5-21-10

Southern Delivery System
Frequently Asked Questions

Need for SDS

1. Why do we need SDS?

As a municipal utility, Colorado Springs Utilities is charged with providing a reliable water supply for our customers. SDS will ensure we can deliver high quality and affordable drinking water for many generations to come. Population forecasts estimate that El Paso County will be the most populous county in Colorado by the year 2030, with most of the growth occurring within Colorado Springs, Fountain and Security. More than half of the growth that will occur in Colorado Springs is from within our own community – children and grandchildren who choose to stay in the area. Project need dates for SDS were developed using a demand forecast model that incorporates population growth, historical use trends, price, conservation, economic and seasonal use factors. The current planning forecast shows demand may exceed water capacity as early as 2016.

With no major river bringing water to our community, Colorado Springs has built a complex system of reservoirs, pipelines and pump stations to deliver water from the Continental Divide. In addition to supplying water for our future, SDS increases the reliability of our existing water delivery system and provides drought protection by providing access to another source of our water. Reliability is extremely important because water to our community must be available 24/7. The recent shut down of the Homestake system resulting from a massive boulder damaging the pipeline is a reminder of the need for SDS as a back up to our existing system. The nearly 50-year-old Homestake pipeline currently delivers up to 70% of our raw water supply. Another failure and six-month outage on the Homestake system, like the one we experienced in 1990, would result in immediate and severe watering restrictions.

2. What would happen if SDS was not built? How would we meet our future water needs?

Without SDS, the community would most likely pursue other more expensive alternatives to supply water with none of the long-term benefits that SDS provides. Colorado Springs would either be forced to use a piecemeal approach to deliver additional water that will be more expensive in the long run or to impose extreme and potentially permanent water restrictions. A more expensive incremental supply, or a failure to develop those supplies, will result in significant rate increases likely exceeding those needed to fund SDS. This will have a negative impact on our quality of life and the area’s economy by restricting business and residential growth.

3. Why build SDS now?

Water demand forecasts show our community needs the water provided from SDS as early as 2016. We also have deadlines associated with the hard-earned permits we were granted to build the project. Due to historically low interest rates, Colorado Springs could save tens of millions over the life of the project by taking advantage of lower borrowing costs available now. Further, the current construction market is highly competitive, and recent bids have been below engineering estimates.

4. Why are we connecting to Pueblo Reservoir?

Drawing water from Pueblo Reservoir allows us to use the very valuable Arkansas River water rights we own. The NEPA Preferred Alternative from Pueblo Dam was the most cost effective alternative studied and other advantages to our community include:

- Drawing water from Pueblo Reservoir is more reliable than other options considered. Pueblo Reservoir provides a more stable source of water than a river – delivering higher firm yield and better water quality.
- Using Pueblo Reservoir leverages our community's $65-million-plus investment in Fryingpan-Arkansas Project facilities, including Pueblo Reservoir.
- Lower operating costs than other alternatives.
- Similar or fewer environmental effects when compared to the other alternatives.
- There are huge advantages in using a main-stem reservoir which gives us flexibility for our future water resource planning.

5. What is the purpose of SDS Phase II? What is the timeframe and costs?

Phase I of SDS includes the core components that are necessary to deliver water to Colorado Springs (a connection to the water source, a pipeline to carry the water, pump stations to pump the water, a water treatment plant to purify the water and treated-water pipelines to deliver water to our customers). Phase I will increase the overall system reliability by providing more access to our water at a different source – Pueblo Reservoir.

Phase II of the SDS project includes a terminal storage reservoir, an exchange flow reservoir, and enhancements to the pump stations and water treatment plant providing our community additional water storage and water capacity. The timing of Phase II construction will be based on our customers' need for additional water. The terminal storage reservoir will provide additional drought protection with a closer source of supply to our community, and the exchange flow reservoir will help us manage our overall water operations more efficiently.

The construction cost of Phase II, based on the preliminary level of engineering and cost estimates available, is anticipated to range from $387 million to $744 million in 2009 dollars. Assuming escalation based upon the 20-year Construction Cost Index of 3.2%, 30-year funding at 5% interest, and construction beginning as early as 2020 and ending in 2030, the total Phase II outlay is estimated to be between approximately $1.1 billion and $2.1 billion.

Alternatives to SDS from Pueblo Dam

6. Why can't we use water conservation measures to avoid the need for SDS?

As a result of our community's conservation efforts, our customers' per capita residential water use is among the lowest along Colorado's Front Range. Conservation has already allowed us to delay building a new water delivery system for a decade. While our community's conservation efforts have been very effective, conservation alone won't meet our future water needs. And, SDS will provide greater system reliability giving us access to another source of water in the event other parts of the existing system need to be offline for extended maintenance or repairs.

7. What was the "no action" alternative in NEPA?

The No Action alternative is a pipeline along Hwy 115 originating with an intake on the Arkansas River near Florence. This alternative is called the "No Action" alternative because it would not include operating storage, conveyance and exchange contracts in Pueblo Reservoir. According to the EIS, the No Action Alternative would cost significantly more than the Preferred Alternative resulting in higher rates to our customers. It is also likely that Colorado Springs would need to use our emergency supply of water from the non-renewable Denver Basin, an undesirable result for us and for other water users dependent on Denver Basin groundwater for drinking water.

