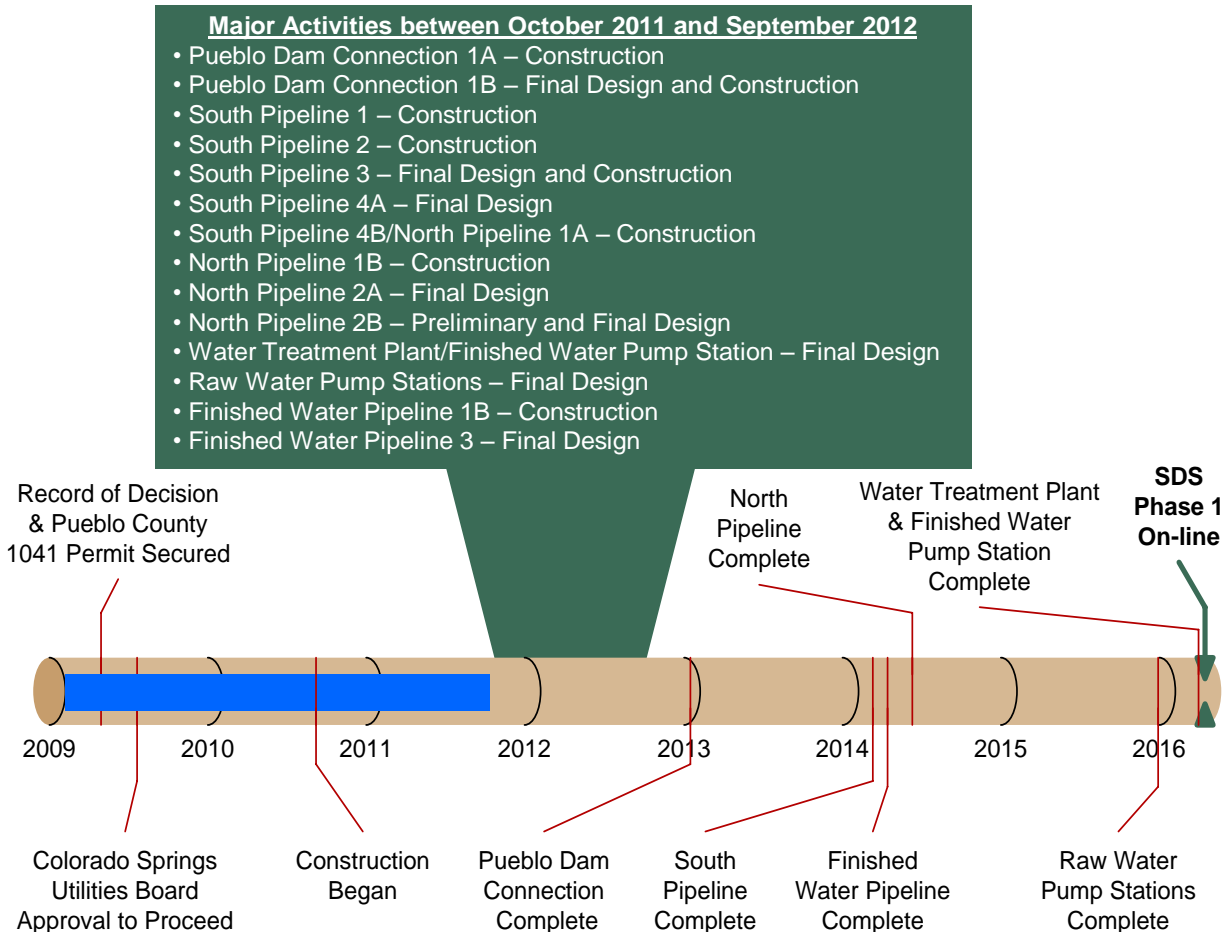
**Figure 1** summarizes the schedule for completing Phase 1 of the SDS. This timeline shows the planned sequence for completing each of the core projects within Phase 1. It also highlights the major activities for the next 12 months. Colorado Springs Utilities anticipates completing Phase 1 as planned, 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 under way or scheduled to commence during the next 12 months. Continued design of eight projects 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:

- **Raw Water Pump Stations Design-Build Contractor** – In progress
- **Finished Water Pipeline 3 Designer** – In progress
- **North Pipeline 2B Designer** – Q2 2012
- **Pueblo Dam Connection 1B Construction Contractor** – Q2 2012

