

**Stormwater Management Plan**  
***SOUTHERN DELIVERY SYSTEM***

**Raw Water Pipeline**  
**South Section One (S1)**

Colorado Springs Utilities

Location of Construction Site:

Pueblo Reservoir Dam to Pueblo West  
Pueblo County, CO  
Section 8, 17, 19, 20, 30, T 20S, R65W  
Section 25, T 20S, R 66W

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## **Foreword**

This Stormwater Management Plan (SWMP) identifies potential sources of pollution (including sediment) which may reasonably be expected to affect the quality of stormwater discharges associated with the construction of the Raw Water Work Package South Section 1 (S1) portions of the Southern Delivery System (SDS) Project. In addition, the plan describes and ensures the implementation of Best Management Practices (BMPs) which will be used to reduce pollutants in stormwater discharges associated with construction activity. The BMPs will be implemented before construction and grading begins.

Colorado Springs Utilities and Contractor personnel will be familiar with this plan and its contents prior to initiating construction on the Project. A copy of this document will be kept on site at all times.

## **Project Description**

### ***Site Description***

The S1 project area extends in a north-northeasterly direction through Lake Pueblo State Park and Pueblo Motorsports Park motocross recreation area in Pueblo County from approximately 140 feet south of Juniper Road near the Pueblo Reservoir Dam to approximately 50 feet north of the intersection of East Spaulding Avenue and South Ashford Drive in Pueblo West, Colorado. The majority of the construction area is located within federal, state and local government-owned lands, with privately-owned properties located in the northern portion of the alignment. The construction area includes a tunneled crossing beneath a Union Pacific Railroad (UPRR) right-of-way, crossing of a Colorado State Parks water line, two crossings of the Fountain Valley Authority (FVA) water pipeline, and two roadway crossings. The entire project area is primarily composed of sparsely vegetated areas of grasses and weeds with ground surface elevations ranging between 4,800 feet above mean sea level (AMSL) at the south end of the alignment, 5,070 feet AMSL at the high point in the central portion, and 4,940 feet AMSL at the north end.

### ***Description of the Construction Activity***

Colorado Springs Utilities has received approval to construct the SDS Project from various regulatory agencies. The SDS Project will provide future water needs through 2046 to the City of Colorado Springs, City of Fountain, Security Water District, and the Pueblo West Metropolitan District (the SDS Participants). The entire water conveyance system will run from the Pueblo Reservoir Dam to the City of Colorado Springs.

S1 consists of the installation of approximately 4.3 miles of 66-inch diameter welded steel pipeline and fiber optic conduit (see **Exhibit A**). Construction of S1 is scheduled to commence in late-2011. One garage structure near the north end of the construction area is scheduled to be removed prior to pipeline construction activities. Removal of the existing structure will take place within the project area boundaries and erosion and sediment controls will be coordinated and/or installed prior to these activities taking place.

### *Phasing and Sequencing of Major Activities*

The work limits will be cleared and grubbed of obstructions and vegetation such as brush, logs, and stumps to prepare a level working surface. Examples of pipeline construction equipment that may be used during pipeline construction generally includes trucks, loaders, graders, excavators, backhoes, trenchers, side-booms, welding and testing supplies, and pickups. Trench spoil will be temporarily excavated and stockpiled to one-side of the trench.

Topsoil will be salvaged before trenching and stockpiled within the work limits. Salvaging of topsoil will be used to assist in the final revegetation and stabilization process at the completion of the pipeline construction activities.

The standard open cut construction method will primarily be used to install the pipeline segments. This work consists of clearing, trenching, pipe installation, welding, weld testing, interior joint lining, exterior joint coating, backfilling, compacting, hydrostatic testing for leakage, cleanup, and restoration. A trenchless crossing will be constructed beneath the UPRR right-of-way in the southern portion of the alignment, with a vertical raised bore extending from the north end of the trenchless crossing.

Imported granular material and controlled low strength material (CLSM, or flowfill) will be used for pipe bedding and pipe zone backfill depending upon local soil conditions in the trench. Native material from excavations will be used as trench backfill above the pipe zone. Compaction will meet the requirements defined in the specifications.

Grading may be performed if necessary to level the ground surface to permit transit and operation of vehicles and equipment, but surface grades will be generally restored to pre-project contours at the end of construction.

#### *Stage 1: Pre-Construction*

Stormwater runoff from the site is primarily at undeveloped levels. From field observations, erosion is minimal from the existing vegetative cover. Initial erosion control facilities will be installed at the pre-construction stage. Site perimeter erosion controls, such as silt fence, will be placed down-gradient of the work limits to prevent sediment runoff. Construction entrances will be installed to reduce or prevent material from being transmitted to and from roadway surfaces. Rock check dams will be constructed where indicated on the drawings included in **Exhibit A**.

Duration of this phase is anticipated to be 2 weeks, but may be impacted by construction phasing.

#### *Stage 2: Clearing and Grubbing*

Clearing and grubbing will be performed within the project work limits to non-paved/improved surfaces. There are no large trees in the project corridor. Existing topsoil will be excavated, temporarily stockpiled, and protected from erosion as appropriate for use in later re-establishing permanent vegetation.

BMPs will be implemented prior to clearing and grubbing. Typical BMPs are included in **Exhibit A**.

Duration of this phase is anticipated to be 2 to 4 weeks, but may be impacted by construction phasing.

*Stage 3: Active Construction*

Trenching will be performed with equipment such as excavators, backhoes, loaders, or similar equipment. Trenching activities will be performed in accordance with the construction documents and standard engineering practices. The trench will be excavated to sufficient depth to provide adequate cover over the pipeline and to a width between 8.5 and 10 feet wide and sloped as required for safety. The spoil bank from the trenching operations will be maintained free of foreign materials. Where the pipeline crosses public roadways, a trench crossing will be constructed.

Where the pipeline crosses beneath the UPRR railway, a trenchless crossing will be constructed. This method of construction will allow the pipeline to be installed without impacting the surface of the railway. Appropriate BMPs will be installed in these areas to contain any potential sediment or other discharges associated with this method of pipeline installation.

Backfilling of the trench and boring pits will be performed using appropriate methods to minimize impacts to the right-of-way and to minimize soil disturbance. When backfilling on hillsides or sloping ground, furrows or terraces may be constructed across the pipeline trench to direct the flow of water into natural drainages. Existing drainage ditches will be maintained and left unobstructed to prevent the ponding of water against the spoil bank or backfill crown.

Interim erosion control facilities will be installed as construction progresses. Identified BMPs for stormwater pollution prevention are discussed further below.

Duration of this phase is anticipated to be up to 9 months, but may be impacted by construction phasing.

*Stage 4: Site Stabilization*

Permanent erosion control measures will be installed immediately after substantial completion of pipeline installation. Disturbed areas will be seeded and mulched. Once all areas of the site are stabilized via seeding and mulching, temporary sediment control measures will be removed from the site. The post-construction stormwater management measures, including seeding and mulching, will be installed at the end of the construction process to control stormwater discharges after construction operations have been completed. These facilities will be monitored and maintained for a period of 2 years after construction or until 90% of pre-existing vegetation has been re-established.

Duration of this phase is anticipated to be up to 2 years following active construction.

## **Estimates of the Total Disturbance Area**

The entire area to be impacted for this portion of the project is approximately 102 acres. This includes any potential construction or staging areas outside of the work area for S1. Although not all of the disturbed area will be cleared and graded at once, up to 102 acres of ground disturbing activities may occur.

## **Soils Information**

The surficial soils consist of lean clay, sandy lean clay, lean clay with sand and gravel, sand with silt, and clayey sand. These soils are associated with Post-Piney Creek and Piney Creek Alluvium, Colluvial and Residual Bedrock Deposits, and Older Stream Terrace Deposits. Soil depths within the S1 construction area range from near the ground surface to approximately 23 feet below ground surface. The underlying bedrock consists of Carlisle Shale, Fort Hayes Member – Niobrara Formation, Greenhorn Limestone, and Graneros Shale.

## **Existing Vegetation Information**

The existing vegetation across the project area consists of a mixture of weedy areas, dry grassland, upland shrublands, and areas of sparsely vegetated juniper woodlands. Kochia (*Bassia sieversiana*) and other weedy annuals dominate the disturbed areas. Western wheatgrass (*Pascopyrum smithii*), three-awn (*Aristida purpurea*), and other mostly native grasses dominate the dry upland grasslands. Some of the residential yards in the northern portion of the project area contain pasture and turf grasses. Upland shrublands dominated by yucca (*Yucca glauca*), broom snakeweed (*Gutierrezia sarothrae*), and other shrubs and subshrubs occur in patches across the project area.

The shaley upper slopes are sparsely vegetated with a mixture of cushion plants and native grasses including three-awn and blue grama (*Chondrosom gracile*). Two populations of Rocky Mountain Bladderpod (RMP) (*Lesquerella calcicola*), a plant species of concern, have been identified north of the UPRR track on shaley soils within an area of sparsely vegetated juniper woodlands. Additional populations of RMP habitat are also known to have existed in other shaley areas along the central portion of the alignment. Due to recent drought conditions, these areas may not have emerged or survived.

## **Other Potential Pollution Sources**

Other potential pollution sources include spills, particularly those resulting from vehicle or equipment leaks or refueling incidents. Stationary equipment and materials with an identified spill potential will be contained within secondary containment structures to prevent and contain the spill or release of materials.

Vehicles will be inspected for leaks prior to being brought on site. Construction equipment requiring maintenance that might result in the draining or leaking of fluids will be serviced only when appropriate containment measures have been installed. Details regarding refueling and site

controls can be found in the project specifications Section 01 57 22 – Temporary Stormwater Pollution, Erosion and Sediment Control.

Designated containers will be provided to facilitate the regular disposal of garbage, rubbish, construction wastes, and other waste. The trash containers will be maintained during construction. No wastes or imported materials will be buried or dumped on site.

Increased levels of dust/particulates may be generated by the construction activities associated with this site. Fugitive dust emissions resulting from construction activities will be regulated under the Colorado Department of Public Health and Environment's (CDPHE) Land Development General Construction Permit. The Contractor will take appropriate measures on site to control the level of fugitive dust emissions associated with the project.

Details regarding the control of noxious weeds on site can be found in the Project Specifications Section 01 57 17 – Temporary Weed Control.

### **Material Handling and Spill Response Information**

The Contractor will prepare a Spill Response plan or other similar plan for the project prior to construction commencing. The discharge of hazardous substances or oil in stormwater discharges from the construction site must be prevented or minimized in accordance with the Contractor's Spill Response plan. Details regarding the fueling of vehicles or transfer of fuels are described in **Attachment #1**.

Appropriate containment will be installed to protect chemicals, paints, solvents, fuel, lubricating oils, and other potentially toxic or hazardous materials from stormwater runoff. Spills of liquid or dry materials that have occurred will be promptly cleaned up. Spills of toxic or hazardous material at or above reportable quantities will be reported to the appropriate federal, state, or local government agency.

Hazardous materials or products will be properly contained and disposed of in accordance with applicable laws, rules, and regulations. No wastes or imported materials will be buried, dumped, or discharged to Waters of the U.S. or state.

### **Other Controls**

The following control measures and good housekeeping practices may be implemented to prevent or minimize potentially-polluting construction materials from contact with stormwater:

- Construction areas and unpaved roads will be sprayed with water or tackifier, as needed, to reduce the effects of wind erosion and to control fugitive dust. Conditions will be monitored throughout construction and these areas will be re-sprayed, as needed;
- If any measurable quantity of sediment is discharged from the construction area as a result of structural failure or lack of designed capacity of temporary erosion control measures, the sediment will be cleaned up as soon as practicable and replaced within the right-of-way; easement or work limits, or properly disposed of in a manner approved by the general permit;

- Construction equipment and vehicles will be inspected for leaks, and necessary repairs will be made before returning the equipment to service. Equipment will be cleaned and inspected and no leaking equipment will be allowed on the worksite, including staging areas;
- Wash-down areas protected from stormwater runoff will be provided for construction equipment and vehicle cleanup;
- Regular disposal of garbage, rubbish, construction wastes, and sanitary waste will be maintained at all times during construction;
- Portable chemical toilets will be provided by Contractor at the staging area. Sanitary waste will be collected and removed for disposal at regular intervals to an appropriate licensed sewage disposal facility. No sewage will be buried, dumped or discharged to Waters of the U.S. or state.

### **Non-Stormwater Discharges**

Construction trench dewatering and hydrostatic test dewatering are the only identified potential non-stormwater discharges that are anticipated to occur on the project area during construction. These discharges will be permitted under the appropriate CDPHE permit(s) as needed.

### **Receiving water(s)**

The nearest receiving waters are an unnamed drainage creek approximately 500 feet north of the S1 pipeline alignment, an unnamed drainage creek in the central portion of the S1 alignment (which is crossed by the pipeline project at Station S 240+50), and the Arkansas River, located approximately 0.35 mile south of the S1 alignment. No discharge will go to municipal storm sewers. The ultimate receiving water is the Arkansas River.

### **Site Map(s)**

Site maps and erosion control plan drawings are included in **Exhibit A**. These maps and drawings show the general location of S1 and the specific types and locations of stormwater BMPs.

### **BMPs for Stormwater Pollution Prevention**

#### ***Erosion and Sediment Controls***

Erosion controls limit the amount and rate of erosion occurring on disturbed sites. Sediment controls are generally designed to retain sediment on-site to the extent feasible. During construction, BMPs will be employed as identified on the maps and drawings associated with this SWMP (**Exhibit A**) and as deemed necessary to reduce erosion and control sediment on the disturbed areas.

The Contractor will designate a SWMP Plan Administrator and that person will be responsible for ensuring that appropriate control measures are installed and maintained in all areas. The SWMP Plan Administrator will maintain status reports and appropriate records for compliance with permit requirements imposed by federal, state, or local agencies.

Control measures will be properly selected, installed, and maintained in accordance with relevant manufacturer specifications and good engineering practices to control the effects of erosion caused by stormwater runoff. In most cases, a combination of vegetative, structural, and stormwater management practices are used to control erosion and transport of sediment.

Selection of appropriate erosion control materials will be based on soil properties, steepness of the slope, and anticipated surface flow or runoff. In general, wattles and/or silt fence will be the appropriate control measures to be used for sediment and erosion control during construction in the vicinity of drainage crossings or adjacent to roadways. As conditions require, other control measures may be considered. As site and weather conditions vary throughout the project, these decisions will be made on a site specific basis.

Temporary BMPs will be removed during finalization of the project.

### ***Structural Practices***

#### ***Silt Fencing***

Silt fence is a temporary sediment barrier made of woven, synthetic fabric supported by wood or metal posts. The bottom portion of the silt fence should be trenched in and compacted, as shown on the technical drawing in **Exhibit A**, so that fencing filter fabric is buried and cannot be easily pulled out by hand. Where joints are required, silt fence should be spliced together at a supporting post with appropriate overlap and securely sealed.

Silt fence guidance, installation techniques, and locations can be found in **Exhibit A**.

#### ***Temporary Earthen Berm***

Where ground conditions do not allow silt fence to be installed or where flows may need to be directed, a temporary earthen berm and diversion may be used in place of silt fence to divert and direct sediment laden runoff to check dams (discussed below) to filter the runoff. These continuous berms serve as temporary sediment barriers consisting of compacted in situ soil berms which are typically 18-inches high and generally consist of a ridge of compacted soil which intercepts and diverts runoff from construction areas. Berms intercept flow from the construction area and direct it to temporary slope drains or to outlets where it can be safely discharged. They are generally used to direct or divert runoff flows, or as barriers to collect and store runoff.

Temporary earthen berm details can be found in **Exhibit A**.

#### ***Construction Entrances***

Temporary gravel or paved construction entrances to paved roads will be installed at access points to paved public roadways to prevent or minimize tracking of mud, dirt, sediment, or similar materials onto the roadway. Deposits that have been tracked by vehicles or have been transported off the right-of-way by wind or stormwater will be promptly cleaned up.



Construction entrance guidance, installation techniques, and locations can be found in **Exhibit A**.

#### *Straw Bales*

A straw bale barrier is a linear wall of straw bales designed to intercept sheet flow and trap sediment before runoff exits a disturbed area. All straw bales must be certified as weed free. Straw bale barriers should not be used in areas of concentrated flow or in areas where ponding is not desirable. Staking of bales is required and stakes should be driven into the ground at the spacing and depth indicated on the technical drawing in **Exhibit A**. Sediment accumulated behind the bale should be removed when the sediment reaches one-quarter of the bale height. Bales should be checked for degrading and replaced as necessary.

Straw bale guidance, installation techniques, and locations can be found in **Exhibit A**.

#### *Rock Check Dam*

A check dam is a rock dam that is constructed in a drainage swale to reduce flow velocities in order to minimize erosion. Detailed installation instructions and the sizing of riprap required for check dams are located on the technical drawings in **Exhibit A**. Sediment accumulated upstream of check dams should be removed when the sediment depth upstream of the check dam is within half of the height of the crest or when debris accumulation compromises the effectiveness of the feature.

Check dam guidance, installation techniques, and locations can be found in **Exhibit A**.

#### *Erosion Control Blankets*

An erosion control blanket is a fibrous mat of straw, excelsior, or coconut material trenched in and staked down over prepared soil and/or seedbed. The matting serves to stabilize disturbed areas by promoting vegetative growth and reducing both wind and water erosion. All erosion control blankets and netting should be made of 100% natural and biodegradable, weed free material. Blankets should be oriented correctly, with seams and secured with staples, stakes, or pins as indicated in **Exhibit A** and the manufacturer's specs. Erosion control blankets should be used on slopes greater than 33%.

As currently planned, no erosion control blankets are planned to be used for the construction of S1. However, should erosion control blankets be necessary due to potentially changing site conditions, contractor preference, and/or for soil stabilization activities prior to revegetation activities, guidance and installation techniques can be found in **Exhibit A**.

#### *Rock Socks*

A rock sock is constructed of gravel that has been wrapped by wire mesh or a geotextile to form an elongated cylindrical filter. Rock socks are intended to trap sediment from stormwater runoff that flows onto roadways as a result of construction activities.

Rock socks are susceptible to displacement and breaking due to vehicle traffic. Inspect rock socks for damage and repair or replace as necessary. Remove sediment by sweeping or vacuuming as needed to maintain the functionality of the BMP, typically when sediment has accumulated behind the rock sock to one-half of the sock's height. Installation instructions are located on the technical drawings in **Exhibit A**.

#### ***Concrete Washout Area***

Concrete washout areas are excavated depressions used to contain waste concrete and/or concrete wash water. The containment area will be excavated and constructed as indicated in **Exhibit A**. The excavated material will be used to construct berms around the containment area. The location of the concrete washout area will be clearly marked and a ramp or construction entrance will be installed at the entrance to the washout area.

The containment area will be cleaned out once it is 2/3 full or as necessary to maintain capacity for waste concrete. At the end of construction, concrete will be removed from the containment area and properly disposed of at an approved waste disposal location. The excavated area will be backfilled and reclaimed per landowner or agency requirements. Concrete wash water shall not be discharged to or allowed to runoff to Waters of the U.S., including surface or subsurface storm drainage systems or facilities.

Concrete washout area guidance, installation techniques, and locations can be found in **Exhibit A**.

#### ***Non-Structural Practices***

Minimizing the area being disturbed at any given time is one of the most effective erosion control measures available. Therefore, during clearing and construction activities, efforts will be made to preserve existing vegetation by clearing the construction area to a minimum width that is necessary for safe and efficient construction. Before any other BMPs are to be installed, the limits of the construction area will be clearly identified via silt fence where required, orange safety fence or other appropriate markings to preserve existing vegetation.

### **SWMP Revision Procedures**

Typically, some BMPs will have to be added or modified to adapt to changing environmental conditions and construction phases. The Contractor's SWMP Administrator shall determine the changes needed to reflect actual field conditions. In some cases, BMPs may need to be rebuilt, replaced, moved, or added. Changes will be addressed with the CDPHE, as applicable. This plan must be revised when/if changes are necessary in accordance with the Colorado Discharge Permit System (CDPS) General Permit for Stormwater Discharges Associated with Construction Activity (Permit No. COR-030000).

### **Final Stabilization and Long-term Stormwater Management**

After construction activities have been completed, the areas where soil has been disturbed will be restored as close to pre-construction grade, contours, compaction, and other conditions as

possible. Stabilization measures, including seeding and mulching, will be implemented after final grade has been reached. Final stabilization and permanent seeding will be the responsibility of the Programs' Revegetation Contractor. The Revegetation Contractor will use an approved seed mix that is appropriate for the specific project area. The following permanent seed mix will be used for S1:

**Table 1. Seed Mix for S1**

| COMMON NAME                | SCIENTIFIC NAME               | LBS PLS*/ACRE** | % LBS PLS  |
|----------------------------|-------------------------------|-----------------|------------|
| Three-awn                  | <i>Aristida purpurea</i>      | 2               | 25         |
| Sideoats grama, Vaughn     | <i>Bouteloua curtipendula</i> | 2               | 25         |
| Blue grama, Hachita        | <i>Bouteloua gracilis</i>     | 0.8             | 10         |
| Western wheatgrass, Arriba | <i>Pascopyrum smithii</i>     | 2               | 25         |
| Sand dropseed              | <i>Sporobolus cryptandrus</i> | 1               | 15         |
| <b>TOTAL</b>               |                               | <b>7.8</b>      | <b>100</b> |

\* Pure Live Seed (PLS), PLS= purity x germination

\*\* Seeding rate is for drill seeding. If seed in broadcast, double the rate.

No solid waste, trash, or vegetative debris will be buried onsite. As final cleanup is completed, appropriate tillage will be conducted on all areas occupied during construction in order to relieve soil compaction. Compacted areas will be decompacted with a scarifier prior to topsoil replacement and seeding.

Temporary seeding will be completed within 30 days of initial soil exposure or 7 days after grading is substantially completed. Permanent seeding and planting of disturbed areas will be conducted during the first normal period of favorable seeding and planning conditions after final preparation for seeding and planting.

Final stabilization will be defined to have occurred when surface disturbing activities have been completed and a uniform vegetative cover has been established with an individual plant density of 90% of pre-disturbance levels.

## **Inspections, Maintenance, and Recordkeeping**

During use of the site, the Contractor's SWMP Administrator shall inspect disturbed areas and BMPs. At a minimum, inspections will be conducted once every 14 calendar days and within 24 hours after the end of any precipitation or snow melt event that causes surface erosion. After final clean up of the site, inspection will continue as necessary until the project area is stable and BMPs have been removed.

Inspections will include disturbed areas of the site and areas used for storage of materials that are exposed to precipitation. Inspectors must look for evidence of, or the potential for, pollutants entering the stormwater conveyance system. Sediment and erosion control measures identified in the plan must be observed to ensure proper operation.

Sediment will be removed from sediment traps when capacity of control is reduced by 50 percent. Rock will be added where thickness of the construction entrance is reduced. BMPs will be replaced or rebuilt once they are observed to be nonfunctional, generally within 24 hours.

An inspection report will be prepared and signed by the Contractor's SWMP Administrator following each inspection and will be certified in accordance with permit requirements. This report must include any spills, leaks, or overflows that may have resulted in a discharge of pollutants. The reports will include information on any corrective actions taken to prevent further incidents, and a description detailing any environmental impact that may have occurred. Inspection forms will be kept on site at all times during construction. A copy of the Inspection Form is located in **Attachment #2**.

After final stabilization of the site and it has been determined that the project area has regained 90% of the background cover, a Notice of Termination (NOT) can be filed for appropriate CDPHE Water Quality Control Division permits. Copies of records and information resulting from monitoring activities required by this permit will be retained by Colorado Springs Utilities for a minimum of 3 years.

**ATTACHMENT #1**  
**Directions for On-Site Fuel Transfers**

**This procedure should be readily available to facility personnel involved in product transfer operations or on display in the transfer areas.** In order to minimize the potential for a spill during fuel transfers and to be prepared in the event of a spill, the following measures are to be followed (includes minimum DOT regulations that shall be followed during loading/unloading of fuel):

1. Keep fire away while loading/unloading. Persons in the vicinity are forbidden to smoke, light matches, or carry any flame or lighted cigar, pipe, or cigarette. 49CFR 177.834(c, d)
2. Fuel shall not be loaded/unloaded from any motor vehicle while the engine is running. The exception is when the engine of the vehicle is to be used in the operation of the pump. 49CFR 177.837(a)
3. The supply truck driver shall notify a facility representative when arriving on site.
4. The tank records shall be reviewed to determine the theoretical tank level. 7CCR 1101-14 S2-3-1 & S2-4-2(a)(2)
5. The tank level gauge will be inspected to determine the actual tank level before unloading takes place. (Note: Any tank level discrepancies will be resolved prior to hooking up to the tank.) 7CCR 1101-14 S2-3-1 & S2-4-2(a)(2)
6. The supply truck driver shall observe the transfer during the entire operation. 49CFR 177.834(i)(2)
7. Sufficient secondary containment surrounding the truck shall be available; or enough containment boom to surround the truck shall be available in the immediate area.
8. Once the truck is in position, its emergency brake will be applied and reasonable precautions will be taken to prevent motion of the truck during unloading. 49CFR 177.834(e) (Example – utilize wheel chocks when parked on an incline.)
9. Signs must be posted that remind drivers **NOT** to pull away before detaching hoses. 40CFR 112.7(h)(3)
10. Containers and cargo tanks shall be grounded prior to and during transfer. 49CFR 177.837(b) & (c)
11. All outlets to the vehicle and tank and the transfer line shall be checked for leakage. Any problems shall be fixed prior to hooking up any lines.
12. A drip pan shall be placed under the outlet of the fuel truck transfer line.
13. The transfer line must be properly engaged at each end before opening any valves.
14. Checks for leaks must be conducted after starting the transfer. Any leaks must be corrected before continuing the transfer.
15. All valving must be properly shut off prior to disengaging the transfer line.
16. The transfer line must be properly disengaged and the valves and piping of both the tank and truck must be checked for leaks before allowing the truck to leave the site. (40CFR 112.7 h(4) for trucks)
17. In the event of a spill, immediately shut down the transfer system and contact the supervisor in charge (call 911, as needed).

**ATTACHMENT #2**  
**STORMWATER MANAGEMENT INSPECTION FOR LOCATION**  
**BI-WEEKLY INSPECTION LOG**

Complete this inspection every 14 days and after any precipitation event that may have resulted in an erosion problem. Keep the original in the SWMP file. Refer to the site Stormwater Management Plan (SWMP) for site specifics.

**Outfall**

**Yes**

**No**

- Is there a discharge from the site? \_\_\_\_\_
- Is there any evidence of oil or grease (or other) contamination? \_\_\_\_\_  
(If contamination is evident, collect a water sample and investigate for the contamination source.)

**Site**

- General condition of the area:  
\_\_\_\_\_  
\_\_\_\_\_
- Condition of erosion control measure(s) & needed repairs or changes:  
\_\_\_\_\_  
\_\_\_\_\_
- Are there any notable erosion problems? \_\_\_\_\_  
If so, are there any erosion control actions needed (describe)?  
\_\_\_\_\_  
\_\_\_\_\_
- Results of previous erosion corrective action(s):  
\_\_\_\_\_  
\_\_\_\_\_
- Any other observation of things that may result in an impact to the quality or quantity of the water discharge from this site?  
\_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_ Date & Time: \_\_\_\_\_

Inspector: \_\_\_\_\_

|  |                                  |                          |  |   |                                 |  |  |
|--|----------------------------------|--------------------------|--|---|---------------------------------|--|--|
| <b>KODIAK DEVELOPMENT GROUP</b><br><b>STORMWATER MANAGEMENT PLAN</b><br><b>FIELD INSPECTION REPORT</b>   |                                  |                          |  | (5) Project Name  |                                 |  |  |
|  |                                  |                          |  | (6) Project Number  |                                 | (7) Region                                     |  |
|  |                                  |                          |  | (8) Project Code (SA #)   |                                 |  |  |
| (1) Date of Inspection   |                                  |                          |  | (9) Reason for inspection:<br><input type="checkbox"/> Required Maximum 14 Calendar Day Inspection<br><input type="checkbox"/> Required 30 Calendar Day Inspection for Completed Projects<br><input type="checkbox"/> Required Storm Event Inspection<br><input type="checkbox"/> Complaint: _____<br><input type="checkbox"/> Other: _____ |                                 |  |  |
| (2) Contractor Name  |                                  |                          |  |   |                                 |  |  |
| (3) Contractor's Inspector Name (print)  |                                  |                          |  |   |                                 |  |  |
| (4) Contractor Project Manager Name (print)  |                                  |                          |  |   |                                 |  |  |
| Has there been a storm event since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Storm Start Date _____<br>& Time & _____<br>Source: _____<br>Storm Duration (hrs): VARIES SEE ABOVE _____  |                                  |                          |  |   |                                 |  |  |
| Approximate Amount of Precipitation (in): _____  |                                  |                          |  |   |                                 |  |  |
| <b>(10) CONSTRUCTION SITE ASSESSMENT</b><br><input type="checkbox"/> Construction site perimeter contained. Offsite tracking <span style="margin-left: 100px;"><input type="checkbox"/> Estimate disturbed area at the time of the _____</span><br><input type="checkbox"/> Disturbed areas contained. <span style="margin-left: 100px;"><input type="checkbox"/> Areas used for material and waste storage and fueling</span><br><input type="checkbox"/> SWMP ONSITE. <span style="margin-left: 100px;"><input type="checkbox"/> Active Stormwater at time of inspection.</span> |                                  |                          |  |   |                                 |  |  |
| <b>(11) SWMP MANAGEMENT</b><br><input type="checkbox"/> Changes made to the SWMP during construction? <input type="checkbox"/> Yes <input type="checkbox"/> No <span style="margin-left: 20px;"><input type="checkbox"/> Changes approved and noted on the plans? <input type="checkbox"/> Yes <input type="checkbox"/> No</span>  |                                  |                          |  |   |                                 |  |  |
| <b>BEST MANAGEMENT PRACTICES (BMP's)</b>   |                                  |                          |  |   |                                 |  |  |
| (12)<br><b>BMP Type</b>  | (13)<br><b>Practice Req/Used</b> | (14)<br><b>Reason</b>    | (15)<br><b>Maintenance Sediment Removal</b><br>Yes    No |   | (16)<br><b>Course of Action</b> | (17)<br><b>Date for Action to be Completed</b> |  |
| <b>EROSION CONTROL</b>   |                                  |                          |  |   |                                 |  |  |
| Seeding  | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Mulching   | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Blankets   | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Check Dams   | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Earth Berms  | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Diversion  | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Embankment Protector   | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Outlet Protection  | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Other:   | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Other:   | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| <b>SEDIMENT CONTROL</b>  |                                  |                          |  |   |                                 |  |  |
| Inlet protection   | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Erosion Bales  | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Silt Fence   | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |
| Sediment Trap/Basin  | <input type="checkbox"/>         | <input type="checkbox"/> |  | <input type="checkbox"/>  | <input type="checkbox"/>        |  |  |

| (12)<br>BMP Type  | (13)<br>Practice Req/Used |                          | (14)<br>Reason | (15)<br>Maintenance Sediment Removal<br>Yes      No |                          | (16)<br>Course of Action | (17)<br>Date for Action to be Completed |
|---|---------------------------|--------------------------|----------------|---|--------------------------|--------------------------|---|
| Stabilized Construction Entrance  | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Dewatering Structure  | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Other:  |                           |                          |                |   |                          |                          |   |
| <b>MATERIALS HANDLING &amp; SPILL PREVENTION, WASTE MANAGEMENT AND GENERAL POLLUTION PREVENTION</b>   |                           |                          |                |   |                          |                          |   |
| Stockpile Management  | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Materials Delivery & Storage  | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Spill Prevention & Control  | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Concrete Washout  | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Concrete Saw Water Containment  | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Solid Waste   | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Sanitary Waste  | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Maintenance & Fueling   | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Street Sweeping Vacuuming   | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Other:  | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Other:  | <input type="checkbox"/>  | <input type="checkbox"/> |                | <input type="checkbox"/>                            | <input type="checkbox"/> |                          |   |
| Comments:   |                           |                          |                |   |                          |                          |   |
|   |                           |                          |                |   |                          |                          |   |
| <b>(18) INSPECTIONS AND MAINTENANCE PROGRAM</b>   |                           |                          |                |   |                          |                          |   |
| <input type="checkbox"/> Inspection occurring at least every 14 calendar days.  |                           |                          |                | Course of action:                                   |                          |                          |   |
| <input type="checkbox"/> Inspections occurring after storm events that result in runoff.  |                           |                          |                | Course of action:                                   |                          |                          |   |
| <input type="checkbox"/> Inspections occurring at least every 30 calendar days since project  |                           |                          |                | Course of action:                                   |                          |                          |   |
| <input type="checkbox"/> Inspection reports retained at the construction project site.  |                           |                          |                | Course of action:                                   |                          |                          |   |
| <input type="checkbox"/> Corrective measures completed within 7 calendar days of inspection.  |                           |                          |                | Course of action:                                   |                          |                          |   |
| <b>CERTIFICATION STATEMENT</b>  |                           |                          |                |   |                          |                          |   |
| <p>"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."</p> |                           |                          |                |   |                          |                          |   |
| Contractor's inspector  |                           |                          |                |   | Date                     |                          |   |
| Contractor's Project Manager  |                           |                          |                |   | Date                     |                          |   |



EXHIBIT A

**Site Map and Grading and Erosion Control Plan Drawings  
(attached)**

GENERAL NOTES

1. STATIONING AND DISTANCES SHOWN ON THE DRAWINGS ARE BASED ON HORIZONTAL MEASUREMENTS AND EXPRESSED IN STATE PLANE GRID DISTANCES. CROSS SECTIONS, CROSSING DETAILS, AND REFERENCES TO LEFT AND RIGHT ON THE DRAWINGS ASSUME LOOKING IN THE DIRECTION OF INCREASING STATION ALONG PIPELINE ALIGNMENT.
2. UNLESS OTHERWISE NOTED, PIPE ELEVATIONS SHOWN ARE CENTERLINE ELEVATIONS.
3. LAY PIPE TO UNIFORM GRADE BETWEEN INDICATED ELEVATION POINTS AND IN ACCORDANCE WITH SPECIFICATION SECTION 33 05 01 02, WELDED STEEL PIPE AND FITTINGS - WELD BEFORE BACKFILL.
4. PIPELINE VERTICAL DEFLECTIONS UP TO SIX (6) DEGREES MAY BE MADE USING A BEVELED END JOINT ON EITHER SIDE OF THE LOCATION SHOWN FOR THE DEFLECTION. INDIVIDUAL BEVELED JOINT DEFLECTIONS SHALL NOT EXCEED THREE (3) DEGREES. MAINTAIN ELEVATIONS AND MINIMUM COVER AS SHOWN ON DRAWINGS.
5. THE CONSTRUCTION WORK LIMITS ARE SHOWN ON THE DRAWINGS. CONFINE CONSTRUCTION ACTIVITIES WITHIN WORK LIMITS.
6. LIMITS OF CONSTRUCTION THAT DO NOT HAVE TEMPORARY CONSTRUCTION EASEMENTS OR PERMANENT EASEMENTS OR DESIGNATED WORK LIMITS ARE LIMITED TO PUBLIC RIGHT-OF-WAY. COORDINATE/ESTABLISH CONSTRUCTION LIMITS WITH PUBLIC ENTITIES.
7. INSTALL CONSTRUCTION WORK LIMIT FENCING AS NOTED ON THE DRAWINGS OR AS DIRECTED BY CONSTRUCTION MANAGER. DO NOT INSTALL WORK LIMIT FENCING ACROSS ROAD RIGHT-OF-WAY.
8. INSTALL CONSTRUCTION WORK LIMIT FENCING 7 DAYS PRIOR TO CONSTRUCTION ACTIVITIES INCLUDING TRAVEL FROM ONE LOCATION TO ANOTHER WITHIN WORK LIMITS. PROVIDE AND MAINTAIN WORK LIMIT FENCE THROUGHOUT THE CONSTRUCTION PERIOD. OBTAIN CONSTRUCTION MANAGER'S WRITTEN PERMISSION PRIOR TO REMOVAL OF WORK LIMIT FENCING.
9. LOCATIONS OF COMBINATION AIR VALVE VAULTS, ACCESS MANWAYS, AND BLOWOFF STRUCTURES ARE SHOWN ON THE DRAWINGS. NO CHANGES IN LOCATIONS ARE ALLOWED EXCEPT AS APPROVED BY THE ENGINEER AND IN ACCORDANCE WITH SPECIFICATION SECTION 33 05 01 02 WELDED STEEL PIPE AND FITTINGS - WELD BEFORE BACKFILL.
10. PROVIDE TRENCH PLUGS WHERE SHOWN AND AS DIRECTED BY CONSTRUCTION MANAGER.

11. SUBJECT FACILITIES ARE SHOWN HEAVY LINED. SCREENING IS USED IN ORDER TO CLARIFY DRAWING. FOR EXAMPLE, STRUCTURES ARE SCREENED ON MECHANICAL DRAWINGS TO HIGHLIGHT PIPING AND EQUIPMENT.
12. INSTALL CATHODIC PROTECTION TEST STATIONS AT THE APPROXIMATE LOCATIONS SHOWN ON THE SCHEDULE LOCATED ON DWG S1-G-14, IN ACCORDANCE WITH SPECIFICATIONS, AND AS APPROVED BY CONSTRUCTION MANAGER. INSTALL ANODES AT LOCATIONS IN ACCORDANCE WITH SPECIFICATION SECTION 28 42 02, GALVANIC ANODE CATHODIC PROTECTION SYSTEM.
13. EXISTING PROPERTY LINE, RIGHT-OF-WAY AND EASEMENT INFORMATION SHOWN ON THESE DOCUMENTS WAS DEVELOPED USING LAND SURVEY PLATS PREPARED BY CRITIGEN.
14. TOPOGRAPHIC MAPPING AND PLAN VIEWS FOR DRAWINGS WERE GENERATED FROM AERIAL PHOTOGRAPHY DATED 5/18/2008.
15. PROTECT EXISTING TREES AND SHRUBS NOT DESIGNATED TO BE REMOVED.
16. PRESERVE EXISTING MONUMENTS, BENCH MARKS, RANGE TIES, PROPERTY MARKERS, REFERENCE POINTS, AND STAKES. A COLORADO LICENSED SURVEYOR IS REQUIRED TO REFERENCE, REPLACE AND REPORT ANY EXISTING LAND CORNERS, MONUMENTS, BENCHMARKS, RANGE TIES, PROPERTY MARKERS, REFERENCE POINTS, AND STAKES POTENTIALLY DISTURBED OR DESTROYED BY CONSTRUCTION.
17. REPAIR OR REPLACE EXISTING CULVERTS THAT ARE DAMAGED BY CONSTRUCTION.
18. CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO "CALL BEFORE YOU DIG" PROGRAM AT 1-800-922-1987 (OR 811) 72 BUSINESS HOURS PRIOR TO ANY EXCAVATION.
19. CONTACT UTILITY OWNERS PRIOR TO CONSTRUCTION OF UTILITY CROSSINGS IN ACCORDANCE WITH SPECIFICATION SECTION 01 31 13, PROJECT COORDINATION. PROVIDE UTILITY SUPPORT IN MANNER REQUIRED BY UTILITY OWNERS.
20. FOR UTILITY CROSSINGS GREATER THAN 10" DIAMETER, SEE (3305-762) UNLESS OTHERWISE NOTED.
21. INSTALL PIPE MARKER POSTS (3305-980) ON CENTERLINE OF PIPELINE AT STRUCTURES, BURIED ACCESS MANWAYS, AT LOCATIONS NEAR FIBER OPTIC HANDHOLES, HPI'S, AT ROAD CROSSINGS, AND AT LINE OF SIGHT AS DIRECTED BY CONSTRUCTION MANAGER.
22. RETURN CONTOURS TO PRECONSTRUCTION ELEVATIONS UNLESS OTHERWISE SHOWN. NO NEW ENCLOSED DEPRESSIONS ARE ALLOWED.
23. INSTALL FIBER OPTIC CONDUIT IN ACCORDANCE WITH SPECIFICATION SECTION 40 95 80, FIBER OPTIC COMMUNICATION SUBSYSTEM.
24. VERIFY HEIGHT AND SPAN OF CROSSING OVERHEAD ELECTRIC LINES PRIOR TO CONSTRUCTION.
25. INSTALL EITHER TYPE F OR TYPE J PIPE ZONE MATERIAL EXCEPT WHERE SHOWN ON THE DRAWINGS AND STANDARD DETAILS.

SURVEY CONTROL

| POINT NAME     | NORTHING    | EASTING     | ELEVATION | DESCRIPTION   |
|----------------|-------------|-------------|-----------|---|
| CLEVINGER      | 1248315.200 | 3249105.975 | 5204.01   | STAINLESS STEEL ROD WITH ACCESS LID STAMPED "CLEVINGER 1991"  |
| CORRAL_BLUFFS  | 1378767.054 | 3258121.280 | 6788.15   | USCGS TRIANGULATION DISK STAMPED "CORRAL BLUFFS 1879"         |
| PUEBLO-CBL-973 | 1176842.746 | 3266338.244 | 4946.93   | NGS BRASS DISK STAMPED "CALIBRATION BASELINE 973 1983 U.S.C." |
| SDS-1          | 1365675.811 | 3249458.429 | 6184.90   | 3.25" ALUMINUM CAP STAMPED "SDS 1"                            |
| SDS-2          | 1356851.864 | 3249088.332 | 6053.21   | 3.25" ALUMINUM CAP STAMPED "SDS 2"                            |
| SDS-3          | 1346767.071 | 3250590.865 | 5997.82   | 3.25" ALUMINUM CAP STAMPED "SDS 3"                            |
| SDS-4          | 1334963.226 | 3253584.921 | 5829.49   | 3.25" ALUMINUM CAP STAMPED "SDS 4"                            |
| SDS-5          | 1319525.733 | 3251004.267 | 5727.36   | 3.25" ALUMINUM CAP STAMPED "SDS 5"                            |
| SDS-6          | 1311290.495 | 3249115.118 | 5640.77   | 3.25" ALUMINUM CAP STAMPED "SDS 6"                            |
| SDS-7          | 1275980.612 | 3244487.619 | 5329.01   | 3.25" ALUMINUM CAP STAMPED "SDS 7"                            |
| SDS-8          | 1272438.655 | 3234306.298 | 5465.33   | 3.25" ALUMINUM CAP STAMPED "SDS 8"                            |
| SDS-9          | 1262622.927 | 3233038.574 | 5463.03   | 3.25" ALUMINUM CAP STAMPED "SDS 9"                            |
| SDS-10         | 1249942.257 | 3232117.619 | 5304.13   | 3.25" ALUMINUM CAP STAMPED "SDS 10"                           |
| SDS-11         | 1240330.711 | 3232286.734 | 5468.25   | 3.25" ALUMINUM CAP STAMPED "SDS 11"                           |
| SDS-12         | 1225582.343 | 3231669.126 | 5320.70   | 3.25" ALUMINUM CAP STAMPED "SDS 12"                           |
| SDS-13         | 1210803.056 | 3231935.423 | 5098.26   | 3.25" ALUMINUM CAP STAMPED "SDS 13"                           |
| SDS-14         | 1196341.401 | 3232065.878 | 5032.89   | 3.25" ALUMINUM CAP STAMPED "SDS 14"                           |
| SDS-15         | 1187476.811 | 3231961.540 | 4996.37   | 3.25" ALUMINUM CAP STAMPED "SDS 15"                           |
| SDS-16         | 1178196.563 | 3232239.942 | 4941.71   | 3.25" ALUMINUM CAP STAMPED "SDS 16"                           |
| SDS-17         | 1171526.900 | 3232244.310 | 4960.11   | 3.25" ALUMINUM CAP STAMPED "SDS 17"                           |
| SDS-18         | 1167871.108 | 3226253.994 | 5144.02   | 3.25" ALUMINUM CAP STAMPED "SDS 18"                           |
| SDS-18A        | 1166477.575 | 3229461.646 | 5049.15   | 2.5" ALUM CAP STAMPED CH2M HILL                               |
| SDS-19         | 1161412.073 | 3224324.395 | 4771.63   | 3.25" ALUMINUM CAP STAMPED "SDS 19"                           |

SURVEY NOTES:

1. PROJECT COORDINATE SYSTEM
- HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983, ADJUSTMENT OF 1986 (NAD 83/86)  
PROJECTION: COLORADO STATE PLANE COORDINATES, CENTRAL ZONE  
VERTICAL DATUM: NGVD 1929  
GEOID MODEL: GEOID 03  
UNITS: U.S. SURVEY FEET AT GRID
2. THE PRIMARY PROJECT CONTROL FOR SOUTHERN DELIVERY SYSTEM WAS ESTABLISHED BY KIRKHAM MICHAEL CONSULTING ENGINEERS (KM). A SURVEY CONTROL DIAGRAM WAS PREPARED BY KM AND DEPOSITED WITH THE EL PASO COUNTY CLERK AND RECORDER OFFICE ON AUGUST 10, 2004 UNDER DEPOSIT NUMBER 900110. THE PROJECT CONTROL WAS ACCEPTED BY CH2M HILL AND UTILIZED TO ESTABLISH ADDITIONAL SURVEY CONTROL USING STATIC AND FAST STATIC SURVEY TECHNIQUES.
3. COORDINATES ARE "GRID" VALUES.
4. SOUTHERN DELIVERY SYSTEM SURVEY CONTROL LISTED MAY NOT APPEAR ON THE PLAN SHEETS.