8. Was water reuse considered?

Yes, six reuse options were evaluated and the least expensive reuse option was approximately $800 million more than the preferred alternative. Additionally, this technology is very energy intensive which increases the carbon footprint. Treatment generates a large volume of solid waste – the concentrated salts and other contaminants removed from the wastewater, which must be processed and disposed.

9. Why aren't we building the Hwy 115 alternative? How do those costs compare to the pipeline from Pueblo Reservoir?

A pipeline from Pueblo Reservoir was identified as the Preferred Alternative for many important reasons (see Question #4 above).The NEPA Highway 115 Alternative would cost a minimum of $190 million more to construct than SDS from Pueblo Dam ($880 million versus $1,070 billion in 2009 dollars). Further, the Highway 115 Alternative uses a river intake instead of a reservoir connection and would involve more difficult construction and maintenance.

SDS Project Costs

10. Is SDS the most cost effective project for our community?

Yes, the Southern Delivery System (SDS) from Pueblo Reservoir is the most cost effective project of the alternatives analyzed in the federal environmental review for many reasons, including:

- It has the lowest construction and operation costs and the lowest energy requirements;
- It delivers water rights we already own; and
- By using Pueblo Reservoir, a federal facility, it leverages our community's more than $65 million investment in the Fryingpan-Arkansas project.

After careful consideration, the Colorado Springs Utilities Board directed staff in July 2009 to move forward with implementation of Phase I of SDS from Pueblo Reservoir to be in-service in 2016.

11. Would water rates increase without SDS?

Yes, water rates will increase with or without SDS. We have communicated previously that SDS would require rate increases. We can't build the project without adjusting rates. To ease the impact on our customers, we have delayed construction by nearly a decade and lengthened the implementation schedule to smooth out rate increases. Without SDS, we would still require water rate increases to operate and maintain the existing water system. Additionally, with more demand than supply, it would be necessary to increase water rates to manage a limited supply of water.

12. Are the operating and maintenance costs for Phase I included in the rate projections?

Yes. The projected rate increases for Phase I of SDS include operating and maintenance (O&M) costs such as energy, chemicals, and labor to operate the SDS facilities. SDS from Pueblo Dam has the lowest O&M costs of any of the alternatives studied in the EIS.

13. How is new development in our community paying for SDS?

Development fees have increased and are already being used to pay for water projects. There have been substantial increases in development charges since 2005 which included forecasted SDS costs. Since 2002, development fees have increased on average nearly 140% and residential rates have increased approximately 60%. The rate increases were developed to collect revenue from all users as fairly as possible, so no group or groups bear an unreasonable portion of the cost.

The water rate methodology developed for the SDS project accounts for new customers paying through connection charges (tap fees), and once connected, paying the same rates as existing customers based on consumption.

Development charges and their components will be reviewed by Utilities. Our analysis will be presented to Utilities Board for its consideration later this year. Any adjustments will be proposed to City Council and if approved, would become effective January 1, 2011.

Water Supply

14. Do we have enough water supply and storage for SDS?

Our long-term water resource planning is based on a firm water supply which is calculated by using data from the driest year in which demands can be met without water shortages. Based on extensive water system modeling, Colorado Springs Utilities can meet 30 to 40 years of anticipated growth with SDS as planned, along with other planned local system improvements.

We are contracting with the Bureau of Reclamation for 28,000 ac-ft of excess storage capacity in Pueblo Reservoir which will be sufficient to maintain a firm water supply for SDS operations. Additional storage along the Arkansas River would increase the system firm yield and will be evaluated in the upcoming Integrated Water Resource Plan process.

15. Do we have enough water supply for full build-out of Colorado Springs?

Colorado Springs Utilities staff has partnered with the Municipal Government's Planning staff to estimate the city's build-out water needs. The water needs at the city's build-out range from approximately 125 million gallons per day (mgd) to 138 mgd. At the low end, Utilities has sufficient firm water supply. At the high end, another 13 mgd of supply would be required, but is not projected to be needed for another 50 years or more. This potential future gap can be met through additional storage, water reclamation, water acquisition and /or demand-side management efforts. SDS from Pueblo Reservoir will provide additional opportunities for water acquisition and/or leasing.

16. What are the Arkansas River preservation principles and are there limitations on our use of agricultural water?

The Arkansas River Preservation Principles are a set of goals established in September 2003. As one of the many communities within the Arkansas River Basin, Colorado Springs Utilities has agreed to these goals by supporting efforts to:

1. Maintain and improve the economy of the entire Arkansas River Basin;
2. Protect or improve the quantity and quality of the water in the Arkansas River Basin;
3. Retain water originating in the Arkansas River Basin for use within the Basin while acknowledging the ability of water rights owners to sell their water rights and to support reasonable mitigation for the future loss of any water that is transferred out of the basin by sale, lease or other means;
4. Ensure stream flows in the Arkansas River Basin sufficient to enhance and protect recreation, the environment, agriculture, economic development and water quality;
5. Develop agriculture and municipal water storage and delivery projects for the benefit of Arkansas River Basin users;
6. Establish agreements which will optimize and coordinate water storage and exchanges within the Basin;
7. Promote vitality of Arkansas River Basin communities by pursuing regional economic development, transportation, and other projects of mutual interest;
8. Consider water quality in all discussions, negotiations, agreements and legislation related to the foregoing goals; and
9. Pursue all of these goals in accordance with existing federal, state and local laws.

These do not limit our ability to lease or acquire additional agricultural water rights from parties that are interested in leasing or selling their water rights.