

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 at Pueblo Dam Connection 1B, the raw water pump stations, water treatment plant and finished water pump station, and South Pipeline 4A Central (refer to map on page 4). Upcoming work includes continuing construction on facilities and pipelines, as well as land acquisition.

Key Accomplishments in November

Construction Continued for Facilities.

Pueblo Dam Connection 1B. Garney Construction continued construction of Pueblo Dam Connection 1B – a 0.3-mile raw water pipeline section that will connect the new 90-inch-diameter welded steel pipeline at Pueblo Dam to the future Juniper Pump Station. Activities included completing excavation of a meter vault and more than 3,170 feet of total rock trenching.

Raw Water Pump Stations.

Archer Western Construction, LLC continued construction at all three raw water pump station sites. Work included excavation activities at Juniper and Williams Creek pump stations and construction of a stormwater pond and piping continued at Bradley Pump Station.



Drainage pond outlet pipe at Bradley Pump Station

Water Treatment Plant. McCarthy Building Companies, Inc. continued construction of the water treatment plant located at Marksheffel Road and U.S. Highway 24. About 26 percent of the total rebar has been placed and more than 20 percent of the total concrete has been poured. Through November, more than 95,000 man hours have been worked to construct the water treatment plant and finished water pump station.

Construction Continued for South Pipeline 4A Central.

Garney Construction continued construction of South Pipeline 4A Central – a 1.4-mile raw water pipeline section that tunnels under Interstate 25, two railroads, and Fountain Creek and extends from west of Interstate 25 to east Hanover Road. Activities included installation of sheet piles and excavation of a launch shaft in preparation for tunneling.

Upcoming Work & Challenges

■ **Bidding to Close for North Pipeline 2B.** Bids from pre-qualified prime contractors are due December 5 for the last pipeline section. Construction of this 3.2-mile raw water pipeline section, that starts at North Pipeline 2A and connects to the water treatment plant, will begin the spring of 2014.

Continue Construction of Major Projects.

Pueblo Dam Connection 1B. Garney Construction will continue rock trenching activities, place rebar for the meter vault, and install the first sections of 90-inch diameter pipe.

Raw Water Pump Stations. Archer Western Construction, LLC will begin construction of the pump station foundation at Williams Creek Pump Station and continue excavation activities at Juniper and Bradley pump stations.

Water Treatment Plant. McCarthy Building Companies, Inc. will start installation of yard piping and continue preparing the raw water tank foundation.

South Pipeline 4A Central. Garney Construction will continue launch shaft excavation to enable tunnel construction to begin.

■ **Continue Land Acquisition.** The SDS team will continue to secure the properties needed for SDS Phase 1, including properties along Finished Water Pipeline 3, South Pipeline 4A Central, and North Pipeline 2B. Efforts to acquire land for Upper Williams Creek Reservoir will also continue.



Aerial view of construction at the water treatment plant



Inside the launch shaft at South Pipeline 4A Central



Installation of rebar at the finished water pump station

SPOTLIGHT

SDS Water Treatment Plant Time Lapse Video Posted to YouTube

Time lapse video showing progress at the SDS water treatment plant can now be seen on the SDS Water Project page of YouTube. The contractor is making significant progress as walls for the building are beginning to take shape on the 82,000 square-foot plant that will be an advanced water treatment facility that will use ozone/biological filtration to treat water piped from Pueblo Reservoir. The 100-acre site will also house a 10 million gallon raw water storage tank, a 7 million gallon treated water storage tank, and a finished water pump station. The project began in March 2013 and is providing a benefit for many area businesses with more than 30 Colorado companies helping to build the facility. Click on a link to access the video: sdswater.org or youtube.com