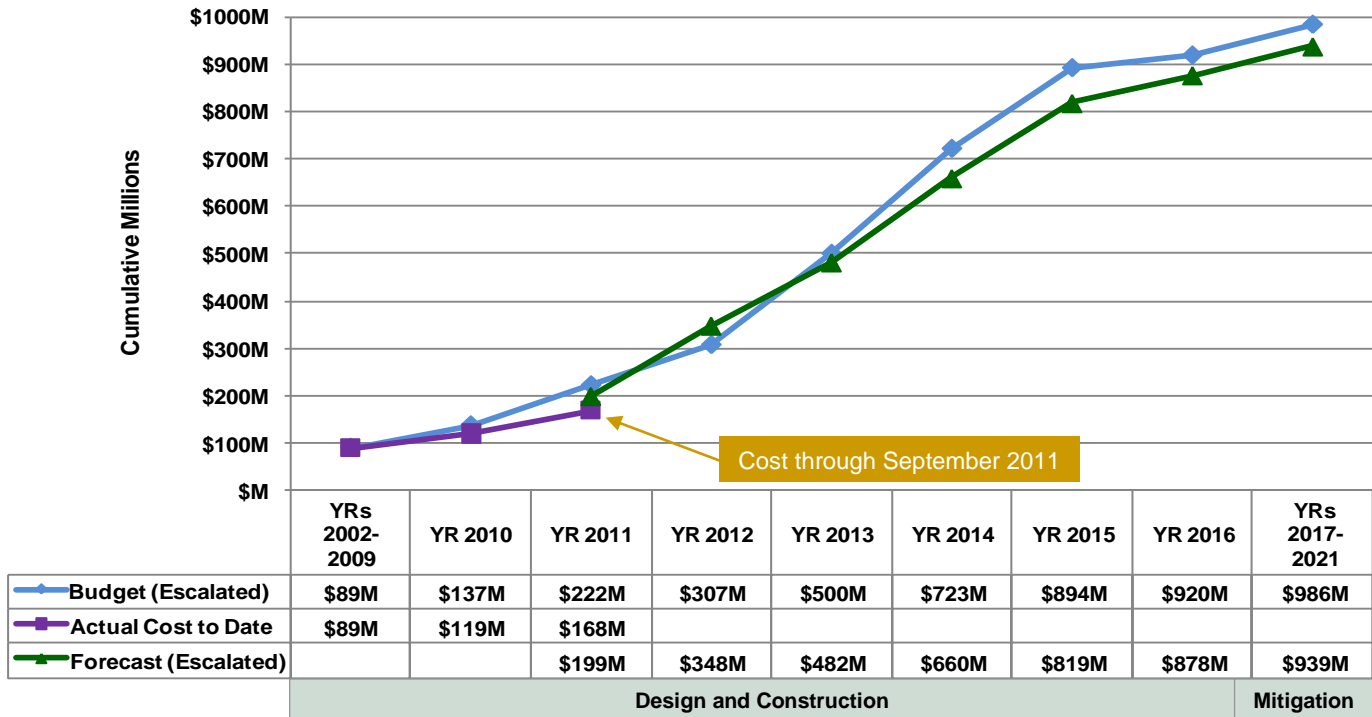
Interested parties are encouraged to monitor the Rocky Mountain E-Purchasing System website ([www.RockyMountainBidSystem.com](http://www.RockyMountainBidSystem.com)) for these or other opportunities with Colorado Springs Utilities. Some opportunities are open only to pre-qualified companies.

**Local and Small Business Opportunities for Water Treatment Plant and Finished Water Pump Station** – McCarthy Building Companies was selected as the design-build contractor for the SDS Water Treatment Plant and Finished Water Pump Station. The McCarthy team is committed to finding opportunities for local and small businesses on this project. Toward that end, McCarthy has established a website that identifies potential subcontractor opportunities and allows businesses to identify themselves and submit their qualifications. Interested businesses can participate by accessing <http://mccarthy-sdswatertreatmentplantproject.com/project-information/>.

## Cost Summary

**Figure 2** shows the budget for Phase 1, actual cost through September 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 \$986 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.

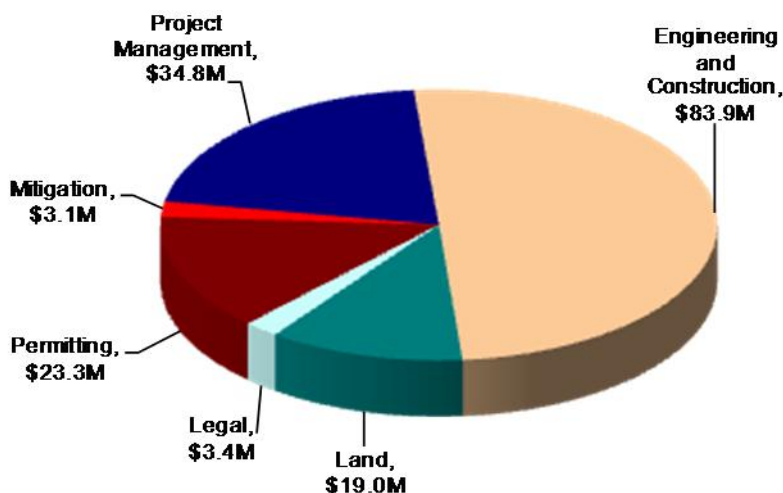
*Figure 2 – Phase 1 Budget Progress – Actual Costs through September 2011*



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.