NATIONWIDE PERMIT NOTES

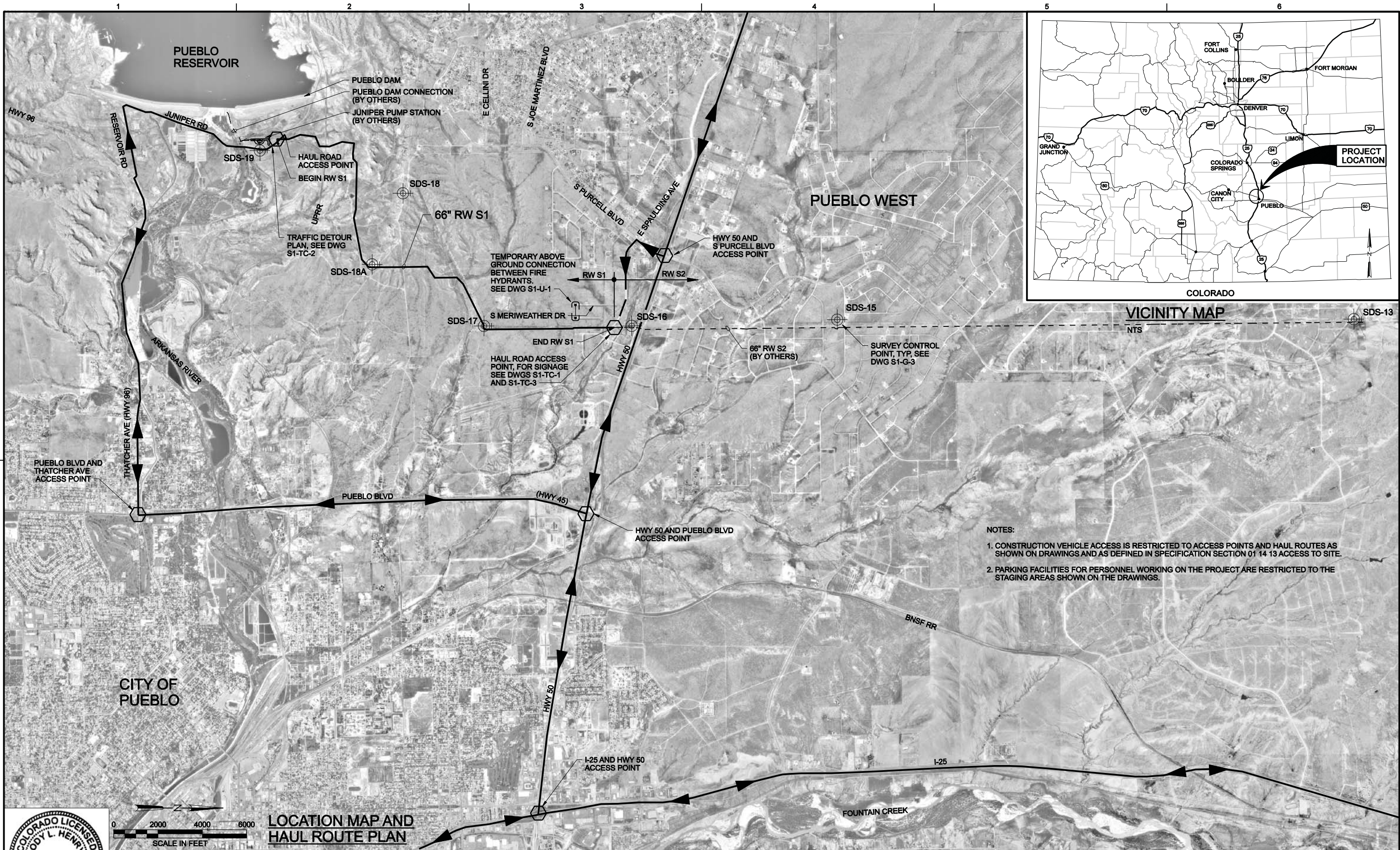
THE FOLLOWING NOTES ARE APPLICABLE TO AREAS THAT ARE SUBJECT TO A NWP 12:

1. TYPE K BACKFILL MUST BE NATIVE TOPSOIL FROM THE TRENCH FOR AREAS SUBJECT TO THE US ARMY CORPS OF ENGINEERS NWP 12 REQUIREMENTS. SEE DWG S1-PP-18 FOR LOCATIONS OF CROSSINGS SUBJECT TO NWP 12.
2. WHEN TEMPORARY FILLS ARE PLACED IN WETLANDS, USE A HORIZONTAL MARKER (FABRIC, CERTIFIED WEED FREE STRAW) AS APPROVED BY CONSTRUCTION MANAGER TO DELINEATE THE EXISTING GROUND ELEVATION OF WETLANDS THAT WILL BE TEMPORARILY FILLED DURING CONSTRUCTION.
3. USE AND MAINTAIN APPROPRIATE SOIL EROSION AND SEDIMENT CONTROLS IN EFFECTIVE OPERATING CONDITION DURING CONSTRUCTION.
4. SEPARATE LOAD BEARING TEMPORARY STRUCTURES IN WATERS OF THE U.S. FROM EXISTING SURFACES BY GEOTEXTILE.
5. PLACE HEAVY EQUIPMENT WORKING IN WETLANDS ON MATS OR OTHER APPROVED MEASURES IN ORDER TO MINIMIZE SOIL DISTURBANCE.
6. PERMANENTLY STABILIZE OTHER FILLS, AS WELL AS ANY WORK BELOW THE ORDINARY HIGH WATER MARK FOR A WATER OF THE U.S. AT THE EARLIEST PRACTICABLE DATE. PERFORM WORK WITHIN WATERS OF THE U.S. DURING LOW-FLOW OR NO FLOW PERIODS.



|      |                |     |      |          |    |                                      |                            |  |  |  |  |                    |       |              |
|------|----------------|-----|------|----------|----|--------------------------------------|----------------------------|--|--|--|--|--------------------|-------|--------------|
| DSGN | E FORD         |     |      |          |    | VERIFY SCALE                         |                            |  |  |  |  | GENERAL            | SHEET | 3            |
| DR   | B NORVILLE     |     |      |          |    | BAR IS ONE INCH ON ORIGINAL DRAWING. |                            |  |  |  |  | SOUTH SECTION ONE  | DWG   | S1-G-3       |
| CHK  | SIMPSON/ROSSER |     |      |          |    | 0" = 1"                              |                            |  |  |  |  | GENERAL NOTES      | DATE  | JULY 2011    |
| APVD | J HENRY        | NO. | DATE | REVISION | BY | APVD                                 | CH2MHILL                   |  |  |  |  | AND SURVEY CONTROL | PROJ  | 171473.20.SP |
|      |                |     |      |          |    |                                      | Colorado Springs, CO 80903 |  |  |  |  |                    |       |              |





|      |                  |     |      |          |    |
|------|------------------|-----|------|----------|----|
| DSGN | E FORD           |     |      |          |    |
| DR   | B NORVILLE       |     |      |          |    |
| CHK  | W CHRISTOFFERSON |     |      |          |    |
| APVD | J HENRY          | NO. | DATE | REVISION | BY |

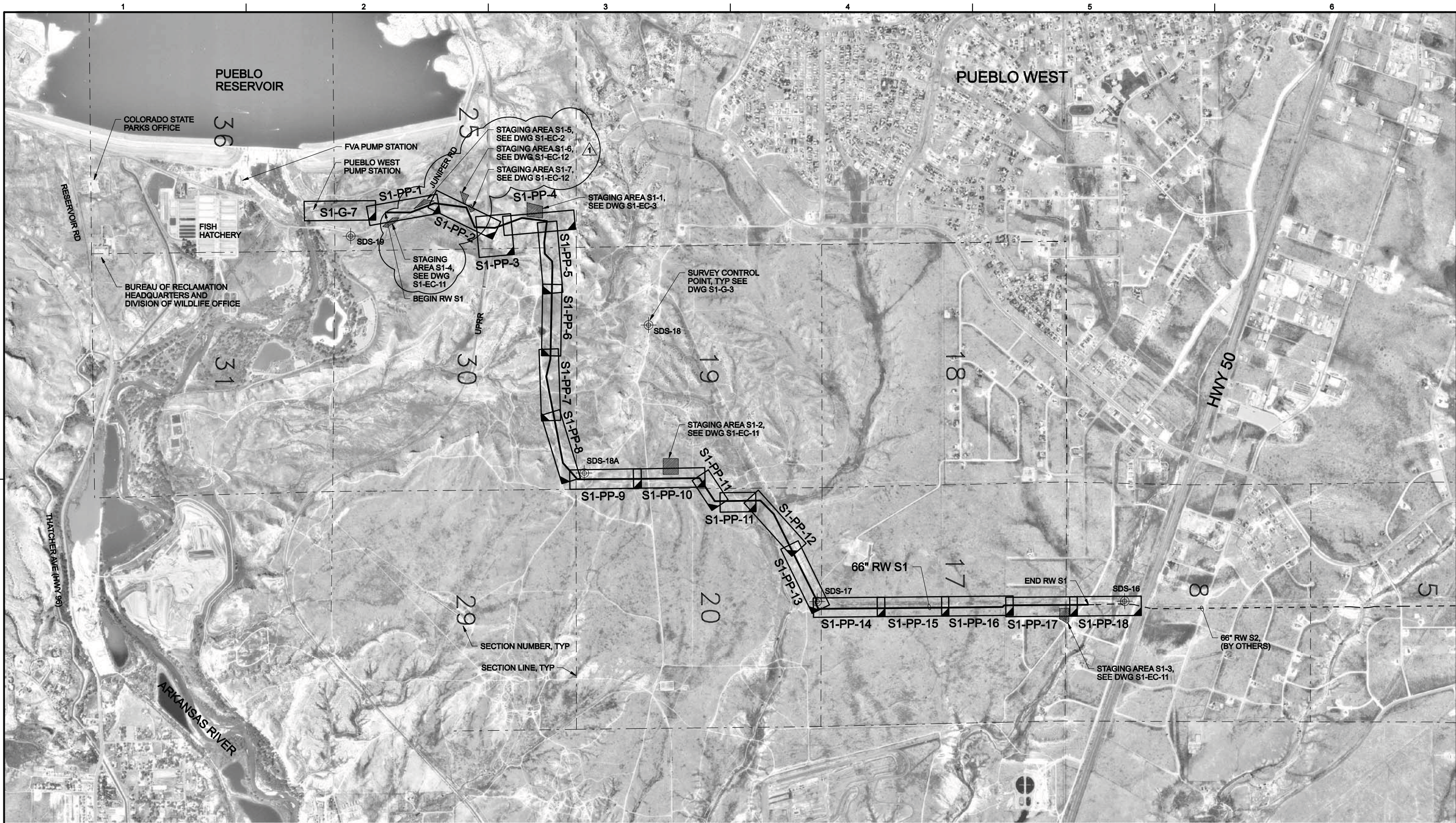
VERIFY SCALE  
BAR IS ONE INCH ON  
ORIGINAL DRAWING.  
0 1"  
IF NOT ONE INCH ON  
THIS SHEET, ADJUST  
SCALES ACCORDINGLY.

**CH2MHILL**  
Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE  
SOUTH SECTION ONE

|  |       |              |
|--|-------|--------------|
| GENERAL  | SHEET | 5            |
| LOCATION MAP, VICINITY MAP,<br>AND HAUL ROUTE PLAN | DWG   | S1-G-5       |
|  | DATE  | JULY 2011    |
|  | PROJ  | 171473.20.SP |





0 1000 2000 3000  
SCALE IN FEET

|      |            |     |         |      |                |          |    |    |    |      |   |
|------|------------|-----|---------|------|----------------|----------|----|----|----|------|---|
| DSGN | J HENRY    | NO. | 7/13/11 | DATE | ADDENDUM NO. 1 | REVISION | BN | JH | BY | APVD | VERIFY SCALE<br>BAR IS ONE INCH ON ORIGINAL DRAWING.<br>IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY. |
| DR   | B NORVILLE |     |         |      |                |          |    |    |    |      |   |
| CHK  | J HENRY    |     |         |      |                |          |    |    |    |      |   |
| APVD | J HENRY    |     |         |      |                |          |    |    |    |      |   |

Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE  
SOUTH SECTION ONE

GENERAL

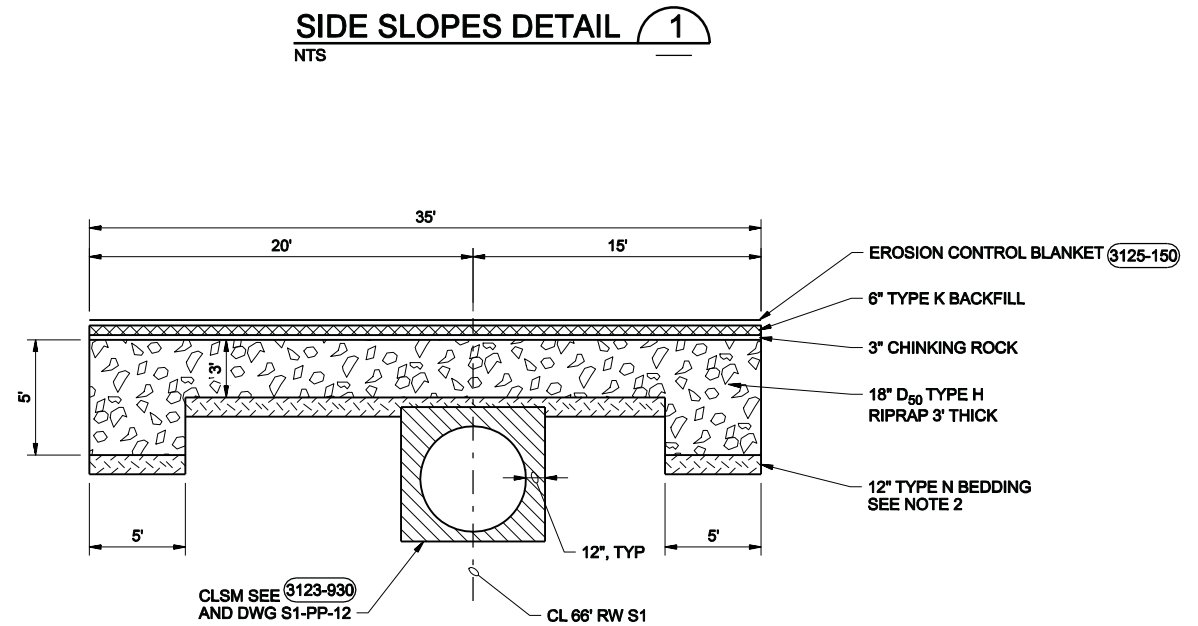
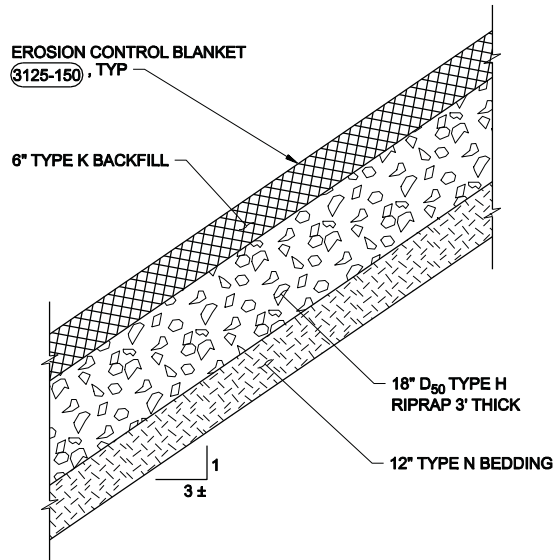
KEY PLAN AND STAGING AREAS

|       |              |
|-------|--------------|
| SHEET | 6            |
| DWG   | S1-G-6       |
| DATE  | JULY 2011    |
| PROJ  | 171473.20.SP |

Colorado Springs Utilities Project Number: SDS-002 CSU Work Order Number: 1146977

FILENAME: SP101nG08d\_171473.dgn PLOT DATE: 7/7/2011 PLOT TIME: 11:52:20 AM






**CHANNEL BOTTOM SECTION**  **A**  
1"=20'

- NOTES:
1. INSTALL RIPRAP AND EROSION CONTROL PER LIMITS IN PLAN VIEW AND HORIZONTAL TYPE N BEDDING INFORMATION.
  2. TYPE N BEDDING TO BE 6" THICK ABOVE CLSM.
  3.  $Q_{100} = Q_{\text{DESIGN}} = 2016\text{CFS}$



|      |                     |     |      |          |    |      |
|------|---------------------|-----|------|----------|----|------|
| DSGN | A ESPOSITO          |     |      |          |    |      |
| DR   | B NORVILLE/J WALKER |     |      |          |    |      |
| CHK  | C HOOPER            |     |      |          |    |      |
| APVD | J HENRY             | NO. | DATE | REVISION | BY | APVD |

**VERIFY SCALE**  
 BAR IS ONE INCH ON  
 ORIGINAL DRAWING.  
 0  1"  
 IF NOT ONE INCH ON  
 THIS SHEET, ADJUST  
 SCALES ACCORDINGLY.

**CH2MHILL**  
Colorado Springs, CO 80903

**SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE  
SOUTH SECTION ONE**

## DRAINAGE CROSSING

### DRAINAGEWAY CROSSING PLAN AND DETAILS

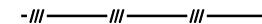
|       |              |
|-------|--------------|
| SHEET | 44           |
| DWG   | S1-DC-3      |
| DATE  | JULY 2011    |
| PROJ  | 171473.20.SP |

## SEDIMENT AND EROSION CONTROL GENERAL NOTES

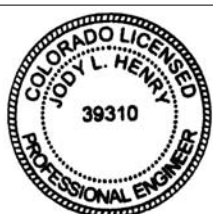
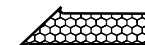
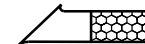
1. A STORMWATER MANAGEMENT PLAN (SWMP) HAS BEEN PREPARED BY UTILITIES FOR THE CONTRACTOR. THE SWMP HAS BEEN PREPARED IN ACCORDANCE WITH PUEBLO COUNTY, PUEBLO WEST METRO DISTRICT AND COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT CRITERIA. USE AS REQUIRED TO OBTAIN PERMITS IDENTIFIED IN THE SPECIFICATIONS. OBTAIN AND RETAIN A COPY OF THE SWMP ON SITE.
2. PLACE EROSION AND SEDIMENT CONTROL BMPS AND PROVIDE MAINTENANCE AND RECORD KEEPING IN ACCORDANCE WITH FEDERAL, STATE, AND COUNTY STANDARDS.
3. INSTALL WORK LIMIT FENCING DEFINING THE LIMITS OF CONSTRUCTION PRIOR TO OTHER CONSTRUCTION ACTIVITIES, INCLUDING CONSTRUCTION LIMITS ADJACENT TO STREAM CORRIDORS AND OTHER AREAS TO BE PRESERVED.
4. INSTALL EROSION AND SEDIMENT CONTROL BMPS, WHERE POSSIBLE, BEFORE THE START OF CONSTRUCTION.
5. INSTALL APPROVED BMPS AROUND STOCKPILED MATERIALS PER THE SPECIFICATIONS.
6. INSTALL APPROVED BMPS AROUND STAGING AREAS AND MAINTENANCE AREAS. PROTECT AND MAINTAIN AREAS PER FEDERAL, STATE, AND COUNTY STANDARDS.
7. STORE AND PROTECT HAZARDOUS MATERIAL PER REQUIREMENTS OF PROJECT PERMITS AND PER FEDERAL, STATE AND COUNTY OR OTHER APPLICABLE REQUIREMENTS
8. ADHERE TO THE APPROVED LIMITS OF CONSTRUCTION. OBTAIN APPROVAL FROM CONSTRUCTION MANAGER PRIOR TO MAKING CHANGES TO THE WORK LIMITS. ADDITIONAL EROSION/SEDIMENT CONTROLS MAY BE REQUIRED.
9. RETAIN AND PROTECT NATURAL VEGETATION WHEREVER POSSIBLE. LIMIT EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS.
10. CONSTRUCTION VEHICLE TRAFFIC MUST ENTER/EXIT THE SITE THROUGH THE APPROVED ACCESS POINTS. VEHICLE TRACKING CONTROLS ARE REQUIRED AT ACCESS POINTS ON THE SITE. ADDITIONAL VEHICLE TRACKING CONTROLS TO BE ADDED AS REQUIRED BY PUEBLO COUNTY. INSTALL AND MAINTAIN VEHICLE TRACKING CONTROLS PER PUEBLO COUNTY.
11. KEEP PAVED AREAS CLEAN INCLUDING STREETS THROUGHOUT CONSTRUCTION. CLEAN WITH A STREET SWEEPER OR SIMILAR DEVICE. AT FIRST NOTICE OF DIRT TRACKED ON PAVED AREAS, STREET WASHING IS NOT ALLOWED. THE CONSTRUCTION MANAGER RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO ENSURE AREA STREETS ARE KEPT FREE OF SEDIMENT AND/OR CONSTRUCTION DEBRIS.
12. THE EROSION CONTROL PLANS MAY REQUIRE CHANGES OR ALTERATIONS TO MEET CHANGING SITE OR PROJECT CONDITIONS, TO ADDRESS INEFFICIENCIES IN DESIGN OR INSTALLATION, OR TO MEET PERMIT REQUIREMENTS.
13. PROVIDE LINING OF TEMPORARY SWALES AND DITCHES. NO PERMANENT EARTH SLOPES GREATER THAN 3:1 ALLOWED, EXCEPT WHERE SHOWN ON DRAWINGS.
14. REMEDIATE SEDIMENT OR SOIL ACCUMULATIONS CREATED DUE TO CONSTRUCTION ACTIVITIES BEYOND THE LIMITS OF CONSTRUCTION IMMEDIATELY.
15. PROVIDE A WATER SOURCE ON SITE DURING CONSTRUCTION ACTIVITIES AND UTILIZE AS REQUIRED TO MINIMIZE DUST FROM EQUIPMENT AND WIND IN ACCORDANCE WITH THE SPECIFICATIONS.
16. SEED AND MULCH SOILS THAT WILL BE STOCKPILED FOR MORE THAN FOURTEEN (14) DAYS. DO NOT PLACE STOCKPILES WITHIN ONE HUNDRED (100) FEET OF THE TOP OF BANK OF ANY WATERWAY OR DRAINAGE.
17. CHEMICAL OR HAZARDOUS MATERIAL SPILLS THAT MAY ENTER WATERS OF THE STATE OF COLORADO, THAT INCLUDE BUT ARE NOT LIMITED TO, SURFACE WATER, GROUNDWATER AND DRY GULLIES OR STORM SEWERS, LEADING TO THE RELEASES OF PETROLEUM PRODUCTS AND CERTAIN HAZARDOUS SUBSTANCES LISTED UNDER THE FEDERAL CLEAN WATER ACT (40 CFR PART 116) MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER AS WELL AS THE CDPHE. REPORT SPILLS THAT POSE AN IMMEDIATE RISK TO HUMAN LIFE TO 911.
18. THE USE OF REBAR, STEEL STAKES, OR STEEL FENCE POSTS FOR STAKING OR SUPPORT OF BMPS IS PROHIBITED.
19. INSTALL CONCRETE WASHOUT LOCATIONS AS NEEDED WITHIN THE WORK LIMITS. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE IS PROHIBITED WITHIN 500 FEET OF ANY WATERWAY. PROPERLY CLEAN UP AND DISPOSE OF CONCRETE WASTE AT AN APPROPRIATE LOCATION.

20. STABILIZE DISTURBED AREAS INCLUDING ROADS, WITHIN 14 DAYS OF SUBSTANTIAL COMPLETION OF GRADING, INCLUDING AREAS TO REMAIN DORMANT FOR LONGER THAN 30 DAYS, WHICHEVER IS LESS. THIS MAY REQUIRE MULTIPLE MOBILIZATIONS FOR SEEDING AND MULCHING.
21. TRASH RECEPTACLES AND PORTABLE TOILETS ARE PROHIBITED WITHIN 500 FEET OF ANY WATERWAY OR DRAINAGE.
22. CONDUCT VEHICLE MAINTENANCE, CLEANING, AND FUELING OFF-SITE, IF POSSIBLE. IF CONDUCTED ONSITE, THESE OPERATIONS MUST BE APPROVED BY CONSTRUCTION MANAGER, AND CONDUCTED ON A LEVEL GROUND SURFACE IN A DESIGNATED AREA WITH APPROVED PERIMETER CONTROLS.
23. STORE HAZARDOUS MATERIALS AND CHEMICALS ONSITE ONLY IN THE STAGING AREA AND ONLY IN AN APPROVED, COVERED TEMPORARY STRUCTURE. OBTAIN ANY REQUIRED PERMITS OR APPROVALS.
24. INSPECT BMPS A MINIMUM OF EVERY 14 DAYS AND IMMEDIATELY AFTER STORM EVENTS. CORRECT ANY DAMAGE OR DEFICIENCIES DISCOVERED DURING THE INSPECTION IN ACCORDANCE WITH PERMIT REQUIREMENTS, SPECIFICATIONS, AND PUEBLO COUNTY.
25. REMOVE SEDIMENTS WHEN SEDIMENTS HAVE ACCUMULATED TO 1/2 THE HEIGHT OF THE BMP.


### EROSION CONTROL LEGEND



**CONSTRUCTION ENTRANCE**



|      |            |     |      |          |    |      |
|------|------------|-----|------|----------|----|------|
| DSGN | E FORD     |     |      |          |    |      |
| DR   | B NORVILLE |     |      |          |    |      |
| CHK  | G SIMPSON  |     |      |          |    |      |
| APVD | J HENRY    | NO. | DATE | REVISION | BY | APVD |

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**CH2MHILL**  
Colorado Springs, CO 80903

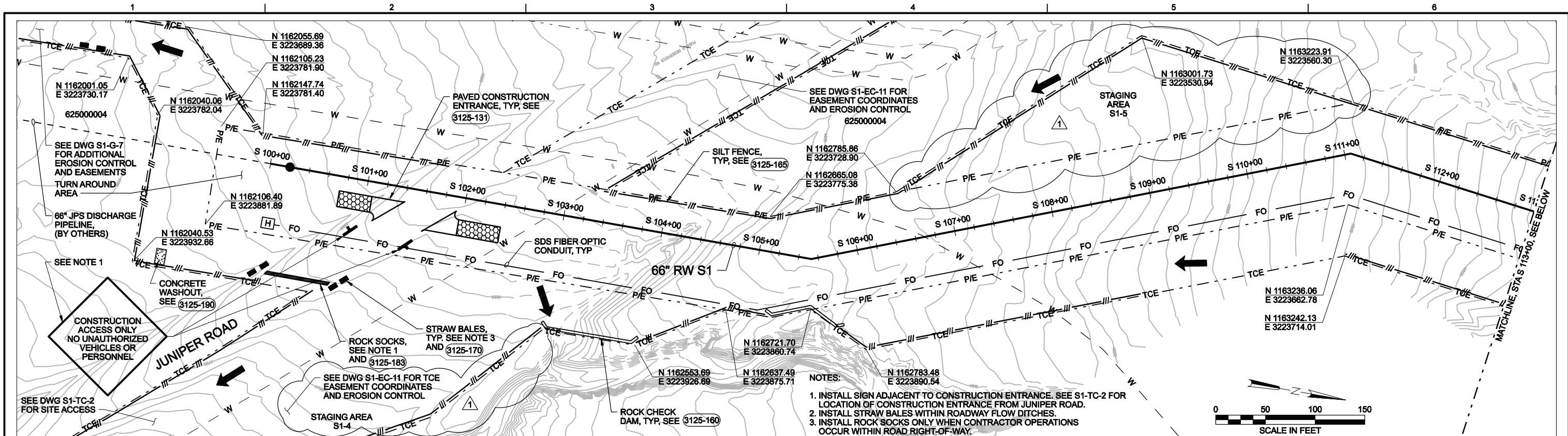
**SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE  
SOUTH SECTION ONE**

### EROSION CONTROL AND EASEMENT PLANS

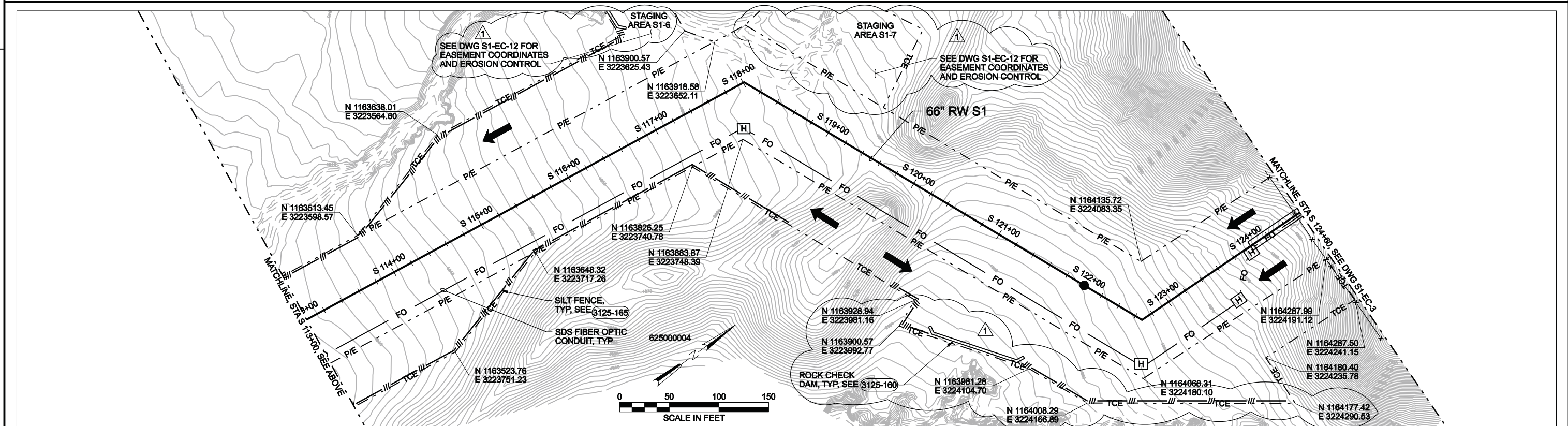
### EROSION CONTROL NOTES

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| DATE  | JULY 2011    |
| PROJ  | 171473.20.SP |

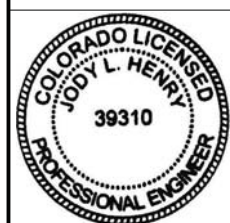




EROSION CONTROL PLAN, SEE S1-PP-1



EROSION CONTROL PLAN, SEE S1-PP-2



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| DSGN | E FORD     |                            |    |      |  |
| DR   | B NORVILLE |                            |    |      |  |
| CHK  | G SIMPSON  |                            |    |      |  |
| APVD | J HENRY    |                            |    |      |  |
| NO.  | 7/13/11    | ADDENDUM NO. 1 - TCE ADDED | BN | JH   |  |
| DATE |            | REVISION                   | BY | APVD |  |

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SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE  
SOUTH SECTION ONE

EROSION CONTROL AND EASEMENT PLANS  
**STATION S 100+00 TO STATION S 124+60**

|       |              |
|-------|--------------|
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| DATE  | JULY 2011    |
| PROJ  | 171473.20.SP |

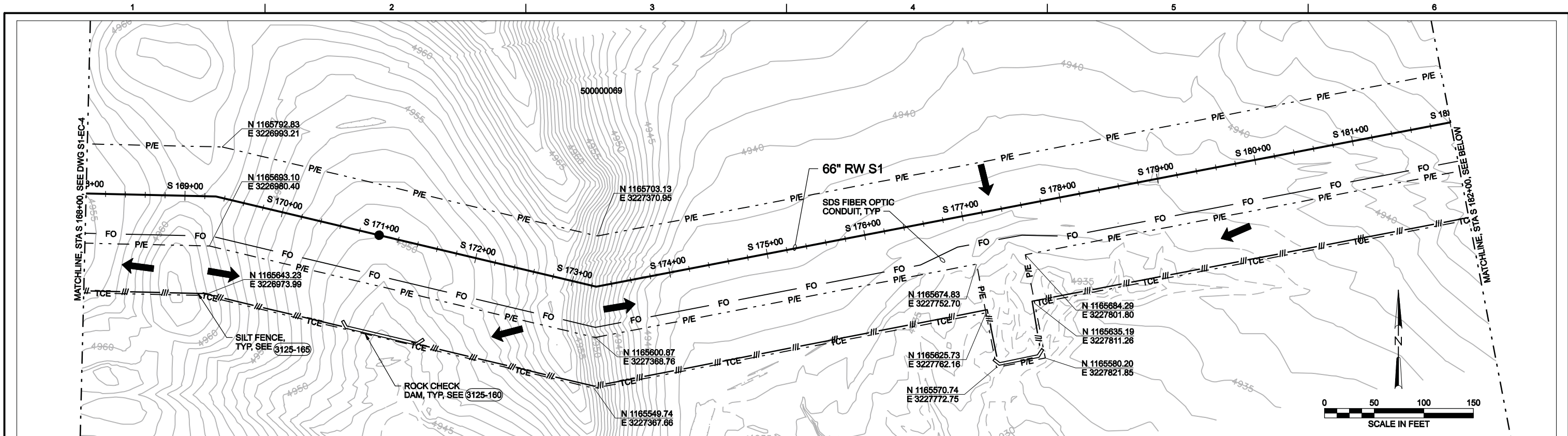




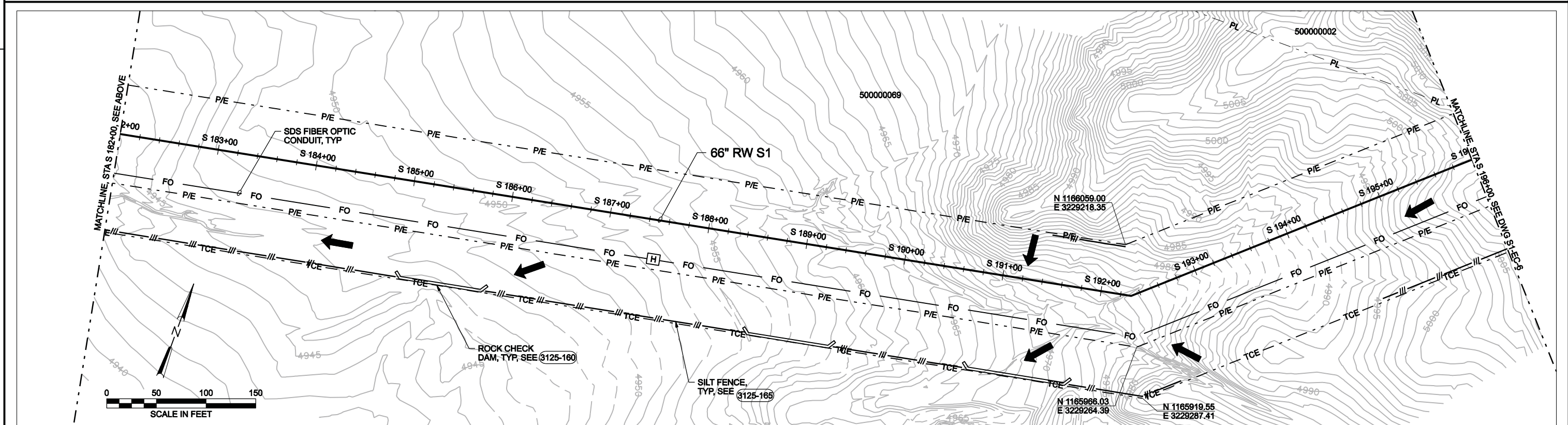




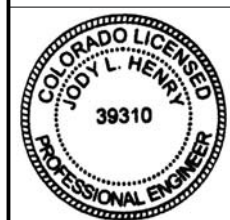




EROSION CONTROL PLAN, SEE S1-PP-7



EROSION CONTROL PLAN, SEE S1-PP-8



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| DSGN | E FORD     |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
| CHK  | G SIMPSON  |     |      |          |    |
| APVD | J HENRY    | NO. | DATE | REVISION | BY |

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Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE  
SOUTH SECTION ONE

EROSION CONTROL AND EASEMENT PLANS  
**STATION S 168+00 TO STATION S 196+00**

|       |              |
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| DATE  | JULY 2011    |
| PROJ  | 171473.20.SP |

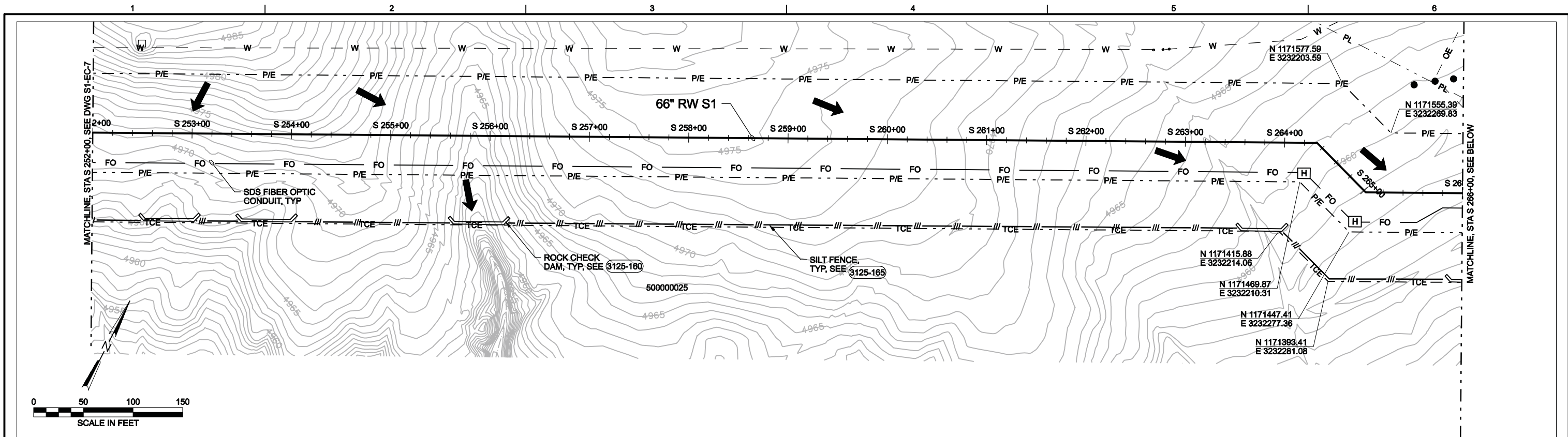




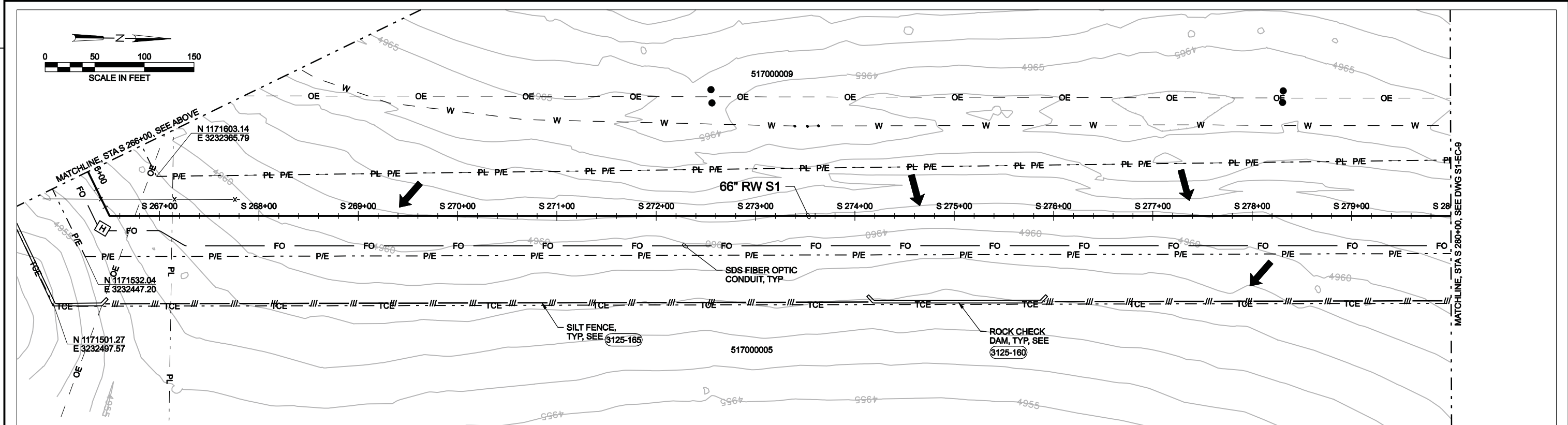




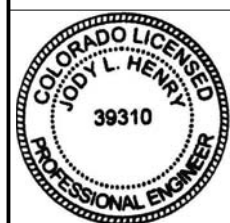




EROSION CONTROL PLAN, SEE S1-PP-13



EROSION CONTROL PLAN, SEE S1-PP-14



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| DR   | B NORVILLE |     |      |          |    |
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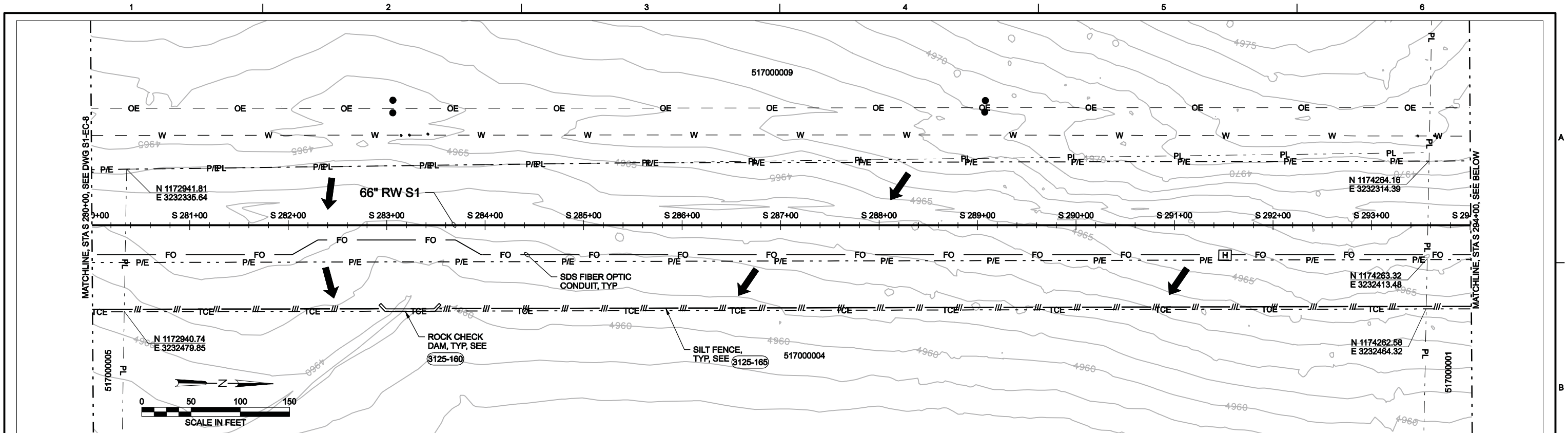
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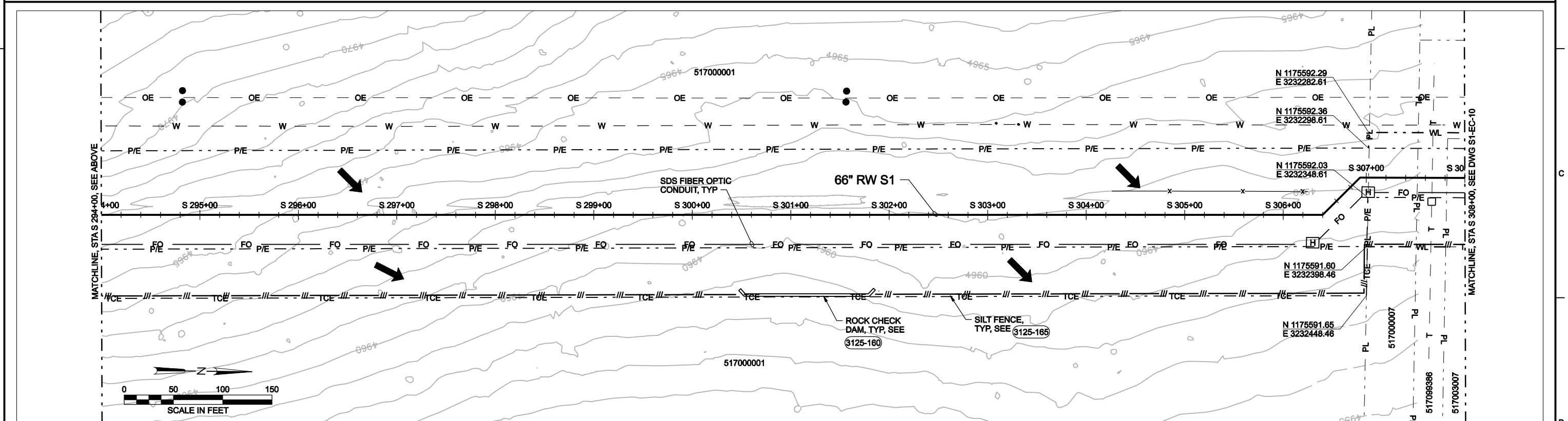
SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE  
SOUTH SECTION ONE

EROSION CONTROL AND EASEMENT PLANS  
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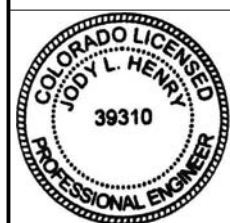
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| DATE  | JULY 2011    |
| PROJ  | 171473.20.SP |



EROSION CONTROL PLAN, SEE S1-PP-15



EROSION CONTROL PLAN, SEE S1-PP-16



|      |            |     |      |          |    |
|------|------------|-----|------|----------|----|
| DSGN | E FORD     |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
| CHK  | G SIMPSON  |     |      |          |    |
| APVD | J HENRY    | NO. | DATE | REVISION | BY |

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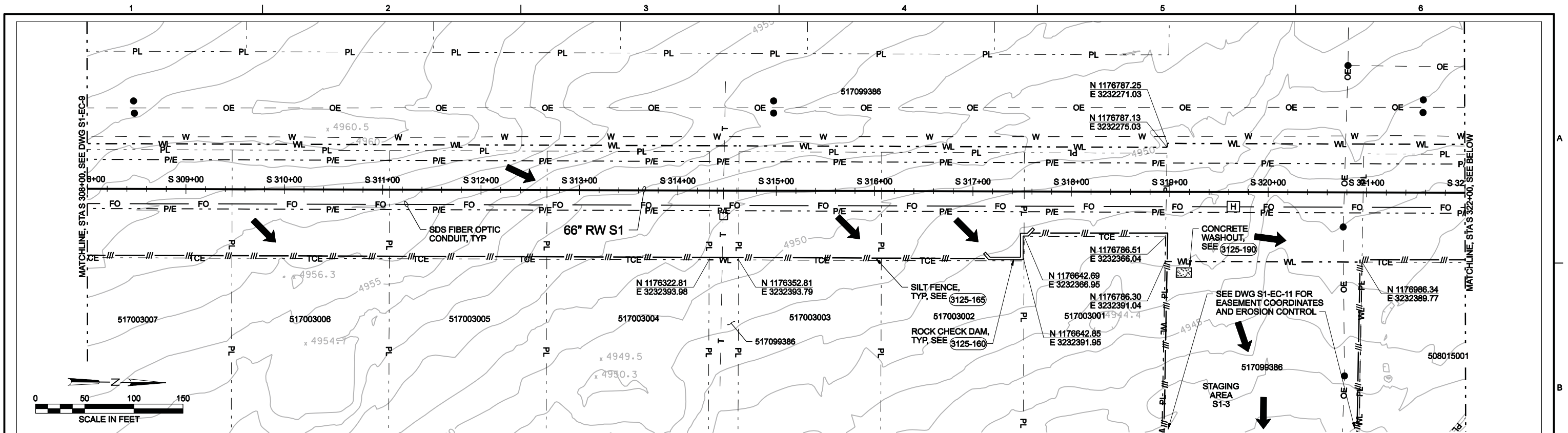
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Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE  
SOUTH SECTION ONE

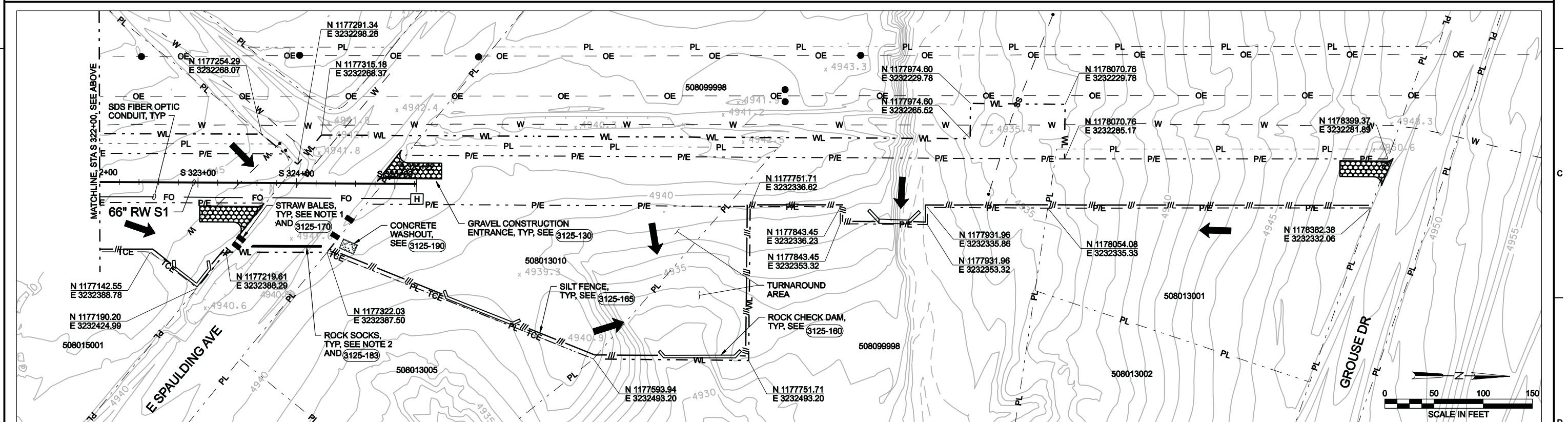
EROSION CONTROL AND EASEMENT PLANS  
**STATION S 280+00 TO STATION S 308+00**

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| DATE  | JULY 2011    |
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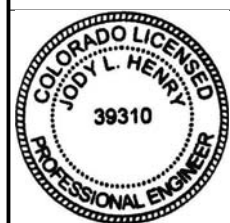
EROSION CONTROL PLAN, SEE S1-PP-17



NOTES:

1. INSTALL STRAW BALES WITHIN ROADWAY FLOW DITCHES.
2. INSTALL ROCK SOCKS ONLY WHEN CONTRACTOR OPERATIONS OCCUR WITHIN ROAD RIGHT-OF-WAY.