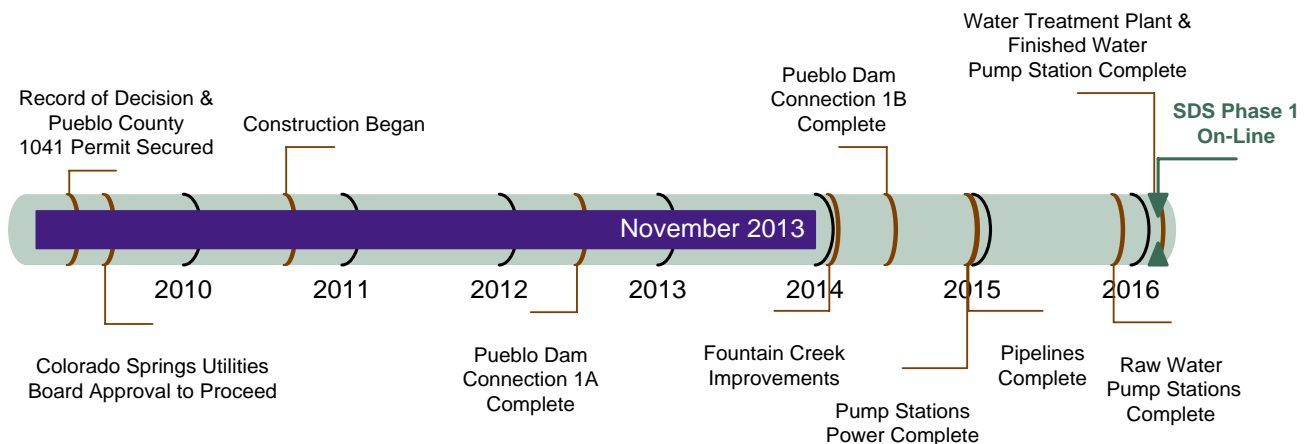
Schedule Summary

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

Figure 1 – Schedule Progress for Major SDS Phase 1 Projects

Major Activities: November 2013 – October 2014

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



Work for Local Businesses



It is our priority to encourage small businesses in southern Colorado to participate in the construction of SDS. Our goal is to provide opportunities for economic benefits to stay within the region. Click on the logo to the left to reach We Think Local's Facebook page.