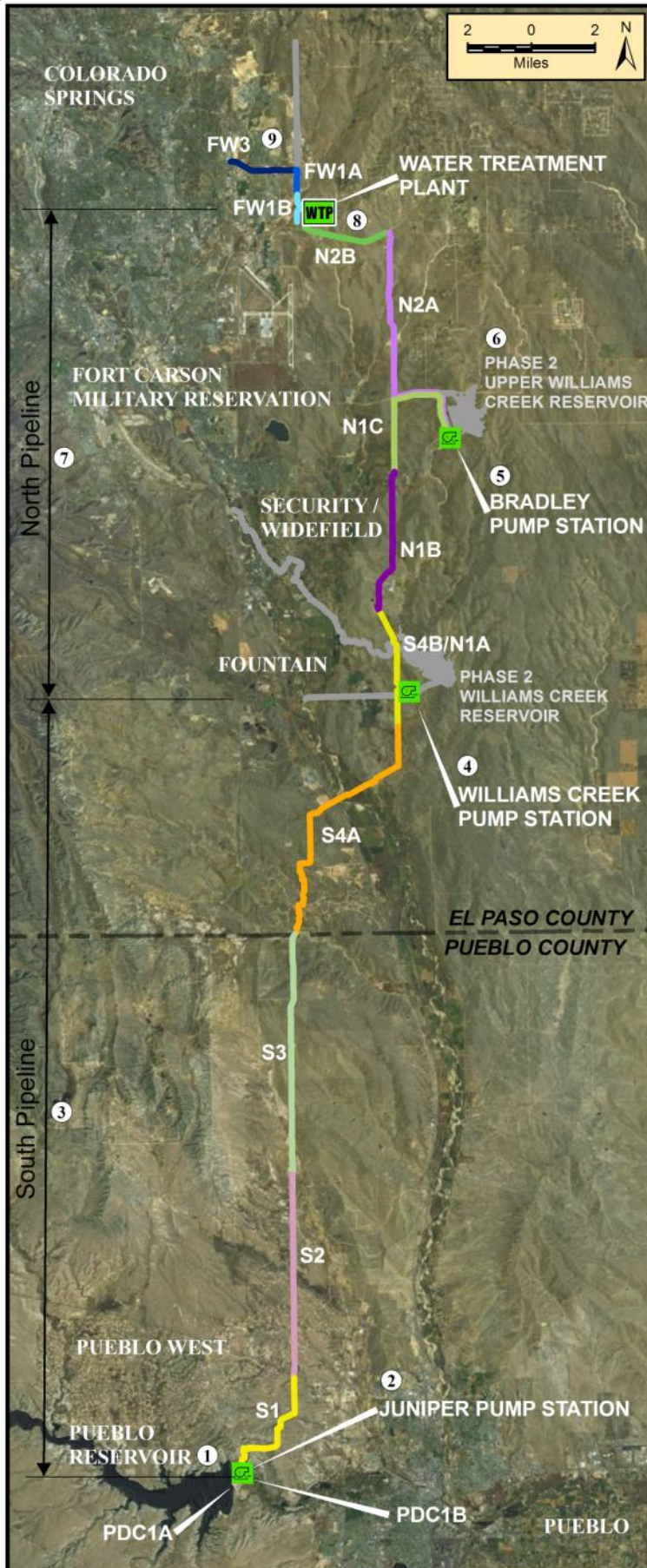
*Figure 3 – Distribution of Phase 1 Direct Costs through September 2011 (\$168M)*



### Key Financial Details

- The budget for Phase 1 is \$986 million, including actual and projected escalation, while the current cost forecast is \$939 million. The project is currently forecasting completion about \$47 million below budget.
- Cumulative actual costs to date are \$168 million, with a majority expended on engineering and construction, permitting, land, and management activities.
- Forecasted costs for 2011 are \$80 million with a cumulative cost of \$199 million by the end of 2011.
- Forecasted costs 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: Constructing segment 1B, procuring 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: Preparing 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: Procuring a design-build contractor	●	●
<b>4 Williams Creek Pump Station</b> Design: 30% Land: 100% of properties secured Focus: Procuring a design-build contractor	●	●
<b>3 South Pipeline (S)</b> Design: 70% Land: 80% of properties secured Focus: Acquiring land, continuing pre-construction for segment 1, constructing 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: Procuring a design-build contractor	●	●
<b>1 Pueblo Dam Connection (PDC)</b> Design: 60% 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.