EROSION CONTROL PLAN, SEE S1-PP-18



|      |            |     |      |          |    |
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| DSGN | E FORD     |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
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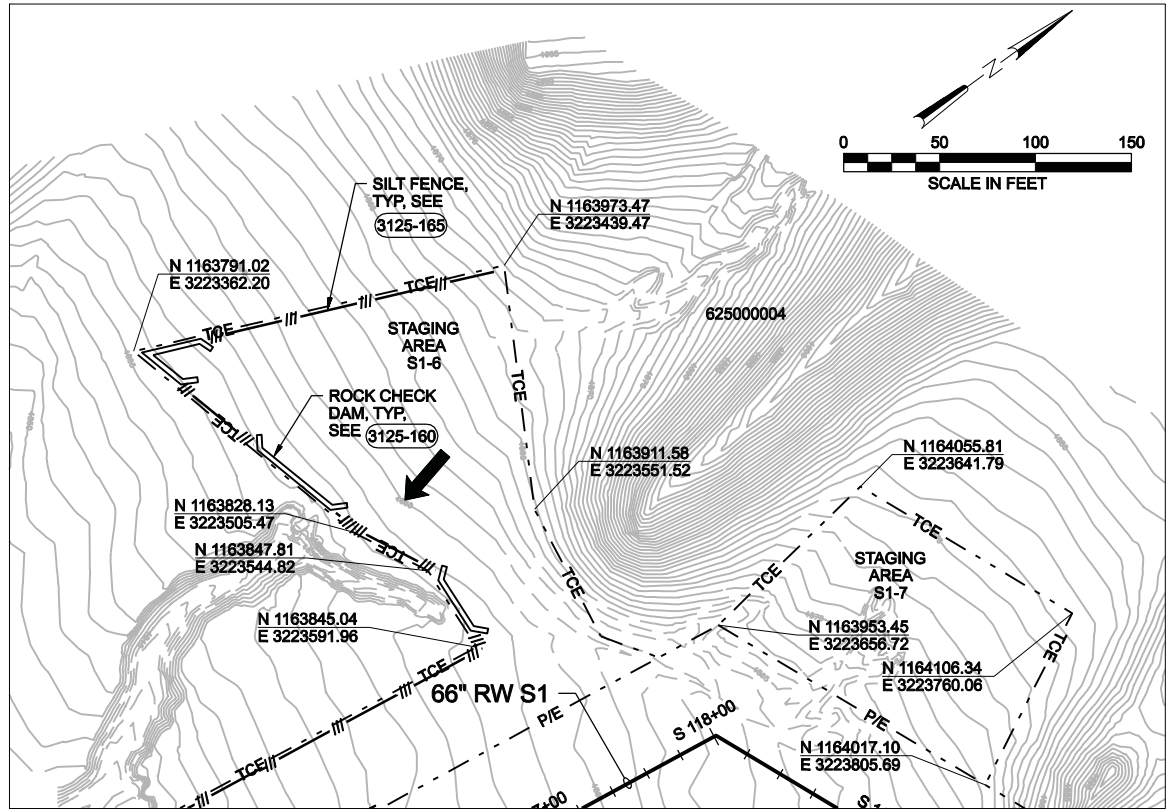
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SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE  
SOUTH SECTION ONE

EROSION CONTROL AND EASEMENT PLANS  
**STATION S 308+00 TO POE STATION S 325+21.87**

|       |              |
|-------|--------------|
| SHEET | 58           |
| DWG   | S1-EC-10     |
| DATE  | JULY 2011    |
| PROJ  | 171473.20.SP |



PARTIAL EASEMENT PLAN, SEE S1-PP-2

1



|      |            |   |         |                            |    |    |
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| DSGN | E FORD     |  | 7/13/11 | ADDENDUM NO. 1 - TCE ADDED | BN | JH |
| DR   | B NORVILLE |   |         |                            |    |    |
| CHK  | G SIMPSON  |   |         |                            |    |    |
| APVD | J HENRY    |   |         |                            |    |    |
|      |            | NO.   | DATE    | REVISION                   | BY |    |

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Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE  
SOUTH SECTION ONE

EROSION CONTROL AND EASEMENT PLANS  
**MISCELLANEOUS PARTIAL PLANS**

|       |              |
|-------|--------------|
| SHEET | 59A          |
| DWG   | S1-EC-12     |
| DATE  | JULY 2011    |
| PROJ  | 171473.20.SP |







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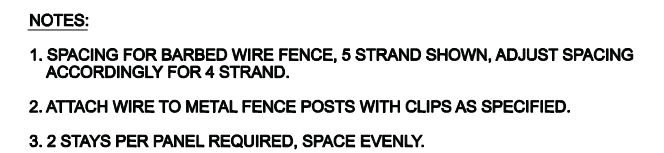
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**WIRE FENCE**  
NTS

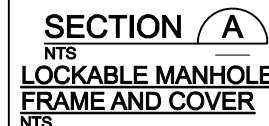
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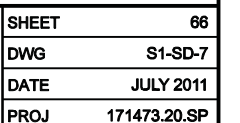
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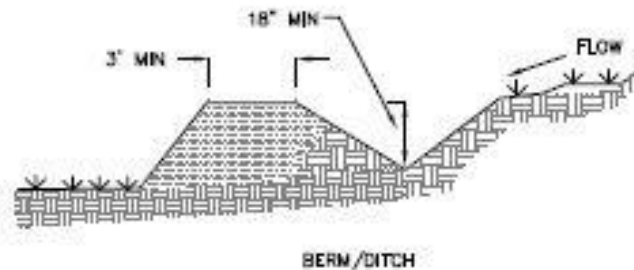
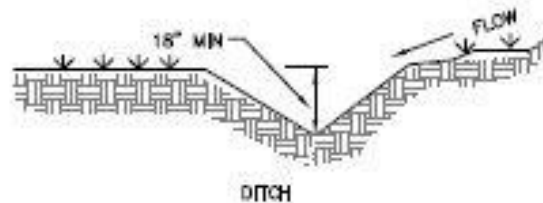
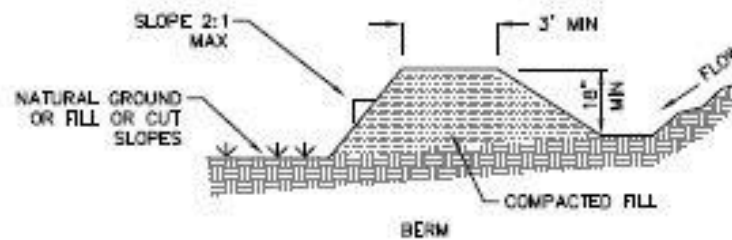
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## TEMPORARY DIVERSION BERM/DITCH DETAIL

### NOTES:

1. MACHINE COMPACTION OF ALL FILL IS REQUIRED. DIVERSIONS SUFFICIENT TO DIRECT ALL SEDIMENT-LADEN STORMWATER INTO A SEDIMENT CONTROL DEVICE MUST BE INSTALLED PRIOR TO CLEARING AND GRUBBING OF THE AREA (OR IN CONJUNCTION WITH THIS OPERATION IF SEDIMENT CONTROLS AND DIVERSIONS ARE INSTALLED AS EACH CRITICAL POINT IS REACHED).
2. DIVERSIONS SHOULD BE LOCATED TO MINIMIZE DAMAGES BY CONSTRUCTION OPERATIONS.



### NOTE:

POSITIVE GRADE MUST BE PROVIDED TO ASSURE DRAINAGE. IF SLOPE EXCEEDS 2% SEED AND MULCH DIVERSION. TRY NOT TO EXCEED 5% (HIGH VELOCITIES RESULT). MAXIMUM DRAINAGE AREA = 5 ACRES WITHOUT SUPPORTING CALCS. DIVERSIONS AT THE TOP OF SLOPES MUST EMPTY INTO AN APPROVED SLOPE DRAIN. BERM/DITCH IS MOST COMMONLY USED.

| REVISIONS |             |
|-----------|-------------|
| DATE      | DESCRIPTION |
|           |             |
|           |             |
|           |             |

**Stormwater Management Plan**

***SOUTHERN DELIVERY SYSTEM***

**Raw Water Pipeline**

**South Section Three (S3)**

Colorado Springs Utilities

Location of Construction Site:

North of Pueblo West to the Pueblo County/  
El Paso County Line  
Pueblo County, CO  
Sec. 5, 8, 17, 20, 29, 32, T18S, R65W  
Sec. 5, 8, T19S, R65W

Key Contact:  
Keith Riley  
Planning & Permitting Program Manager  
Colorado Springs Utilities  
(719) 668-8677

Written by:  
CH2M HILL, Inc.

November 2011

Received by Department of  
Planning & Development  
January 4, 2011

**APPLICANT INFORMATION**

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SDS Project  
Keith Riley  
P.O. Box 1103, MC 930  
Colorado Springs, CO 80947-0930

Prepared by: CH2M HILL  
90 S. Cascade Avenue, Suite 700  
Colorado Springs, CO 80903

SWMP Administrator: Stephanie Smeltzer  
QA/QC Manager and Environmental Representative  
Reynolds, Inc.  
1775 East 69<sup>th</sup> Avenue  
Denver, Colorado 80229

Contractor Information: Reynolds, Inc.  
1775 East 69<sup>th</sup> Avenue  
Denver, Colorado 80229

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Attachment #1 - Directions for On-Site Fuel Transfers

Attachment #2 – Inspection Form

Exhibit A – Site Map and Grading and Erosion Control Plan Drawings



## **Foreword**

This Stormwater Management Plan (SWMP) identifies potential sources of pollution (including sediment) which may reasonably be expected to affect the quality of stormwater discharges associated with the construction of the Raw Water Work Package South Section 3 (S3) portions of the Southern Delivery System (SDS) Project. In addition, the plan describes and ensures the implementation of Best Management Practices (BMPs) which will be used to reduce pollutants in stormwater discharges associated with construction activity. The BMPs will be implemented before construction and grading begins.

Colorado Springs Utilities and Contractor personnel will be familiar with this plan and its contents prior to initiating construction on the project. A copy of this document will be kept on site at all times.

## **Project Description**

### ***Site Description***

The S3 project area is located within Pueblo County, Colorado, beginning at the north end of Pueblo West and ending at the Pueblo County / El Paso County line. The pipeline will parallel an existing Fountain Valley Authority (FVA) easement for approximately 2,640 feet until the FVA easement turns in a northwest direction towards a FVA Pump Station. The pipeline then parallels an existing Xcel Energy overhead electrical easement for approximately 4.8 miles before reaching the Midway Ranches residential subdivision. The majority of the construction area is located within privately owned lands primarily composed of grasses and weeds. In some areas, in-street and open-cut construction will occur where S3 passes through private roadways within the Midway Ranches Subdivision. These roads include Antelope Road, Pronghorn Road, and Salt Cedar Road. The entire project area is relatively flat with intermittent drainages interspersed throughout the project area. The S3 project will cross the Steele Hollow drainageway in the central portion of the work package alignment. Construction in this area will be open-cut and will require special stabilization after construction is complete. Final design of this area is not yet complete, therefore specific stabilization measures have not been identified at this time. Upon completion of the Steele Hollow crossing design, the SWMP will be updated as necessary to address BMPs and final stabilization measures that will be taken in that area.

### ***Description of the Construction Activity***

Colorado Springs Utilities has received approval to construct the SDS Project from various regulatory agencies. The SDS Project will provide future water needs through 2046 to the City of Colorado Springs, City of Fountain, Security Water District, and the Pueblo West Metropolitan District (the SDS Participants). The entire water conveyance system will run from the Pueblo Reservoir Dam to the City of Colorado Springs.

S3 consists of the installation of approximately 7.59 miles of 66-inch diameter welded steel pipeline (see **Exhibit A**). Construction of S3 is scheduled to commence in late-2011.

### *Phasing and Sequencing of Major Activities*

The work limits will be cleared and grubbed of obstructions and vegetation such as brush, logs, and stumps to prepare a level working surface. Examples of pipeline construction equipment that may be used during pipeline construction generally includes trucks, loaders, graders, excavators, backhoes, trenchers, side-booms, welding and testing supplies, and pickups. Trench spoil will be temporarily excavated and stockpiled to one-side of the trench.

Topsoil will be salvaged before trenching and stockpiled within the work limits. Salvaging of topsoil will be used to assist in the final revegetation and stabilization process at the completion of the pipeline construction activities.

The standard open cut construction method will be used to install the pipeline segments. This work consists of clearing, trenching, pipe installation, welding, weld testing, interior joint lining, exterior joint coating, backfilling, compacting, hydrostatic testing for leakage, cleanup, and restoration.

Imported granular material and controlled low strength material (CLSM, or flowfill) will be used for pipe bedding and pipe zone backfill depending upon local soil conditions in the trench. Native material from excavations will be used as trench backfill above the pipe zone. Compaction will meet the requirements defined in the specifications.

Grading may be performed if necessary to level the ground surface to permit transit and operation of vehicles and equipment, but surface grades will be generally restored to pre-project contours at the end of construction.

#### *Stage 1: Pre-Construction*

Stormwater runoff from the site is at undeveloped levels. From field observations, erosion is minimal from the existing vegetative cover. Initial erosion control facilities will be installed at the pre-construction stage. Site perimeter erosion controls, such as silt fence and compacted soil berms, will be placed down-gradient of the work limits to prevent sediment runoff. Construction entrances will be installed to reduce or prevent material from being transmitted to and from paved surfaces. Rock check dams will be constructed where indicated on the drawings included in **Exhibit A**.

Duration of this phase is anticipated to be 1 to 2 weeks, but may be impacted by construction phasing.

#### *Stage 2: Clearing and Grubbing*

Clearing and grubbing will be performed within the project work limits to non-paved/improved surfaces. There are no large trees in the project corridor. Existing topsoil will be excavated, temporarily stockpiled, and protected from erosion as appropriate for use in later re-establishing permanent vegetation.

BMPs will be implemented prior to clearing and grubbing. Typical BMPs are included in **Exhibit A**.

Duration of this phase is anticipated to be 2 to 4 weeks, but may be impacted by construction phasing.

*Stage 3: Active Construction*

Trenching will be performed with equipment such as excavators, backhoes, loaders, or similar equipment. Trenching activities will be performed in accordance with the construction documents and standard engineering practices. The trench will be excavated to sufficient depth to provide adequate cover over the pipeline and to a width between 8.5 and 10 feet wide and sloped as required for safety. The spoil bank from the trenching operations will be maintained free of foreign materials. Where the pipeline crosses public roadways, a trench crossing will be constructed.

A temporary dedicated controlled low strength material (CLSM) batch plant will be utilized within the construction staging area in the northern portion of the S3 project area during construction. The CLSM produced with the batch plant will be used as a backfill material associated with the pipeline installation process. Permits including a CDPHE Air Pollution Emission Notice (APEN) and Construction Permit for Concrete Batching Plants, and a Pueblo County Special Use Permit for Concrete Batch Plants, will be obtained prior to operation of the plant equipment.

Backfilling of the trench will be performed using appropriate methods to minimize impacts to the right-of-way and to minimize soil disturbance. When backfilling on hillsides or sloping ground, furrows or terraces may be constructed across the pipeline trench to direct the flow of water into natural drainages. Existing drainage ditches will be maintained and left unobstructed to prevent the ponding of water against the spoil bank or backfill crown.

Interim erosion control facilities will be installed as construction progresses. Identified BMPs for stormwater pollution prevention are discussed further below.

Duration of this phase is anticipated to be up to 12 months, but may be impacted by construction phasing.

*Stage 4: Site Stabilization*

Permanent erosion control measures will be installed immediately after substantial completion of pipeline installation. Disturbed areas will be seeded and mulched. Once all areas of the site are stabilized via seeding and mulching, temporary sediment control measures will be removed from the site. The post-construction stormwater management measures, including seeding and mulching, will be installed at the end of the construction process to control stormwater discharges after construction operations have been completed. These facilities will be monitored and maintained for a period of 2 years after construction or until 90% of pre-existing vegetation has been re-established.

Duration of this phase is anticipated to be up to 2 years following active construction.

## **Estimates of the Total Disturbance Area**

The entire area to be impacted for this portion of the project is approximately 140 acres. This includes any potential construction or staging areas outside of the work area for S3. Although not all of the disturbed area will be cleared and graded at once, up to 140 acres of ground disturbing activities may occur.

## **Soils Information**

The surficial soils consist of shale, silty sand, lean clay, sandy lean clay, lean clay with sand, widely graded sands with clay and gravel, and clayey sand. These soils are associated with Post-Piney Creek and Piney Creek Alluvium, Older Stream Terrace Deposit, and Colluvial and Residual Bedrock Deposits.

The geology within the Steele Hollow area (approximately Sta. 1015+00), consists of colluvial and residual bedrock soils overlying Pierre Shale bedrock. The surficial soils in this area consist of clay with sand. The unnamed drainageway north of Steele Hollow, near Sta. 1043+00, consists of approximately greater than 30 feet of alluvial soils. The surficial soils consist of silty sand over sandy clay and clay with sand. The sandy soils are loose, fine to coarse-grained sands. The northern most unnamed drainageway near Sta. 1132+00 consists of colluvial and residual bedrock soils overlying Pierre Shale bedrock. The surficial soils consist of predominantly clayey sand. The sandy soils are fine to coarse grained.

## **Existing Vegetation Information**

The S3 project area is located parallel to an existing utility easement through Pueblo County, Colorado. Several intermittent drainages cross the generally level plains of the project area.

Native uplands cover most of the project area dominated by blue grama (*Chondrosum gracile*), western wheatgrass (*Pascopyrum smithii*), galleta grass (*Hilaria jamesii*), prickly pear (*Opuntia polyacantha*) and a variety of other grasses and forbs. The tall cholla cactus (*Cylindropuntia imbricata*) is scattered throughout the grasslands with dense patches occurring on ridges and hillslopes. The southern portion of the project area consists of a salt flat with small drainage channels and flow lines showing that water occasionally (but not frequently) flows across this broad flat area. Four-wing salt brush (*Atriplex canescens*) prickly pear cactus, alkali sacaton (*Sporobolus airoides*), and a variety of other shrubs, forbs, and grasses are sparsely scattered across this salt flat. Steele Hollow and an unnamed drainage located in the central and northern portion of the S3 project area are steep-sided gullies. Salt cedar (*Tamarisk* sp.) densely cover the bottom of the gullies with an understory ranging from no vegetation to patches of western wheatgrass, blue grama, barnyard grass (*Echinochloa crus-galli*), and other herbaceous species.

Pueblo goldenweed (*Oonopsis puebloensis*) was found in the upland native shrubland salt flats at the southern end of the project area and is listed by the Colorado Natural Heritage Program as imperiled in Colorado. This species is closely related to another goldenweed, Leafy false goldenweed (*Oonopsis foliosa* subsp. *foliosa*), that also occurs in the area. One of the main characteristics distinguishing the two species is that the bracts around the flower-heads are bent backward in Pueblo goldenweed and not bent as strongly in leafy false goldenweed. Many of the

goldenweed plants were not flowering at the time the vegetation survey was completed and no determination could be made about which species an individual plant belonged to. Goldenweed often occurs in moister areas at the bottom of shallow rivulets where water had previously flowed, although it can also occur scattered across the salt flat. Only a small portion of the goldenweed population (totaling 50 plants) was found in the project area, mostly on the western edges. Larger numbers of goldenweed were found west of the project area.

## **Other Potential Pollution Sources**

Other potential pollution sources include spills, particularly those resulting from vehicle or equipment leaks or refueling incidents. Stationary equipment and materials with an identified spill potential will be contained within secondary containment structures to prevent and contain the spill or release of materials.

Vehicles will be inspected for leaks prior to being brought on site. Construction equipment requiring maintenance that might result in the draining or leaking of fluids will be serviced only when appropriate containment measures have been installed. Details regarding refueling and site controls can be found in the project specifications Section 01 57 22 – Temporary Stormwater Pollution, Erosion and Sediment Control.

Designated containers will be provided to facilitate the regular disposal of garbage, rubbish, construction wastes, and other waste. The trash containers will be maintained during construction. No wastes or imported materials will be buried or dumped on site.

Increased levels of dust/particulates may be generated by the construction activities associated with this site. Fugitive dust emissions resulting from construction activities will be regulated under the Colorado Department of Public Health and Environment's (CDPHE) Land Development General Construction Permit. The Contractor will take appropriate measures on site to control the level of fugitive dust emissions associated with the project.

Details regarding the control of noxious weeds on site can be found in the Project Specifications Section 01 57 17 – Temporary Weed Control.

## **Material Handling and Spill Response Information**

The Contractor will prepare a Spill Response plan for the project prior to construction commencing. The discharge of hazardous substances or oil in stormwater discharges from the construction site must be prevented or minimized in accordance with the Contractor's Spill Response plan. Details regarding the fueling of vehicles or transfer of fuels are described in **Attachment #1**.

Appropriate containment will be installed to protect chemicals, paints, solvents, fuel, lubricating oils, and other potentially toxic or hazardous materials from stormwater runoff. Spills of liquid or dry materials that have occurred will be promptly cleaned up. Spills of toxic or hazardous material at or above reportable quantities will be reported to the appropriate federal, state, or local government agency.

Hazardous materials or products will be properly contained and disposed of in accordance with applicable laws, rules, and regulations. No wastes or imported materials will be buried, dumped, or discharged to Waters of the U.S.

## **Other Controls**

The following control measures and good housekeeping practices may be implemented to prevent or minimize potentially-polluting construction materials from contact with stormwater:

- Construction areas and unpaved roads will be sprayed with water or tackifier, as needed, to reduce the effects of wind erosion and to control fugitive dust. Conditions will be monitored throughout construction and these areas will be re-sprayed, as needed;
- If any measurable quantity of sediment is discharged from the construction area as a result of structural failure or lack of designed capacity of temporary erosion control measures, the sediment will be cleaned up as soon as practicable and replaced within the right-of-way, easement or work limits, or properly disposed of in a manner approved by the general permit;
- Construction equipment and vehicles will be inspected for leaks, and necessary repairs will be made before returning the equipment to service. Equipment will be cleaned and inspected and no leaking equipment will be allowed on the worksite, including staging areas;
- Wash-down areas protected from stormwater runoff will be provided for construction equipment and vehicle cleanup;
- Regular disposal of garbage, rubbish, construction wastes, and sanitary waste will be maintained at all times during construction;
- Portable chemical toilets will be provided by Contractor at the staging area. Sanitary waste will be collected and removed for disposal at regular intervals to an appropriate licensed sewage disposal facility. No sewage will be buried, dumped or discharged to Waters of the U.S.

## **Non-Stormwater Discharges**

Construction trench dewatering and hydrostatic test dewatering are the only identified potential non-stormwater discharges that are anticipated to occur on the project area during construction. These discharges will be permitted under the appropriate CDPHE permit(s) as needed.

## **Receiving water(s)**

The nearest receiving water is Steele Hollow which is crossed by the pipeline project. There are two other smaller unnamed drainageways north of Steele Hollow. No discharge will go to municipal storm sewers. The ultimate receiving water is Fountain Creek, which discharges to the Arkansas River.

## **Site Map(s)**

Site maps (Key Plans) and erosion control plan drawings are included in **Exhibit A**. These maps and drawings show the general location of S3 and the specific types and locations of stormwater BMPs.

## **BMPs for Stormwater Pollution Prevention**

### ***Erosion and Sediment Controls***

Erosion controls limit the amount and rate of erosion occurring on disturbed sites. Sediment controls are generally designed to retain sediment on-site to the extent feasible. During construction, BMPs will be employed as identified on the maps and drawings associated with this SWMP (**Exhibit A**) and as deemed necessary to reduce erosion and control sediment on the disturbed areas.

The Contractor will designate a SWMP Plan Administrator and that person will be responsible for ensuring that appropriate control measures are installed and maintained in all areas. The SWMP Plan Administrator will maintain status reports and appropriate records for compliance with permit requirements imposed by federal, state, or local agencies.

Control measures will be properly selected, installed, and maintained in accordance with relevant manufacturer specifications and good engineering practices to control the effects of erosion caused by stormwater runoff. In most cases, a combination of vegetative, structural, and stormwater management practices are used to control erosion and transport of sediment.

Selection of appropriate erosion control materials will be based on soil properties, steepness of the slope, and anticipated surface flow or runoff. In general, wattles and/or silt fence will be the appropriate control measures to be used for sediment and erosion control during construction in the vicinity of drainage crossings or adjacent to roadways. As conditions require, other control measures may be considered. As site and weather conditions vary throughout the project, these decisions will be made on a site specific basis.

Temporary BMPs will be removed during finalization of the project.

### ***Structural Practices***

#### ***Silt Fencing***

Silt fence is a temporary sediment barrier made of woven, synthetic fabric supported by wood or metal posts. The bottom portion of the silt fence should be trenched in and compacted, as shown on the technical drawing in **Exhibit A**, so that fencing filter fabric is buried and cannot be easily pulled out by hand. Where joints are required, silt fence should be spliced together at a supporting post with appropriate overlap and securely sealed.

Silt fence guidance, installation techniques, and locations can be found in **Exhibit A**.

#### ***Continuous Berm***

Continuous berms are temporary sediment barriers consisting of compacted in situ soil berms and sediment control logs. The compacted in situ soil berms are 18-inches high and generally consist of a ridge of compacted soil which intercepts and diverts runoff from construction areas. Berms intercept flow from the construction area and direct it to temporary slope drains or to outlets where it can be safely discharged. They are used to direct or divert runoff flows, or as

barriers to collect and store runoff. Sediment control logs are 100% biodegradable and installed at minimum 200-foot increments to allow flow through the continuous berm. The sediment control logs are embedded in a 2-inch trench and staked per the manufacturer's recommendations. The sediment control logs are 20-inches nominal diameter.

Continuous berm details and locations can be found in **Exhibit A**.

#### *Construction Entrances*

Temporary gravel or paved construction entrances to paved roads will be installed at access points to paved public roadways to prevent or minimize tracking of mud, dirt, sediment, or similar materials onto the roadway. Deposits that have been tracked by vehicles or have been transported off the right-of-way by wind or stormwater will be promptly cleaned up.

Construction entrance guidance, installation techniques, and locations can be found in **Exhibit A**.

#### *Straw Bales*

A straw bale barrier is a linear wall of straw bales designed to intercept sheet flow and trap sediment before runoff exits a disturbed area. All straw bales must be certified as weed free. Straw bale barriers should not be used in areas where ponding is not desirable. Staking of bales is required and stakes should be driven into the ground at the spacing and depth indicated on the technical drawing in **Exhibit A**. Sediment accumulated behind the bale should be removed when the sediment reaches one-quarter of the bale height. Bales should be checked for degrading and replaced as necessary.

Straw bale guidance, installation techniques, and locations can be found in **Exhibit A**.

#### *Rock Check Dam*

A check dam is a rock dam that is constructed in a drainage swale to reduce flow velocities in order to minimize erosion. Detailed installation instructions and the sizing of riprap required for check dams are located on the technical drawings in **Exhibit A**. Sediment accumulated upstream of check dams should be removed when the sediment depth upstream of the check dam is within half of the height of the crest or when debris accumulation compromises the effectiveness of the feature.

Check dam guidance, installation techniques, and locations can be found in **Exhibit A**.

#### *Erosion Control Blankets*

An erosion control blanket is a fibrous mat of straw, excelsior, or coconut material trenched in and staked down over prepared soil and/or seedbed. The matting serves to stabilize disturbed areas by promoting vegetative growth and reducing both wind and water erosion. All erosion control blankets and netting should be made of 100% natural and biodegradable, weed free material. Blankets should be oriented correctly, with seams and secured with staples, stakes, or



pins as indicated in **Exhibit A** and the manufacturer's specs. Erosion control blankets should be used on slopes greater than 33%.

As currently planned, no erosion control blankets are planned to be used for the construction of S3. However, should erosion control blankets be necessary due to potentially changing site conditions and/or contractor preference, guidance and installation techniques can be found in **Exhibit A**.

#### *Rock Socks*

A rock sock is constructed of gravel that has been wrapped by wire mesh or a geotextile to form an elongated cylindrical filter. Rock socks are intended to trap sediment from stormwater runoff that flows onto roadways as a result of construction activities.

Rock socks are susceptible to displacement and breaking due to vehicle traffic. Inspect rock socks for damage and repair or replace as necessary. Remove sediment by sweeping or vacuuming as needed to maintain the functionality of the BMP, typically when sediment has accumulated behind the rock sock to one-half of the sock's height. Installation instructions are located on the technical drawings in **Exhibit A**.

#### *Concrete Washout Area*

Concrete washout areas are excavated depressions used to contain waste concrete and/or concrete wash water. The containment area will be excavated and constructed as indicated in **Exhibit A**. The excavated material will be used to construct berms around the containment area. The location of the concrete washout area will be clearly marked and a ramp or construction entrance will be installed at the entrance to the washout area.

The containment area will be cleaned out once it is 2/3 full or as necessary to maintain capacity for waste concrete. At the end of construction, concrete will be removed from the containment area and properly disposed of at an approved waste disposal location. The excavated area will be backfilled and reclaimed per landowner or agency requirements. Concrete wash water shall not be discharged to or allowed to runoff to Waters of the U.S., including surface or subsurface storm drainage systems or facilities.

Concrete washout area guidance, installation techniques, and locations can be found in **Exhibit A**.

#### *Non-Structural Practices*

Minimizing the area being disturbed at any given time is one of the most effective erosion control measures available. Therefore, during clearing and construction activities, efforts will be made to preserve existing vegetation by clearing the construction area to a minimum width that is necessary for safe and efficient construction. Before any other BMPs are to be installed, the limits of the construction area will be clearly identified via silt fence where required, orange safety fence or other appropriate markings to preserve existing vegetation.

## SWMP Revision Procedures

Typically, some BMPs will have to be added or modified to adapt to changing environmental conditions and construction phases. The Contractor's SWMP Administrator shall determine the changes needed to reflect actual field conditions. In some cases, BMPs may need to be rebuilt, replaced, moved, or added. Changes will be addressed with the CDPHE, as applicable. This plan must be revised when/if changes are necessary in accordance with the Colorado Discharge Permit System (CDPS) General Permit for Stormwater Discharges Associated with Construction Activity (Permit No. COR-030000).

## Final Stabilization and Long-term Stormwater Management

After construction activities have been completed, the areas where soil has been disturbed will be restored as close to pre-construction grade, contours, compaction, and other conditions as possible. Stabilization measures, including seeding and mulching, will be implemented after final grade has been reached. Final stabilization and permanent seeding will be the responsibility of the Programs' Revegetation Contractor. The Revegetation Contractor will use an approved seed mix that is appropriate for the specific project area. The following permanent seed mixes will be used for S3:

### Native shortgrass seed mix

| Common Name, Variety      | Scientific Name                     | Lbs PLS/<br>Acre* | % Lbs PLS  |
|---------------------------|-------------------------------------|-------------------|------------|
| Galleta grass, Viva       | <i>Hilaria (Pleuraphis) jamesii</i> | 4                 | 35         |
| Blue grama, Hachita       | <i>Bouteloua gracilis</i>           | 0.8               | 5          |
| Vine mesquite             | <i>Panicum obtusum</i>              | 1.5               | 15         |
| Sideoats grama, Vaughn    | <i>Bouteloua curtipendula</i>       | 3                 | 25         |
| Alkali sacaton, Salado    | <i>Sporobolus airoides</i>          | 0.4               | 5          |
| Western wheatgrass, Walsh | <i>Pascopyrum smithii</i>           | 2                 | 15         |
| <b>Totals</b>             |                                     | <b>11.7</b>       | <b>100</b> |

\*Seeding rate is for drill seeding. If the seed is broadcast, double the rate.

### Native seed mix for sandy areas.

| Common Name, Variety       | Scientific Name                | Lbs PLS/<br>Acre* | % Lbs PLS     |
|----------------------------|--------------------------------|-------------------|---------------|
| Blue grama, Alma           | <i>Bouteloua gracilis</i>      | 0.6               | 5.61          |
| Sand dropseed              | <i>Sporobolus cryptandrus</i>  | 0.1               | 0.93          |
| Little bluestem, Pastura   | <i>Schizachyrium scoparium</i> | 2                 | 18.69         |
| Slender wheatgrass, native | <i>Elymus trachycaulus</i>     | 2                 | 18.69         |
| Switchgrass, Nebraska 28   | <i>Panicum virgatum</i>        | 1.5               | 14.02         |
| Western wheatgrass, Barton | <i>Pascopyrum smithii</i>      | 2.5               | 23.36         |
| Sideoats grama, El Reno    | <i>Bouteloua curtipendula</i>  | 2                 | 18.69         |
| <b>Total</b>               |                                | <b>10.7</b>       | <b>100.00</b> |

\*Seeding rate is for drill seeding. If the seed is broadcast, double the rate.

No solid waste, trash, or vegetative debris will be buried onsite. As final cleanup is completed, appropriate tillage will be conducted on all areas occupied during construction in order to relieve soil compaction. Compacted areas will be decompacted with a scarifier prior to topsoil replacement and seeding.

Temporary seeding will be completed within 30 days of initial soil exposure or 7 days after grading is substantially completed. Permanent seeding and planting of disturbed areas will be conducted during the first normal period of favorable seeding and planting conditions after final preparation for seeding and planting.

Final stabilization will be defined to have occurred when surface disturbing activities have been completed and a uniform vegetative cover has been established with an individual plant density of 90% of pre-disturbance levels.

### **Inspections, Maintenance, and Recordkeeping**

During use of the site, the Contractor's SWMP Administrator shall inspect disturbed areas and BMPs. At a minimum, inspections will be conducted once every 14 calendar days and within 24 hours after the end of any precipitation or snow melt event that causes surface erosion. After final clean up of the site, inspection will continue as necessary until the project area is stable and BMPs have been removed.

Inspections will include disturbed areas of the site and areas used for storage of materials that are exposed to precipitation. Inspectors must look for evidence of, or the potential for, pollutants entering the stormwater conveyance system. Sediment and erosion control measures identified in the plan must be observed to ensure proper operation.

Sediment will be removed from sediment traps when capacity of control is reduced by 50 percent. Rock will be added where thickness of the construction entrance is reduced. BMPs will be replaced or rebuilt once they are observed to be nonfunctional, generally within 24 hours.

An inspection report will be prepared and signed by the Contractor's SWMP Administrator following each inspection and will be certified in accordance with permit requirements. This report must include any spills, leaks, or overflows that may have resulted in a discharge of pollutants. The reports will include information on any corrective actions taken to prevent further incidents, and a description detailing any environmental impact that may have occurred. Inspection forms will be kept on site at all times during construction. A copy of the Inspection Form is located in **Attachment #2**.

After final stabilization of the site and it has been determined that the project area has regained 90% of the background cover, a Notice of Termination (NOT) can be filed for appropriate state permits. Copies of records and information resulting from monitoring activities required by this permit will be retained by Colorado Springs Utilities for a minimum of 3 years.

**ATTACHMENT #1**  
**Directions for On-Site Fuel Transfers**

**This procedure should be readily available to facility personnel involved in product transfer operations or on display in the transfer areas.** In order to minimize the potential for a spill during fuel transfers and to be prepared in the event of a spill, the following measures are to be followed (includes minimum DOT regulations that shall be followed during loading/unloading of fuel):

1. Keep fire away while loading/unloading. Persons in the vicinity are forbidden to smoke, light matches, or carry any flame or lighted cigar, pipe, or cigarette. 49CFR 177.834(c, d)
2. Fuel shall not be loaded/unloaded from any motor vehicle while the engine is running. The exception is when the engine of the vehicle is to be used in the operation of the pump. 49CFR 177.837(a)
3. The supply truck driver shall notify a facility representative when arriving on site.
4. The tank records shall be reviewed to determine the theoretical tank level. 7CCR 1101-14 S2-3-1 & S2-4-2(a)(2)
5. The tank level gauge will be inspected to determine the actual tank level before unloading takes place. (Note: Any tank level discrepancies will be resolved prior to hooking up to the tank.) 7CCR 1101-14 S2-3-1 & S2-4-2(a)(2)
6. The supply truck driver shall observe the transfer during the entire operation. 49CFR 177.834(i)(2)
7. Sufficient secondary containment surrounding the truck shall be available; or enough containment boom to surround the truck shall be available in the immediate area.
8. Once the truck is in position, its emergency brake will be applied and reasonable precautions will be taken to prevent motion of the truck during unloading. 49CFR 177.834(e) (Example – utilize wheel chocks when parked on an incline.)
9. Signs must be posted that remind drivers **NOT** to pull away before detaching hoses. 40CFR 112.7(h)(3)
10. Containers and cargo tanks shall be grounded prior to and during transfer. 49CFR 177.837(b) & (c)
11. All outlets to the vehicle and tank and the transfer line shall be checked for leakage. Any problems shall be fixed prior to hooking up any lines.
12. A drip pan shall be placed under the outlet of the fuel truck transfer line.
13. The transfer line must be properly engaged at each end before opening any valves.
14. Checks for leaks must be conducted after starting the transfer. Any leaks must be corrected before continuing the transfer.
15. All valving must be properly shut off prior to disengaging the transfer line.
16. The transfer line must be properly disengaged and the valves and piping of both the tank and truck must be checked for leaks before allowing the truck to leave the site. (40CFR 112.7 h(4) for trucks)
17. In the event of a spill, immediately shut down the transfer system and contact the supervisor in charge (call 911, as needed).

**ATTACHMENT #2**  
**STORMWATER MANAGEMENT INSPECTION FOR LOCATION**  
**BI-WEEKLY INSPECTION LOG**

Complete this inspection every 14 days and after any precipitation event that may have resulted in an erosion problem. Keep the original in the SWMP file. Refer to the site Stormwater Management Plan (SWMP) for site specifics.

**Outfall**

**Yes**

**No**

- Is there a discharge from the site? \_\_\_\_\_
- Is there any evidence of oil or grease (or other) contamination? \_\_\_\_\_  
(If contamination is evident, collect a water sample and investigate for the contamination source.)

**Site**

- General condition of the area:  
\_\_\_\_\_  
\_\_\_\_\_
- Condition of erosion control measure(s) & needed repairs or changes:  
\_\_\_\_\_  
\_\_\_\_\_
- Are there any notable erosion problems? \_\_\_\_\_  
If so, are there any erosion control actions needed (describe)?  
\_\_\_\_\_  
\_\_\_\_\_
- Results of previous erosion corrective action(s):  
\_\_\_\_\_  
\_\_\_\_\_
- Any other observation of things that may result in an impact to the quality or quantity of the water discharge from this site?  
\_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_ Date & Time: \_\_\_\_\_

Inspector: \_\_\_\_\_

EXHIBIT A

**Site Maps and Grading and Erosion Control Plan Drawings  
(attached)**

GENERAL NOTES

1. STATIONING AND DISTANCES SHOWN ON THE DRAWINGS ARE BASED ON HORIZONTAL MEASUREMENTS AND EXPRESSED IN STATE PLANE GRID DISTANCES. CROSS SECTIONS, CROSSING DETAILS, AND REFERENCES TO LEFT AND RIGHT ON THE DRAWINGS ASSUME LOOKING IN THE DIRECTION OF INCREASING STATION ALONG PIPELINE ALIGNMENT.
2. UNLESS OTHERWISE NOTED, PIPE ELEVATIONS SHOWN ARE CENTERLINE ELEVATIONS.
3. LAY PIPE TO UNIFORM GRADE BETWEEN INDICATED ELEVATION POINTS AND IN ACCORDANCE WITH SPECIFICATION SECTION 33 05 01 02, WELDED STEEL PIPE AND FITTINGS - WELD BEFORE BACKFILL.
4. PIPELINE VERTICAL DEFLECTIONS UP TO SIX (6) DEGREES MAY BE MADE USING BEVELED END JOINTS. INDIVIDUAL BEVELED JOINT DEFLECTIONS SHALL NOT EXCEED THREE (3) DEGREES. MAINTAIN PIPE CENTERLINE AT OR BELOW ELEVATIONS SHOWN ON PLAN AND PROFILE DRAWINGS. MAINTAIN MINIMUM CLEARANCE WITH CROSSING UTILITIES.
5. THE CONSTRUCTION WORK LIMITS ARE SHOWN ON THE DRAWINGS. CONFINE CONSTRUCTION ACTIVITIES WITHIN WORK LIMITS.
6. LIMITS OF CONSTRUCTION THAT DO NOT HAVE TEMPORARY CONSTRUCTION EASEMENTS OR PERMANENT EASEMENTS OR DESIGNATED WORK LIMITS ARE LIMITED TO PUBLIC RIGHT-OF-WAY. COORDINATE/ESTABLISH CONSTRUCTION LIMITS WITH PUBLIC ENTITIES.
7. INSTALL CONSTRUCTION WORK LIMIT FENCING AS NOTED ON THE DRAWINGS OR AS DIRECTED BY CONSTRUCTION MANAGER. DO NOT INSTALL WORK LIMIT FENCING ACROSS ROAD RIGHT-OF-WAY.
8. INSTALL CONSTRUCTION WORK LIMIT FENCING 7 DAYS PRIOR TO CONSTRUCTION ACTIVITIES INCLUDING TRAVEL FROM ONE LOCATION TO ANOTHER WITHIN WORK LIMITS. PROVIDE AND MAINTAIN WORK LIMIT FENCE THROUGHOUT THE CONSTRUCTION PERIOD. OBTAIN CONSTRUCTION MANAGER'S WRITTEN PERMISSION PRIOR TO REMOVAL OF WORK LIMIT FENCING.
9. LOCATIONS OF COMBINATION AIR VALVE VAULTS, ACCESS MANWAYS, AND BLOWOFF STRUCTURES ARE SHOWN ON THE DRAWINGS. NO CHANGES IN LOCATIONS ARE ALLOWED EXCEPT AS APPROVED BY THE ENGINEER AND IN ACCORDANCE WITH SPECIFICATION SECTION 33 05 01 02 WELDED STEEL PIPE AND FITTINGS - WELD BEFORE BACKFILL.
10. PROVIDE TRENCH PLUGS WHERE SHOWN AND AS DIRECTED BY CONSTRUCTION MANAGER.

SURVEY CONTROL

| POINT NAME     | NORTHING    | EASTING     | ELEVATION | DESCRIPTION   |
|----------------|-------------|-------------|-----------|---|
| CLEVANGER      | 1248315.200 | 3249105.975 | 5204.01   | STAINLESS STEEL ROD WITH ACCESS LID STAMPED "CLEVANGER 1991"  |
| CORRAL BLUFFS  | 1378767.054 | 3258121.280 | 6788.15   | USCGS TRIANGULATION DISK STAMPED "CORRAL BLUFFS 1879"         |
| PUEBLO-CBL-973 | 1176842.746 | 3266338.244 | 4946.93   | NGS BRASS DISK STAMPED "CALIBRATION BASELINE 973 1983 U.S.C." |
| SDS-1          | 1365675.811 | 3249458.429 | 6184.90   | 3.25" ALUMNUM CAP STAMPED "SDS 1"                             |
| SDS-2          | 1356851.864 | 3249088.332 | 6053.21   | 3.25" ALUMNUM CAP STAMPED "SDS 2"                             |
| SDS-3          | 1346767.071 | 3250590.865 | 5997.82   | 3.25" ALUMNUM CAP STAMPED "SDS 3"                             |
| SDS-4          | 1334963.226 | 3253584.921 | 5829.49   | 3.25" ALUMNUM CAP STAMPED "SDS 4"                             |
| SDS-5          | 1319525.733 | 3251004.267 | 5727.36   | 3.25" ALUMNUM CAP STAMPED "SDS 5"                             |
| SDS-6          | 1311290.495 | 3249115.118 | 5640.77   | 3.25" ALUMNUM CAP STAMPED "SDS 6"                             |
| SDS-7          | 1275980.612 | 3244487.619 | 5329.01   | 3.25" ALUMNUM CAP STAMPED "SDS 7"                             |
| SDS-8          | 1272438.655 | 3234306.298 | 5465.33   | 3.25" ALUMNUM CAP STAMPED "SDS 8"                             |
| SDS-9          | 1262622.927 | 3233038.574 | 5463.03   | 3.25" ALUMNUM CAP STAMPED "SDS 9"                             |
| SDS-10         | 1249942.257 | 3232117.619 | 5304.13   | 3.25" ALUMNUM CAP STAMPED "SDS 10"                            |
| SDS-11         | 1240330.711 | 3232286.734 | 5468.25   | 3.25" ALUMNUM CAP STAMPED "SDS 11"                            |
| SDS-12         | 1225582.343 | 3231669.126 | 5320.70   | 3.25" ALUMNUM CAP STAMPED "SDS 12"                            |
| SDS-13         | 1210803.056 | 3231935.423 | 5098.26   | 3.25" ALUMNUM CAP STAMPED "SDS 13"                            |
| SDS-14         | 1196341.401 | 3232065.878 | 5032.89   | 3.25" ALUMNUM CAP STAMPED "SDS 14"                            |
| SDS-15         | 1187476.811 | 3231961.540 | 4996.37   | 3.25" ALUMNUM CAP STAMPED "SDS 15"                            |
| SDS-16         | 1178196.563 | 3232239.942 | 4941.71   | 3.25" ALUMNUM CAP STAMPED "SDS 16"                            |
| SDS-17         | 1171526.900 | 3232244.310 | 4960.11   | 3.25" ALUMNUM CAP STAMPED "SDS 17"                            |
| SDS-18         | 1167871.108 | 3226253.994 | 5144.02   | 3.25" ALUMNUM CAP STAMPED "SDS 18"                            |
| SDS-18A        | 1166477.575 | 3229461.646 | 5049.15   | 2.5" ALUM CAP STAMPED CH2M HILL                               |
| SDS-19         | 1161412.073 | 3224324.395 | 4771.63   | 3.25" ALUMNUM CAP STAMPED "SDS 19"                            |

SURVEY NOTES:

1. PROJECT COORDINATE SYSTEM
- HORIZONTAL DATUM:  
PROJECTION:  
VERTICAL DATUM:  
GEOID MODEL:  
UNITS:

NORTH AMERICAN DATUM OF 1983, ADJUSTMENT OF 1986 (NAD 83/86)  
COLORADO STATE PLANE COORDINATES, CENTRAL ZONE  
NGVD 1929  
GEOID 03  
U.S. SURVEY FEET AT GRID
2. THE PRIMARY PROJECT CONTROL FOR SOUTHERN DELIVERY SYSTEM WAS ESTABLISHED BY KIRKHAM MICHAEL CONSULTING ENGINEERS (KM). A SURVEY CONTROL DIAGRAM WAS PREPARED BY KM AND DEPOSITED WITH THE EL PASO COUNTY CLERK AND RECORDER OFFICE ON AUGUST 10, 2004 UNDER DEPOSIT NUMBER 900110. THE PROJECT CONTROL WAS ACCEPTED BY CH2M HILL AND UTILIZED TO ESTABLISH ADDITIONAL SURVEY CONTROL USING STATIC AND FAST STATIC SURVEY TECHNIQUES.
3. COORDINATES ARE "GRID" VALUES.
4. SOUTHERN DELIVERY SYSTEM SURVEY CONTROL LISTED MAY NOT APPEAR ON THE PLAN SHEETS.