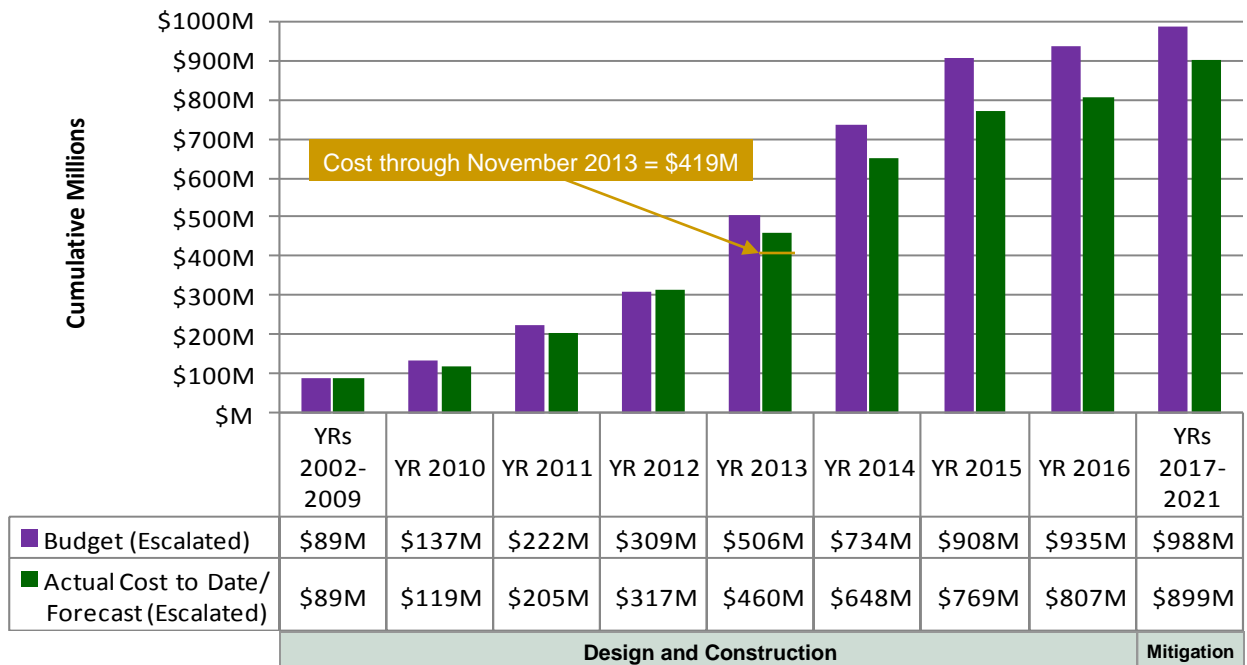
SDS Jobs Database

With construction work peaking on the water treatment plant and raw water pump stations, the contractors and their subcontractors are looking to hire specialized trade workers to supplement their growing workforces. Based on results from the two SDS job fairs held in July, a jobs database was created for interested parties to submit their name and resume for contractors to review for qualified candidates. For more information, visit www.sdswater.org and go to Job / Business Opportunities and Jobs, or click the following link: [SDS Jobs Database](#).

Cost Summary

Figure 2 shows the budget for Phase 1, actual costs through November 2013, and forecasted costs for Phase 1. Actual costs to date are consistent with achieving planned construction progress and on time completion. **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 \$988 million 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.

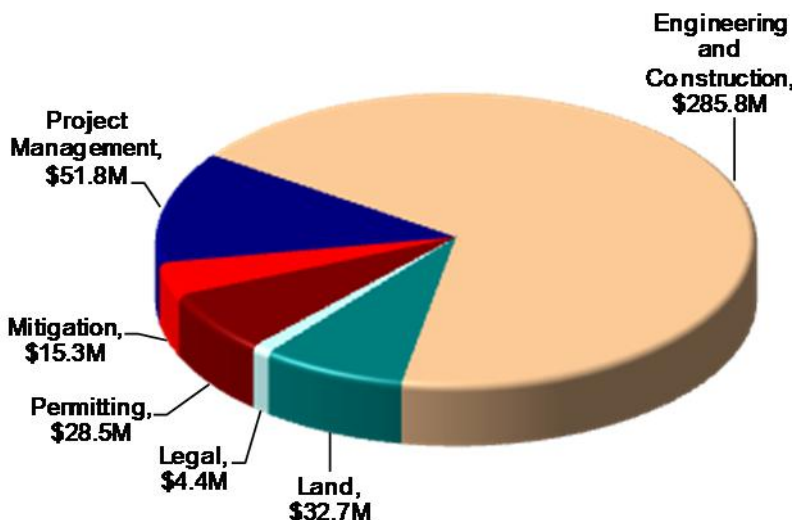
Figure 2 – Phase 1 Budget Progress – Actual Costs through November 2013



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 (for design and construction through 2016), U.S. Bureau of Labor Statistics Producer Price Index for finished goods (for monetary mitigation payments in 2017 through 2021), and periodic forecasts by IHS Global Insight.