11. SUBJECT FACILITIES ARE SHOWN HEAVY LINED. SCREENING IS USED IN ORDER TO CLARIFY DRAWING. FOR EXAMPLE, STRUCTURES ARE SCREENED ON MECHANICAL DRAWINGS TO HIGHLIGHT PIPING AND EQUIPMENT.
12. INSTALL CATHODIC PROTECTION TEST STATIONS AT THE APPROXIMATE LOCATIONS SHOWN ON THE SCHEDULE LOCATED ON DWG S1-G-18, IN ACCORDANCE WITH SPECIFICATIONS, AND AS APPROVED BY CONSTRUCTION MANAGER. INSTALL ANODES AT LOCATIONS IN ACCORDANCE WITH SPECIFICATION SECTION 28 42 02, GALVANIC ANODE CATHODIC PROTECTION SYSTEM.
13. EXISTING PROPERTY LINE, RIGHT-OF-WAY AND EASEMENT INFORMATION SHOWN ON THESE DOCUMENTS WAS DEVELOPED USING LAND SURVEY PLATS PREPARED BY CRITIGEN.
14. TOPOGRAPHIC MAPPING AND PLAN VIEWS FOR DRAWINGS WERE GENERATED FROM AERIAL PHOTOGRAPHY DATED 5/18/2008.
15. PROTECT EXISTING TREES AND SHRUBS NOT DESIGNATED TO BE REMOVED.
16. PRESERVE EXISTING MONUMENTS, BENCH MARKS, RANGE TIES, PROPERTY MARKERS, REFERENCE POINTS, AND STAKES. A COLORADO LICENSED SURVEYOR IS REQUIRED TO REFERENCE, REPLACE AND REPORT ANY EXISTING LAND CORNERS, MONUMENTS, BENCHMARKS, RANGE TIES, PROPERTY MARKERS, REFERENCE POINTS, AND STAKES POTENTIALLY DISTURBED OR DESTROYED BY CONSTRUCTION.
17. REPAIR OR REPLACE EXISTING CULVERTS THAT ARE DAMAGED BY CONSTRUCTION.
18. CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO "CALL BEFORE YOU DIG" PROGRAM AT 1-800-922-1987 (OR 811) 3 BUSINESS DAYS PRIOR TO ANY EXCAVATION.
19. CONTACT UTILITY OWNERS PRIOR TO CONSTRUCTION AT UTILITY CROSSINGS IN ACCORDANCE WITH SPECIFICATION SECTION 01 31 13, PROJECT COORDINATION. PROVIDE UTILITY SUPPORT IN MANNER REQUIRED BY UTILITY OWNERS.
20. INSTALL PIPE MARKER POSTS (3305-980) ON CENTERLINE OF PIPELINE AT STRUCTURES, BURIED ACCESS MANWAYS, AT LOCATIONS NEAR FIBER OPTIC HANDHOLES, HPI'S, AT ROAD CROSSINGS, AND AT LINE OF SIGHT AS DIRECTED BY CONSTRUCTION MANAGER.
21. RETURN CONTOURS TO PRECONSTRUCTION ELEVATIONS UNLESS OTHERWISE SHOWN. NO NEW ENCLOSED DEPRESSIONS ARE ALLOWED.
22. INSTALL FIBER OPTIC CONDUIT IN ACCORDANCE WITH SPECIFICATION SECTION 40 95 80, FIBER OPTIC COMMUNICATION SUBSYSTEM.
23. VERIFY HEIGHT AND SPAN OF CROSSING OVERHEAD ELECTRIC LINES PRIOR TO CONSTRUCTION.
24. INSTALL EITHER TYPE F OR TYPE J PIPE ZONE MATERIAL EXCEPT WHERE SPECIFIC PIPE ZONE MATERIAL IS CALLED OUT ON THE DRAWINGS AND STANDARD DETAILS.
25. RESTORE OR REPLACE EXISTING FENCES AND GATES DISTURBED BY CONSTRUCTION ACTIVITIES TO A CONDITION EQUAL TO OR BETTER THAN PRECONSTRUCTION CONDITION.
26. GEOTECHNICAL INFORMATION IS NOT AVAILABLE BETWEEN STA S 1132+00 AND STA S1178+00. SOIL CONDITIONS TO BE VERIFIED DURING CONSTRUCTION. EXCAVATE TO ALLOW ENGINEER TO INSPECT SOIL DURING TRENCHING. DIMENSION BETWEEN PIPE AND PIPE ZONE TRENCH WALL MAY BE INCREASED TO 33-INCHES IF REQUIRED BY ENGINEER.
27. INSTALL PERMANENT GATES AT EXISTING FENCES FOR FUTURE ACCESS AS DIRECTED BY CONSTRUCTION MANAGER.
28. WHERE CLSM IS REQUIRED IN PIPE ZONE TO TOP OF BEDROCK, VERIFY ELEVATION OF BEDROCK PRIOR TO INSTALLATION OF PIPE. PIPE SHALL BE INSTALLED A MINIMUM OF 1 FOOT BELOW TOP OF BEDROCK, OR ELEVATIONS AS SHOWN ON DRAWINGS, WHICHEVER IS LOWER.

NATIONWIDE PERMIT NOTES

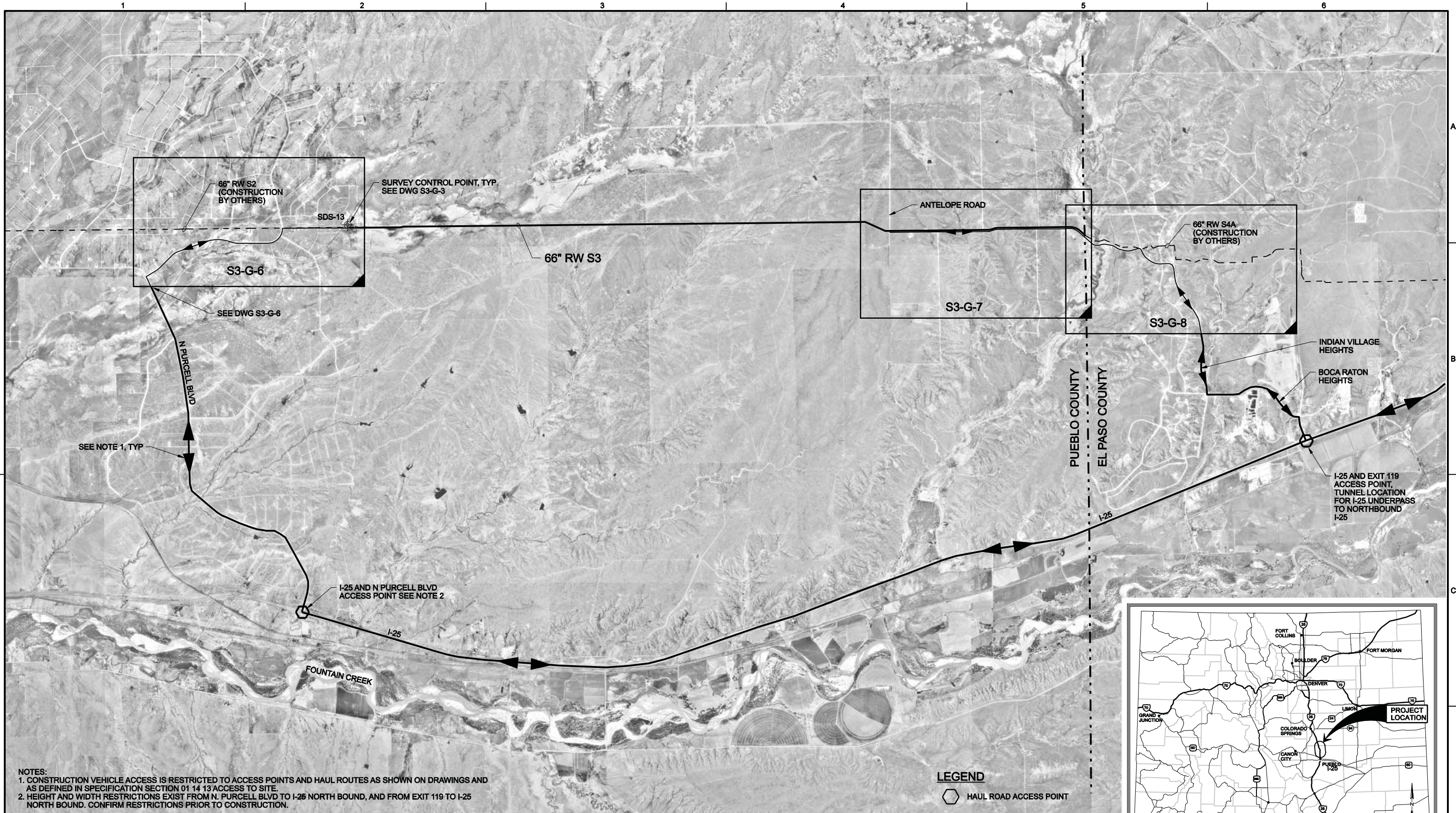
THE FOLLOWING NOTES ARE APPLICABLE TO AREAS THAT ARE SUBJECT TO A NWP 12 OR A NWP 33:

1. TYPE K BACKFILL MUST BE NATIVE TOPSOIL FROM THE TRENCH WITHIN AREAS SUBJECT TO THE US ARMY CORPS OF ENGINEERS NWP 12 REQUIREMENTS.
2. WHEN TEMPORARY FILLS ARE PLACED IN WETLANDS OR WATERS OF THE U.S., USE A HORIZONTAL MARKER (FABRIC, CERTIFIED WEED FREE STRAW) AS APPROVED BY CONSTRUCTION MANAGER TO DELINEATE THE EXISTING GROUND ELEVATION OF WETLANDS THAT WILL BE TEMPORARILY FILLED DURING CONSTRUCTION.
3. USE AND MAINTAIN APPROPRIATE SOIL EROSION AND SEDIMENT CONTROLS IN EFFECTIVE OPERATING CONDITION DURING CONSTRUCTION.
4. SEPARATE LOAD BEARING TEMPORARY STRUCTURES IN WATERS OF THE U.S. FROM EXISTING SURFACES BY GEOTEXTILE.
5. PLACE HEAVY EQUIPMENT WORKING IN WETLANDS ON MATS OR OTHER APPROVED MEASURES IN ORDER TO MINIMIZE SOIL DISTURBANCE.
6. PERMANENTLY STABILIZE OTHER FILLS, AS WELL AS ANY WORK BELOW THE ORDINARY HIGH WATER MARK FOR A WATER OF THE U.S. AT THE EARLIEST PRACTICABLE DATE. PERFORM WORK WITHIN WATERS OF THE U.S. DURING LOW-FLOW OR NO FLOW PERIODS.



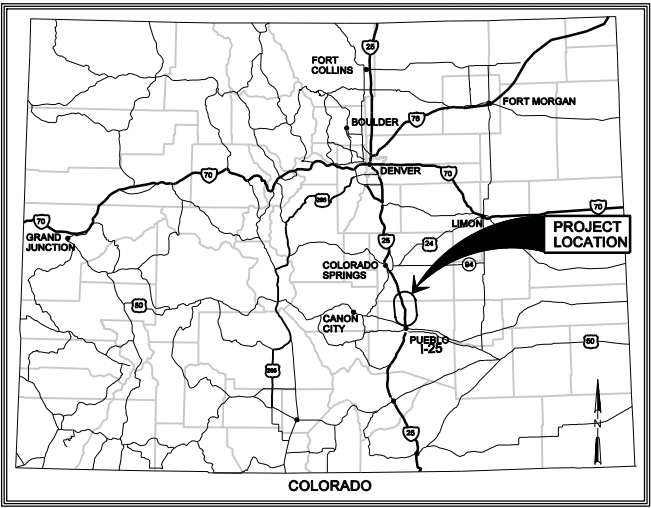
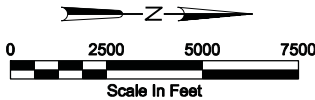
|                                  |            |     |      |          |    |   |   |  |  |   |         |       |               |
|----------------------------------|------------|-----|------|----------|----|---|---|--|--|---|---------|-------|---------------|
| DSGN                             | E FORD     |     |      |          |    | VERIFY SCALE  | <div>CH2MHILL</div> <div>Colorado Springs, CO 80903</div> |  |  | SOUTHERN DELIVERY SYSTEM<br>RAW WATER PIPELINE S3 | GENERAL | SHEET | 3             |
| DR                               | B NORVILLE |     |      |          |    | BAR IS ONE INCH ON ORIGINAL DRAWING.<br>0 1"              |   |  |  |   |         | DWG   | S3-G-3        |
| CHK                              | B SPILLER  |     |      |          |    | IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY. |   |  |  |   |         | DATE  | NOVEMBER 2011 |
| APVD                             | T MATSUURA | NO. | DATE | REVISION | BY | APVD  |   |  |  |   |         | PROJ  | 425190.S3.03  |
| GENERAL NOTES AND SURVEY CONTROL |            |     |      |          |    |   |   |  |  |   |         |       |               |





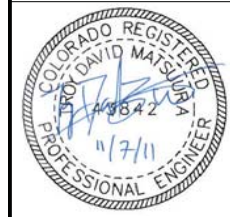
NOTES:  
1. CONSTRUCTION VEHICLE ACCESS IS RESTRICTED TO ACCESS POINTS AND HAUL ROUTES AS SHOWN ON DRAWINGS AND AS DEFINED IN SPECIFICATION SECTION 01 14 13 ACCESS TO SITE.  
2. HEIGHT AND WIDTH RESTRICTIONS EXIST FROM N. PURCELL BLVD TO I-25 NORTH BOUND, AND FROM EXIT 119 TO I-25 NORTH BOUND. CONFIRM RESTRICTIONS PRIOR TO CONSTRUCTION.

LEGEND  
○ HAUL ROAD ACCESS POINT



VICINITY MAP  
NTS

LOCATION MAP AND OVERALL HAUL ROUTE PLAN



|             |            |                |                                      |
|-------------|------------|----------------|--------------------------------------|
| PLAN WINDOW | S3-G-6     | DRAWING NUMBER | INDICATES LOWER RIGHT CORNER OF PLAN |
| DSGN        | T MATSUURA | NO.            | DATE                                 |
| DR          | B NORVILLE | REVISION       | BY                                   |
| CHK         | B SPILLER  | REVISION       | BY                                   |
| APVD        | T MATSUURA | NO.            | DATE                                 |

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|---|
| VERIFY SCALE  |
| BAR IS ONE INCH ON ORIGINAL DRAWING.                      |
| 0 1"  |
| IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY. |

**CH2MHILL**  
Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

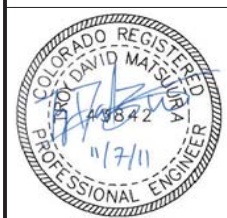
GENERAL  
LOCATION MAP, VICINITY MAP,  
AND OVERALL HAUL ROUTE PLAN

|       |               |
|-------|---------------|
| SHEET | 5             |
| DWG   | S3-G-5        |
| DATE  | NOVEMBER 2011 |
| PROJ  | 425190.S3.03  |



NOTES:

1. CONSTRUCTION VEHICLE ACCESS IS RESTRICTED TO ACCESS POINTS AND HAUL ROUTES AS SHOWN ON DRAWINGS AND AS DEFINED IN SPECIFICATION SECTION 01 14 13 ACCESS TO SITE.
2. PARKING FACILITIES FOR PERSONNEL WORKING ON THE PROJECT IS RESTRICTED TO THE STAGING AREAS SHOWN ON THE DRAWINGS.
3. USE OF TURN AROUND AREA FOR STAGING IS NOT ALLOWED.
4. COORDINATE WITH S2 CONTRACTOR TO AVOID CONFLICTS AND DISRUPTION DURING CONSTRUCTION. MAINTAIN ACCESS AND RESTORE AREAS USED FOR ACCESS.



|      |            |     |      |          |    |
|------|------------|-----|------|----------|----|
| DSGN | E FORD     |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
| CHK  | B SPILLER  |     |      |          |    |
| APVD | T MATSUURA | NO. | DATE | REVISION | BY |

VERIFY SCALE  
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**CH2MHILL**  
Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

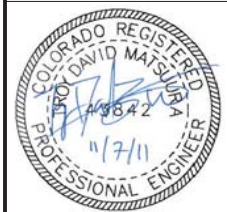
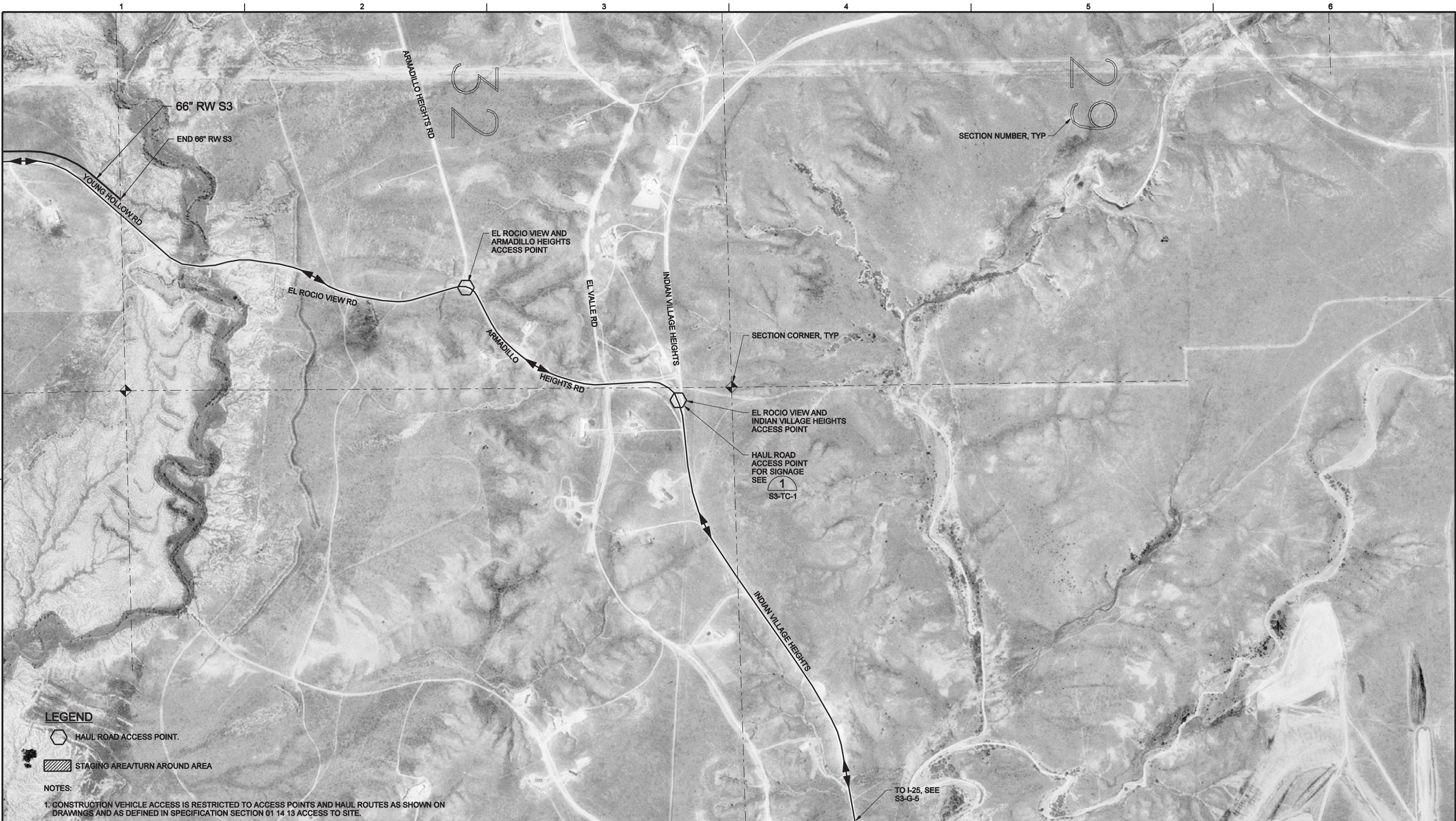
GENERAL  
**HAUL ROUTE PLAN**  
1 OF 3

|       |               |
|-------|---------------|
| SHEET | 6             |
| DWG   | S3-G-6        |
| DATE  | NOVEMBER 2011 |
| PROJ  | 425190.S3.03  |









|      |            |     |      |          |    |
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| DSGN | E FORD     |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
| CHK  | B SPILLER  |     |      |          |    |
| APVD | T MATSUURA | NO. | DATE | REVISION | BY |

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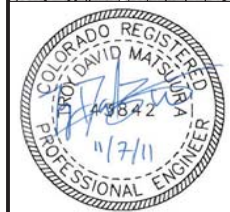
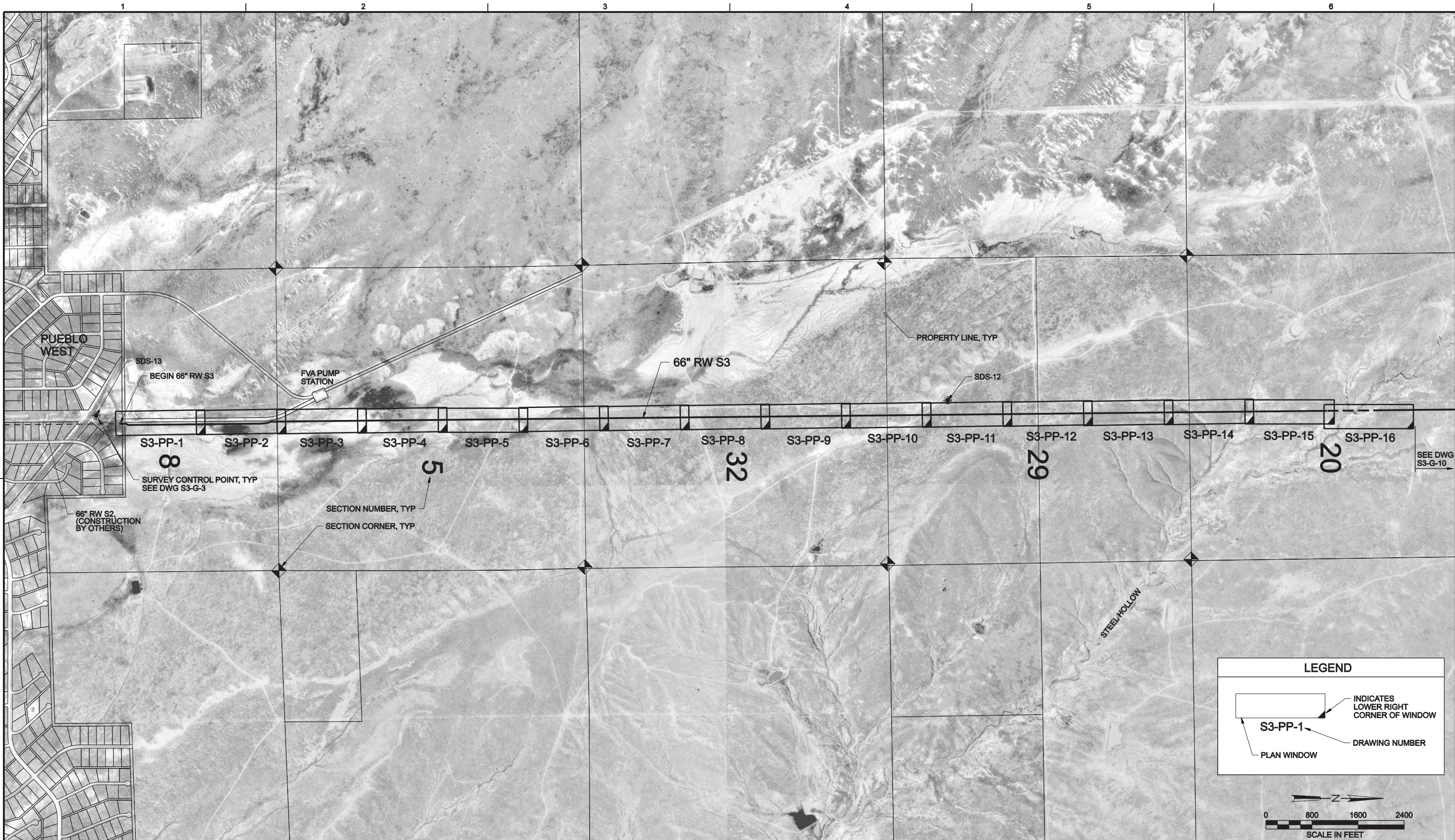
**CH2MHILL**  
Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

GENERAL  
**HAUL ROUTE PLAN**  
3 OF 3

|       |               |
|-------|---------------|
| SHEET | 8             |
| DWG   | S3-G-8        |
| DATE  | NOVEMBER 2011 |
| PROJ  | 425190.S3.03  |





|      |            |     |      |          |    |      |  |
|------|------------|-----|------|----------|----|------|--|
| DSGN | E FORD     |     |      |          |    |      |  |
| DR   | B NORVILLE |     |      |          |    |      |  |
| CHK  | B SPILLER  |     |      |          |    |      |  |
| APVD | T MATSUURA | NO. | DATE | REVISION | BY | APVD |  |

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THIS SHEET, ADJUST  
SCALES ACCORDINGLY.

**CH2MHILL**  
Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

GENERAL  
**KEY PLAN**  
1 OF 2

|       |               |
|-------|---------------|
| SHEET | 9             |
| DWG   | S3-G-9        |
| DATE  | NOVEMBER 2011 |
| PROJ  | 425190.S3.03  |







## PLOT TIME: 12:15:39 PM






SEDIMENT AND EROSION CONTROL GENERAL NOTES


1. A STORMWATER MANAGEMENT PLAN (SWMP) HAS BEEN PREPARED BY UTILITIES FOR USE BY THE CONTRACTOR. THE SWMP HAS BEEN PREPARED IN ACCORDANCE WITH PUEBLO COUNTY, PUEBLO WEST METRO DISTRICT AND COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT CRITERIA. USE AS REQUIRED TO OBTAIN PERMITS IDENTIFIED IN THE SPECIFICATIONS. OBTAIN AND RETAIN A COPY OF THE SWMP ON SITE.
2. PLACE EROSION AND SEDIMENT CONTROL BMPS AND PROVIDE MAINTENANCE AND RECORD KEEPING IN ACCORDANCE WITH FEDERAL, STATE, AND COUNTY STANDARDS.
3. INSTALL WORK LIMIT FENCING DEFINING THE LIMITS OF CONSTRUCTION PRIOR TO OTHER CONSTRUCTION ACTIVITIES, INCLUDING CONSTRUCTION LIMITS ADJACENT TO STREAM CORRIDORS AND OTHER AREAS TO BE PRESERVED.
4. INSTALL EROSION AND SEDIMENT CONTROL BMPS, WHERE POSSIBLE, BEFORE THE START OF CONSTRUCTION.
5. INSTALL APPROVED BMPS AROUND STOCKPILED MATERIALS PER THE SPECIFICATIONS.
6. INSTALL APPROVED BMPS AROUND STAGING AREAS AND MAINTENANCE AREAS. PROTECT AND MAINTAIN AREAS PER FEDERAL, STATE, AND COUNTY STANDARDS.
7. STORE AND PROTECT HAZARDOUS MATERIAL PER REQUIREMENTS OF PROJECT PERMITS AND PER FEDERAL, STATE AND COUNTY OR OTHER APPLICABLE REQUIREMENTS
8. ADHERE TO THE APPROVED LIMITS OF CONSTRUCTION. OBTAIN APPROVAL FROM CONSTRUCTION MANAGER PRIOR TO MAKING CHANGES TO THE WORK LIMITS. ADDITIONAL EROSION/SEDIMENT CONTROLS MAY BE REQUIRED.
9. RETAIN AND PROTECT NATURAL VEGETATION WHEREVER POSSIBLE. LIMIT EXPOSURE OF BARE SOIL TO MINIMIZE EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION TO THE IMMEDIATE AREA REQUIRED FOR CONSTRUCTION OPERATIONS.
10. CONSTRUCTION VEHICLE TRAFFIC MUST ENTER/EXIT THE SITE THROUGH THE APPROVED ACCESS POINTS. VEHICLE TRACKING CONTROLS ARE REQUIRED AT ACCESS POINTS ON THE SITE. ADDITIONAL VEHICLE TRACKING CONTROLS TO BE ADDED AS REQUIRED BY PUEBLO COUNTY. INSTALL AND MAINTAIN VEHICLE TRACKING CONTROLS PER PUEBLO COUNTY.
11. KEEP PAVED AREAS CLEAN INCLUDING STREETS THROUGHOUT CONSTRUCTION. CLEAN WITH A STREET SWEEPER OR SIMILAR DEVICE. AT FIRST NOTICE OF DIRT TRACKED ON PAVED AREAS, STREET WASHING IS NOT ALLOWED. THE CONSTRUCTION MANAGER RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO ENSURE AREA STREETS ARE KEPT FREE OF SEDIMENT AND/OR CONSTRUCTION DEBRIS.
12. THE EROSION CONTROL PLANS MAY REQUIRE CHANGES OR ALTERATIONS TO MEET CHANGING SITE OR PROJECT CONDITIONS, TO ADDRESS MODIFICATIONS IN DESIGN OR INSTALLATION, OR TO MEET PERMIT REQUIREMENTS.
13. PROVIDE LINING OF TEMPORARY SWALES AND DITCHES. NO PERMANENT EARTH SLOPES GREATER THAN 3:1 ALLOWED, EXCEPT WHERE SHOWN ON DRAWINGS.
14. REMEDIATE SEDIMENT OR SOIL ACCUMULATIONS CREATED DUE TO CONSTRUCTION ACTIVITIES BEYOND THE LIMITS OF CONSTRUCTION IMMEDIATELY.
15. PROVIDE A WATER SOURCE ON SITE DURING CONSTRUCTION ACTIVITIES AND UTILIZE AS REQUIRED TO MINIMIZE DUST FROM EQUIPMENT AND WIND IN ACCORDANCE WITH THE SPECIFICATIONS.
16. SEED AND MULCH SOILS THAT WILL BE STOCKPILED FOR MORE THAN FOURTEEN (14) DAYS. DO NOT PLACE STOCKPILES WITHIN ONE HUNDRED (100) FEET OF THE TOP OF BANK OF ANY WATERWAY OR DRAINAGE.
17. CHEMICAL OR HAZARDOUS MATERIAL SPILLS THAT MAY ENTER WATERS OF THE STATE OF COLORADO, THAT INCLUDE BUT ARE NOT LIMITED TO, SURFACE WATER, GROUNDWATER AND DRY GULLIES OR STORM SEWERS, LEADING TO THE RELEASES OF PETROLEUM PRODUCTS AND CERTAIN HAZARDOUS SUBSTANCES LISTED UNDER THE FEDERAL CLEAN WATER ACT (40 CFR PART 116) MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER AS WELL AS THE CDPHE. REPORT SPILLS THAT POSE AN IMMEDIATE RISK TO HUMAN LIFE TO 911.
18. THE USE OF REBAR, STEEL STAKES, OR STEEL FENCE POSTS FOR STAKING OR SUPPORT OF BMPS IS PROHIBITED.
19. INSTALL CONCRETE WASHOUT LOCATIONS AS NEEDED WITHIN THE WORK LIMITS. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE IS PROHIBITED WITHIN 500 FEET OF ANY WATERWAY. PROPERLY CLEAN UP AND DISPOSE OF CONCRETE WASTE AT AN APPROPRIATE LOCATION.

20. STABILIZE DISTURBED AREAS INCLUDING ROADS, WITHIN 14 DAYS OF SUBSTANTIAL COMPLETION OF GRADING, INCLUDING AREAS TO REMAIN DORMANT FOR LONGER THAN 30 DAYS, WHICHEVER IS LESS. THIS MAY REQUIRE MULTIPLE MOBILIZATIONS FOR SEEDING AND MULCHING.
21. TRASH RECEPTACLES AND PORTABLE TOILETS ARE PROHIBITED WITHIN 500 FEET OF ANY WATERWAY OR DRAINAGE.
22. CONDUCT VEHICLE MAINTENANCE, CLEANING, AND FUELING OFF-SITE, IF POSSIBLE. IF CONDUCTED ONSITE, THESE OPERATIONS MUST BE APPROVED BY CONSTRUCTION MANAGER, AND CONDUCTED ON A LEVEL GROUND SURFACE IN A DESIGNATED AREA WITH APPROVED PERIMETER CONTROLS.
23. STORE HAZARDOUS MATERIALS AND CHEMICALS ONSITE ONLY IN THE STAGING AREA AND ONLY IN AN APPROVED, COVERED TEMPORARY STRUCTURE. OBTAIN ANY REQUIRED PERMITS OR APPROVALS.
24. INSPECT BMPS A MINIMUM OF EVERY 14 DAYS AND IMMEDIATELY AFTER STORM EVENTS. CORRECT ANY DAMAGE OR DEFICIENCIES DISCOVERED DURING THE INSPECTION IN ACCORDANCE WITH PERMIT REQUIREMENTS, SPECIFICATIONS, AND PUEBLO COUNTY.
25. REMOVE SEDIMENTS WHEN SEDIMENTS HAVE ACCUMULATED TO 1/2 THE HEIGHT OF THE BMP.
26. REMOVE AND REPLACE EROSION LOGS AFTER EVERY STORM.


EROSION CONTROL LEGEND




STRAW BALES




ROCK SOCKS




ROCK CHECK DAMS



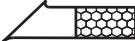
SILT FENCE



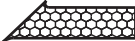
EROSION CONTROL BERM  
(SILT FENCE SUBSTITUTE)




CONCRETE WASHOUT




CONSTRUCTION ENTRANCE



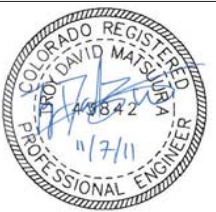
PAVED



GRAVEL



DIRECTION OF DRAINAGE FLOW



|      |             |     |      |          |    |      |
|------|-------------|-----|------|----------|----|------|
| DSGN | T MATSUJURA |     |      |          |    |      |
| DR   | B NORVILLE  |     |      |          |    |      |
| CHK  | B SPILLER   |     |      |          |    |      |
| APVD | J HENRY     | NO. | DATE | REVISION | BY | APVD |

VERIFY SCALE  
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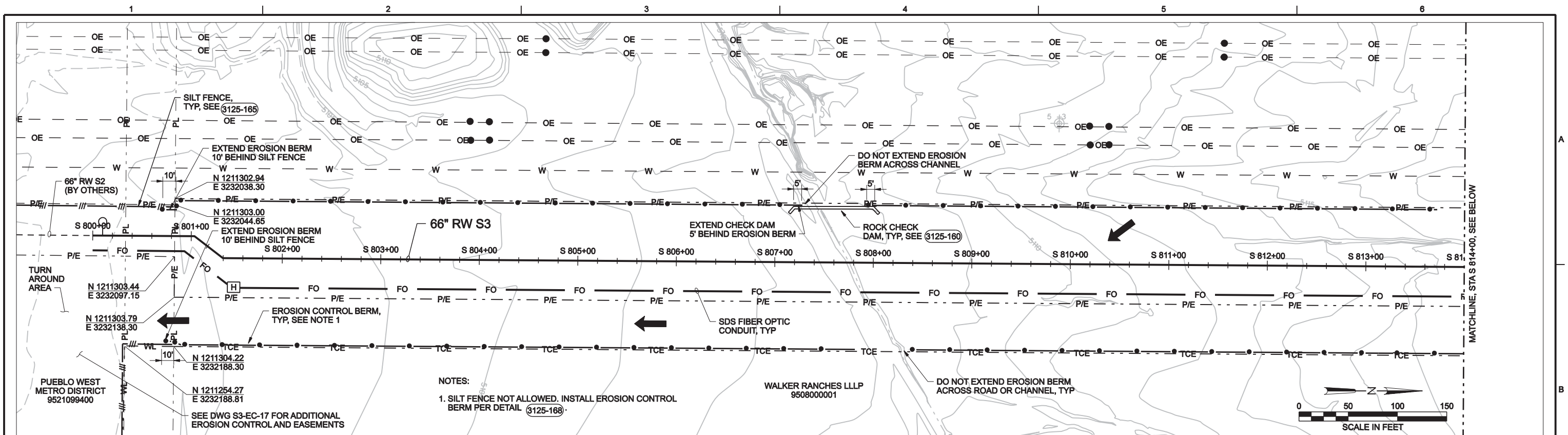
**CH2MHILL**  
Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

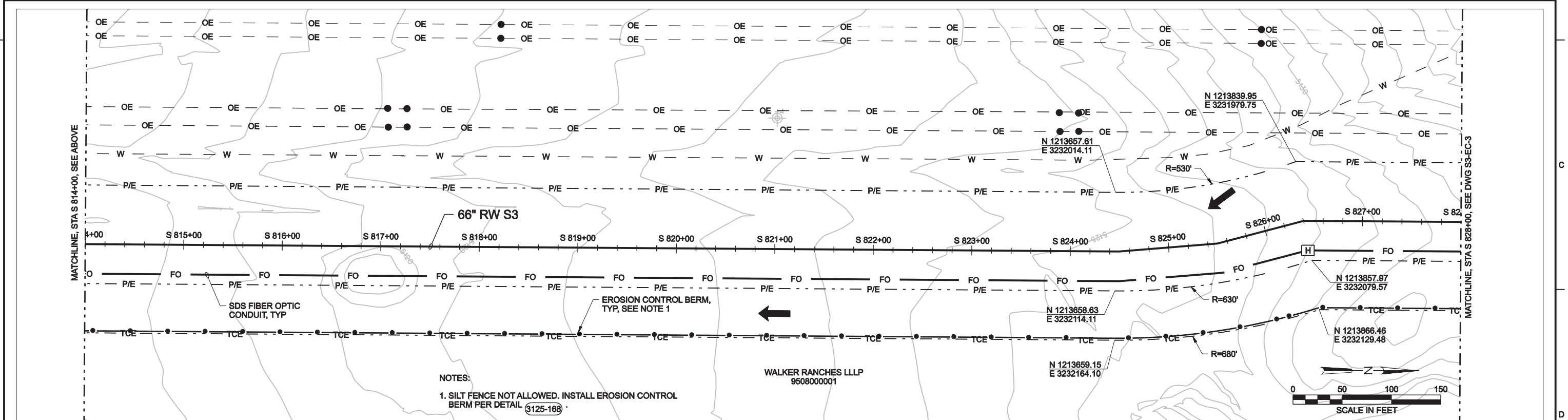
EROSION CONTROL AND EASEMENT PLANS

EROSION CONTROL NOTES

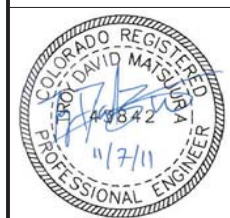
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|-------|---------------|
| SHEET | 63            |
| DWG   | S3-EC-1       |
| DATE  | NOVEMBER 2011 |
| PROJ  | 425190.S3.03  |



EROSION CONTROL PLAN, SEE S3-PP-1



EROSION CONTROL PLAN, SEE S3-PP-2



|      |            |     |      |          |    |
|------|------------|-----|------|----------|----|
| DSGN | A VAUGHAN  |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
| CHK  | B SPILLER  |     |      |          |    |
| APVD | T MATSUURA | NO. | DATE | REVISION | BY |

VERIFY SCALE  
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ORIGINAL DRAWING.  
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SCALES ACCORDINGLY.

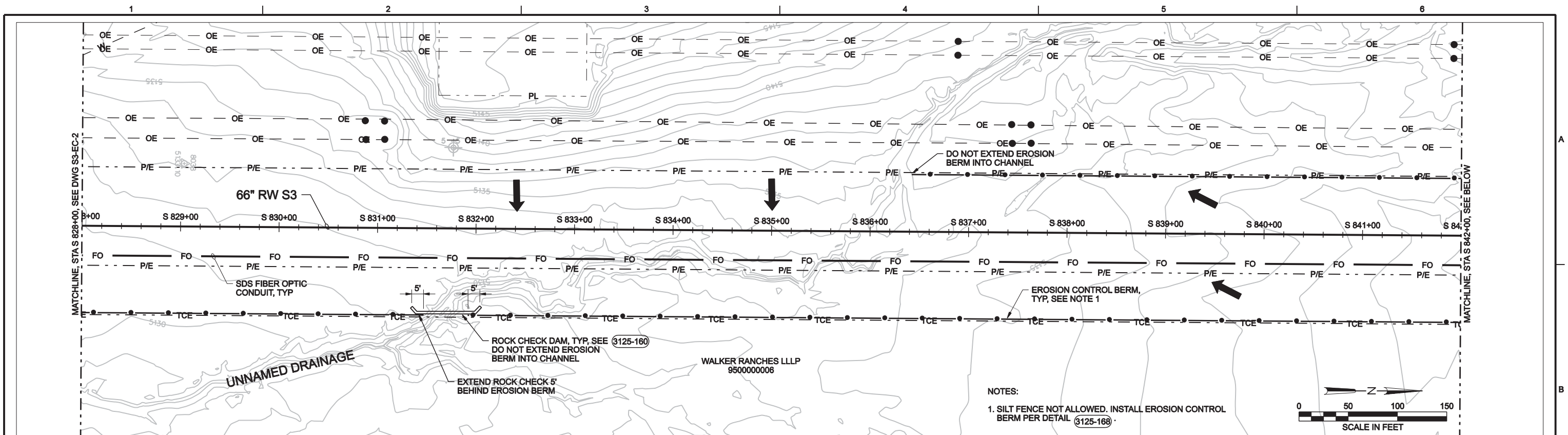
**CH2MHILL**  
Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

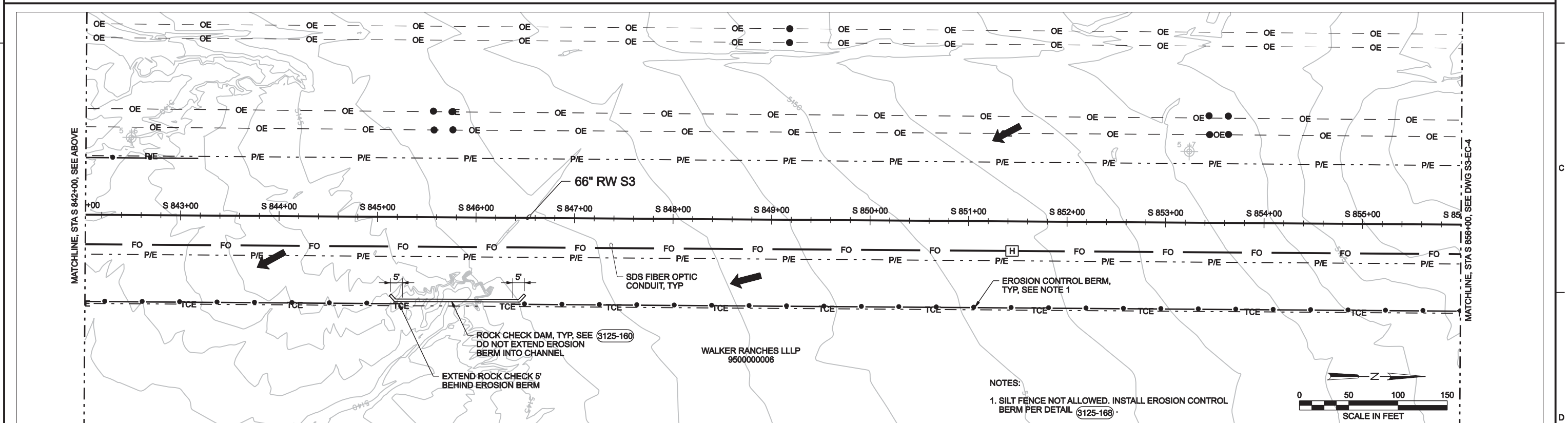
EROSION CONTROL AND EASEMENT PLANS  
STATION S 800+00 TO STATION S 828+00

|       |               |
|-------|---------------|
| SHEET | 64            |
| DWG   | S3-EC-2       |
| DATE  | NOVEMBER 2011 |
| PROJ  | 425190.S3.03  |

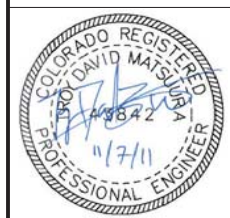




EROSION CONTROL PLAN, SEE S3-PP-3



EROSION CONTROL PLAN, SEE S3-PP-4



|      |            |     |      |          |    |
|------|------------|-----|------|----------|----|
| DSGN | A VAUGHAN  |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
| CHK  | B SPILLER  |     |      |          |    |
| APVD | T MATSUURA | NO. | DATE | REVISION | BY |

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Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

EROSION CONTROL AND EASEMENT PLANS  
**STATION S 828+00 TO STATION S 856+00**

|       |               |
|-------|---------------|
| SHEET | 65            |
| DWG   | S3-EC-3       |
| DATE  | NOVEMBER 2011 |
| PROJ  | 425190.S3.03  |



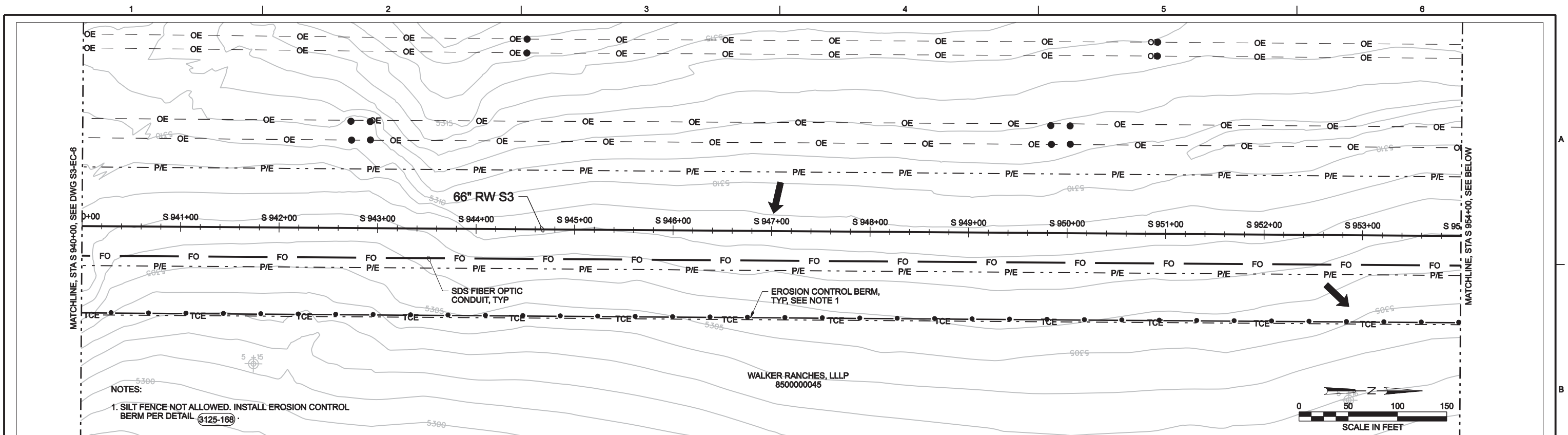




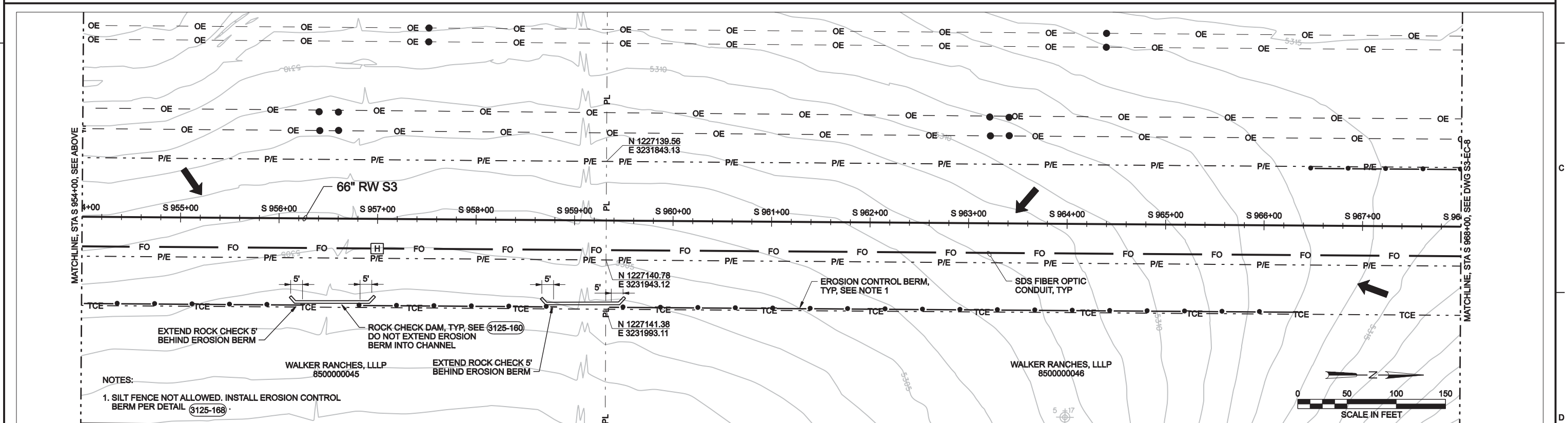




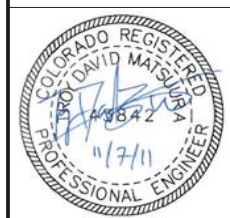




EROSION CONTROL PLAN, SEE S3-PP-11



EROSION CONTROL PLAN, SEE S3-PP-12



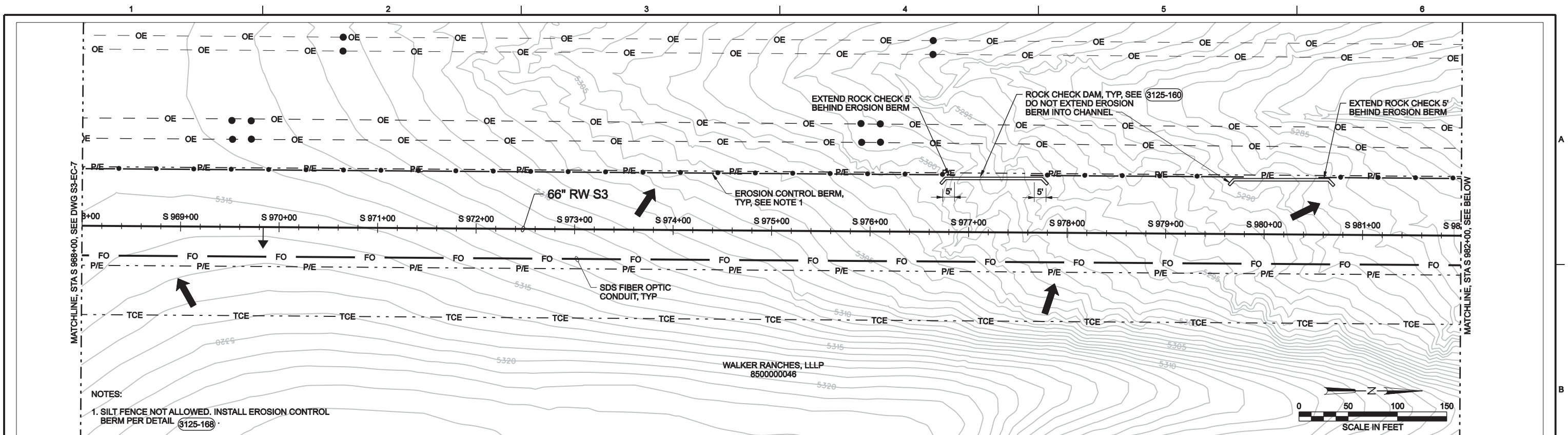
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| DR   | B NORVILLE |     |      |          |    |
| CHK  | B SPILLER  |     |      |          |    |
| APVD | T MATSUURA | NO. | DATE | REVISION | BY |

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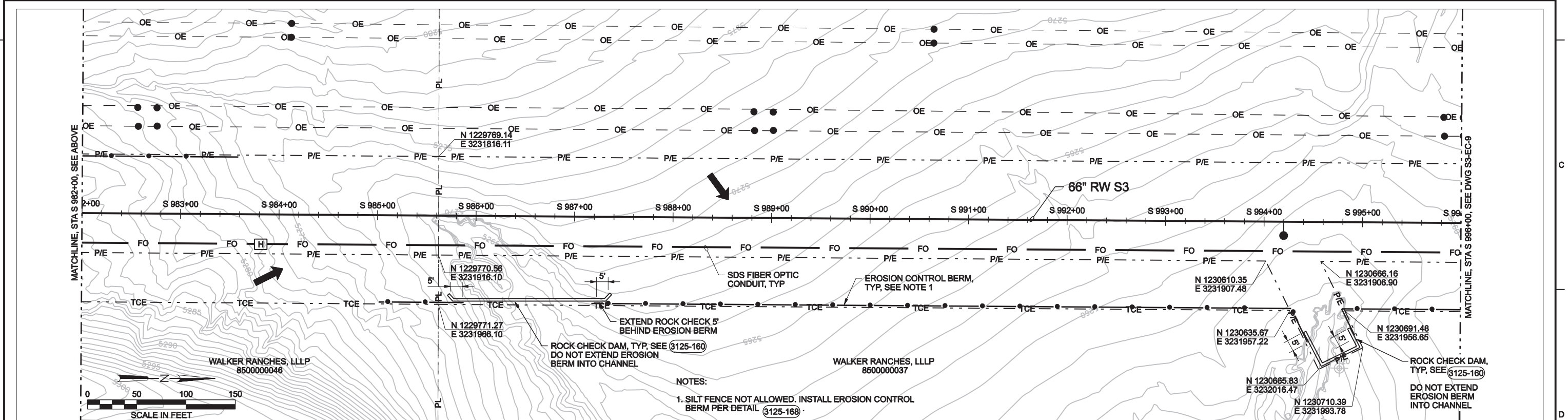
**CH2MHILL**  
Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

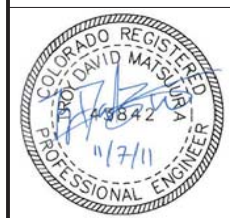
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|--------------------------------------|--|-------|---------------|
| EROSION CONTROL AND EASEMENT PLANS   |  | SHEET | 69            |
| STATION S 940+00 TO STATION S 968+00 |  | DWG   | S3-EC-7       |
|                                      |  | DATE  | NOVEMBER 2011 |
|                                      |  | PROJ  | 425190.S3.03  |



EROSION CONTROL PLAN, SEE S3-PP-13



EROSION CONTROL PLAN, SEE S3-PP-14



|      |            |     |      |          |    |
|------|------------|-----|------|----------|----|
| DSGN | A VAUGHAN  |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
| CHK  | B SPILLER  |     |      |          |    |
| APVD | T MATSUURA | NO. | DATE | REVISION | BY |

VERIFY SCALE  
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ORIGINAL DRAWING.  
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SCALES ACCORDINGLY.