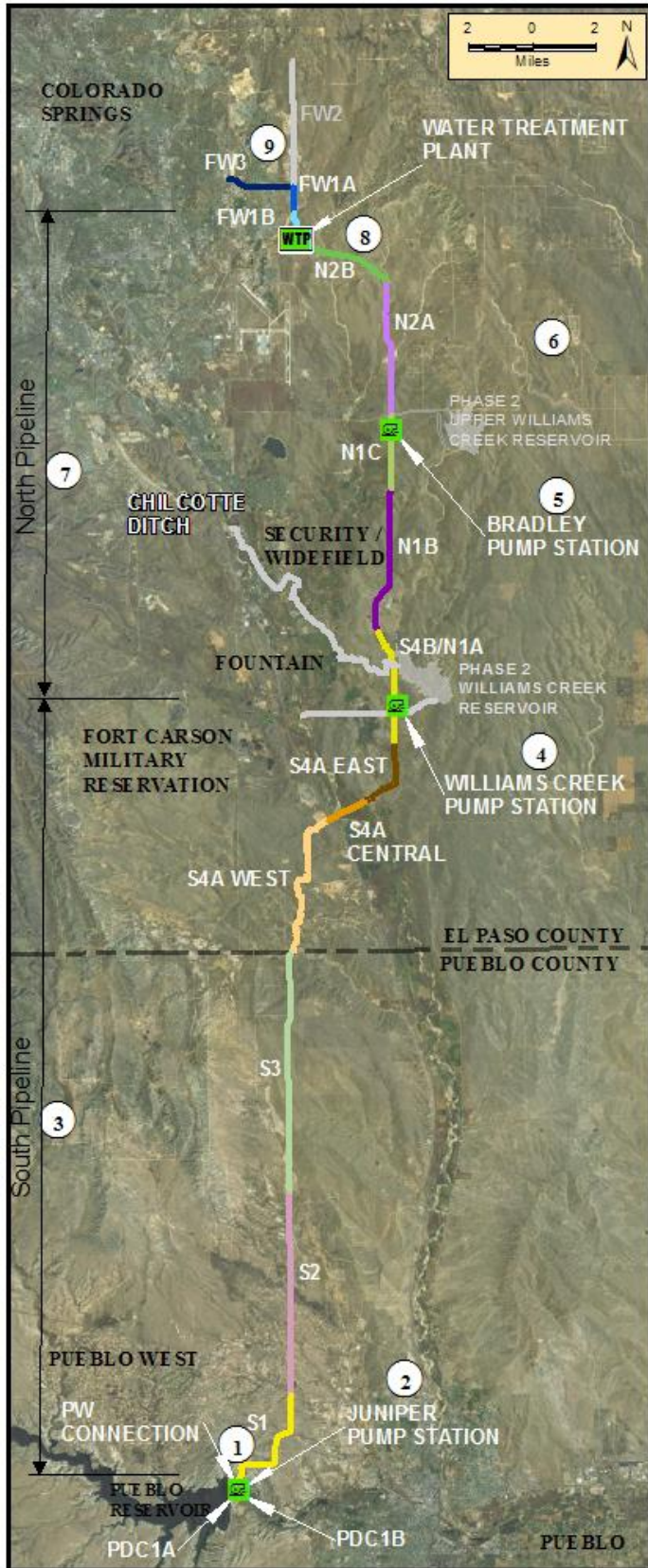
Figure 3 – Distribution of Phase 1 Direct Costs through November 2013 (\$419M Total)



Key Financial Details

- The budget for Phase 1 is \$988 million, including actual and projected escalation, while the current cost forecast is \$899 million. The project is currently forecasting completion approximately \$89 million below budget. These anticipated savings are accounted for in water rates and bond issuance planning.
- Cumulative actual costs to date are \$419 million, with a majority expended on engineering and construction, permitting, land, and management activities.
- Forecasted costs for 2013 are \$143 million with a cumulative expenditure of \$460 million by the end of 2013.

Figure 4 – Phase 1 Projects Status Map



- 9 Finished Water Pipeline (FW)**
 Design: 100%
 Land: 75% of properties secured
 Focus: Progressing easement acquisitions, preparing for construction of section 3
- 8 SDS Water Treatment Plant and Finished Water Pump Station**
 Design: 100%
 Land: 100% of properties secured
 Focus: Constructing water treatment plant – setting reinforcements and pouring concrete
- 7 North Pipeline (N)**
 Design: 100%
 Land: 90% of properties secured
 Focus: Completing construction of sections 1C & 2A, procuring contractor for section 2B
- 6 Upper Williams Creek Reservoir**
 Design: Conceptual design complete
 Land: 40% of properties secured
 Focus: Cultural resource survey, acquiring land
- 5 Bradley Pump Station**
 Design: 100%
 Land: 100% of properties secured
 Focus: Constructing raw water pump station – excavation and hauling operations
- 4 Williams Creek Pump Station**
 Design: 100%
 Land: 100% of properties secured
 Focus: Constructing raw water pump station – excavation and foundation construction
- 3 South Pipeline (S)**
 Design: 100%
 Land: 90% of properties secured
 Focus: Constructing section 4A Central, completing construction of sections 4A East & West
- 2 Juniper Pump Station**
 Design: 100%
 Land: Construction authorization secured
 Focus: Constructing raw water pump station – excavation and hauling operations
- 1 Pueblo Dam Connection (PDC)**
 Design: 100%
 Land: Construction authorization secured
 Focus: Rock trenching 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 \$89 million.

Visit www.sdswater.org for additional information.