**CH2MHILL**  
Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

EROSION CONTROL AND EASEMENT PLANS  
**STATION S 968+00 TO STATION S 996+00**

|       |               |
|-------|---------------|
| SHEET | 70            |
| DWG   | S3-EC-8       |
| DATE  | NOVEMBER 2011 |
| PROJ  | 425190.S3.03  |

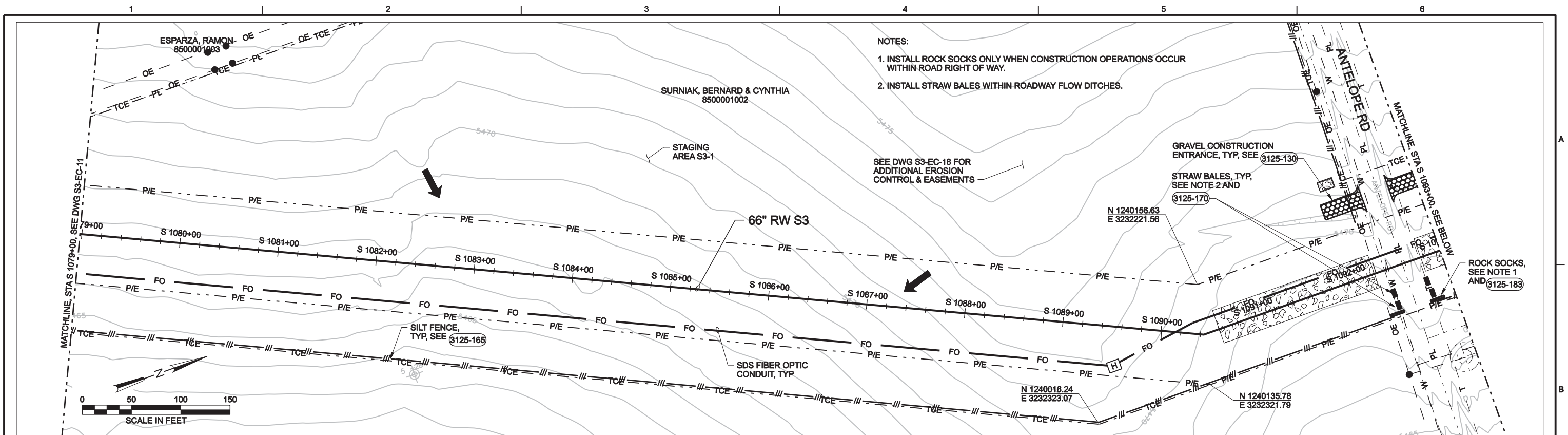




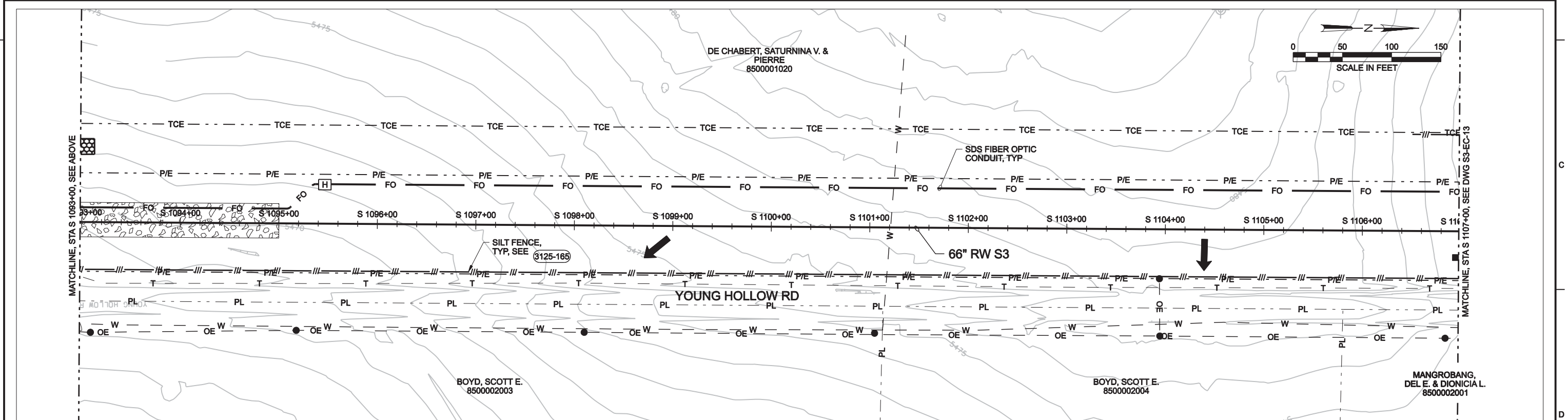




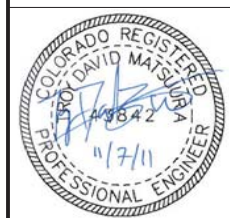




EROSION CONTROL PLAN, SEE S3-PP-21



EROSION CONTROL PLAN, SEE S3-PP-22



|      |             |     |      |          |    |
|------|-------------|-----|------|----------|----|
| DSGN | A VAUGHAN   |     |      |          |    |
| DR   | B NORVILLE  |     |      |          |    |
| CHK  | B SPILLER   |     |      |          |    |
| APVD | T MATSUJURA | NO. | DATE | REVISION | BY |

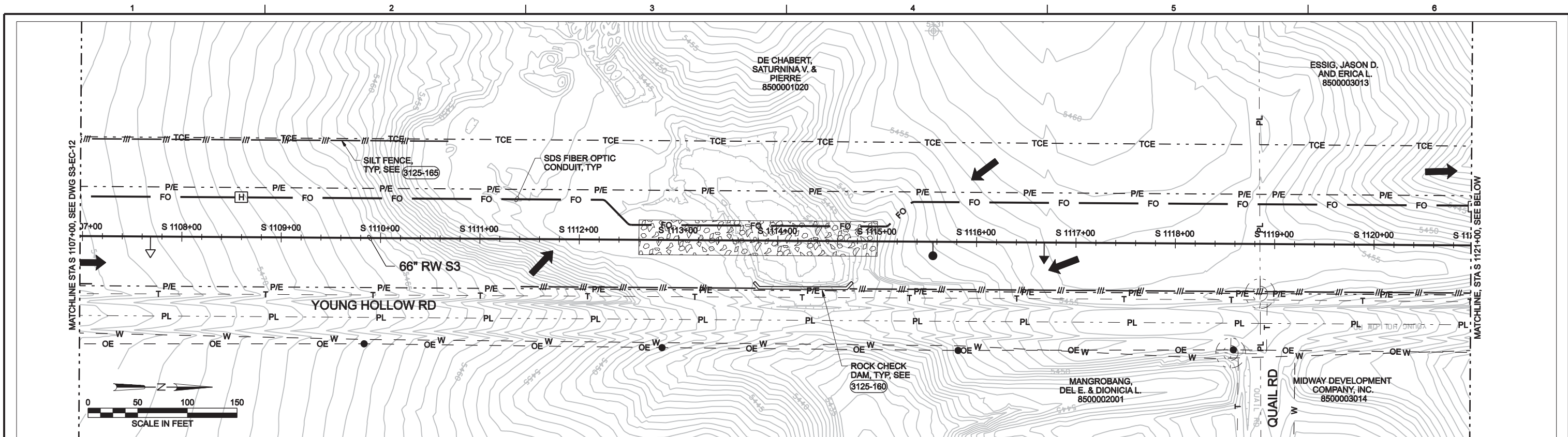
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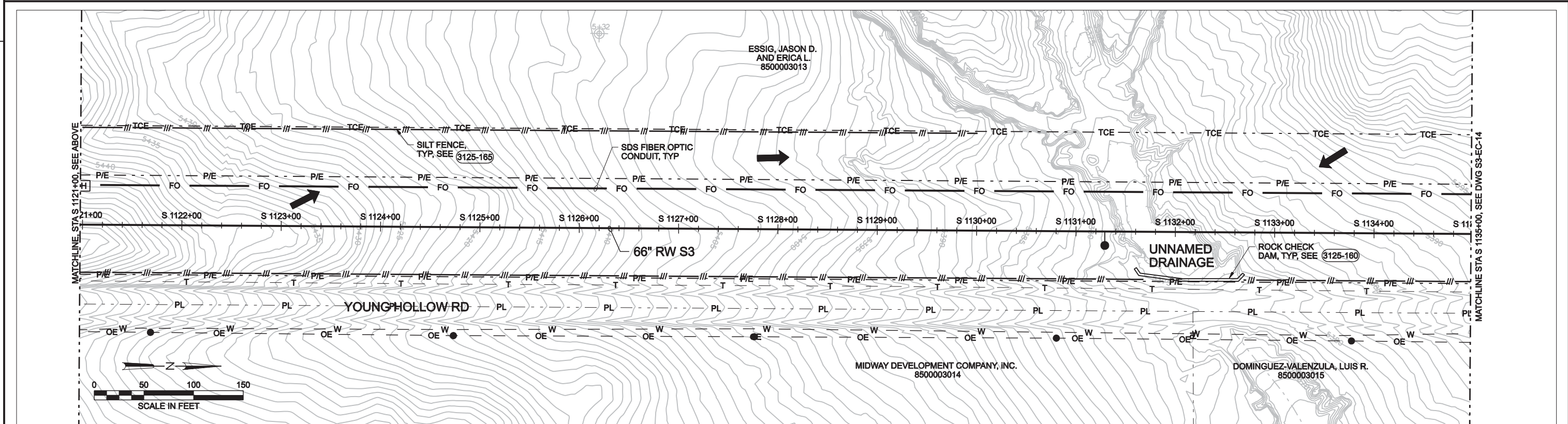
SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

|  |  |       |               |
|--|--|-------|---------------|
| EROSION CONTROL AND EASEMENT PLANS     |  | SHEET | 74            |
| STATION S 1079+00 TO STATION S 1107+00 |  | DWG   | S3-EC-12      |
|  |  | DATE  | NOVEMBER 2011 |
|  |  | PROJ  | 425190.S3.03  |

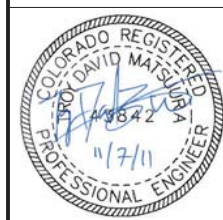




EROSION CONTROL PLAN, SEE S3-PP-23



EROSION CONTROL PLAN, SEE S3-PP-24



|      |            |     |      |          |    |
|------|------------|-----|------|----------|----|
| DSGN | A VAUGHAN  |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
| CHK  | B SPILLER  |     |      |          |    |
| APVD | T MATSUURA | NO. | DATE | REVISION | BY |

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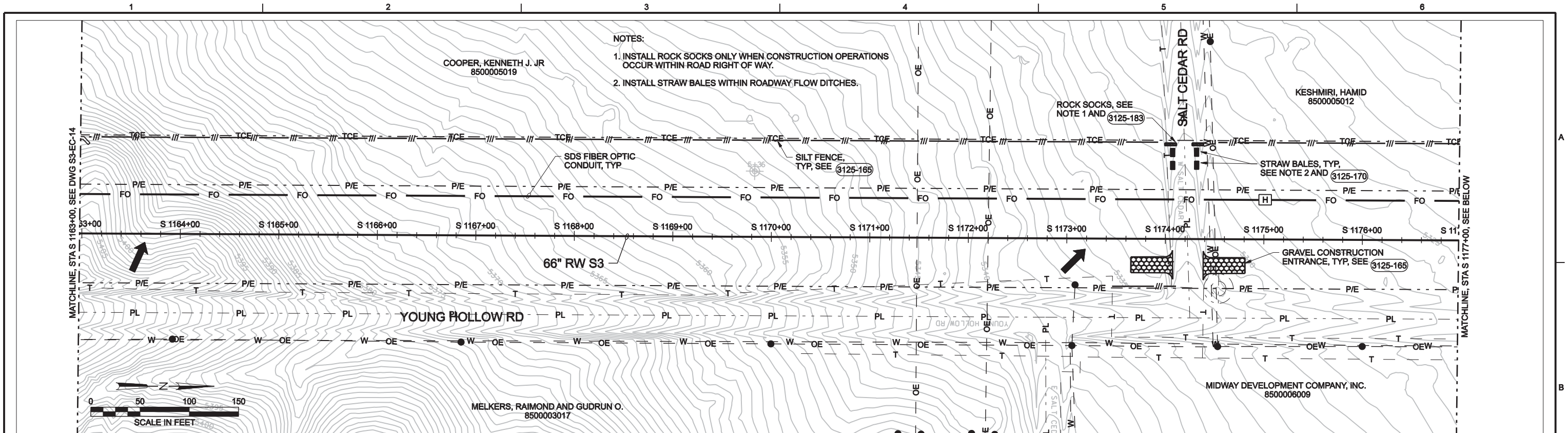
SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

|  |  |       |               |
|--|--|-------|---------------|
| EROSION CONTROL AND EASEMENT PLANS     |  | SHEET | 75            |
| STATION S 1107+00 TO STATION S 1135+00 |  | DWG   | S3-EC-13      |
|  |  | DATE  | NOVEMBER 2011 |
|  |  | PROJ  | 425190.S3.03  |

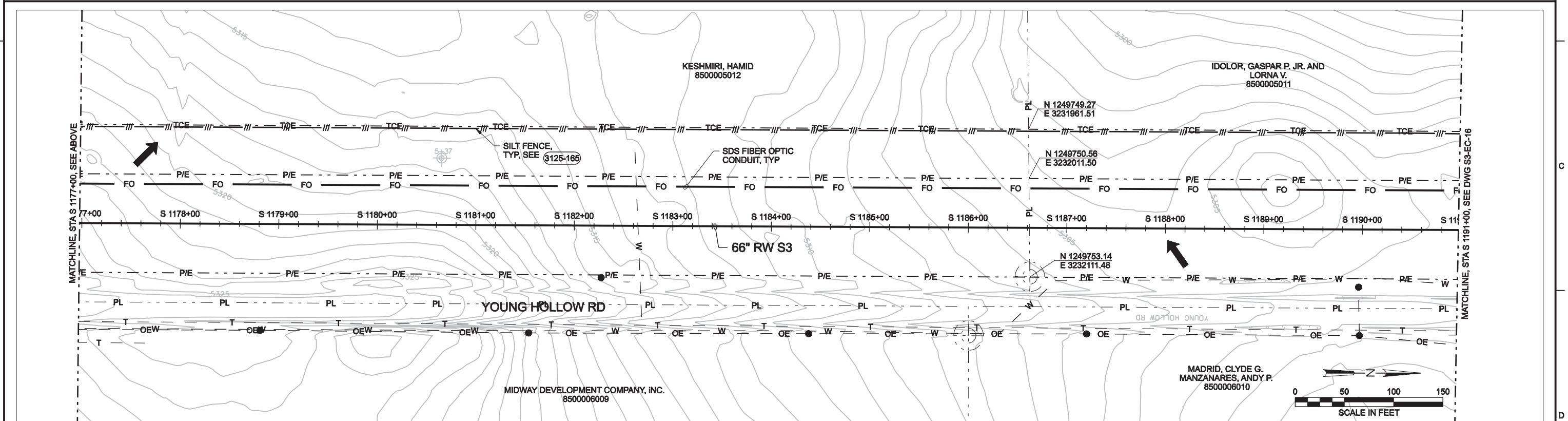




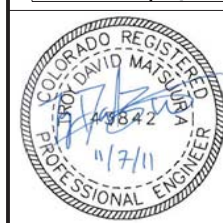




EROSION CONTROL PLAN, SEE S3-PP-27



EROSION CONTROL PLAN, SEE S3-PP-28



|      |            |     |      |          |    |
|------|------------|-----|------|----------|----|
| DSGN | A VAUGHAN  |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
| CHK  | B SPILLER  |     |      |          |    |
| APVD | T MATSUURA | NO. | DATE | REVISION | BY |

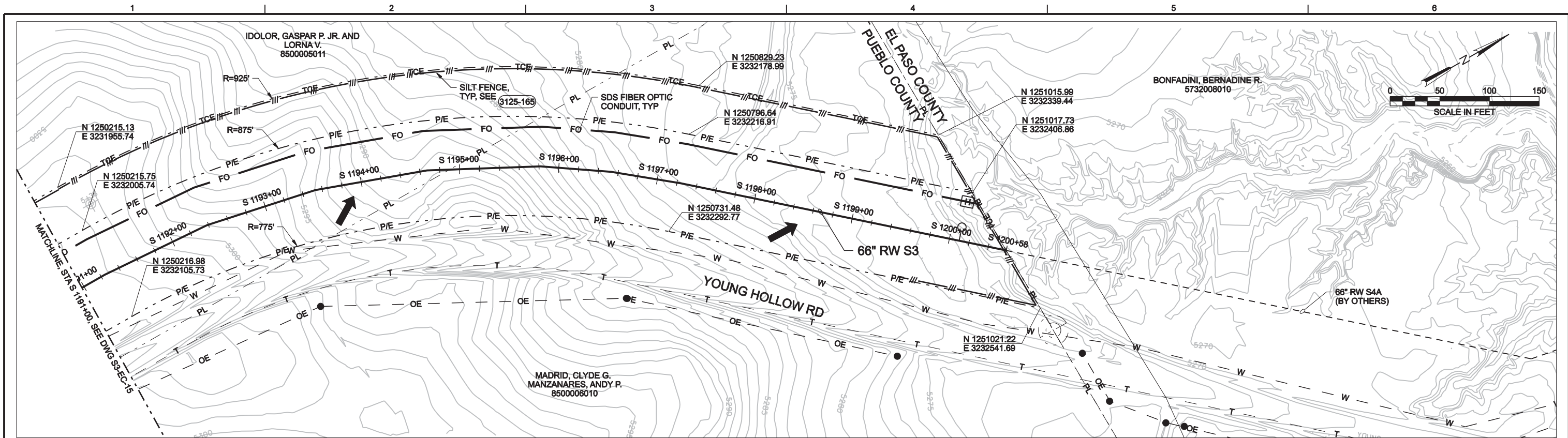
VERIFY SCALE  
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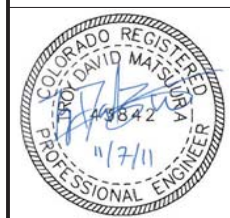
SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

EROSION CONTROL AND EASEMENT PLANS  
STATION S 1163+00 TO STATION S 1191+00

|       |               |
|-------|---------------|
| SHEET | 77            |
| DWG   | S3-EC-15      |
| DATE  | NOVEMBER 2011 |
| PROJ  | 425190.S3.03  |



EROSION CONTROL PLAN, SEE S3-PP-29



|      |            |     |      |          |    |
|------|------------|-----|------|----------|----|
| DSGN | A VAUGHAN  |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
| CHK  | B SPILLER  |     |      |          |    |
| APVD | T MATSUURA | NO. | DATE | REVISION | BY |

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SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

EROSION CONTROL AND EASEMENT PLANS

STATION S 1191+00 TO  
POE STATION S 1200+58.38

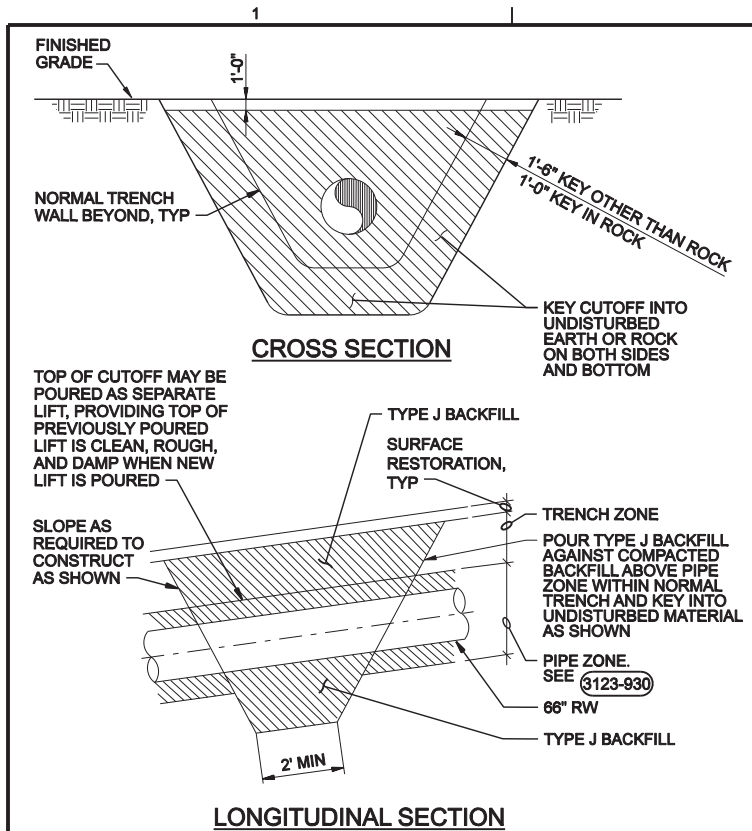
|       |               |
|-------|---------------|
| SHEET | 78            |
| DWG   | S3-EC-16      |
| DATE  | NOVEMBER 2011 |
| PROJ  | 425190.S3.03  |





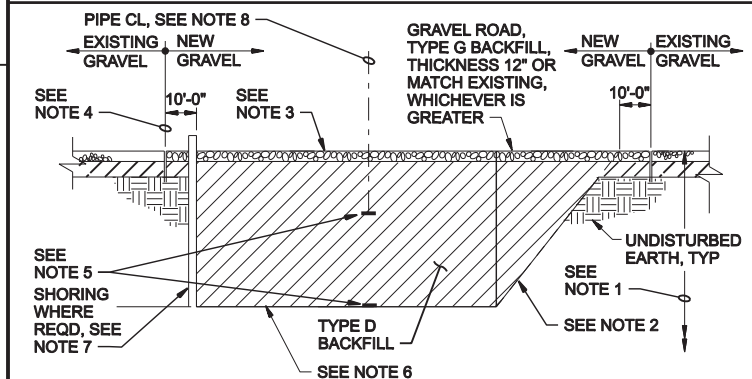






**TRENCH PLUG**  
NTS

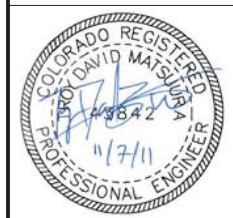
3123-900



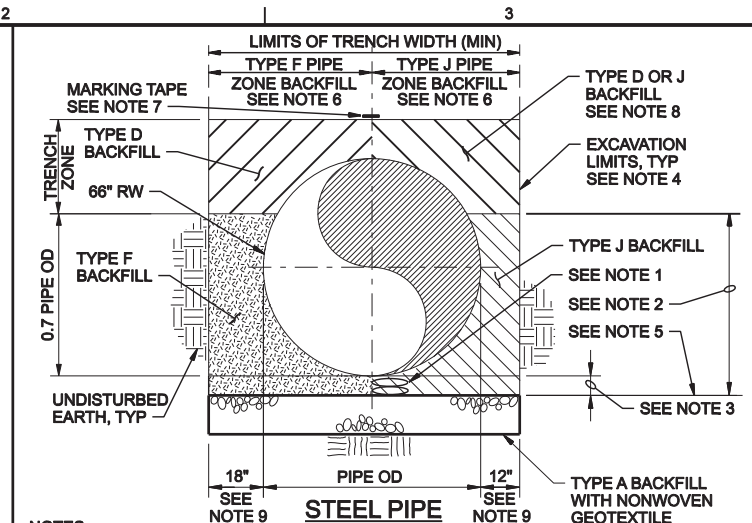
- NOTES:**
1. TRENCH ZONE.
  2. SLOPE TRENCH WALLS OR SHORE EXCAVATIONS FOR CONSTRUCTION SAFETY AND IN ACCORDANCE WITH OSHA REQUIREMENTS. FOR ROADWAY CROSSINGS, CONSTRUCTION PERMIT FROM ROADWAY PERMITTING AUTHORITY WILL GOVERN THE USE OF SLOPED TRENCH SIDEWALLS.
  3. REPLACE GRAVEL ROADWAY SECTION, MINIMUM THICKNESS 12".
  4. EXTEND NEW GRAVEL 10 FEET OUTSIDE LIMITS OF TRENCH EXCAVATION EACH SIDE.
  5. INSTALL MARKING TAPE 2 FEET BELOW GRADE AND ONE FOOT ABOVE TOP OF PIPE AT CENTERLINE, AS INDICATED.
  6. SEE (3123-930).
  7. REMOVE SHORING UNLESS OTHERWISE APPROVED BY THE CONSTRUCTION MANAGER.
  8. LIMITS OF TRENCH WIDTH (3123-930).

**TRENCH ZONE - GRAVEL**  
**SURFACE RESTORATION**

3123-930C



|      |            |     |      |          |    |
|------|------------|-----|------|----------|----|
| DSGN | E FORD     |     |      |          |    |
| DR   | B NORVILLE |     |      |          |    |
| CHK  | B SPILLER  |     |      |          |    |
| APVD | T MATSUURA | NO. | DATE | REVISION | BY |

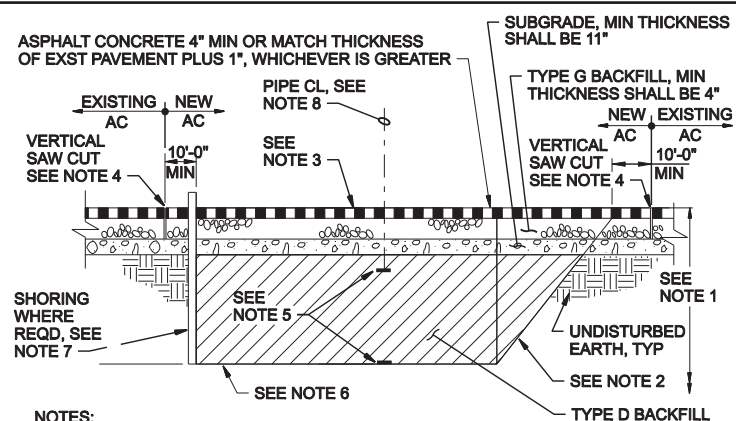


- NOTES:**
1. SAND BAG SUPPORTS IF TYPE J BACKFILL IS USED. PIPE BEDDING OTHERWISE.
  2. PIPE ZONE.
  3. PIPE BEDDING SHALL BE 6" MIN FOR TYPE J BACKFILL AND 8" MIN FOR TYPE F.
  4. SLOPE TRENCH WALLS OR SHORE EXCAVATIONS FOR CONSTRUCTION SAFETY AND IN ACCORDANCE WITH OSHA REQUIREMENTS. FOR ROADWAY CROSSINGS, CONSTRUCTION PERMIT, IF APPLICABLE, FROM ROADWAY OWNER WILL GOVERN THE USE OF SLOPED TRENCH SIDEWALLS.
  5. DURING CONSTRUCTION, IF THE WATER TABLE IS DISCOVERED TO BE ABOVE THE TRENCH BOTTOM. NOTIFY THE ENGINEER, DEWATER AS SPECIFIED.
  6. SEE (3123-930A), (3123-930B), (3123-930C), (3123-930D), & (3123-930E) FOR TRENCH ZONE.
  7. INSTALL MARKING TAPE ONE FOOT ABOVE TOP OF PIPE.
  8. INSTALL TYPE J BACKFILL 12" ABOVE TOP OF PIPE OR TO TOP OF BEDROCK WHERE INDICATED ON DWGS.
  9. DIMENSIONS AS SHOWN UNLESS OTHERWISE SPECIFIED OR DIRECTED BY ENGINEER. SEE DWG S3-G-3.

**TYPICAL PIPE ZONE**

NTS

3123-930



- NOTES:**
1. TRENCH ZONE.
  2. SLOPE TRENCH WALLS OR SHORE EXCAVATIONS FOR CONSTRUCTION SAFETY IN ACCORDANCE WITH OSHA REQUIREMENTS. FOR ROADWAY CROSSINGS, CONSTRUCTION PERMIT FROM ROADWAY PERMITTING TRENCH SIDEWALLS.
  3. REPLACE PAVED ROADWAY SECTION AS INDICATED.
  4. CONDUCT SAW CUTS OF EXISTING PAVEMENT STRAIGHT, SQUARE AND PARALLEL TO THE TRENCH, A MINIMUM OF 10' OUTSIDE LIMITS OF TRENCH EXCAVATION. PAINT EDGE OF EXISTING ASPHALT WITH TACK COAT PRIOR TO PAVING. CRACK SEAL AFTER PAVING OPERATION.
  5. INSTALL MARKING TAPE 4 FEET BELOW GRADE AND ONE FOOT ABOVE TOP OF PIPE AT CENTERLINE, AS INDICATED.
  6. SEE (3123-930).
  7. REMOVE SHORING UNLESS OTHERWISE DIRECTED BY THE CONSTRUCTION MANAGER.
  8. LIMITS OF TRENCH WIDTH (3123-930). PERMITTING AUTHORITY WILL GOVERN THE USE OF SLOPES AS INDICATED.

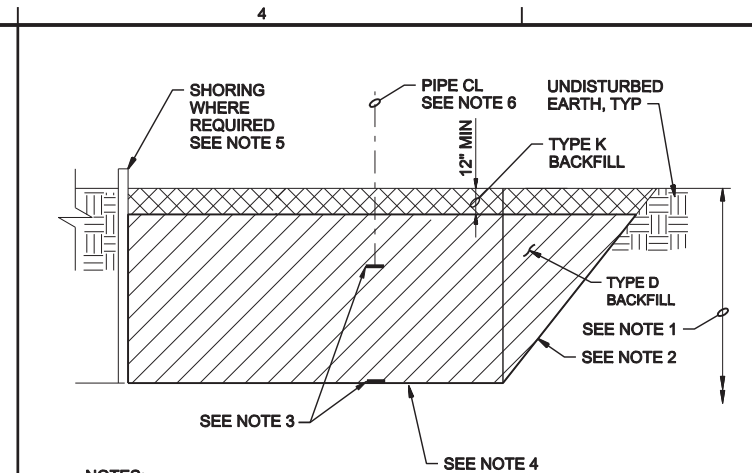
**TRENCH ZONE - PAVED SURFACE RESTORATION**

3123-930D

|      |  |  |  |  |  |
|------|--|--|--|--|--|
| DSGN |  |  |  |  |  |
| DR   |  |  |  |  |  |
| CHK  |  |  |  |  |  |
| APVD |  |  |  |  |  |

VERIFY SCALE  
BAR IS ONE INCH ON ORIGINAL DRAWING.  
0 1"  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

**CH2MHILL**  
Colorado Springs, CO 80903

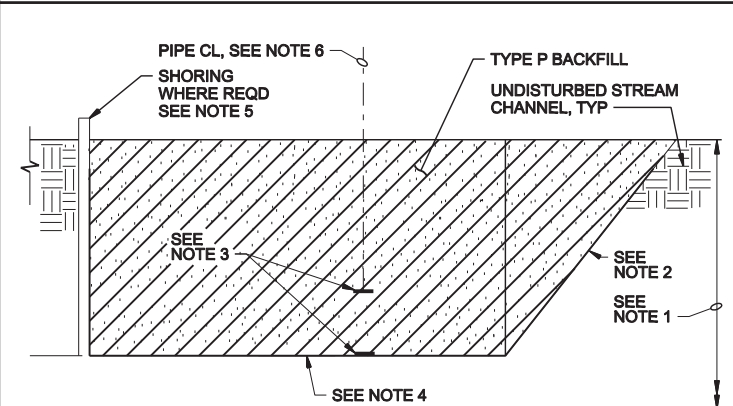


- NOTES:**
1. TRENCH ZONE.
  2. SLOPE TRENCH WALLS OR SHORE EXCAVATIONS FOR CONSTRUCTION SAFETY AND IN ACCORDANCE WITH OSHA REQUIREMENTS.
  3. INSTALL MARKING TAPE 2 FEET BELOW GRADE AND ONE FOOT ABOVE TOP OF PIPE AT CENTERLINE, AS INDICATED.
  4. SEE (3123-930).
  5. REMOVE SHORING UNLESS OTHERWISE APPROVED BY THE CONSTRUCTION MANAGER.
  6. LIMITS OF TRENCH WIDTH (3123-930).

**TRENCH ZONE - OPEN COUNTRY**  
**SURFACE RESTORATION**

NTS

3123-930A

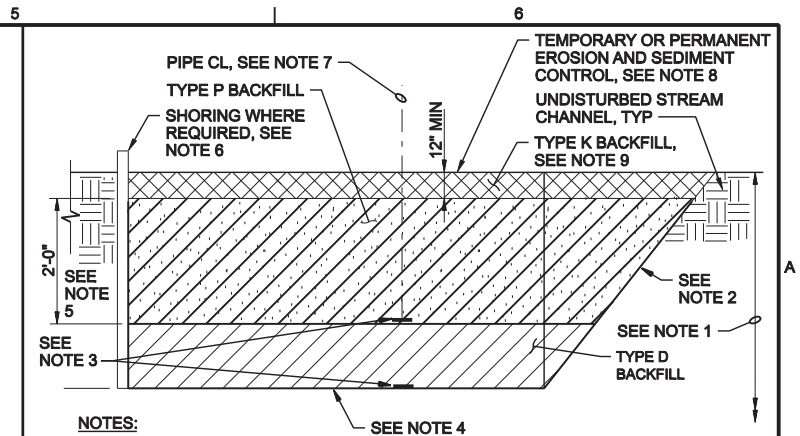


- NOTES:**
1. TRENCH ZONE.
  2. SLOPE TRENCH WALLS OR SHORE EXCAVATIONS FOR CONSTRUCTION SAFETY IN ACCORDANCE WITH OSHA REQUIREMENTS.
  3. INSTALL MARKING TAPE 3 FEET BELOW GRADE AND ONE FOOT ABOVE TOP OF PIPE AT CENTERLINE, AS INDICATED.
  4. SEE (3123-930).
  5. REMOVE SHORING UNLESS OTHERWISE APPROVED BY THE CONSTRUCTION MANAGER.
  6. LIMITS OF TRENCH WIDTH (3123-930).
  7. IN SOME CASES CLSM MAY EXTEND INTO TRENCH ZONE.

**TRENCH ZONE - NON-VEGETATED STREAM**  
**CHANNEL RESTORATION**

NTS

3123-930E

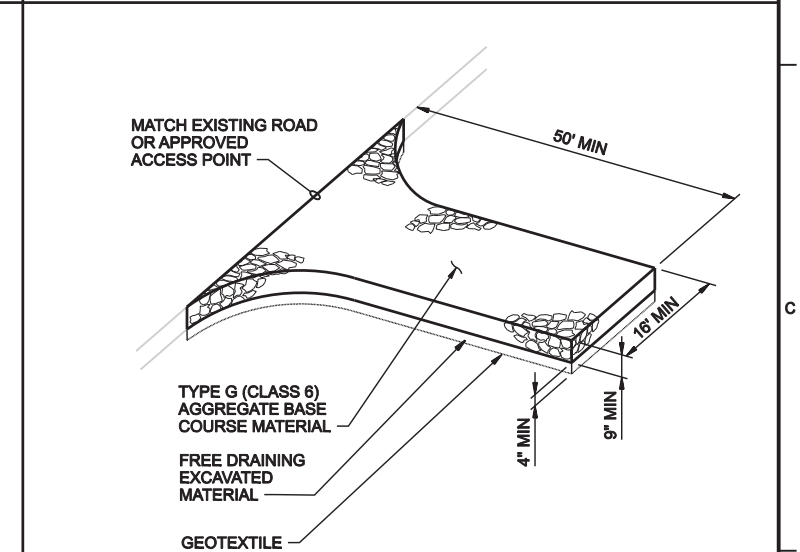


- NOTES:**
1. TRENCH ZONE.
  2. SLOPE TRENCH WALLS OR SHORE EXCAVATIONS FOR CONSTRUCTION SAFETY AND IN ACCORDANCE WITH OSHA REQUIREMENTS.
  3. INSTALL MARKING TAPE 2 FEET BELOW GRADE AND ONE FOOT ABOVE TOP OF PIPE AT CENTERLINE, AS INDICATED.
  4. SEE (3123-930).
  5. INSTALL TYPE P BACKFILL IN TRENCH ZONE TWO FEET BELOW TYPE K BACKFILL.
  6. REMOVE SHORING UNLESS OTHERWISE APPROVED BY THE CONSTRUCTION MANAGER.
  7. LIMITS OF TRENCH WIDTH (3123-930).
  8. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROLS PER SPECIFICATION 01 57 13 TEMPORARY EROSION AND SEDIMENT CONTROLS. INSTALL PERMANENT EROSION AND SEDIMENT CONTROLS WHERE INDICATED ON DRAWINGS.
  9. USE NATIVE TOPSOIL FROM PROJECT SITE.

**TRENCH ZONE - VEGETATED STREAM**  
**CHANNEL RESTORATION**

NTS

3123-930B



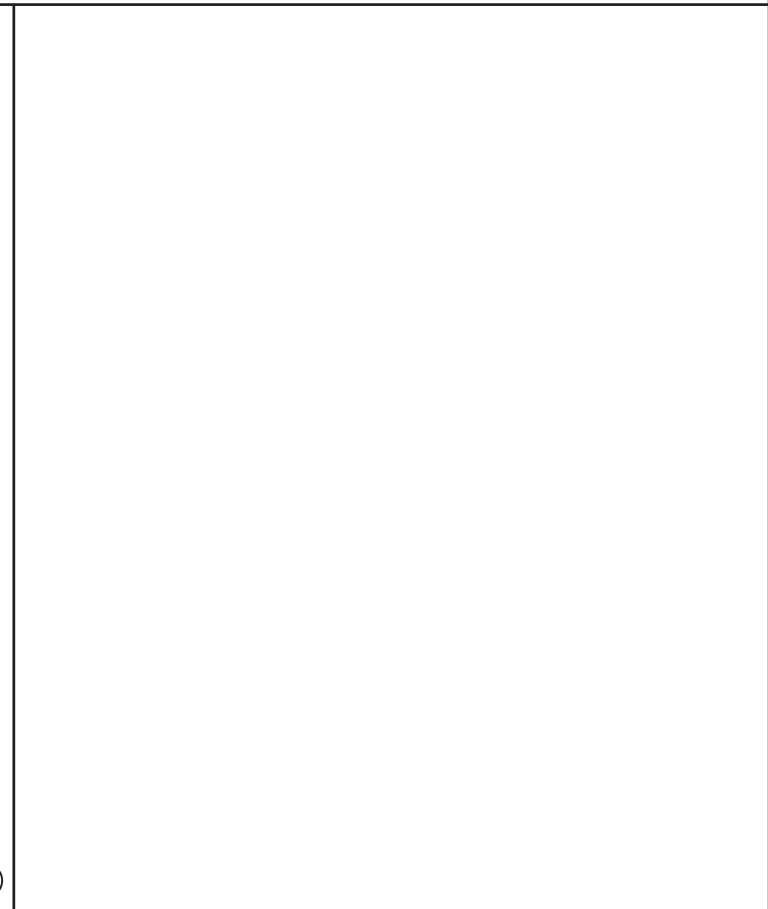
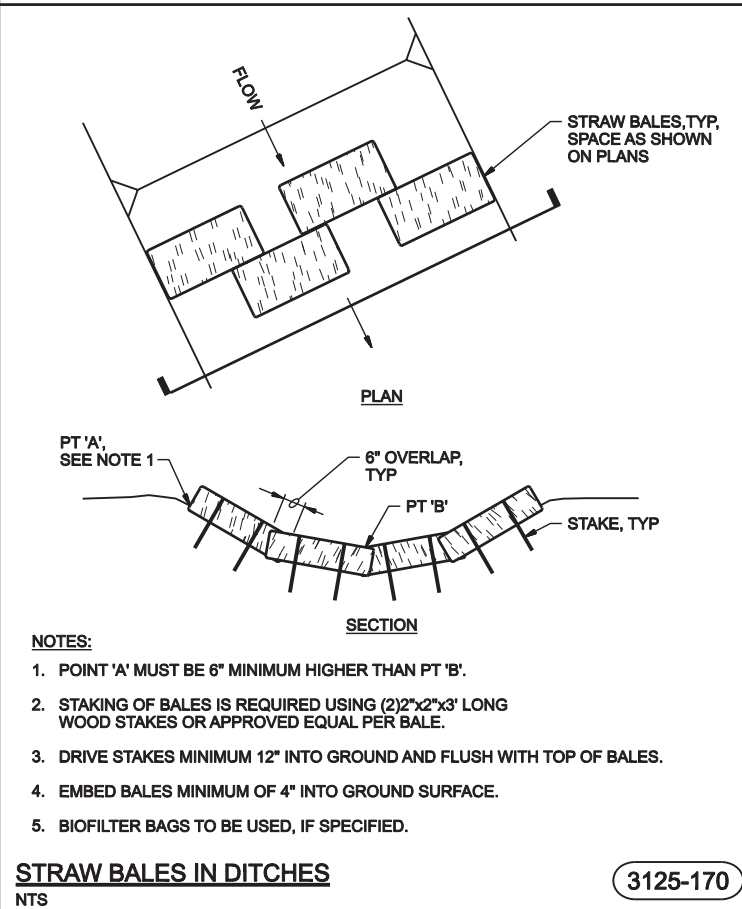
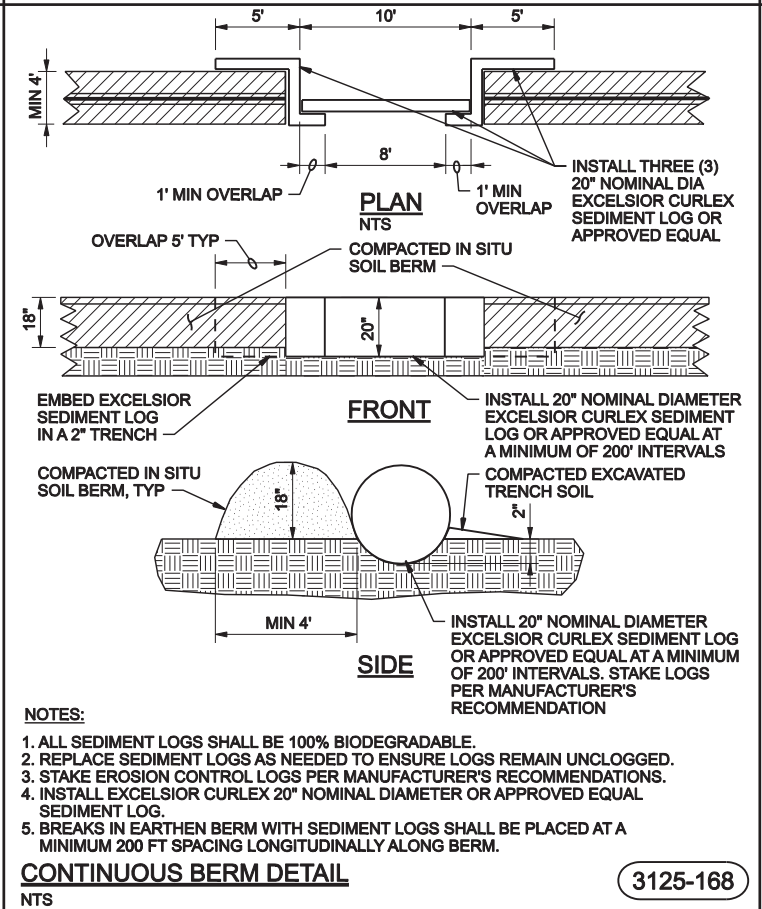
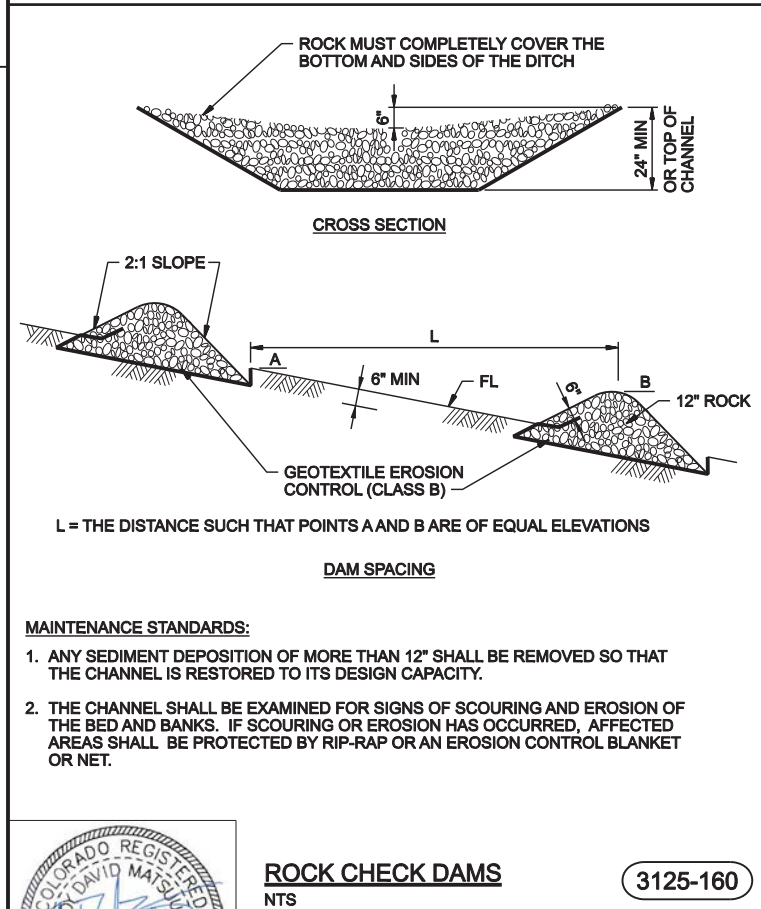
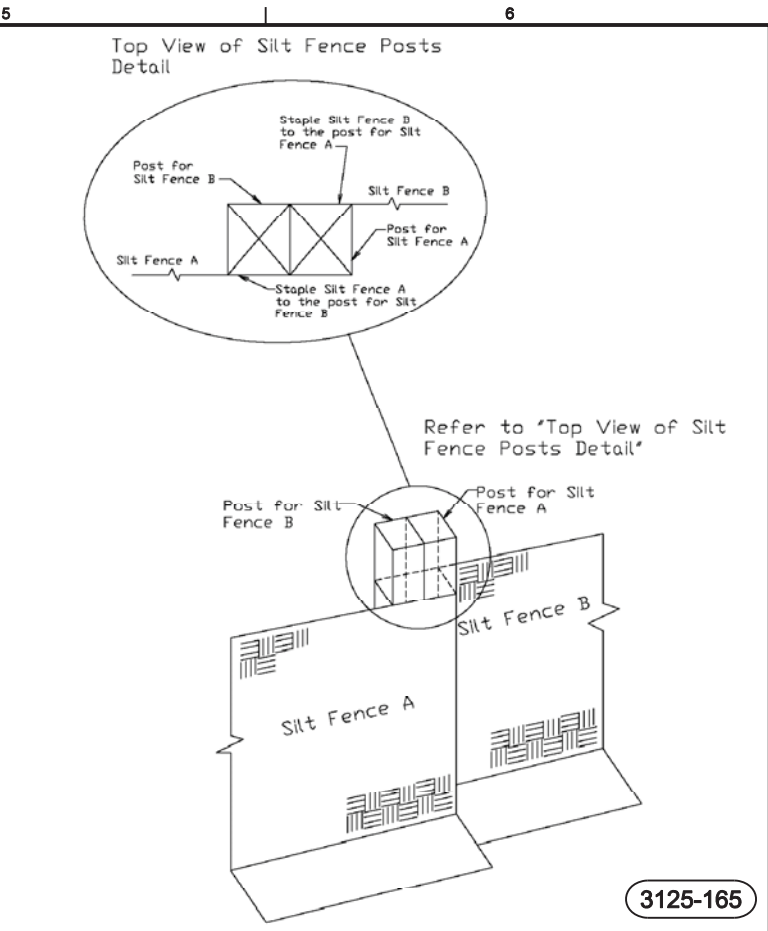
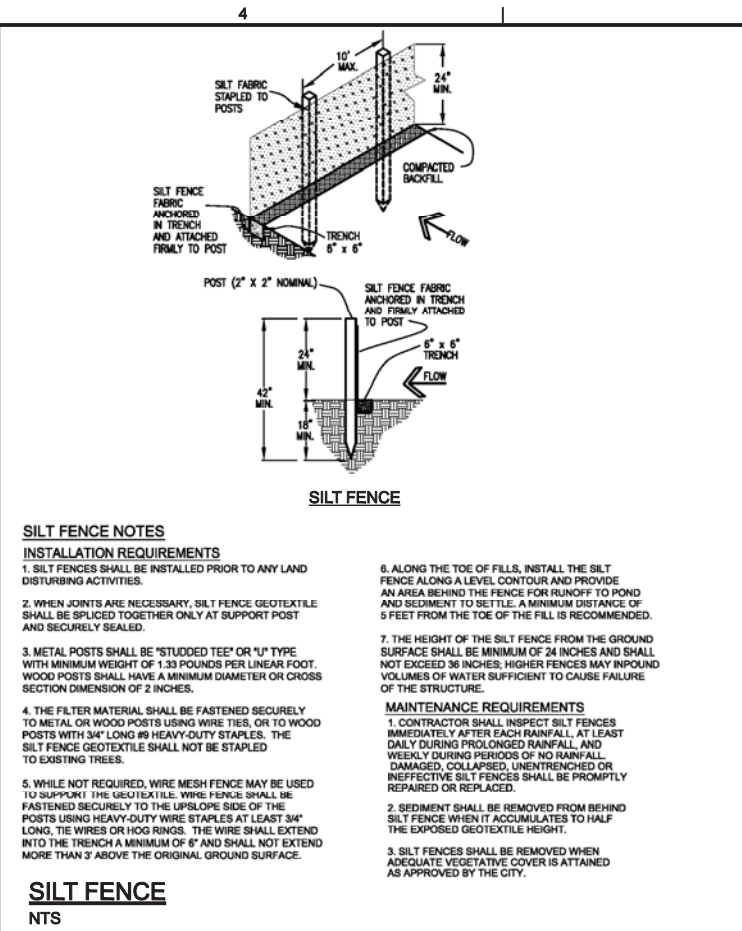
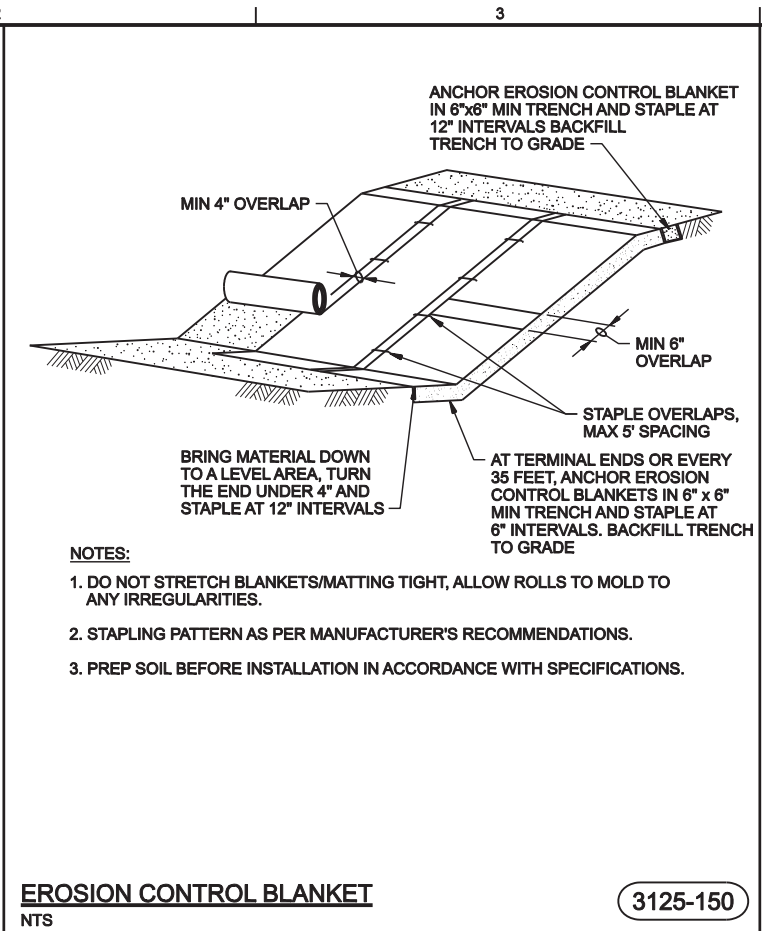
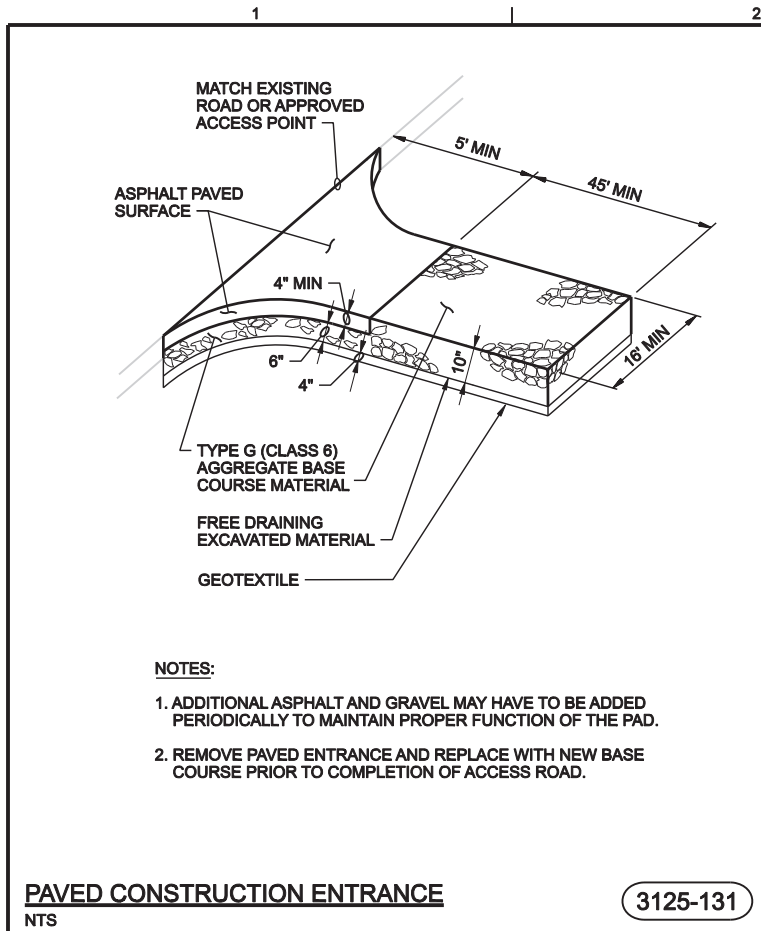
- NOTES:**
1. ADDITIONAL GRAVEL MAY HAVE TO BE ADDED PERIODICALLY TO MAINTAIN PROPER FUNCTION OF THE PAD.
  2. REMOVE GRAVEL ENTRANCE AND REPLACE WITH NEW BASE COURSE PRIOR TO COMPLETION OF ACCESS ROAD.

**GRAVEL CONSTRUCTION ENTRANCE**

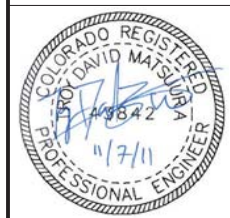
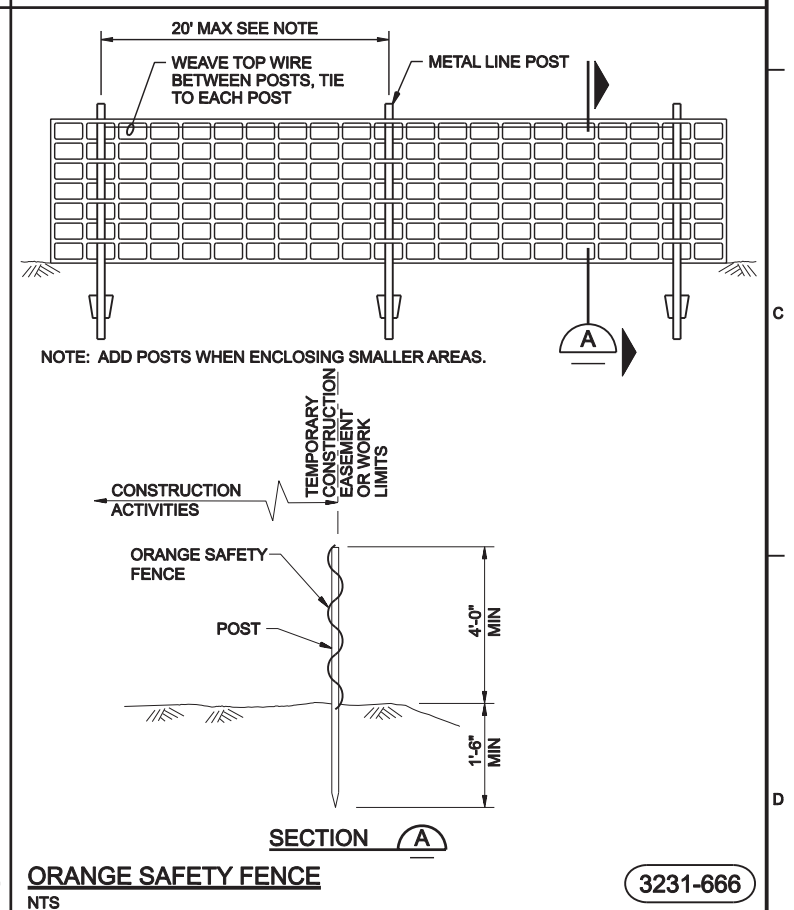
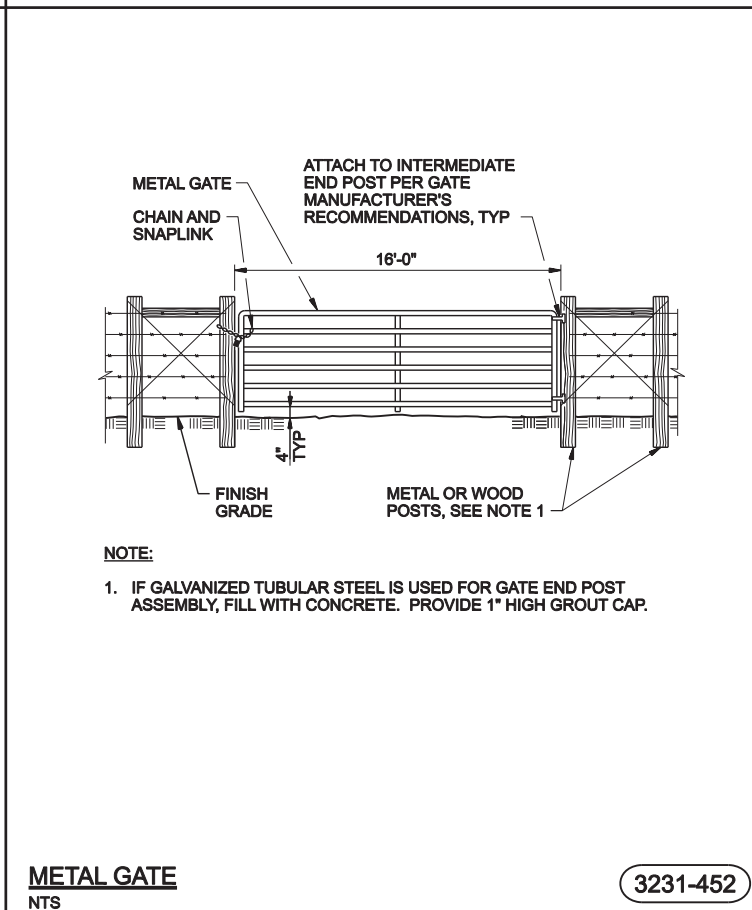
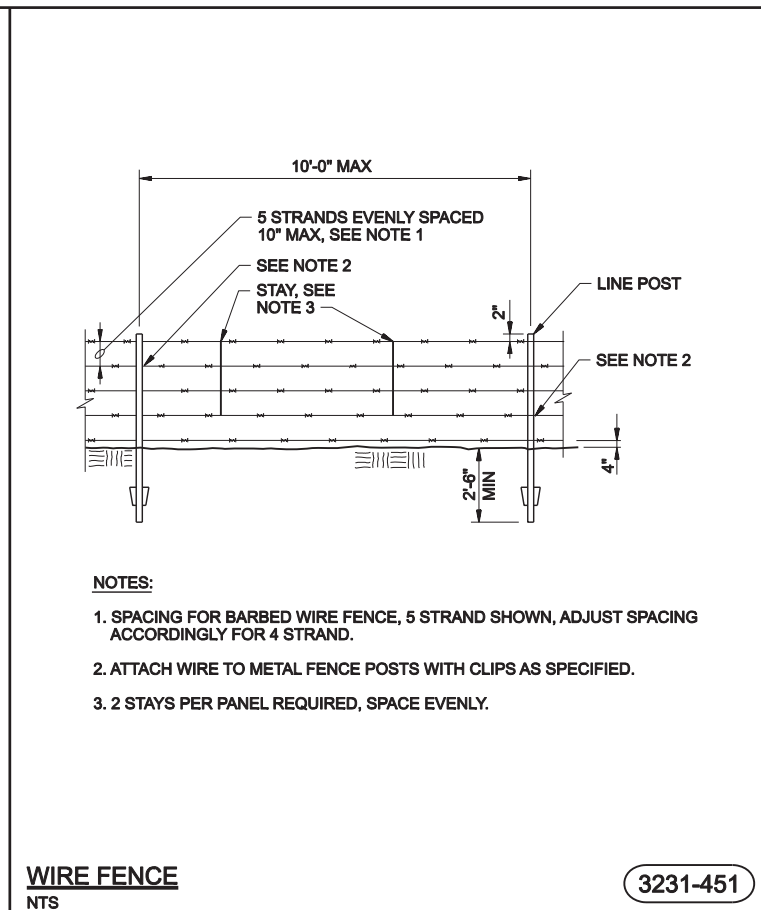
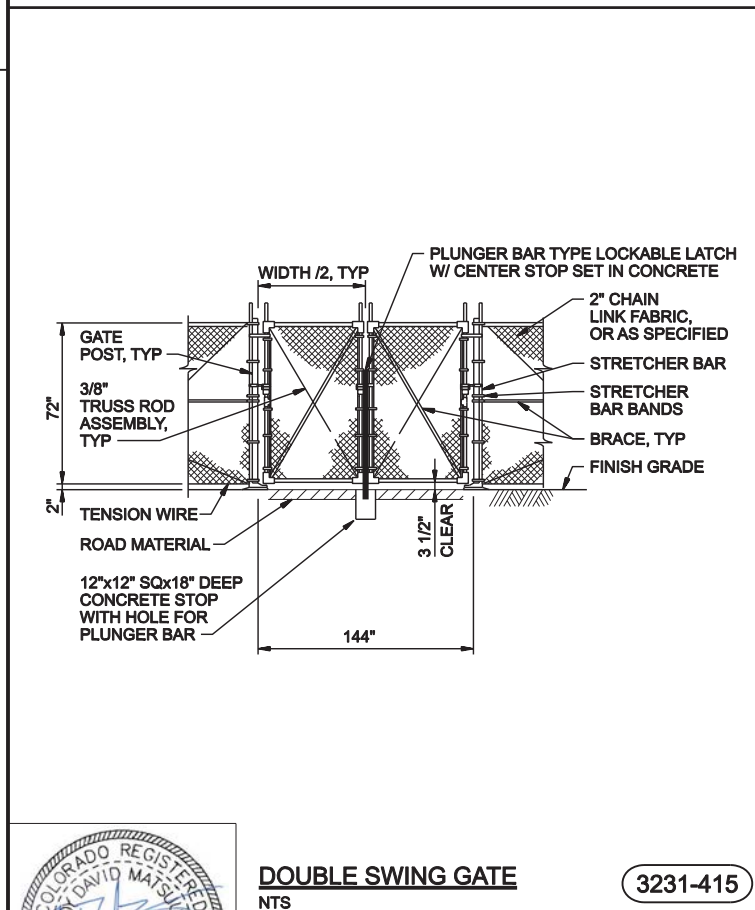
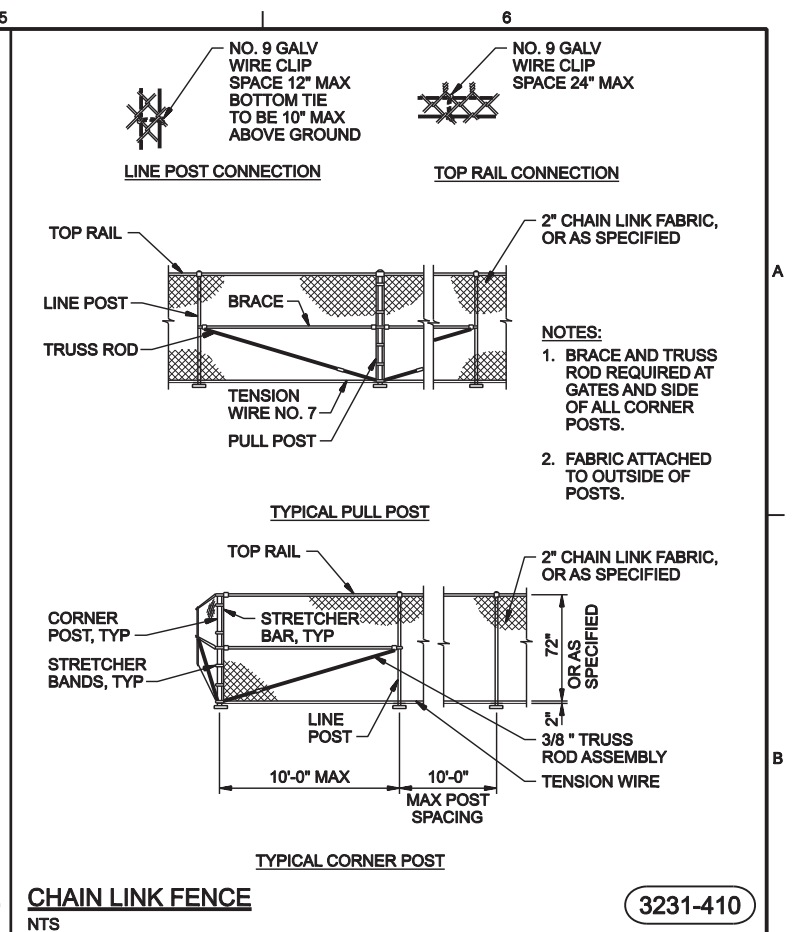
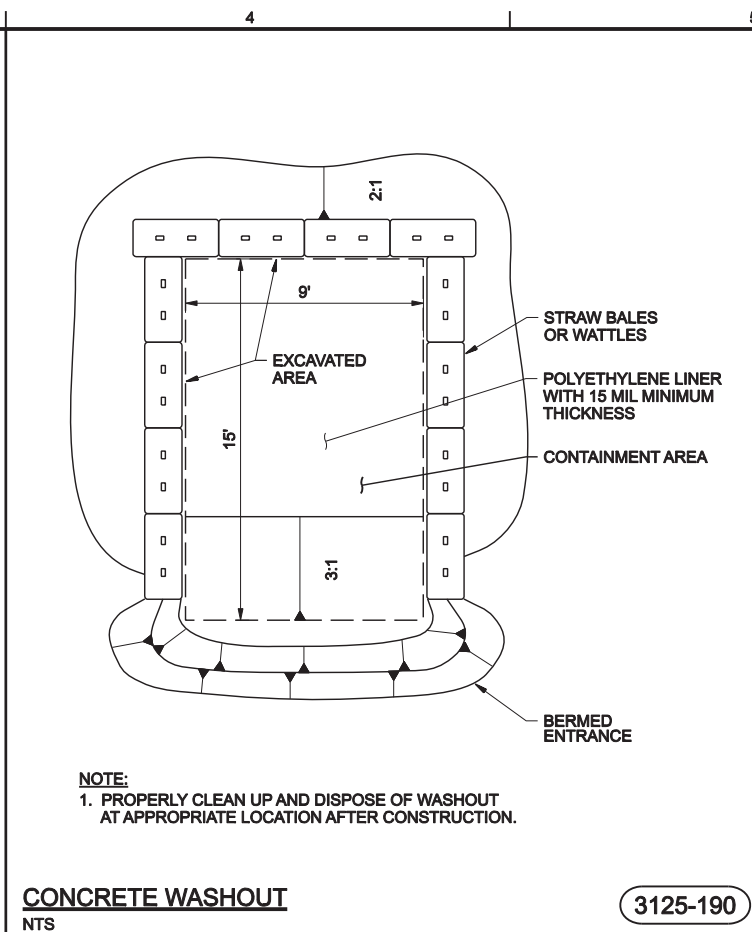
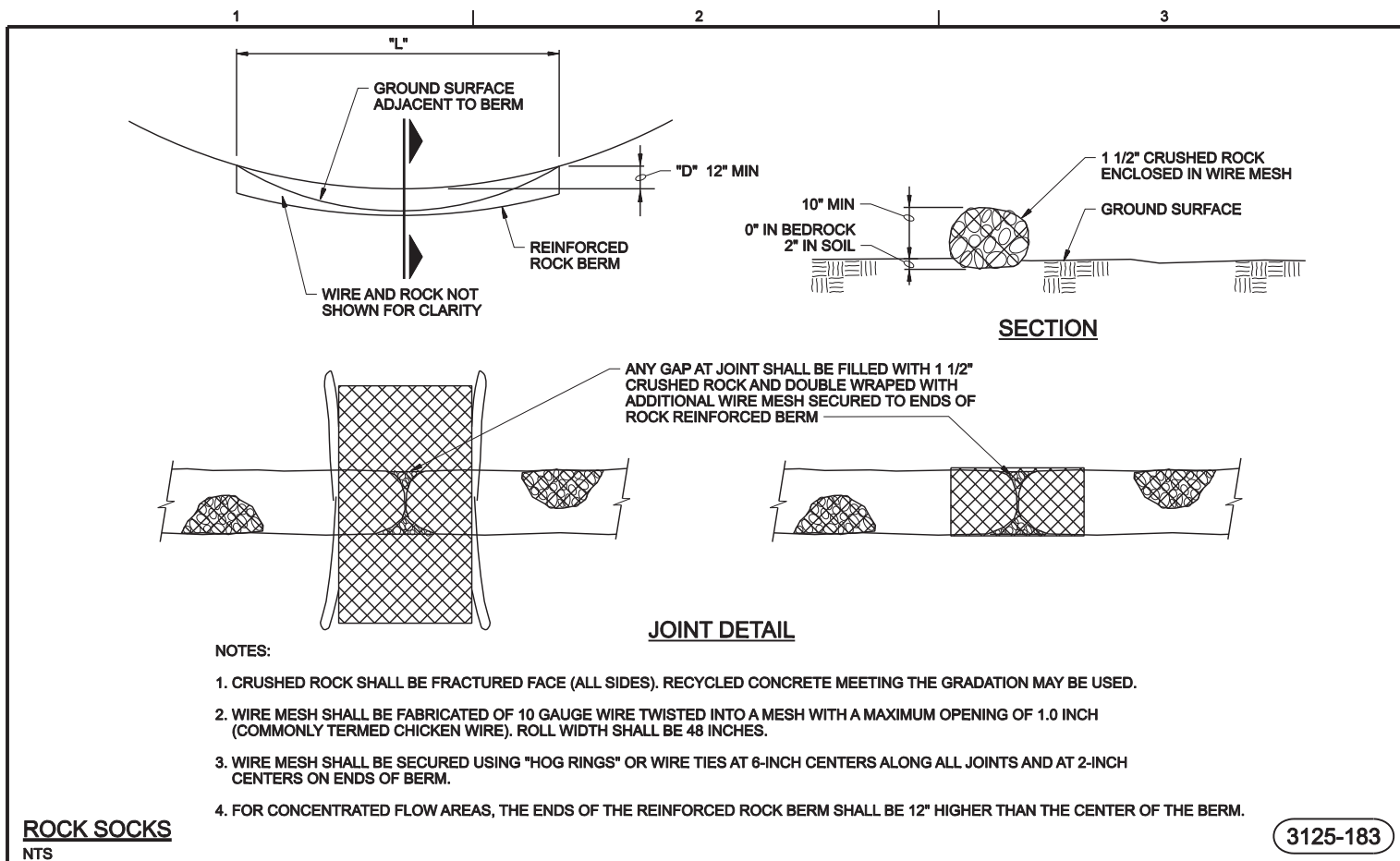
NTS

3125-130

|                  |       |               |
|------------------|-------|---------------|
| STANDARD DETAILS | SHEET | 85            |
| STANDARD DETAILS | DWG   | S3-SD-5       |
|                  | DATE  | NOVEMBER 2011 |
|                  | PROJ  | 425190.S3.03  |







| DSGN            | NO. | DATE | REVISION | BY | APVD |
|-----------------|-----|------|----------|----|------|
| E FORD          |     |      |          |    |      |
| DR B NORVILLE   |     |      |          |    |      |
| CHK B SPILLER   |     |      |          |    |      |
| APVD T MATSUURA |     |      |          |    |      |

VERIFY SCALE  
BAR IS ONE INCH ON ORIGINAL DRAWING.  
0 1"  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

**CH2MHILL**  
Colorado Springs, CO 80903

SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S3

STANDARD DETAILS  
STANDARD DETAILS

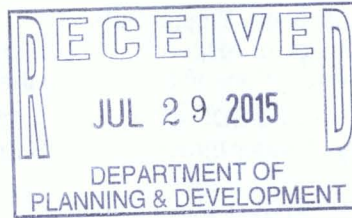
|       |               |
|-------|---------------|
| SHEET | 87            |
| DWG   | S3-SD-7       |
| DATE  | NOVEMBER 2011 |
| PROJ  | 425190.S3.03  |



Colorado Springs Utilities  
*It's how we're all connected*

July 28, 2015

Ms. Joan Armstrong  
Director of Planning & Development  
Pueblo County  
229 West 12<sup>th</sup> Street  
Pueblo, CO 81003-2810



**RE: Pueblo County 1041 Permit No. 2008-002 Compliance for Southern Delivery System (SDS) Mitigations Appendix Conditions C-1 through C-22, SE-1, CR-1 through CR-11, and General Conditions 13 and 20**

Dear Ms. Armstrong,

As has been reported during our monthly SDS project status meetings with Pueblo County staff, major construction activities associated with installation of the SDS pipeline through Pueblo County have been completed. In fact, the SDS Program has now moved from the construction phase of the project to the testing and commissioning phase of the project (where the system will be tested and inspected to confirm proper operation prior to delivery of water).

With this transition, Colorado Springs Utilities (on behalf of the SDS Participants) believes it has satisfactorily completed the Pueblo County 1041 Permit No. 2008-002 Mitigation Appendix Construction Conditions C-1 through C-22, Socio-Economic Condition SE-1, and County Roads Conditions CR-1 through CR-11 for the pipeline construction activities associated with the SDS construction activities through Pueblo County in compliance with General Condition 13 (County Road Improvements and Restorations) and General Condition 20 (Construction Impact Mitigation), with those exceptions specified below. Further evidence of such completion can be found in the quarterly and annual reports filed with the County, as well as the Environmental Closeout Documentation Manual provided to the U.S. Bureau of Reclamation (copy attached).

Though the SDS Program has offered to prepare additional construction condition compliance summary documentation for each project segment within Pueblo County in accordance with the "Draft" summary document for Segment S2, as provided to Pueblo County staff on May 14, 2013 and again on June 15, 2015, it is our understanding that such further documentation will not be necessary.

Exceptions:

- C-9, Site Restoration, Project Detail 2.e:  
"The revegetated area will be considered acceptable if the revegetated area cover is not less than 90 percent of the pre-construction vegetation cover with similar species diversity. The pipeline access road will not be included in the 90 percent coverage calculation".
  - Concurrence will be requested from the Pueblo County Board of Commissioners following completion of a publically held meeting regarding achievement of this condition.
- C-9, Site Restoration, Project Detail 6:  
"Provide Pueblo County a security bond equal to \$2,000 per acre of land in permanent or temporary construction easement in each work package. The security bond shall be released in full to the Applicant two years following the final completion of the construction contract, upon successful revegetation, as described above. If successful revegetation is not achieved, the security bond will be forfeited in the amount of \$2,000 for each acre, or fraction of an acre, that has not been successfully revegetated".
  - Request for bond release will be made at the completion of the publically held meeting regarding achievement of this condition.

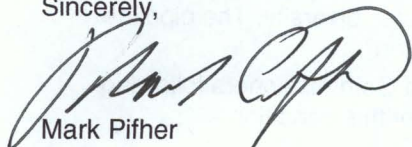


- C-10, Public Communication, Project Detail 1:  
"Assign a point of contact for responding to public questions, comments and concerns. The point of contact shall continue for one year following the final construction in Pueblo County".
  - The SDS Hotline (1-855-SDS-4YOU) will continue to operate until at least one year following the initial delivery of water through the SDS Project.
- C-16, Noxious Weed Control, Project Detail 3:  
"Implement an eradication program within the project limits. Eradicate existing Class A and B noxious weed populations".
  - Per the conditions of the U.S. Bureau of Reclamation Record of Decision (ROD), the SDS Program will continue to monitor construction areas for 3 years after completion of construction activities to assess if noxious weeds have invaded the site, and will mitigate as necessary.
- SE-2, Payment in Lieu of Property Taxes:  
"Applicant shall reimburse Pueblo County for property taxes lost due to acquisition of land in fee".
  - The City of Colorado Springs will continue to follow the requirements of this condition until such time that the affected properties are sold or transferred to another party.
- CR-10, Future Roadways / Utilities:  
"Applicant shall not unreasonably prohibit the installation of future roadways and utilities across the utility easement. Future roadways are expected to be surface crossings at existing grade for a typically defined roadway section in the Pueblo County Roadway Design and Construction Standards today or as modified in the future".
  - Colorado Springs Utilities will continue to abide by this condition now and into the future.

In relation to compliance with other General Terms and Conditions and Mitigation Appendix Conditions outlined in the Pueblo County 1041 Permit No. 2008-002 not discussed in this letter, the SDS Program will continue to provide quarterly reports to Pueblo County through completion of the project commissioning in accordance with Mitigation Appendix ENF-1, Compliance Monitoring and Reporting, Project Detail 1; and annually beginning the year following commencement of water delivery in accordance with Mitigation Appendix ENF-1, Project Detail 2. In addition, the SDS Program will continue to submit Project Commitment Annual Reports (PCARs) to the U.S. Bureau of Reclamation in accordance with the ROD conditions and provide copies to Pueblo County for review.

We appreciate your attention to this matter and should you have any questions or comments, please feel free to contact me directly at 719-668-8693.

Sincerely,



Mark Pifher  
Permitting and Compliance Manager  
Southern Delivery System

Cc: John Fredell, SDS Program Director, Colorado Springs Utilities  
Keith Riley, SDS Deputy Program Director, Colorado Springs Utilities  
Allison Mosser, Sr. Project Manager, Colorado Springs Utilities  
Kevin Binkley, SDS Permitting and Compliance Specialist, MWH  
Alec Hart, SDS Restoration Project Manager, MWH  
Gary Raso, Pueblo County Attorney  
Terry Stroh, Environmental Specialist, U.S. Bureau of Reclamation



# SDS Compliance



## Environmental Closeout Documentation

Bureau of Reclamation

June 17, 2015



**RECEIVED**

DEPARTMENT OF PLANNING  
AND DEVELOPMENT

229 West 12th Street, Pueblo, CO 81003-2810-719-583-6100

July 29, 2015



# SDS Closeout Documentation

## Table of Contents

**1. MOU**

**2. 404**

**3. Excess Capacity**

**4. NOW**

**5. FWMP**

**6. ROD**

**7. 1041**

# **CO Parks and Wildlife - Memorandum of Understanding**

## **"DPOR" MOU, April 4, 2011**

1. **Paragraph 5e:** Minimize damage to the access roads and adjoining portions of the State Park. UTILITIES will promptly repair any damage.

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Agreement from CPW on restoration/payment

2. **Paragraph 5j:** The parties will pay the sum of \$24,000 to DPOR as complete compensation for such unanticipated impacts occurring through the initial term of this MOU (ending December 31, 2016) within 30 (thirty) days from execution of this MOU.

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_



Next Step: \_\_\_\_\_

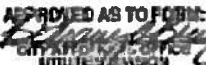
Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Payment receipt



## Signed and Updated FHA Agreement/Payment

|   |  |
|---|--|
| <b>Federal Highway Administration</b><br><b>Federal Lands Highway</b><br><b>GRANT AGREEMENT</b><br><br><b>DTFH68-15-E-00044</b>   |  |
| <b>PARTIES TO THE AGREEMENT</b>   |  |
| <b>Reimbursing Organization</b><br>Colorado Springs Utilities<br>An enterprise of the City of Colorado Springs<br>121 S. Tejon St., MC930<br>Colorado Springs, CO 80903   | <b>Organization to be Reimbursed</b><br>Federal Highway Administration<br>Central Federal Lands Highway Division<br>12300 West Dakota Ave<br>Lakewood, CO 80228  |
| <b>Appropriation Chargeable</b>   | <b>DUNS Number</b> 127711760   |
| <b>POINTS OF CONTACT FOR THE AGREEMENT</b>  |  |
| <b>Reimbursing Organization</b><br><b>Finance Point of Contact</b><br>Name: Elizabeth Baston<br>Address: 121 S. Tejon St., MC930<br>Colorado Springs, CO 80903<br>Phone: (719)888-8538<br>E-mail: ebaston@csu.org | <b>Organization to be Reimbursed</b><br><b>Finance Point of Contact</b><br>Name: Regina Monroe<br>Address: 12300 West Dakota Ave<br>Lakewood, CO 80228<br>Phone: 720-863-3480<br>E-mail: regina.monroe@dot.gov |
| <b>Reimbursing Organization</b><br><b>Program Point of Contact</b><br>Name: Joseph Rasmussen<br>Address: 121 S Tejon St, MC930<br>Colorado Springs, CO 80903<br>Phone: 719-868-4173<br>E-mail: jrasmussen@csu.org | <b>Organization to be Reimbursed</b><br><b>Program Point of Contact</b><br>Name: Tony Galardi<br>Address: 12300 W Dakota Ave<br>Lakewood, CO 80228<br>Phone: 720-863-3889<br>E-mail: Anthony.Galardi@dot.gov   |
| <b>PERIOD OF PERFORMANCE</b><br>All work shall be completed no later than December 31, 2016   | <b>LEGAL AUTHORITY</b><br>23 U.S.C. 204(b)(2)  |
| <b>TOTAL AGREEMENT AMOUNT</b><br>TOTAL AGREEMENT AMOUNT: \$563,765.44   | <b>PAYMENT TERMS AND SCHEDULE</b><br>Check; see SOW  |
| <b>DESCRIPTION OF SUPPLIES, SERVICES, AND DELIVERABLES</b><br>See attached SOW  |  |
| <b>AUTHORIZED APPROVALS</b>   |  |
| <b>For Reimbursing Organization</b><br>Signature:  Date: 4-17-2015<br>Name/Title: Jeff Daniel/Manager                          | <b>For Organization to be Reimbursed</b><br>Signature:  Date: 22 APR 2015<br>Name/Title: Ricardo Suarez/ Division Engineer |

APPROVED AS TO FORM:  
  
 COLORADO SPRINGS UTILITIES DIVISION

1 | Page

Copy of Check: \$563765.44

| Colorado Springs Utilities   |          |                     |                 | No. 246495          |  |
|--|----------|---------------------|-----------------|---------------------|--|
| (719) 668-8550 - Vendor Payment Inquiries<br>(719) 448-4800 - Customer Refund Inquiries  |          |                     |                 | Check Date: 5/14/15 |  |
| DOT FHWA, on the part of the Federal Highway Administration, Federal Aviation Administration, and Department of Transportation |          |                     |                 | (17518)             |  |
| Description  | Date     | Gross Amount        | Discount Amount | Net Amount Paid     |  |
| 13026<br>Customer # 255767<br>Agreement # DTPH6815800044<br>Project # C6081099001<br>Lake Pueblo Rd & Trail Improvement        | 05/09/15 | \$563,765.44        | \$0.00          | \$563,765.44        |  |
| <b>TOTALS:</b>   |          | <b>\$563,765.44</b> | <b>\$0.00</b>   | <b>\$563,765.44</b> |  |

Page 1 of 1

Check at Performance & Designing Center

Colorado Springs Utilities  
It's how we're all connected  
ACCOUNTS PAYABLE SECTION, P.O. BOX 1103, COLORADO SPRINGS, CO 80947-0929

JPMorgan Chase Bank N.A.  
Columbus, OH 43271  
50-1544461

Check Date: 05/14/2015  
Number: 246495

PAY Five Hundred Sixty Three Thousand Seven Hundred Sixty Five and 44/100 Dollars

Amount: \$563,765.44  
Valid after 60 Days

PAY TO THE ORDER OF  
DOT FHWA  
ENTERPRISE SVC CENTER (HDQ RM 2)  
FEDERAL AVIATION ADMIN  
ATTN AMZ-340 MARK RICHARDSON  
6500 S MACARTHUR BLVD  
OKLAHOMA CITY OK 73169

W J Cherman

⑆0000246495⑆ ⑆044115443⑆ 634866024⑆

DPOR Agreement

Paragraph 5e



**SATISFACTION AND RELEASE OF MEMORANDUM OF  
UNDERSTANDING REPAIR, RESTORATION, AND  
REHABILITATION REQUIREMENTS**

This Satisfaction and Release of Memorandum of Understanding Requirements ("Satisfaction") is hereby entered into this 17 day of April, 2015 (the "Effective Date"), by and between the State of Colorado acting by and through the Colorado Department of Natural Resources, for the use and benefit of the Division of Parks and Wildlife ("CPW"), and Colorado Springs Utilities ("Utilities"), an enterprise of the City of Colorado Springs, a Colorado home rule city and municipal corporation (each individually a "Party" or collectively, the "Parties")

**RECITALS**

**WHEREAS**, the Parties entered into that certain Memorandum of Understanding on April 4, 2011 ("MOU"), which set forth Utilities' obligations with respect to use of lands owned by the U.S. Department of Interior, Bureau of Reclamation and leased to the Colorado Division Parks and Outdoor Recreation, now managed by CPW and known as Lake Pueblo State Park (the "State Park") in relation to Utilities' design and construction of Southern Delivery System ("SDS") facilities, and

**WHEREAS**, the MOU set forth the rights and conditions for Utilities' use and access to areas within the State Park, including, but not limited to requirements related to rehabilitation of roads and other areas within the State Park which would be impacted by Utilities' design and construction activities; and

**WHEREAS**, Section 5(e) of the MOU required that Utilities and its Contractors "promptly repair in a good and workmanlike manner any damage to the access roads or the adjoining portions of the State Park arising or resulting from Utilities and its Contractors' actions or activities and otherwise restore the access roads and adjoining portions of the State Park to the condition existing prior to the occurrence of such damage"; and

**WHEREAS**, Section 5(e) of the MOU further required that the Parties would conduct pre- and post-construction assessments of the State Park roads and construction haul routes and other areas of the State Park and improvements impacted by the SDS Facilities upon completion of the construction of the SDS facilities, and would determine whether and what types of corrective measures would be required for restoration of the access roads and construction haul routes; and

**WHEREAS**, Sections 7 and 8 of the MOU further require that upon any termination of the MOU that Utilities will repair all areas damaged by SDS construction activities; and

**WHEREAS**, based on assessments conducted by the Parties, the Parties have determined and agreed that it is in their respective best interests to satisfy the MOU's requirements with respect to the repair, restoration, and rehabilitation of the State Park through the payment by Utilities to the Federal Highway Administration of an amount equal to Five Hundred Sixty-Three Thousand, Seven Hundred Sixty-Five Dollars and Forty-four Cents (\$563,765.44) in addition to

**\$24K Receipt**

**From:** Regina Casey  
**Sent:** Friday, March 20, 2015 11:29 AM  
**To:** Jackie Mdlwain  
**Subject:** Colorado Division of Park & Outdoor Recreation Payment \$24,000


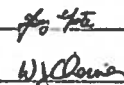
Hi Jackie

Here is the confirmation of payment and the check has been reconciled.  
 I can have Patty get a copy of the check on Monday if you need it.

Vendor: COLORADO DIVISION OF PARKS  
 Remit To Location: COLORADO DIVISION OF PARKS  
 Invoice: 0311\$2400000 0 Invoice  
 Invoice Amount: 24000.00 USD  
 Discount Amount: 0.00  
 Net Payable: 24000.00  
 Taxable Amount: 0.00  
 Tax Amount: 0.00 Tax Code  
 Paid Amount: 24000.00  
 Tax Adjust:  
 Invoice Description:  
 Status: History  
 Approved: Yes  
 Payment Number: 193711 SYS RECONCILE  
 Invoice Date: 03/28/2011 Payment Date: 03/29/2011  
 Due Date: 03/29/2011  
 Voucher: 12110124  
 Purchase Order: 0

This is the comment that appeared on the check for what payment was for.

MOU BETWEEN COLORADO SPRINGS UTILITIES AND THE COLORADO DIVISION OF PARKS AND OUTDOOR RECREATION - SECTION 5J

|   |   |  |   |
|---|---|--|---|
| <br><b>Colorado Springs Utilities</b><br>It's how we're all connected<br>ACCOUNTS PAYABLE SECTION<br>P.O. BOX 1103<br>COLORADO SPRINGS, CO 80947-0129<br>PAY Twenty Four Thousand Dollars AND 00 Cents |   | JPMorgan Chase Bank N.A.<br>Colorado, OH 43271<br>00-1540241 | <b>Check No. 193711</b><br>Check Date<br>03/29/2011<br>Check Amount<br>\$ 24,000.00 |
| TO THE ORDER OF<br>COLORADO DIVISION OF PARKS AND OUTDOOR RECREATION<br>4755 SANTON RD<br>COLORADO SPRINGS CO 80907<br>UNITED STATES  |  |  |   |
| MICR LINE: @C0001937111 @C0441154430 634866024  |   |  |   |
| RECEIVED<br>APR 30 2011<br>CREDIT TO DRASH...<br>KEYBANK...<br>LB 6037-7896810-1571... 1156 126   |   |  |   |



## **MEMORANDUM OF UNDERSTANDING**

This MEMORANDUM OF UNDERSTANDING ("MOU") by and between the STATE OF COLORADO, acting by and through the DEPARTMENT OF NATURAL RESOURCES, for the use and benefit of the DIVISION OF PARKS AND OUTDOOR RECREATION (hereinafter "DPOR"), and COLORADO SPRINGS UTILITIES (hereinafter "UTILITIES"), an enterprise owned and operated by the City of Colorado Springs, a Colorado home-rule city and municipal corporation, is dated this 4<sup>th</sup> day of April, 2011.

### **RECITALS**

The U.S. Department of Interior, Bureau of Reclamation, issued a Record of Decision (hereinafter "ROD") based upon an environmental impact statement (hereinafter "EIS") concerning requests by UTILITIES for a long term storage contract for use of Pueblo Reservoir for non project water and a long term conveyance contract and authorization to construct the proposed Southern Delivery System facilities (hereinafter "SDS"). SDS facilities and construction activities include, but are not limited to, the Pueblo Dam Connection, Raw Water Pipeline, Pump Stations, Electrical Sub-Station and Distribution Lines.

Pursuant to a Lease with the Bureau of Reclamation (Contract No. 14-06-700-8018, dated January 15, 1975) (hereinafter the "Lease"), DPOR is responsible for the operation, management and administration of Pueblo Reservoir and surrounding property owned by the Bureau of Reclamation (hereinafter "Reclamation"), known as Lake Pueblo State Park (hereinafter the "State Park"), for recreation and related purposes. This MOU applies to and affects only the property owned by Reclamation that is leased to DPOR for operation of the State Park and the construction activities identified herein.

It is necessary for UTILITIES, its employees, agents, contractors and subcontractors (hereinafter "UTILITIES and its Contractors") to enter upon the State Park to advance design

and prepare for and execute construction of SDS facilities which requires a significant level of coordination with DPOR.

Pursuant to the terms of the Lease and the Pueblo Reservoir Area Management Plan (hereinafter "Pueblo RAMP") incorporated therein, UTILITIES must obtain the necessary use rights and access permits for location and construction of the SDS pipeline within the State Park from Reclamation. Pursuant to the Pueblo RAMP, DPOR is to advise Reclamation regarding the compatibility of the proposed use and make recommendations regarding terms of the use. In addition, while Reclamation retained the right under the Lease and the Pueblo RAMP to authorize such uses and to issue such permits, the DPOR is specifically authorized and obligated to administer the use of roads within the State Park.

#### **AGREEMENTS AND COMMITMENTS**

1. Prior to entering the State Park to design, prepare for or begin SDS construction activities, UTILITIES shall provide DPOR with a detailed construction schedule outlining the individual work packages, including, but not limited to, the Pueblo Dam Connection, Raw Water Pipeline, Pump Stations, Electrical Sub-Station and Distribution Lines. Prior to undertaking any individual work package, UTILITIES shall consult with DPOR regarding proposed construction traffic volume and routes, duration of such construction activities and any changes from or modifications of the construction schedule previously proposed. All proposed road closures, rerouting of traffic, or significant restriction on public use of a road require the approval of DPOR, which approval will not be unreasonably withheld.

2. Prior to entering the State Park to design, prepare for or begin SDS construction activities, UTILITIES shall require that all of its Contractors provide and maintain insurance of the type and with limits as set forth below, on all of its operations, and with companies



authorized to do business in the State of Colorado and rated by A.M. Best's Rating as A:VIII or better, or with companies reasonably acceptable to DPOR, as follows: (i) Workers' Compensation insurance as required by an applicable law or regulation; (ii) Employer's liability insurance in amounts not less than \$500,000 each accident for bodily injury by accident, with a \$500,000 policy limit for bodily injury by disease, and \$500,000 each employee for bodily injury by disease; (iii) Commercial General Liability insurance in amounts not less than \$1,000,000 each occurrence (combined single limit for bodily injury and property damage) and \$2,000,000 General Aggregate; (iv) Professional Liability insurance including errors and omissions coverage in an amount of not less than \$1,000,000 per occurrence (or claims made) and aggregate for licensed professional consultants; and (v) Umbrella/excess liability insurance in an amount of not less than \$1,000,000. The DPOR shall be named as an additional insured on all liability policies.

All insurance policies shall include provisions preventing cancellation without 60 days prior written notice to the DPOR. UTILITIES' Contractors shall provide certificates evidencing adequate insurance coverage to DPOR prior to accessing the State Park pursuant to this MOU. UTILITIES is not required to provide or maintain such insurance unless UTILITIES, or its employees or agents, intend to use the access roads and enter the State Park to monitor performance by its Contractors and then, as a public entity, UTILITIES shall maintain such liability insurance, by commercial policy or self-insurance, as is necessary to meet its obligations under the Colorado Governmental Immunity Act, § 24-10-101 et seq., C.R.S. Should UTILITIES choose to purchase a commercial policy, the DPOR shall be named as an additional insured and the policy shall include a provision preventing cancellation without 60 days prior written notice to the DPOR. Upon request by the DPOR, UTILITIES shall provide proof of such commercial insurance or a statement of self-insurance. In addition, the parties hereto understand

and agree that liability for claims for injuries to persons or property against the DPOR is controlled and limited by the provisions of § 24-10-101 et seq., C.R.S., and § 24-30-1501, et seq., C.R.S. Any provision of this instrument, whether or not incorporated herein by reference, shall be controlled, limited and otherwise modified so as to limit any liability of the DPOR to the above cited laws. Utilities will hold performance bonds with its contractors as it determines appropriate to ensure satisfactory completion of the construction activities in the State Park.

3. UTILITIES agrees that entry into the State Park and associated use of access roads pursuant to the MOU shall be at the entering parties' sole risk. UTILITIES shall require its Contractors to indemnify, save and hold harmless the DPOR, its employees and agents, against any and all claims, damages, liability and court awards including costs, expenses and attorney fees incurred as a result of any act or omission related to work performed pursuant to the terms of this MOU.

4. In addition to compliance with the terms of this MOU, UTILITIES and its Contractors shall comply with all federal, state and local laws and regulations that are applicable to its activities, including but not limited to environmental laws and regulations. Utilities will comply with authorizations of Reclamation for SDS facilities and construction at the State Park.

5. UTILITIES makes the following commitments to protect the recreation uses within the State Park from potential impacts created by SDS:

- (a) UTILITIES will utilize vehicle permits to identify all vehicles and wheeled or tracked construction equipment accessing the State Park pursuant to this MOU. Such permits will be of the color and form, and contain the information as the form attached hereto as Exhibit 1. The vehicle permits will be issued for durations commensurate with activities



being performed, but will not exceed one year in duration. All vehicles and equipment must display the permit upon entry and at all times while in the State Park.

- (b) UTILITIES will record information regarding the issued permits including, to whom the permit was issued, the permitted vehicles company name, a description of the vehicle, date of permit issuance, date of permit expiration, and vehicle license plate number. UTILITIES will report monthly on the number of such permits issued.
- (c) To assist DPOR in correcting visitation numbers due to the presence of construction vehicles and equipment, UTILITIES will install a vehicle counter on North Spillway road immediately south of the intersection of North Spillway road and Juniper road. UTILITIES will maintain this vehicle counter and collect traffic data during all periods of active construction.
- (d) UTILITIES' construction vehicles and equipment may only enter the State Park through the east entrance and may only use the roads identified on the map attached hereto as Exhibit 2.
- (e) All activities undertaken pursuant to this MOU shall be performed in a manner calculated to minimize damage to the access roads and adjoining portions of the State Park. UTILITIES and its Contractors shall promptly repair in a good and workmanlike manner any damage to the access roads or the adjoining portions of the State Park arising or resulting from UTILITIES and its Contractors' actions or activities and shall otherwise

restore the access roads and the adjoining portions of the State Park to the condition existing prior to the occurrence of such damage. To establish existing conditions, UTILITIES and DPOR will evaluate the condition of the roads proposed for use before each construction work package begins to document road conditions. Evaluations shall include a collection of digital images of road conditions that DPOR and UTILITIES will retain. UTILITIES shall maintain and keep all roads in a passable condition for construction traffic and recreational traffic while they are actively being utilized for construction. Upon completion of each SDS construction package at the State Park, UTILITIES and DPOR will complete a post construction assessment of the roads used by UTILITIES and its Contractors. UTILITIES and DPOR staff will review the pre- and post-construction assessments of construction haul routes in determining whether corrective measures are necessary and as appropriate what the corrective measures shall be. In the event that UTILITIES and DPOR disagree on appropriate corrective measures, Reclamation may be asked to assist with determination of appropriate corrective measures.

- (f) UTILITIES agrees to perform work within the hours of 7:00 am to 6:00 pm Monday through Friday. Work outside of these hours will be restricted to maintenance of traffic, safety, and construction controls, maintenance of construction equipment, and approved exceptions. DPOR shall be notified 48 hours in advance of work outside of these hours, for activities other than routine maintenance or emergency work.



- (g) All construction vehicles and equipment that will come into contact with Lake Pueblo or the Arkansas River shall be inspected for aquatic nuisance species. UTILITIES will coordinate with DPOR inspectors to insure the inspection of all such construction vehicles and equipment.
- (h) Should the need for law enforcement be necessary during any construction activities, UTILITIES and their Contractors will request law enforcement response by calling the State Patrol Dispatch at 719-544-2424. In the event of a law enforcement or medical emergency, UTILITIES or their Contractors will call 911.
- (i) UTILITIES agrees to pay DPOR for reasonable staff time expended in response to SDS activities undertaken pursuant to the MOU. DPOR will submit to UTILITIES invoices of expenses charged to UTILITIES identifying the individual, the quantity of hours, bill rate, and a description of services provided. UTILITIES will be entitled to challenge expenses that it deems to be excessive or unreasonable. If a challenge is asserted, DPOR and UTILITIES will promptly meet to resolve the concerns and agree on an appropriate adjustment, if any is warranted.
- (j) The parties acknowledge that construction of the SDS facilities may have impacts on recreational use of the State Park, including, but not limited to, delays at State Park entry points or along roads or road closures discouraging or diminishing recreational use or enjoyment. The parties also acknowledge that a quantification of such impacts can be difficult and time consuming and agree that UTILITIES will pay the sum of \$24,000 to

DPOR as complete compensation for such unanticipated impacts occurring through the initial term of this MOU (ending December 31, 2016) within 30 (thirty) days from execution of this MOU. Such payment will in all respects be non-refundable.

- (k) UTILITIES agrees to take the lead on writing and distributing news releases and media advisories related to SDS project activities at the State Park and will provide them to the Lake Pueblo State Park Manager before being released to the media. For releases or advisories involving State Park operations, UTILITIES will obtain approval from the Lake Pueblo State Park Manager before distributing to the media. In addition to media notifications, UTILITIES will keep the public informed of construction and project activities at the State Park by posting information on the UTILITIES SDS website. Information to be posted will include, but may not be limited to, schedules, construction progress, type of work and activities expected, traffic and travel delays, temporary road and trail closures, areas closed to public access, etc. However, nothing set forth above precludes DPOR from issuing its own news releases or media advisories related to SDS project activities.

- (l) All public complaints associated with the SDS project received by DPOR will be forwarded to UTILITIES for response and resolution. Any complaints associated with park operations received by UTILITIES or its Contractors shall be forwarded to the Lake Pueblo State Park Manager for response and resolution.



- (m) During all phases of the SDS project, UTILITIES will take all reasonable measures necessary to minimize interference and/or disturbance of the State Park operations. Monthly for the first 12 months after commencement of construction activities and every three months thereafter, representatives of Colorado Springs Utilities and DPOR will meet to consider such measures.

6. No amendment to this MOU shall be made nor be enforceable unless made by written amendment signed by an authorized representative of each of the parties. This provision may not be waived except by a writing signed by all parties.

7. The term of this MOU is through December 31, 2016 and is renewable thereafter on an annual basis upon payment of additional agreed upon compensation for impacts to recreational use of the State Park, if any, until completion of all SDS project work on Reclamation land. DPOR may, at any time, revoke or terminate this MOU for good cause, including without limitation, any violation of the terms of this MOU or any applicable law. Upon expiration or termination, UTILITIES and its Contractors shall immediately remove their vehicles and equipment, repair all damage caused by SDS construction activities to the access roads and the State Park unless and to the extent otherwise directed by DPOR.

8. Performance of UTILITIES obligations under this MOU are expressly subject to the annual appropriation of funds by the Colorado Springs City Council. In the event funds are not appropriated for any calendar year, then consistent with the Colorado Springs City Charter, this MOU is null and void effective as of the date of the non-appropriation. UTILITIES shall notify DPOR by December 31 of the preceding year in the event UTILITIES' appropriation ordinance has not passed for the next calendar year. Upon such event, UTILITIES will be

relieved of all future obligations to perform under this MOU. UTILITIES will, however, continue to be obligated to make payments for work performed by DPOR and other compensation due and owing at the time of notice to DPOR in an amount not to exceed UTILITIES' previous year's appropriation. Further, upon such event, UTILITIES and its contractors shall repair all areas damaged caused by SDS construction activities, and remove all vehicles, equipment and other materials brought onto the State Park by UTILITIES or its Contractors immediately or upon completion of any necessary restoration.

9. This MOU shall be governed and interpreted in accordance with the laws of the State of Colorado.

10. Any dispute or disagreement between the parties arising from or related to this MOU shall be determined and decided by a Colorado state court of competent jurisdiction.

11. The persons executing this MOU on behalf of UTILITIES and DPOR each represent and warrant that they have full authority to execute this MOU on behalf of the party for whom they are signing this MOU. The parties acknowledge and understand that this MOU applies only to property owned by Reclamation that is under the administrative control of DPOR and within the State Park. To the extent UTILITIES requires access to property owned by Reclamation that is under the administrative control of the Division of Wildlife, UTILITIES acknowledges and understands that UTILITIES must obtain the separate agreement of the Division of Wildlife.

12. Any notices or requests for approval required by this MOU shall be delivered to:  
UTILITIES

John A Fredell  
Southern Delivery System Program Director  
121 S Tejon  
PO Box 1103 Mail Code 930



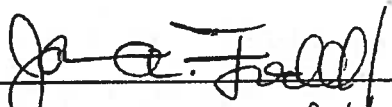
Colorado Springs, Colorado 80947-0930

DPOR

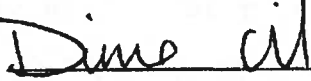
Brad Henley  
Lake Pueblo State Park Manager  
640 Pueblo Reservoir Road  
Pueblo, Colorado 80125

13. GOVERNMENTAL IMMUNITY: No term or condition of this MOU shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, of the Colorado Governmental Immunity Act, CRS §24-10-101 *et seq.*, or the Federal Tort Claims Act, 28 U.S.C. §§1346(b) and 2671 *et seq.*, as applicable now or hereafter amended.

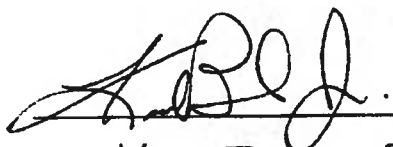
**COLORADO SPRINGS UTILITIES**

By:   
Name: John A. Fredell  
Title: SDS Program Director

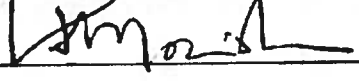
**APPROVED AS TO FORM:**

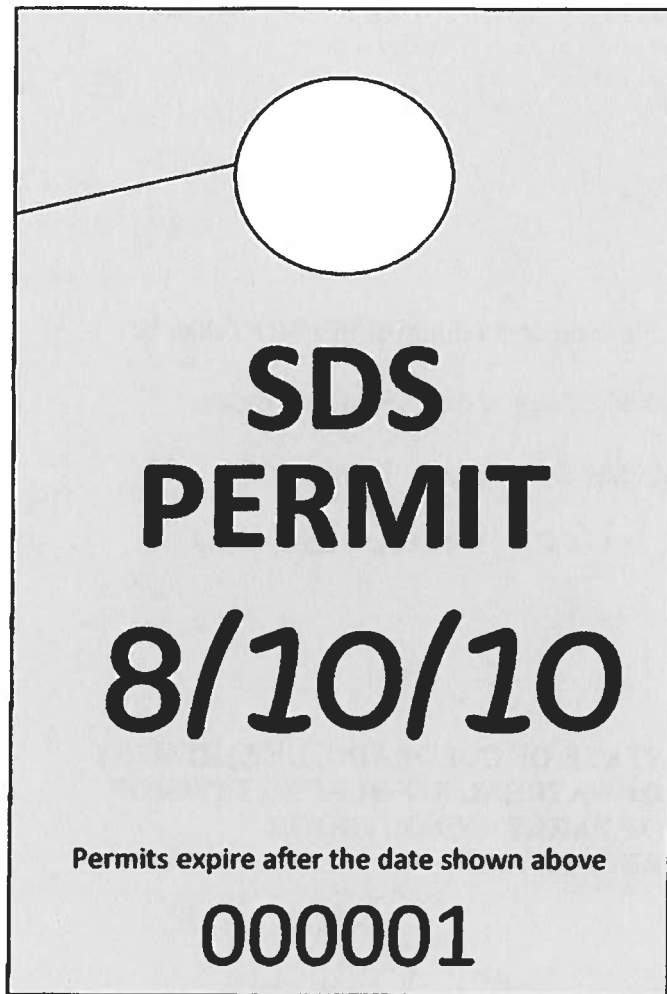
By:   
Name: Diane O'Neil  
Title: Attorney, City Attorney's Office

**STATE OF COLORADO, DEPARTMENT  
OF NATURAL RESOURCES, DIVISION  
OF PARKS AND OUTDOOR  
RECREATION**

By:   
Name: Ken Brink Jr.  
Title: Asst. Director

**APPROVED AS TO FORM:**

By:   
Name: Timothy J. Monahan  
Title: First Assistant Attorney General



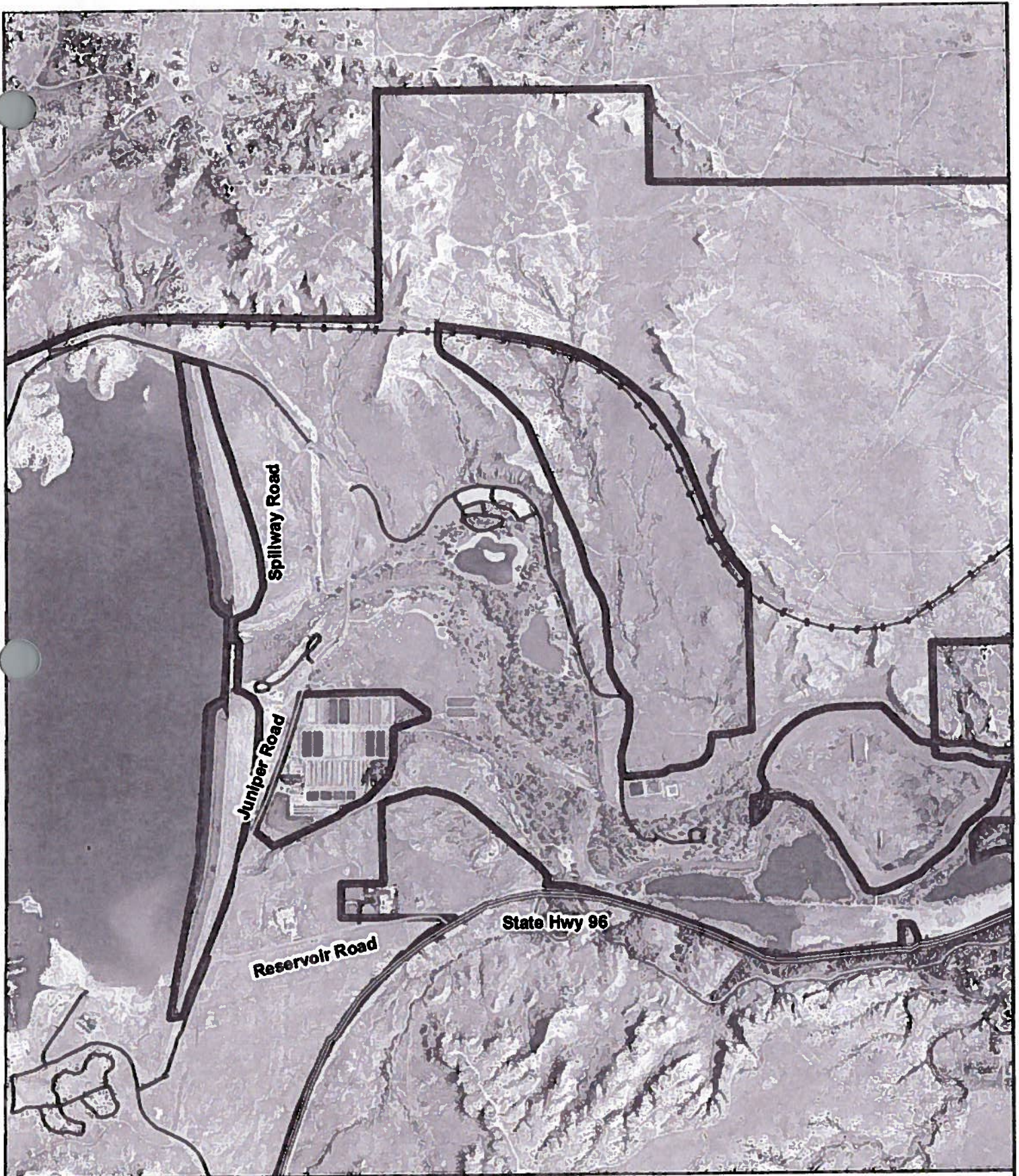
Front of Permit



Rear side of Permit

1. Dates will be handwritten in.
2. Each permit will have a unique number, at the bottom on the front, so that we may record information regarding to whom the permit has been issued, company name, and vehicle license plate number.
3. Permits can be valid for a period covering daily, monthly, or longer use as appropriate.







Colorado State Parks

Access Route

Park Roads

Railroad

Park Boundary

State Highway 96

Lake Pueblo State Park

Exhibit 2



0 750 1,500 3,000 Feet



## 404 Permit

### General Conditions

#### 1. Condition 1: Complete Work by December 31, 2020.

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: X Post-Phase I: \_\_\_\_\_

Next Step: Submittal of 2015 progress report.

Due Date(s): December 31, 2020.

Closure Documentation (if any): Applicable status reports and final permit closeout summary.

#### 2. Condition 2: Maintain Authorized Activity in Good Condition.

In Progress: X Complete: \_\_\_\_\_ Ongoing: X Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): N/A

#### 3. Condition 3: Notification of Discovery of Historic or Archeological Remains.

In Progress: \_\_\_\_\_ Complete: X (Phase I) Ongoing: X (Pinello) Post-Phase I: \_\_\_\_\_

Next Step: N/A

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): No discoveries in jurisdiction.

#### 4. Condition 4: Validation of Any transfer of Ownership.

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: X Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): N/A

#### 5. Condition 5: Comply with 401 Certification Conditions.

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: X Post-Phase I: X (Pending)

Next Step: Continue monitoring.

Due Date(s): Annually.

Closure Documentation (if any): PCAR and IAMP.

#### 6. Condition 6: Allow Corps Inspection of Activities.

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: X Post-Phase I: \_\_\_\_\_

Next Step: Continued site access availability.

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): USACE Records (Pending)



## Special Conditions

### 1. Condition 1: Compensatory Mitigation per Wetland Mitigation Plan (incl. monitoring and adaptive management).

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: N/A

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): January 22, 2015 closure letter from USACE.

### 2. Condition 2: Demonstrate Wetland Success and Obtain Corps Verification.

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: N/A

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): January 22, 2015 closure letter from USACE.

### 3. Condition 3: Consult with CDOW on Jimmy Camp Creek Crossings.

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): USACE Concurrence and CPW Consultation letters.

### 4. Condition 4: Properly Address Temporary Impacts of Pipeline Crossings.

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): NWP 12 Self-Cert and S2 specification drawing

### 5. Condition 5: Perform Open Trench Crossings during Low or No Flow Periods.

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Specifications (S2 Example).

### 6. Condition 6: Obtain Corps Approved Plan of restoration for Temporary Impacts.

In Progress: \_\_\_\_\_ Complete:   X (Phase I)   Ongoing: \_\_\_\_\_ Post-Phase I:   X (Pending)  

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): WUS Restoration Plan and Acceptance letter.

**7. Condition 7: Avoid, as practicable, Stockpiling of Trench Spoil in Flowing Waters.**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_  
Next Step: \_\_\_\_\_  
Due Date(s): \_\_\_\_\_  
Closure Documentation (if any): Specifications (S2 Example).

**8. Condition 8: Obtain Corps Approval of all Work in WOUS required by Other Agencies.**

In Progress:   X   Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_  
Next Step: \_\_\_\_\_  
Due Date(s): \_\_\_\_\_  
Closure Documentation (if any): N/A.

**9. Condition 9: Obtain Corps Approval of Williams Creek Outfall, Chilcotte Intake, and Pueblo Dam Outlet Works.**

In Progress: \_\_\_\_\_ Complete:   X (Phase I)   Ongoing: \_\_\_\_\_ Post-Phase I:   X (Pending)    
Next Step: Pueblo Dam Outlet Works complete; WC Outfall & Chilcotte Intake in Phase II.  
Due Date(s): December 31, 2020.  
Closure Documentation (if any): Design and Acceptance letter for Phase I

**10. Condition 10: Comply with 401 Certification Conditions.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I:   X (Pending)    
Next Step: Continue monitoring.  
Due Date(s): Annually.  
Closure Documentation (if any): PCAR and IAMP.



2015 Progress Report

| Project Component              | Work Package  | Wetland Identification | 404 Evaluation              |                                 |                             |                                 | Post Construction Wetland Variance (2014) |                                 | Notes  |                                |   |   |
|--------------------------------|---|------------------------|-----------------------------|---------------------------------|-----------------------------|---------------------------------|---|---------------------------------|--------|--------------------------------|---|---|
|                                |   |                        | Jurisdictional<br>Temporary | Non-Jurisdictional<br>Temporary | Jurisdictional<br>Permanent | Non-Jurisdictional<br>Permanent | Jurisdictional<br>Temporary               | Non-Jurisdictional<br>Permanent |        |                                |   |   |
| 1                              | Finished Water Pipelines  | FW2 CSPV-1             | 0.000                       | 0.000                           | 0.000                       | 0.400                           | 0.000                                     | ---                             | ---    | Excluded from SDS              |   |   |
|                                |   | FW3 WUS 3              | 0.500                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | Avoided by trenchless crossing |   |   |
|                                |   | FW3 WUS 2              | 0.060                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | Avoided by trenchless crossing |   |   |
|                                |   | FW3                    | ---                         | ---                             | ---                         | ---                             | 0.000                                     | 0.000                           | -0.16  | 0.000                          | Wetland Impact in Pond - Not identified in 404      |   |
|                                |   | FWIB WUS 9             | 0.592                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | No Wetland (WUS)                                    |   |
| Total for Project Component 1  |   |                        | 1.152                       | 0                               | 0                           | 0.4                             | 0   | 0                               | -0.16  | 0                              | No disturbance in 2014 - UWCER, BEPS, WTP           |   |
| Total for Project Component 2  |   |                        | 0                           | 0                               | 0                           | 0                               | 0.13                                      | 0                               | 0      | 0                              | No disturbance in 2014 - UWCER Return Flow Pipeline |   |
| Total for Project Component 3  |   |                        | 0.574                       | 0.012                           | 0                           | 0.3                             | 0   | 0                               | 0      | 0                              | 0   | No disturbance in 2014 - UWCER Return Flow Pipeline |
| 4a                             | Pueblo Reservoir Outfall Structure and Untreated Water Pipeline - North     | NIB EPN 3-1            | 0.000                       | 0.000                           | 0.000                       | 0.117                           | 0.054                                     | 0.000                           | 0.000  | 0.000                          | 0.003   |   |
|                                |   | NIB EPN 4-1            | 0.000                       | 0.000                           | 0.000                       | 0.074                           | 0.033                                     | 0.000                           | 0.000  | -0.095                         | -0.010  |   |
|                                |   | S4B/NIF EPN 4-5        | 0.000                       | 0.000                           | 0.000                       | 0.087                           | 0.054                                     | 0.000                           | 0.000  | -0.150                         | 0.000   |   |
|                                |   | S4B/NIF EPN 4-10       | 0.000                       | 0.000                           | 0.000                       | 0.229                           | 0.138                                     | 0.000                           | 0.000  | 0.000                          | 0.043   |   |
|                                |   | S4B/NIF EPN 4-20       | 0.000                       | 0.000                           | 0.000                       | 0.025                           | 0.015                                     | 0.000                           | 0.000  | -0.130                         | -0.010  |   |
| Total for Project Component 4a |   |                        | 0.000                       | 0.000                           | 0.000                       | 0.443                           | 0.260                                     | 0.000                           | -0.012 | -0.008                         |   |   |
| 4b                             | Pueblo Reservoir Outfall Structure and Untreated Water Pipeline - South     | S4A EPN 1-1            | 0.000                       | 0.000                           | 0.000                       | 0.074                           | 0.070                                     | 0.000                           | 0.000  | 0.000                          | 0.009   |   |
|                                |   | S4A EPN 1-5            | 0.126                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | -0.163                          | 0.000  | 0.000                          | 0.000   |   |
|                                |   | S4A EPN 1-6            | 0.000                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | -0.065                          | 0.000  | 0.000                          | 0.000   |   |
|                                |   | S4A WCN-1              | 0.237                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | -0.183                          | 0.000  | 0.000                          | 0.000   |   |
|                                |   | S4A EPN-N-EPW 1-1      | 0.892                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | Avoided by trenchless crossing                      |
| 4c                             | Pueblo Reservoir Outfall Structure and Untreated Water Pipeline - South     | S4A EPN-S-EPW 1-1      | 0.828                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | Avoided by trenchless crossing                      |
|                                |   | S4A WUS 14             | 0.085                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | Avoided by trenchless crossing                      |
|                                |   | S4A WUS 15             | 0.010                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | No Wetland (WUS)                                    |
|                                |   | S4A WUS 16             | 0.100                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | No Wetland (WUS)                                    |
|                                |   | S4A EPN 1-11           | 0.155                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | -0.207                          | 0.000  | 0.000                          | 0.000   |   |
| 4d                             | Pueblo Reservoir Outfall Structure and Untreated Water Pipeline - South     | S2 PW 2-1              | 0.005                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | 0.000                           | 0.000  | 0.000                          | 0.000   |   |
|                                |   | S2 PW 2-2              | 0.111                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | -0.011                          | 0.000  | 0.000                          | 0.000   |   |
|                                |   | PDC PW 3-4             | 1.290                       | 0.026                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | 0.000                          | 0.000   |   |
|                                |   | JUM PW 3-5             | 0.540                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | 0.000                          | 0.000   |   |
|                                |   | ELEC PW 3-6            | 0.380                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | Impacts avoided                                     |
| Total for Project Component 4b |   |                        | 4.883                       | 0.026                           | 0.000                       | 0.074                           | 0.073                                     | -0.623                          | 0      | 0                              | 0.009   | Excluded from SDS                                   |
| 4e                             | Untreated Water Pipeline from Upper Williams Creek Reservoir to the SDS WTP | N2B LUC6               | 1.472                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | Wetland removed from 404                            |
|                                |   | N2B None               | 0.060                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | Wetland removed from 404                            |
|                                |   | N2B WUS 7              | 0.064                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | No Wetland (WUS)                                    |
|                                |   | N2A WUS 4N             | 0.675                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | Avoided by re-alignment                             |
|                                |   | N2A WUS 4S             | 0.643                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | Avoided by re-alignment                             |
| 4f                             | Pueblo Reservoir Outfall Structure and Untreated Water Pipeline - South     | N2A WUS 10             | 0.514                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | No Wetland (WUS)                                    |
|                                |   | N2A WUS 11             | 0.010                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | No Wetland (WUS)                                    |
|                                |   | N2A WUS 12             | 0.438                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | No Wetland (WUS)                                    |
|                                |   | N2A WUS 13             | 2.561                       | 0.000                           | 0.000                       | 0.000                           | 0.000                                     | ---                             | ---    | ---                            | ---   | No disturbance in 2014 - WPCR                       |
|                                |   | N2A WUS 14             | 12.4                        | 0.24                            | 0.000                       | 1.500                           | 0.000                                     | -0.63                           | 0      | -0.55                          | 0.027   | No disturbance in 2014 - CHIL                       |
| Total for Project Component 4c |   |                        | 12.379                      | 0.238                           | 0.000                       | 1.383                           | 0.000                                     | -0.629                          | 0      | -0.547                         | 0.027   |   |
| Total for Project Component 4d |   |                        | 12.379                      | 0.238                           | 0.000                       | 1.383                           | 0.000                                     | -0.629                          | 0      | -0.547                         | 0.027   |   |
| Total for Project Component 4e |   |                        | 12.379                      | 0.238                           | 0.000                       | 1.383                           | 0.000                                     | -0.629                          | 0      | -0.547                         | 0.027   |   |
| Total for Project Component 4f |   |                        | 12.379                      | 0.238                           | 0.000                       | 1.383                           | 0.000                                     | -0.629                          | 0      | -0.547                         | 0.027   |   |
| Total Impact                   |   |                        | 12.379                      | 0.238                           | 0.000                       | 1.383                           | 0.000                                     | -0.629                          | 0      | -0.547                         | 0.027   |   |

2014 PCAR

# **Southern Delivery System Permit Compliance Annual Report Calendar Year 2014**

Prepared for:

**Bureau of Reclamation**

**Colorado Department of Public Health and  
Environment**

**Colorado Division of Parks and Wildlife**

**El Paso County**

**Pueblo County**

**Fountain Creek Watershed Flood Control and  
Greenway District**

Submitted by:

**Colorado Springs Utilities, SDS Project Manager  
on behalf of the SDS Participants**

January 2015



**SDS IAMP**

# **Southern Delivery System Integrated Adaptive Management Plan**

Prepared for:  
**Bureau of Reclamation**

Submitted by:  
**Colorado Springs Utilities, SDS Project Manager  
on behalf of the SDS Participants**

**CH2MHILL**

March 18, 2011

**Wetlands Letter**



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS**  
**SOUTHERN COLORADO REGULATORY OFFICE**  
**200 S. SANTA FE AVENUE, SUITE 301**  
**PUEBLO, COLORADO 81003**

January 22, 2015

**Regulatory Division**

**SUBJECT: Mitigation compliance for impacts to jurisdictional waters of the United States for the Southern Delivery System- Action No. SPA-2005-00131-SCO**

**Allison Mosser**  
**Colorado Springs Utilities**  
**P.O. Box 1103 MC940**  
**Colorado Springs, CO 80902**

**Ms. Mosser:**

I am writing this letter concerning your Department of the Army Permit No. SPA-2005-00131-SCO for the required jurisdictional mitigation for the Southern Delivery System on the Clear Spring Ranch property in El Paso County, Colorado.

We have determined that the required mitigation for impacts in jurisdictional waters of the United States is established and complete. Thus, no further monitoring or annual reports are required for the mitigation within our jurisdiction.

If you have any questions concerning this matter, please contact me at 719-543-6915 or by e-mail at [van.a.truan@usace.army.mil](mailto:van.a.truan@usace.army.mil).

Sincerely,

A handwritten signature in black ink, appearing to read "Van A. Truan", is written over a horizontal line.

**Van Truan**  
**Chief, Southern Colorado**  
**Regulatory Office**



## Wetlands Letter

REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS  
SOUTHERN COLORADO REGULATORY OFFICE  
200 S. SANTA FE AVENUE, SUITE 301  
PUEBLO, COLORADO 81003

January 22, 2015

## Regulatory Division

**SUBJECT:** Mitigation compliance for impacts to jurisdictional waters of the United States for the Southern Delivery System- Action No. SPA-2005-00131-SCO

Alfison Mosser  
Colorado Springs Utilities  
P.O. Box 1103 MC940  
Colorado Springs, CO 80902

Ms. Mosser:

I am writing this letter concerning your Department of the Army Permit No. SPA-2005-00131-SCO for the required jurisdictional mitigation for the Southern Delivery System on the Clear Spring Ranch property in El Paso County, Colorado.

We have determined that the required mitigation for impacts in jurisdictional waters of the United States is established and complete. Thus, no further monitoring or annual reports are required for the mitigation within our jurisdiction.

If you have any questions concerning this matter, please contact me at 719-543-6915 or by e-mail at [van.a.truan@usace.army.mil](mailto:van.a.truan@usace.army.mil).

Sincerely,

A handwritten signature in dark ink, appearing to read "Van A. Truan", written over a horizontal line.

Van Truan  
Chief, Southern Colorado  
Regulatory Office

## USACE Concurrence Letter - Jimmy Camp Creek



July 29, 2014

Mr. Van Truan  
U.S. Army Corps of Engineers  
Southern Colorado Regulatory Office  
200 S. Santa Fe, Ste 301  
Pueblo, CO 81003-3046

Subject: Redelineation of Jurisdictional Wetlands in Jimmy Camp Creek under 404 Individual Permit No. SPA-2005-001310SCO, Special Conditions 3 - 7 - Southern Delivery System (SDS) North 2B Raw Water Pipeline

Dear Mr. Truan,

Colorado Springs Utilities (Utilities), Project Manager for the SDS Project, is submitting this letter in an effort to remove certain previously identified jurisdictional wetlands from the permit inventory that were initially described as temporarily impacted by SDS construction in Jimmy Camp Creek in El Paso County, Colorado. We are also providing a status update on Special Condition 3 compliance.

The Jimmy Camp Creek crossing associated with this request is identified in the April 2009 Section 404 Individual Permit Application (see SDS Wetlands 6 Series Sheet, Attachment 1). The pipeline conceptual design showed the open trench for this area on the south side of Highway 94. The conformed set of drawings, March, 2013, places the open trench for the raw water pipeline on the north side of the highway (see Sheets 5 and 26 in Attachment 2).

The 2007 investigation by ERO Resources Corp. (ERO) for the Wetlands, Waters, and Riparian Resources Technical Report for Southern Delivery System Environmental Impact Statement (EIS) (ERO, 2007), identified jurisdictional wetlands in the vicinity of the conceptual design area, and although the alignment was moved north of Highway 94, there were also jurisdictional wetlands identified in the Jimmy Camp Creek footprint of the new project area during ERO's initial investigation.

As is consistent with SDS guidelines, a pre-construction resource survey was conducted by ERO in March, 2014. The report for this survey, May 16, 2014 (Attachment 3), notes that the wetlands identified in the studies for the SDS EIS have transitioned to a more upland community, no longer meeting the criteria for wetland classification.

SDS proposes that, consistent with the conditions of the referenced 404 permit, the remaining Special Conditions specific to the construction area will be followed, and managed as temporary impacts to waters of the US, i.e., Nationwide 12 permit conditions for open trench crossings. However, the condition referencing the restoration and revegetation of the wetlands should be found no longer applicable, as the wetlands no longer exist in this area of Jimmy Camp Creek.

## CPW Consultation Letter





## **COLORADO**

### **Parks and Wildlife**

Department of Natural Resources

Pueblo Service Center - Area 11  
600 Reservoir Road  
Pueblo, CO 81005  
P 719-561-5300 | F 719-531-5321

July 18, 2014

Allison Mosser, Sr. Project Manager, Southern Delivery System  
Colorado Springs Utilities  
121 S. Tejon  
Colorado Springs, CO 80947-0930

**RE: Redelineation of Jurisdictional Wetlands in Jimmy Camp Creek under 404 Individual Permit No. SPA-20050001310SCO, Special Conditions 3 - 7 - Southern Delivery System (SDS) North 2B Raw Water Pipeline**

To Ms. Allison Mosser

Colorado Parks and Wildlife (CPW) has reviewed your June 26, 2014 letter to the U.S. Army Corps of Engineers regarding the redelineation of jurisdictional wetlands for the Southern Delivery System Jimmy Camp Creek pipeline crossing (attached). CPW has no objection to your request, provided Nationwide 12 permit conditions for open trench crossings continue to apply.

Thank you for the opportunity to comment on this issue.

Sincerely,

Brett A. Ackerman  
Deputy Regional Manager, Southeast Region  
Colorado Parks and Wildlife

## NDW 12 Example



## Colorado Springs Utilities

*It's how we're all connected*

October 22, 2013

Mr. Van Truan  
U.S. Army Corps of Engineers  
Southern Colorado Regulatory Office  
200 S. Santa Fe, Ste 301  
Pueblo CO 81003-3046

RE: Nationwide Permits 12 Certificate of Compliance  
Southern Delivery System (SDS) Raw Water Pipeline North 2A (N2A)  
Corral Tributary Bank Stabilization

Dear Van,

Please find the attached Certificates of Compliance for the Nationwide Permits for the Corral Tributary drainage located on the SDS N2A pipeline alignment.

Stabilization activities of the channel bed and above the ordinary high water mark included the installation of an access road stabilized with Type C road base over Type M buried riprap and graded to a 10:1 slope to elevations matching the pre-existing surrounding grade, and stabilizing the bank wall with Type M buried riprap and grading to a 3:1 slope to elevations matching the pre-existing surrounding grade. The areas that were not stabilized with exposed riprap or road base were seeded with a native vegetation seed mix. The restored banks will continue to be maintained and monitored for successful vegetation establishment until a satisfactory stand is achieved.

No designated wetlands, listed species or designated critical habitat were identified in the crossing area. Construction began with the temporary crossing on April 22, 2013, and the bank stabilization activities commenced on September 9, 2013. The scope of activity associated with the permit was completed on October 11, 2013. Attached are two photographs of the completed work in the drainage.

Please do not hesitate to contact me if you have any questions or require additional information at (719) 668-8667 or email me at [amosser@csu.org](mailto:amosser@csu.org).

Sincerely,

Allison Mosser



**D. Completely contain, transport, and dispose of excavated materials and fluid additives away from the construction site. Contain spoils in trucks or other containers. Dumping of spoil on the ground, discharge into sewers or ditches, or discharge into the shafts is not permitted. Only use the disposal sites identified in approved Submittals for muck and spoil disposal.**

**Restoration Plan Submitted**

Colorado Springs Utilities

*It's how we're all connected*

October 14, 2010

Van Truan  
USACE  
720 N. Main St. Rm. 205  
Pueblo, CO 81003-3046

Mr. Truan,

Colorado Springs Utilities is submitting the attached Restoration Plan for Disturbed Areas of Waters of the United State – Southern Delivery System (SDS) Pueblo Dam Connection for your review and approval, per U.S Army Corps of Engineers (USACE) 404 Permit No. SPA-2005-00131-SCO.

Thank you for your time in reviewing this information and providing your approval. Please address correspondence to Colorado Springs Utilities – SDS Project, to the Attention of Keith Riley, Colorado Springs Utilities. Please feel free to contact me at (719) 668-8677 if you have any questions or if you need additional information.

Sincerely,  
Colorado Springs Utilities, on behalf of the SDS Participants

Keith Riley  
Planning & Permitting Program Manager



## USACE Acceptance Letter



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS  
SOUTHERN COLORADO REGULATORY OFFICE  
200 S. SANTA FE, SUITE 301  
PUEBLO, COLORADO 81003

November 23, 2010

Regulatory Division

Keith Riley  
Colorado Springs Utilities  
212 S. Tejon, MC 930  
Colorado Springs, Colorado 80947

Dear Mr Riley:

This replies to your letter dated October 11, 2010 regarding the Southern Delivery System (SDS) Restoration Plan for the Pueblo Dam Connection. Action No. SPA-2005-00131-SCQ.

We have reviewed your Restoration Plan submitted as required by Special Condition of the SDS Permit. Your plan is within the conditions of the permit, thus are accepted for the restoration of the Pueblo Dam portion of the project.

If you have any questions regarding this approval, please feel free to contact me at 719-543-6915 or by email at [van.a.truan@usace.army.mil](mailto:van.a.truan@usace.army.mil).

Sincerely

A handwritten signature in black ink, appearing to read "Van A. Truan", written over a horizontal line.

Van Truan  
Chief, Southern Colorado  
Regulatory Branch

Specifications Text

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 Signature P

allowable radial overcut, to prevent loss of ground and settlement or possible damage to overlying structures. Control the advance rate and monitor the volume of material excavated and adjust advance rate, as required, to avoid loss of ground, overexcavation, or surface heave.

D. Completely contain, transport, and dispose of excavated materials and fluid additives away from the construction site. Contain spoils in trucks or other containers. Dumping of spoil on the ground, discharge into sewers or ditches, or discharge into the shafts is not permitted. Only use the disposal sites identified in approved Submittals for muck and spoil disposal.



PDC1A

**Orren, Sandy/DEN**

---

**From:** Hamilton, Kyle/DEN  
**Sent:** Thursday, June 03, 2010 1:03 PM  
**To:** Bettag, Brad/DEN; Orren, Sandy/DEN  
**Subject:** FW: USACE Approval of PDC Construction

Please post this email to the 404 permit -- this is USACE's approval of PDC.  
Thanks.

Kyle Hamilton, P.E.  
 CH2M HILL  
 9103 S. Jamaica St.  
 Englewood, CO 80112  
 Ph: 720-286-5240  
 Fax: 720-286-9882

---

**From:** Hamilton, Kyle/DEN  
**Sent:** Thursday, June 03, 2010 12:57 PM  
**To:** 'AMosser@csu.org'  
**Cc:** 'KRiley@csu.org'; Miller, Trent/GVO; Koran, Claire/DEN; Christofferson, Wendy/DEN  
**Subject:** USACE Approval of PDC Construction

Allison,  
 Shown below is an email from USACE approving the work at PDC. We'll post this to SharePoint for the record.  
 Thanks,  
 Kyle

Kyle Hamilton, P.E.  
 CH2M HILL  
 9103 S. Jamaica St.  
 Englewood, CO 80112  
 Ph: 720-286-5240  
 Fax: 720-286-9882

-----Original Message-----  
**From:** Truan, Van A SPA [mailto:Van.A.Truan@usace.army.mil]  
**Sent:** Wednesday, June 02, 2010 8:28 AM  
**To:** Miller, Trent/GVO  
**Subject:** RE: SDS Permit Special Conditions #6 & 8

Trent,

Yes this work on the outlet structure at Pueblo Res. Dan was addressed in the IP, so you are good to go.

Van

-----Original Message-----  
**From:** Trent.Miller@CH2M.com [mailto:Trent.Miller@CH2M.com]  
**Sent:** Monday, May 24, 2010 1:10 PM  
**To:** Truan, Van A SPA  
**Subject:** SDS Permit Special Conditions #6 & 8

## Williams Creek



DEPARTMENT OF THE ARMY  
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS  
SOUTHERN COLORADO REGULATORY OFFICE  
720 NORTH MAIN STREET SUITE 300  
PUEBLO CO 81003-3047

March 14, 2005

Operations Division  
Regulatory Branch

Gary Bostrom  
Colorado Springs Utilities  
121 South Tejon Street, Forth Floor  
P.O. Box 1103, MC 940  
Colorado Springs, CO 80947

Dear Mr. Bostrom:

This replies to your December 23, 2004 letter requesting a Section 404 jurisdictional determination for waters of the United States for the proposed jurisdictional determination site in Williams Creek near Fountain, El Paso County, Colorado. We have assigned Action No. 2005 00131 to this request.

We have evaluated the information you provided and concur with your findings of waters of the United States within the project site. I visited the site on May 5, 2004. The Williams Creek, including adjacent wetlands is regulated under provisions of Section 404 of the Clean Water Act below the portion identified as upland, no distinct channel and flows appear to sheetflow for approximately 0.72 miles. All areas above this site in the upper areas of Williams Creek are considered isolated.

This jurisdictional determination will be valid for 5 years from the date of this letter unless new information warrants revision of the determination before the expiration date. Please note that this Corps of Engineers' wetland delineation concurrence is specifically for Clean Water Act jurisdiction and does not serve the purposes of the Food Security Act or other federal, state, or local requirements.

A Department of the Army permit may be required for the discharge of dredged or fill material into these waters below the sheetflow site, where the channel, OHWM, and/or wetlands begin

## DEPARTMENT OF THE ARMY PERMIT

Permittee: Colorado Springs Utilities

Permit No. SPA-2005-00131-SCO

Issuing Office: Albuquerque District, U.S. Army Corps of Engineers

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

**Project Description:** To discharge dredged and fill material into waters of the U.S. for the construction of a linear underground raw water pipeline crossing streams and wetlands and the construction of three outfall/inlet structures. The project involves constructing a 53-mile, 66-inch pipeline from Pueblo Reservoir dam north through Pueblo County into El Paso County to Colorado Springs. This includes 23 individual small stream/wetland crossings. The project includes construction of a raw water intake at the Pueblo Dam outlet works, modification to the Chilcotte Diversion intake structure and construction of an outfall structure for the return flow pipeline that discharges into Fountain Creek. The project includes 0.23 acre of permanent impacts to jurisdictional wetlands and 12.4 acres of temporary impacts to jurisdictional waters of the U.S., including wetlands. The project will be constructed in accordance with the attached Public Notice and drawings, entitled, "Southern Delivery System, Application No. SPA-2005-00131-SCO sheets 1 through 3 of 3 dated November 2008.

**Project Locations:** The project commences at the Pueblo Reservoir dam outlet and proceeds north by a linear pipeline through Pueblo West, Pueblo County and El Paso County, Colorado. The pipeline project includes open channel crossings in Pueblo County in Dry and Wild Horse Creeks, Steele Hollow, and two unnamed drainages. In El Paso County the project includes open channel crossings of Sand Creek (2 times), West Fork Sand Creek, Squirrel Creek, Jimmy Camp Creek (5 times), and Sand Creek (near Fountain), Young's Hollow, and 5 unnamed drainages. The return flow in El Paso County involves modification of the Chilcotte Ditch intake in the town of Fountain and construction of a return flow outfall into Fountain Creek south of the town of Fountain. The applicant will employ jack and bore technology for pipeline crossings of Fountain Creek to avoid stream and wetland impacts.

### General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2020. If you find that you need



more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

#### Special Conditions:

After a detailed and careful review of all of the conditions contained in this permit, the permittee acknowledges that, although said conditions were required by the Corps of Engineers, nonetheless the permittee agreed to those conditions voluntarily to facilitate issuance of the permit; the permittee will comply fully with all the terms of all the permit conditions.

1. Compensatory mitigation for authorized permanent impacts to jurisdictional wetlands is required per the Southern Delivery System Jurisdictional Wetland Mitigation Plan, dated January 2010, prepared for Colorado Springs Utilities by CH2M Hill. This includes monitoring as described in the plan and adaptive management as necessary to achieve success criteria.
2. The Permittee's responsibility to complete the required compensatory mitigation as set forth in Special Condition No. 2 will not be considered fulfilled until the permittee has demonstrated mitigation success and have received written verification from USACE.
3. Consultation with Colorado Department of Wildlife is required prior to beginning construction on any open trench crossing of Jimmy Camp Creek. This consultation must include discussion of channel

restoration and re-vegetation requirements.

4. Temporary impacts from trenched pipeline crossing of waters of the US will be conducted as described in Section 5.4 of the permit application, and subject to the terms and conditions described in Appendix C of the application. An exception is that temporary fills in wetlands will be placed on construction fabric or a similar barrier. Any load bearing temporary structures (work pads, etc) in waters of the U.S. must be separated from existing surfaces by construction fabric. In addition, limits and requirements for utility line crossings described in Nationwide Permit 12 are applicable to all open trench crossings. This includes those conditions associated with handling trench spoil and temporary fills.

5. Open trench crossings will be done during a low flow period of the hydrograph in perennial streams (does not pertain to jack and bore operations), and during times of no flow in intermittent or ephemeral channels.

6. The permittee will submit a plan that specifies how disturbed areas associated with temporary impacts to waters of the US will be restored. The plan must be approved by USACE before any temporary disturbance occurs. This plan will include reestablishment of pre-project contours, in-kind re-establishment of existing vegetation, including and woody species, methodologies for soil stabilization prior to plant establishment, success criteria, a maintenance/adaptive management plan, weed control and a monitoring plan. If existing vegetation is dominated by species commonly recognized as weeds, the permittee will base re-vegetation plans on a nearby undisturbed reach. This requirement pertains to temporary disturbances associated with the Chilcotte Ditch/Fountain Creek diversion and the Williams Creek Reservoir/Fountain Creek outfall and the raw water intake at the Pueblo Reservoir outfall site.

7. Trench spoil will not be stockpiled in flowing waters unless there is no practicable alternative.

8. All work in waters of the U.S. as required by the Bureau of Reclamation's Record of Decision, or by other agencies with permitting authority for this project, must be reviewed by USACE prior to project construction to determine if additional USACE authorization is required.

9. Prior to construction of the Williams Creek outfall structure and the Chilcotte Ditch intake structure and the Pueblo Dam Outlet Works intake structure, the final plans and design must be reviewed and approved by USACE.

10. Any conditions and requirements established in the Colorado Department of Public Health and Environment's Section 401 Water Quality Certification, if provided, are considered conditions of this permit.

**Further Information:**

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

- a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

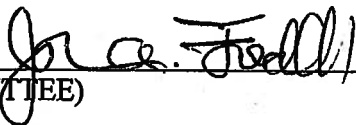
- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.



Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.


6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

  
(PERMITTEE)

4.26.2010  
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

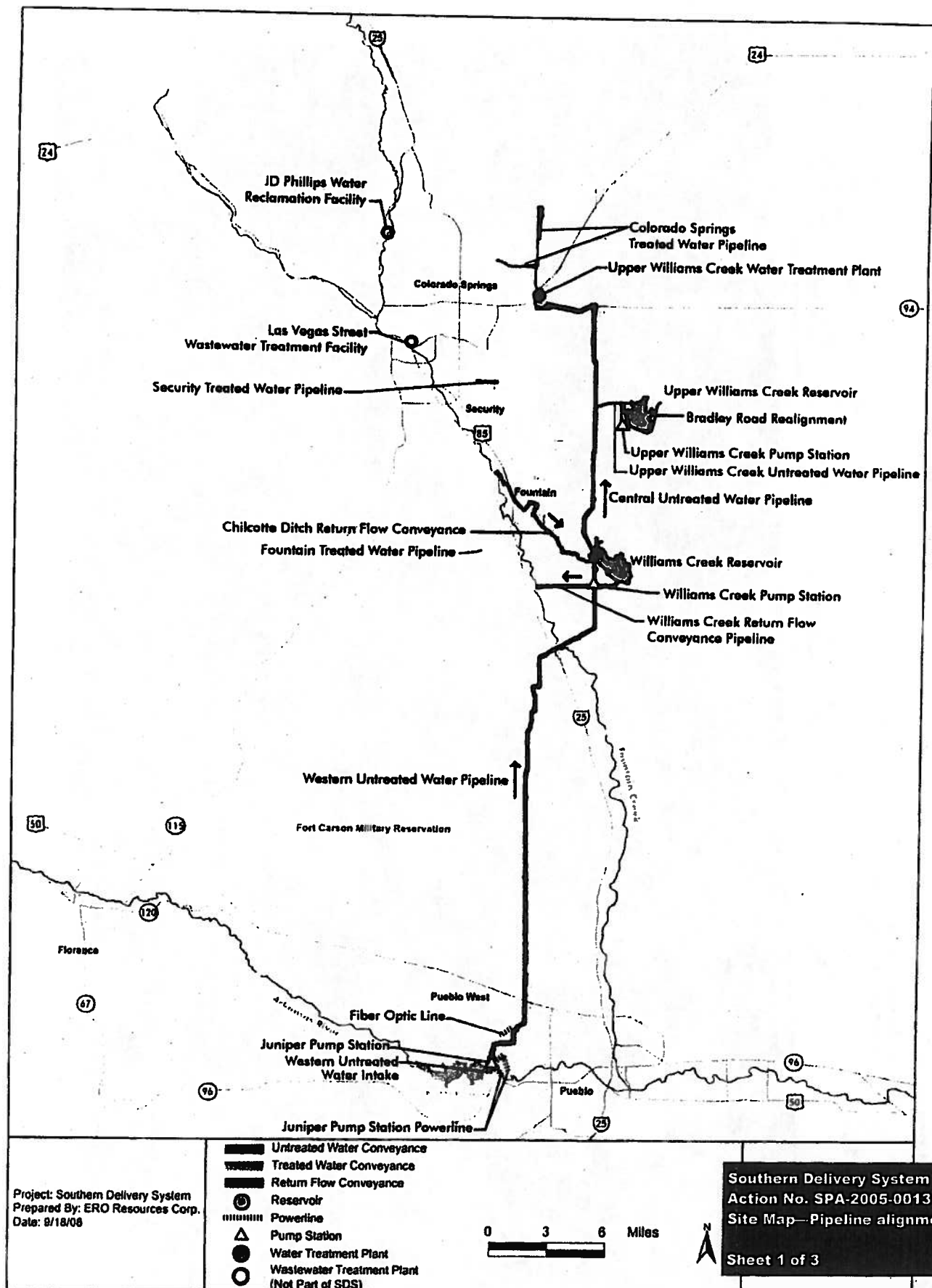
  
(For The DISTRICT ENGINEER)  
Kimberly M. Colloton  
Lieutenant Colonel, U.S. Army  
District Commander

5.20.2010  
(DATE)

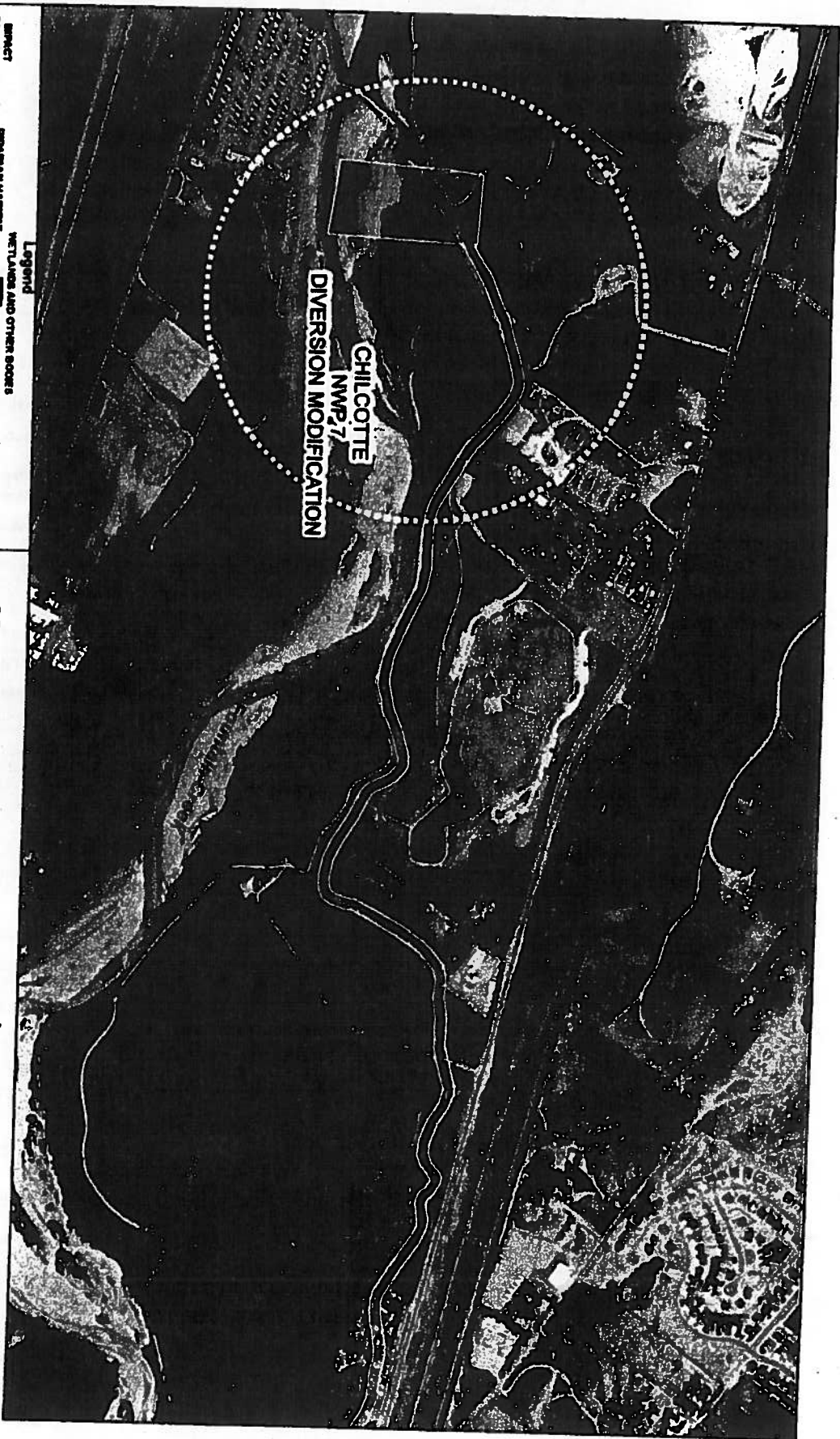
When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFERREE)

\_\_\_\_\_  
(DATE)







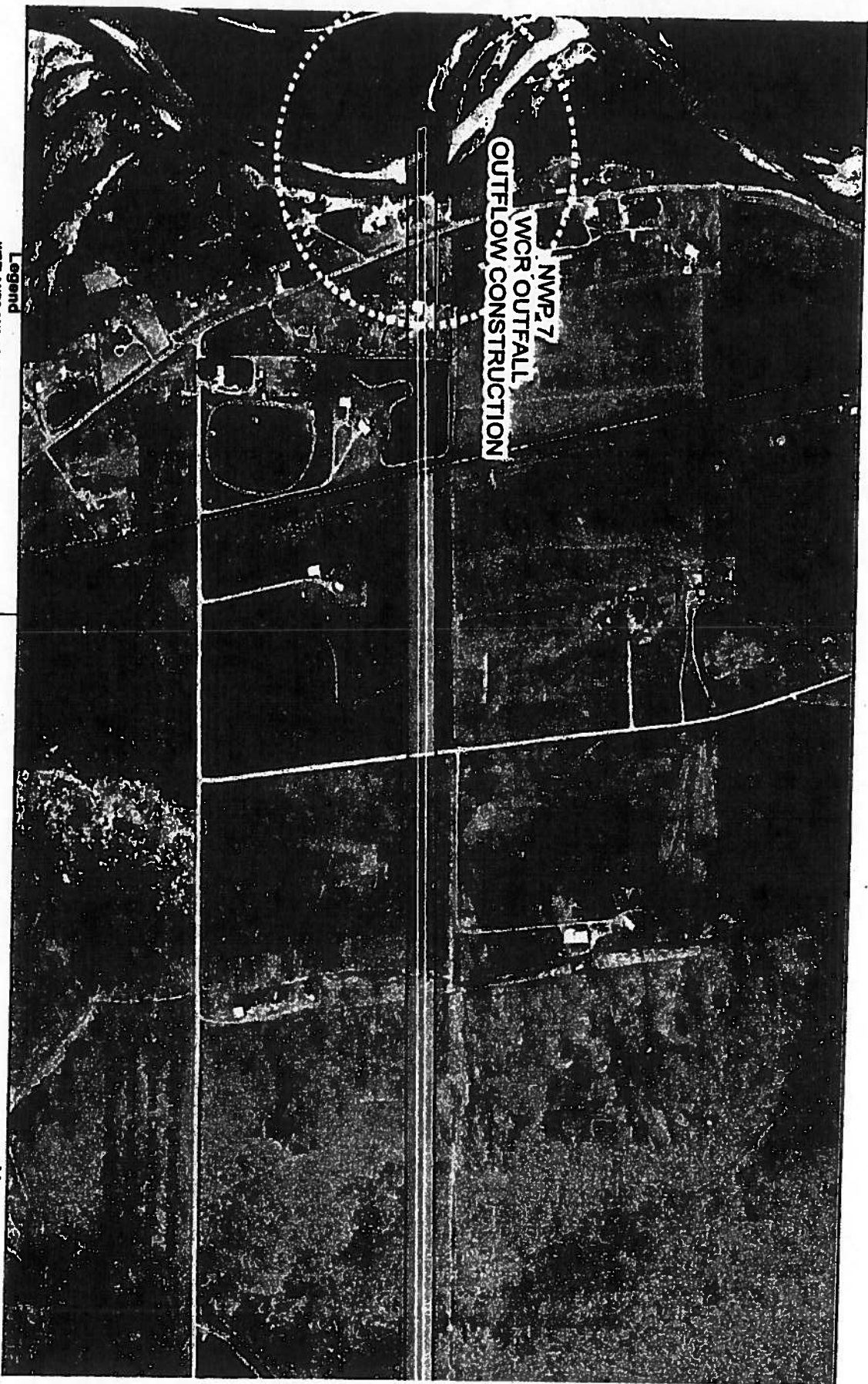
**SOUTHERN DELIVERY SYSTEM  
WETLAND SERIES**

Nov 14, 2008



**SDS WETLANDS 19**

**Southern Delivery System**  
**Chicotte Ditch Intake Structure—Location Map**  
**Action No. SPA-2005-00131-SCO**



## ***Excess Capacity Contract***

**US DOI BoR Federal Contract No. 11XX6C0005**

**1. Paragraph 6.a: In the years 2011-2017 the Contract will be the instrument used to address payments for all SDS participants.**

In Progress:   X   Complete:            Ongoing:   X   Post-Phase I:           

### Next Step: Payments tracked and records maintained in SharePoint

**Due Date(s):** 2011 through 2017

**Closure Documentation (if any):** Payment Records

**2. Paragraph 6.e: Can re-evaluate price if Reclamation adopts market based pricing policy for use of excess capacity (expires May 4, 2016).**

In Progress: X (tbd) Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

**Next Step: Discuss with BOR**

**Due Date(s):** May 4, 2016

**Closure Documentation (if any):**

**3. Paragraph 7.b: Contractor to receive “recognition for over sizing” first 1600 feet of pipe to 90”.**

In Progress:   X   Complete:            Ongoing:            Post-Phase I:           

**Next Step: Final Transfer Report (PDC1B)**

**Due Date(s):** Fall 2015

Closure Documentation (if any): Discounted Payments for Recognition

**4. Paragraph 9.a: Contractor is obligated to implement the FEIS**

## Environmental Commitments.

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

**Next Step: Annual Reports through 2046**

**Due Date(s):** Next Report Jan 2016

**Closure Documentation (if any):** ECP and PCAR

**a. Submit report by Jan. 31 of previous year's progress "regarding successfully implementing the commitments in a timely manner" (Reclamation can ask for cease and desist if noncompliance)**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

**Next Step: Annual Reports through 2046**

**Due Date(s):** Next Report Jan 2016

**Closure Documentation (if any):** PCAR



**5. Paragraph 10: Contractor must obtain all necessary permits and approvals and comply therewith; provide copies of "licenses and approvals as they are completed, issued or modified."**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): PCAR and SharePoint Library

**6. Paragraph 12.b: Reclamation can terminate for violation upon 60 days written notice.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

Next Step: Remain in compliance (all 4 parties)

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

**7. Paragraph 17: Contractor must make timely payments for excess capacity.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

Next Step: Make Payments

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Payment Records

**8. Paragraph 23: Books, Records, Reports. Contractor shall establish and maintain accounts pertaining to administration of the terms and conditions of the contract.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): SharePoint, EMS, document archives, PCM

**9. Paragraph 25.b: Contractor must comply with all state and local water quality standards.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): PCAR Water Quality Data

**10. Paragraph 26: Contractor shall have in place water conservation plan prior to taking water delivery.**

In Progress:   X   Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: Document Final; Board Approval for Draft Water Efficiency Plan

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): CSU has updated their conservation plan to include SDS

## Payments

|  |   |   |
|--|---|---|
| DI-1040  | UNITED STATES DEPARTMENT OF THE INTERIOR<br>BILL FOR COLLECTION | Page: 1   |
| Make Remittance Payable To: Bureau of Reclamation<br>Billing Contact: Renee Steinmetz Phone: 406-247-7689                      |   | Bill #: 1801055571<br>Customer: 3000019310<br>Date: 02/14/2015<br>Due Date: 03/16/2015          |
| Remit Payment To: BOR - Great Plains Region<br>PO Box 301506<br>Los Angeles, CA 90030-1506                                     |   | Send Overnight Mail To:<br>BOR - Great Plains<br>19220 Normandie Ave Ste B<br>Torrance CA 90502 |
| Payer: COLORADO SPRINGS UTILITIES<br>PO BOX 1103 MC 929<br>COLORADO SPRINGS CO 80947   |   |   |
| Checks must be made payable to Bureau of Reclamation. Please detach the top portion or include bill number on all remittances. |   |   |
| Amount of Payment. \$ _____  |   |   |

| Date                         | Description | Qty | Unit Price |     | Amount          |
|------------------------------|-------------|-----|------------|-----|-----------------|
|                              |             |     | Cost       | Per |                 |
| 02/14/2015                   | 11XX6C0002  | 1   | 1,187.50   | 1   | 1,187.50        |
| <b>Amount Due this Bill:</b> |             |     |            |     | <b>1,187.50</b> |

Interest will be assessed at the rate of 1.00 % on any unpaid balance if full payment is not made by the date of delinquency. A penalty charge of 6.00 % per annum will be charged on the unpaid portion of a debt, which remains unpaid 90 days after the date of delinquency. An additional administrative fee of \$10.00 will be assessed when the dunning notice is issued. See notice of actions in event of delinquency.

|  |  |
|--|--|
| Accounting Classification:<br>RX.03824854.0140000            | ACCOUNTS PAYABLE - RCVD<br>FEB 17 '15 AM 11:52     |
| Customer: 3000019310<br>Bill #: 1801055571<br>TIN: 846000574 | RECEIVED<br>By Joe Bandy at 10:06 am, Feb 16, 2015 |

## Oversizing

| Year | Colorado Springs | Fountain | Security | Pueblo West | Total Storage | Rate    | Storage Payment               | Recognition of Oversized Pipe | Bill Amount   |
|------|------------------|----------|----------|-------------|---------------|---------|-------------------------------|-------------------------------|---------------|
| 2011 | 17,000           | 400      | 250      | 8,000       | 25,650        | \$36.00 | \$ 923,400.00                 | \$ 236,000.00                 | \$ 1,386.00 * |
| 2012 | 17,500           | 400      | 250      | 8,000       | 26,150        | \$36.64 | \$ 958,136.00                 | \$ 955,000.00                 | \$ 3,136.00   |
| 2013 | 18,000           | 700      | 500      | 8,000       | 27,200        | \$37.30 | \$1,014,560.00                | \$1,012,000.00                | \$ 2,560.00   |
| 2014 | 18,500           | 700      | 500      | 8,000       | 27,700        | \$37.97 | \$ 1,051,769.00               | \$1,049,000.00                | \$ 2,769.00   |
| 2015 | 19,000           | 1,000    | 750      | 8,000       | 28,750        | \$38.65 | \$ 1,111,187.50               | \$1,110,000.00                | \$ 1,187.50   |
| 2016 | 19,500           | 1,000    | 750      | 8,312.5     | 29,562.5      | \$39.34 | \$ 1,162,988.75               | \$1,162,000.00                | \$ 988.75     |
| 2017 | 20,000           | 1,300    | 1,000    | 8,312.5     | 30,612.5      | \$40.04 | \$1,225,724.50                | \$ 476,522.17                 | \$749,202.33  |
|      |                  |          |          |             |               |         | Total                         | \$6,000,522.17                |               |
|      |                  |          |          |             |               |         | Recognition of Oversized Pipe |                               |               |

\*The SDS Participants collectively made payments under their 2011 temporary contracts in the amount of \$636,014, which left a balance of \$237,186 (Long Term Storage Payment less Temporary Storage Payment). \$236,000 was the recognition for the oversized pipe therefore \$1,386 was the remaining bill amount.



**FEIS Commitments**

---

# **Southern Delivery System Environmental Commitments Plan**

Prepared for:

**Bureau of Reclamation**

Submitted by:

**Colorado Springs Utilities, SDS Project Manager  
on behalf of the SDS Participants**

**March 18, 2011**

## Executive Summary

---

The Southern Delivery System Project (SDS Project) is a proposed regional water delivery system that will serve the City of Colorado Springs, City of Fountain, Security Water District, and Pueblo West Metropolitan District (collectively, the SDS Participants).

### Purpose

The purpose of the SDS Environmental Commitments Plan (ECP) is to provide a detailed and specific listing of the environmental commitments of the SDS Project for the seven programmatic permits/approvals received to date for the SDS Project and plans for implementing these commitments.

### Scope

This ECP addresses environmental commitments related to the following programmatic permits/approvals:

- Record of Decision (ROD)
- U.S. Army Corps of Engineers (USACE) 404 Individual Permit
- Colorado Department of Public Health and Environment (CDPHE) 401 Certification
- Fish and Wildlife Mitigation Plan (FWMP)
- Pueblo County 1041 Permit
- El Paso County Location Approvals
- Fountain Creek Watershed, Flood Control and Greenway District (District) resolution

### Listing and Plan

A detailed and specific listing of the environmental commitments for the SDS Project for each of the seven programmatic permits or approvals was developed and is provided in a series of tables. These tables include a brief approach of the SDS Project's plan for the programmatic implementation of each of the environmental commitments listed.

### Reporting

The SDS Project will provide an annual report summarizing the SDS Project's progress, which will be submitted to the Bureau of Reclamation (Reclamation) by June 30 of the subsequent year. This report will include a brief summary of compliance with the ECP.

PCAR

# **Southern Delivery System Permit Compliance Annual Report Calendar Year 2014**

Prepared for:

**Bureau of Reclamation**

**Colorado Department of Public Health and  
Environment**

**Colorado Division of Parks and Wildlife**

**El Paso County**

**Pueblo County**

**Fountain Creek Watershed Flood Control and  
Greenway District**

Submitted by:

**Colorado Springs Utilities, SDS Project Manager  
on behalf of the SDS Participants**

January 2015



Permits

Site Actions ▾

Library Tools

Documents Library

Browse



Environmental ▸ Permit Documents ▸ By Category and Subcategory ▾

Main Environmental Document Archive

| SDS Portal                    | SDS Program | mPDS | MWH  | Confidential | Document Center | Team Sites ▾ | SDS Operation and Maintenance Manual |
|-------------------------------|-------------|------|------|--------------|-----------------|--------------|--------------------------------------|
| Lists                         |             | Type | Name | File Size    | Title           | WP Code      |                                      |
| ProjectWorkPackage            |             |      |      |              |                 |              |                                      |
| Environmental Inspection      |             |      |      |              |                 |              |                                      |
| Complaints                    |             |      |      |              |                 |              |                                      |
| Accidents                     |             |      |      |              |                 |              |                                      |
| Photos                        |             |      |      |              |                 |              |                                      |
| Libraries                     |             |      |      |              |                 |              |                                      |
| AutoForm                      |             |      |      |              |                 |              |                                      |
| Pictures                      |             |      |      |              |                 |              |                                      |
| Environmental Team Photos     |             |      |      |              |                 |              |                                      |
| Discussions                   |             |      |      |              |                 |              |                                      |
| Environmental Team Discussion |             |      |      |              |                 |              |                                      |
| Documents                     |             |      |      |              |                 |              |                                      |
| Environmental Dashboard       |             |      |      |              |                 |              |                                      |
| Permit Documents              |             |      |      |              |                 |              |                                      |
| Shared Documents              |             |      |      |              |                 |              |                                      |
| Document Search               |             |      |      |              |                 |              |                                      |
| Attorney Client Privilege     |             |      |      |              |                 |              |                                      |

paragraph 17



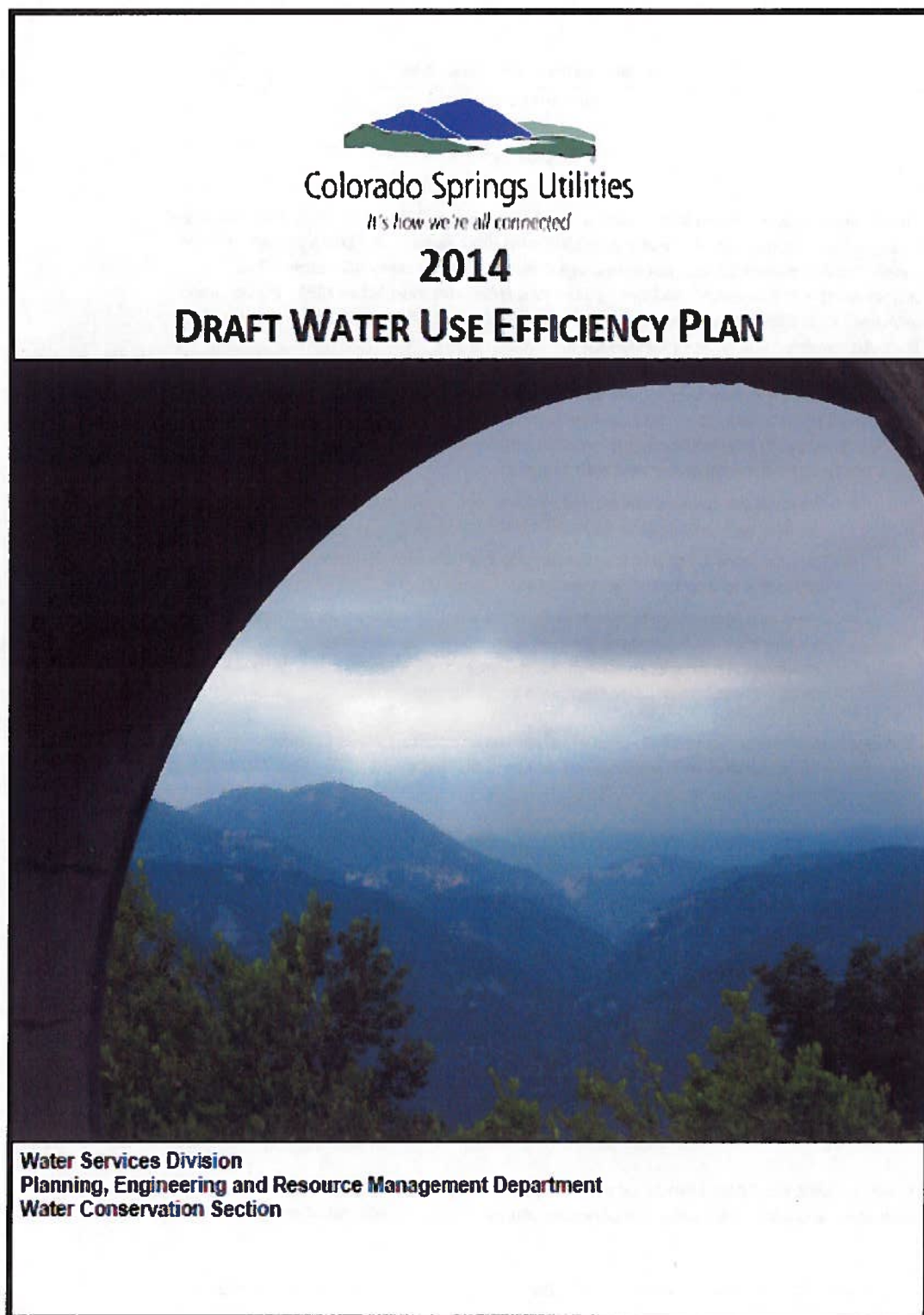


# Water Quality

| Location  | Date     | Flow | Barometric pressure | Dissolved oxygen | pH  | Specific conductance | Temperature | Turbidity | Escherichia coli | Total coliform | Ammonia | Selenium | Note |
|---|----------|------|---------------------|------------------|-----|----------------------|-------------|-----------|------------------|----------------|---------|----------|------|
| Standards (if applicable)                       |          |      |                     |                  |     |                      |             |           |                  |                |         |          |      |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20131021 | 141  | 648                 | 9.4              | 8.4 | 542                  | 12.8        | 16        | 24               | 1700           | 0.02    | 9.8      | 17.4 |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20131113 | 333  | 649                 | 10.6             | 8.4 | 481                  | 9.1         | 4.7       | 18               | 650            | 0.02    | 7.3      |      |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20131204 | 55   | 639                 | 11.9             | 8.7 | 639                  | 4.7         | 0.2       | 6                | 190            | 0.02    | 15.8     |      |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20140113 | 58   | 646                 | 13.5             | 8.8 | 639                  | 3.3         | 2.1       | 3                | 100            | <0.02   | 20.3     |      |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20140219 | 67   | 638                 | 13.1             | 8.8 | 621                  | 8           | 4.1       | 4                | 47             | <0.02   | 17.7     |      |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20140303 | 70   | 644                 | 13.1             | 8.7 | 604                  | 2.9         | 7.6       | 1                | 110            | 0.03    | 15.7     |      |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20140401 | 159  | 638                 | 11.8             | 8.7 | 546                  | 8.3         | 3.3       | 2                | 100            | <0.02   | 11.9     |      |
| Selenium Standard Change *Updated Rule 20140430 |          |      |                     |                  |     |                      |             |           |                  |                |         |          |      |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20140512 | 364  | 649                 | 11.1             | 8.6 | 472                  | 9.4         | 0.7       | 18               | 2400           | <0.02   | 8.5      |      |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20140603 | 4860 | 642                 | 9.3              | 8.3 | 407                  | 13.4        | 1.3       | 11               | 1400           | 0.059   | 5        |      |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20140702 | 1360 | 661                 | 8.7              | 8.4 | 271                  | 16.5        | 15        | 44               | 2400           | <0.02   | 2.6      |      |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20140812 | 867  | 649                 | 8.3              | 8.2 | 322                  | 19.6        | 14        | 26               | > 2400         | 0.02    | 4.5      |      |
| ARKANSAS RIVER AT MOHPAT STREET AT PUEBLO, CO   | 20140902 | 343  | 645                 | 8.6              | 8.7 | 348                  | 21.7        | 5.5       | 14               | > 2400         | 0.05    | 4.3      |      |
| Standards (if applicable)                       |          |      |                     |                  |     |                      |             |           |                  |                |         |          |      |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20131022 | 25.0 | 614                 | 10.9             | 8.1 | 288                  | 6.2         | 45        | 130              | 530            | <0.02   | 0.2      |      |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20131112 | 21.0 | 621                 | 10.5             | 8.2 | 339                  | 4.7         | 63        | 54               | 2400           | 0.02    | 0.2      |      |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20131203 | 15   | 599                 | 10.4             | 8.1 | 351                  | 4.2         | 0.3       | 66               | 170            | <0.02   | 0.17     |      |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20140109 | 11   | 604                 | 10.9             | 8.2 | 360                  | 2.2         | 0.2       | 130              | 390            | <0.02   | 0.2      |      |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20140211 | 3.9  | 609                 | 10.7             | 8.2 | 467                  | 2.1         | 8.6       | 44               | 170            | <0.02   | 0.24     | *90  |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20140304 | 8.1  | 606                 | 10.6             | 8.4 | 437                  | 4.5         | 7.7       | 170              | 960            | 0.03    | 0.2      |      |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20140402 | 6.9  | 602                 | 10.1             | 8.3 | 445                  | 5.6         | 2.6       | 38               | 140            | <0.02   | 0.2      |      |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20140508 | 10   | 605                 | 9.1              | 8.3 | 393                  | 9.4         | 57        | 770              | 2400           | <0.02   | 0.2      |      |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20140605 | 9.9  | 611                 | 8.1              | 8.7 | 329                  | 13.9        | 60        | 270              | 10000          | <0.02   | 0.16     |      |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20140710 | 8.5  | 611                 | 7.7              | 8.3 | 430                  | 16          | 22        | 1000             | 8700           | <0.02   | 0.16     |      |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20140811 | 20   | 618                 | 8.5              | 8.2 | 298                  | 12.1        | 180       | 1700             | 24000          | 0.07    | 0.16     |      |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.       | 20140903 | 9.9  | 603                 | 7.5              | 8.3 | 444                  | 17.3        | 15        | *2               |                | *7      | 0.17     |      |

**Water Conservation Plan**

(now known as CSU 2014 Draft Water Use Efficiency Plan)



## Introduction

## 2014 DRAFT WATER USE EFFICIENCY PLAN

October 20, 2014

## INTRODUCTION

The Colorado Water Conservation Board (CWCB) through the Office of Water Conservation and Drought Planning requires that water providers with total demand of 2,000 acre-feet or more develop and implement plans that encourage customers to use water efficiently. This requirement was first established through the Water Conservation Act of 1991. In compliance with the Act of 1991, Utilities submitted a Water Conservation Plan to the State of Colorado that was reviewed and accepted on March 23, 1998.

During the 2004 legislative session, the State of Colorado revised the minimum requirements of the Water Conservation Act of 1991. In March 2006, Utilities was notified by the CWCB that Utilities' plan was in need of revision to ensure compliance with the Water Conservation Act of 2004 and to include the following new plan elements:

- The steps the covered entity used to develop, and will use to implement, monitor, review and revise its water conservation plan;
- The time period, not to exceed seven years, after which the covered entity will review and update its adopted plan;
- Either as a percentage or in acre-foot increments, an estimate of the amount of water that has been saved through a previously implemented conservation plan and an estimate of the amount of water that will be saved through conservation when the plan is implemented.

In compliance with the Act of 2004, Utilities submitted an updated Water Conservation Plan to the State of Colorado that was reviewed and accepted on January 30, 2008. This Water Conservation Plan expires January 29, 2015.

In addition to the CWCB requirements, other factors that drive the need for an updated Plan include:

- Increased public awareness of the need to conserve due to regional drought and five years of water restrictions since 2002
- Higher customer expectations regarding Utilities' role in promoting water conservation
- Changes in statewide water appliance standards and advancements in water-efficient technologies
- Continued population growth and increased competition for state and regional water resources
- An updated Integrated Water Resource Plan is being written concurrently

In July of 2012, the CWCB introduced a new *Water Conservation Plan Development Guidance Document* and *Model Plan* for water providers interested in developing what are now referred



## 2014 DRAFT WATER USE EFFICIENCY PLAN

October 20, 2014

to as water efficiency plans. The 2014 Water Use Efficiency Plan (Plan) generally follows the Guidance Document and meets or exceeds all statutory requirements.

The scope of the Plan provides an overview of water use, the current water demand forecast and the water system, including ongoing system improvements. The Plan further describes how Utilities will implement and monitor individual programs. The Plan addresses the process by which Utilities identified, screened and selected programs for implementation. Finally, includes a statement of water conservation goals and an analysis and description of selected programs.

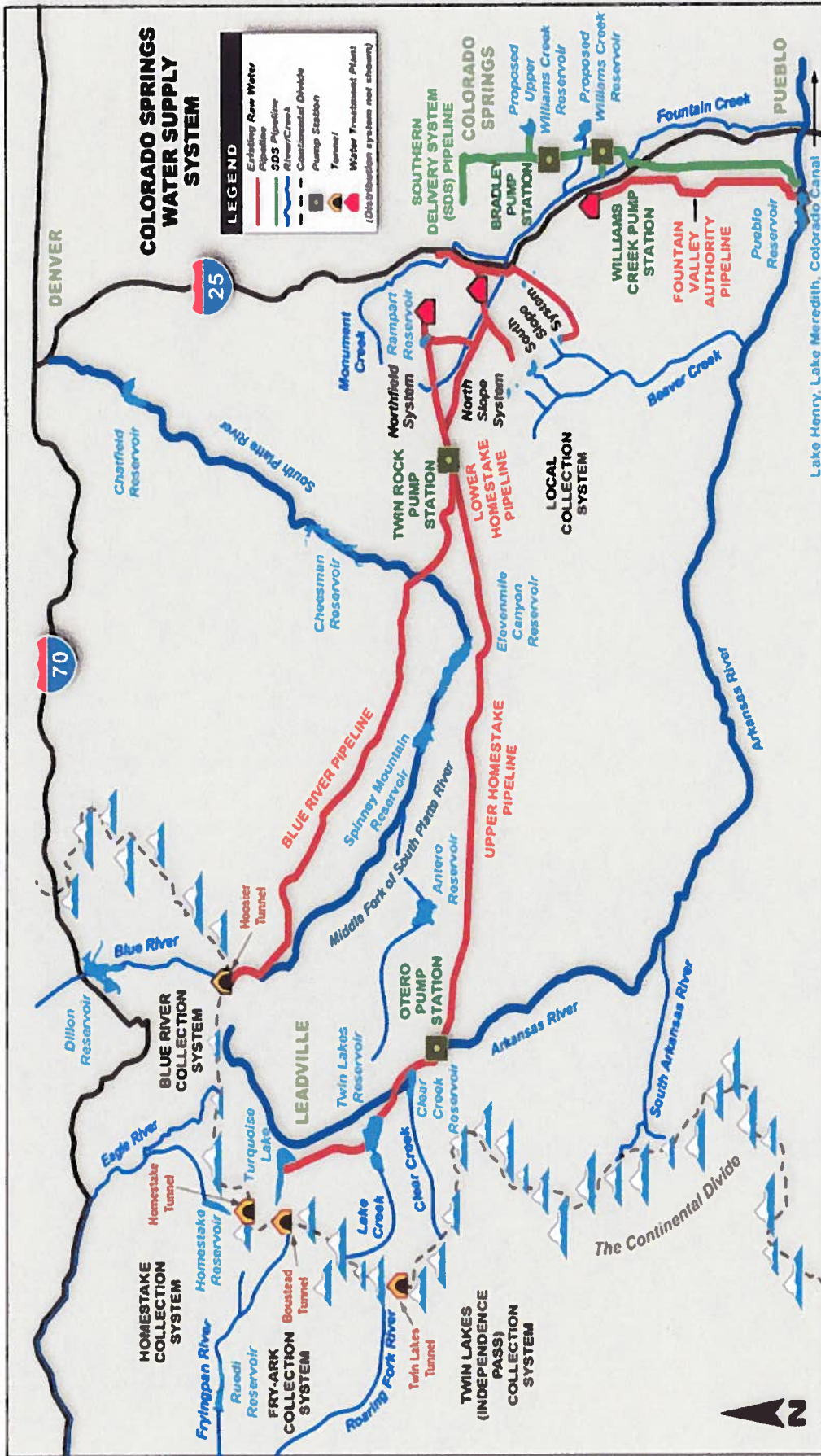
This Plan is not an integrated resource plan. However, it is being prepared in close coordination with an Integrated Water Resources Plan (IWRP) being developed concurrently. The IWRP is a long-term strategic plan that incorporates water supply and demand, water quality, infrastructure reliability, environmental protection, water reuse, financial planning, energy use, regulatory and legal concerns, and public participation. When the IWRP is completed in mid-2015, Utilities will compare the cost and yield of supply-side improvements and additions to determine the role of water conservation and demand-side activities.

This Plan does not address long-range plans related to water supply, delivery or treatment. Instead, the Plan focuses on customer-side or demand-side activities, such as education, rates, rebates, audits, regulations and distribution system water loss. Water supply plans, including drought response plans, are available upon request from Utilities.

The 2014 Water Use Efficiency Plan is a high-level strategic plan, designed to satisfy the diverse interests of multiple stakeholders. The plan is also designed to provide a foundation for Utilities to make sound business decisions related to water conservation and efficiency. The Plan is not intended to provide detail for any one program. Individual programs will be refined during the implementation phase. Many programs will be introduced as pilot projects during the first year of implementation in order to work through program details.

In summary, the Plan reflects the unique characteristics and the core values of the Colorado Springs community. It further demonstrates Utilities' long-standing and deep-rooted commitment to water conservation and efficient water use.

# Water Conservation Plan



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
Fryingpan-Arkansas Project, Colorado

**CONTRACT BETWEEN THE UNITED STATES OF AMERICA  
AND THE CITY OF COLORADO SPRINGS FOR THE USE OF EXCESS CAPACITY  
IN THE FACILITIES OF THE FRYINGPAN-ARKANSAS PROJECT**

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**Contract No. 11XX6C0002**

|  |     |
|--|-----|
| Exhibit A (Storage Payment) .....                            | A-1 |
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**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
Fryingpan-Arkansas Project, Colorado**

**CONTRACT BETWEEN THE UNITED STATES OF AMERICA  
AND THE CITY OF COLORADO SPRINGS, COLORADO, FOR THE USE OF  
EXCESS CAPACITY IN THE FACILITIES OF THE  
FRYINGPAN-ARKANSAS PROJECT**

THIS CONTRACT, made this 4<sup>th</sup> day of MAY, 2011, pursuant generally to the Act of June 17, 1902 (32 Stat. 388; 43 U.S.C. § 391, et seq.), and acts amendatory thereof and supplementary thereto, particularly, but not limited to, Section 14 of the Reclamation Project Act of 1939 (53 Stat. 1197; 43 U.S.C. § 389) and the Fryingpan-Arkansas (Fry-Ark) Project Act of August 16, 1962 (76 Stat. 389; 43 U.S.C. § 616) as amended, all collectively known as the Federal Reclamation laws, is between the UNITED STATES OF AMERICA, hereinafter referred to as the "United States," represented by the Contracting Officer executing this Contract, and the CITY OF COLORADO SPRINGS, COLORADO, acting by and through its UTILITY ENTERPRISE, hereinafter referred to as the "Contractor." The United States and the Contractor collectively are referred to as the "Parties."

**EXPLANATORY RECITALS**

The following statements are made in explanation:

- a. WHEREAS, the Secretary of the Interior (Secretary), acting through the Bureau of Reclamation (Reclamation), was authorized by the Fry-Ark Project Act of August 16, 1962 (76 Stat. 389; 43 U.S.C. § 616) as amended, to construct, operate and maintain the Fry-Ark Project (Project), Colorado, in substantial accordance with the engineering plans set forth in House Document 187, 83rd Congress, 1<sup>st</sup> Session, as modified by House Document 353, 86th Congress, 2<sup>nd</sup> Session, and as further modified and described in the description of the proposal contained in the final environmental statement for the Fry-Ark Project; and
- b. WHEREAS, Section 1 of the Fry-Ark Project Act states that the Secretary is authorized to construct, operate and maintain the Project for the purposes of supplying water for irrigation, municipal, domestic, industrial, hydroelectric power, flood control and other beneficial incidental uses including recreation and the conservation and development of fish and wildlife; and
- c. WHEREAS, Section 3 of the Fry-Ark Project Act requires that the Project shall be operated in accordance with the Operating Principles as adopted by the State of Colorado on December 9, 1960 (House Document 130, 87<sup>th</sup> Congress, 1<sup>st</sup> Session); and
- d. WHEREAS, the Project is a multipurpose project in Colorado that diverts water from the Colorado River Basin on the West Slope and transports it through the Continental Divide to the Arkansas River Basin on the East Slope; and

e. WHEREAS, Section 14 of the Reclamation Project Act of 1939 (53 Stat. 1197; 43 U.S.C. § 389) authorizes the Secretary to enter into contracts for the exchange or replacement of water as in the judgment of the Secretary are necessary and in the interests of the United States and the Project; and

f. WHEREAS, Southeastern Colorado Water Conservancy District (District) is the repayment entity for the reimbursable costs of the Project; pursuant to Contract No. 5-07-70-W0086 (January 21, 1965), as amended, with the United States; and

g. WHEREAS, Article 13 of Contract No. 5-07-70-W0086, as amended, establishes and describes the order of priority for evacuation of excess water stored in order to meet Project purposes; and

h. WHEREAS, the United States and the Contractor have had a continuous and long-standing contractual relationship dating back to the original Project authorization, that includes several long-term contracts and, since 2005, annual temporary Excess Capacity contracts for up to 20,000 acre-feet of water; and

i. WHEREAS, by letters dated April 13, 2004, and March 2, 2005, the Contractor requested a long-term contract for storage of Nonproject Water and Project Water Return Flows in Pueblo Reservoir for up to 28,000 acre-feet per year. The Contractor also requested a long-term contract to exchange up to 10,000 acre-feet per year of Nonproject Water and Project Water Return Flows in Pueblo Reservoir with Project Water stored upstream in Twin Lakes or Turquoise Reservoirs; and

j. WHEREAS, the Parties desire to enter into a contract, pursuant to applicable Federal Reclamation laws and the laws of the State of Colorado, for use of Excess Capacity pursuant to the terms and conditions set forth herein; and

k. WHEREAS the Contractor is acting through its community-owned utility enterprise that provides natural gas, electricity, water and wastewater services to customers in the Pikes Peak region of El Paso County, Colorado. The Contractor, through its utility enterprise, is responsible for Colorado Springs' water system, including formulation of policy, review and approval of the budget, setting rates, and long-range planning, to ensure that the Contractor's water system is operated and maintained in an efficient and cost-effective manner. As such, the Contractor has need and necessity for the storage and exchange contracts that are the subject hereof for the purpose of supplying water for municipal and other uses to the present and future inhabitants of the City of Colorado Springs and to those persons, firms, or corporations desiring water from the Contractor's water system. The Contractor has also requested that the United States recognize the occasional need to release water from Pueblo Reservoir to the Arkansas River for augmentation purposes. The Contractor's service area is within the Arkansas River basin and within the District's boundaries; and

l. WHEREAS, the Contractor currently holds water rights, operates facilities and undertakes other lawful transactions concerning water operations in the Arkansas River Valley; and



m. WHEREAS, the Southern Delivery System (SDS) is a proposed non-federal regional water delivery project that is designed to meet future water needs of the SDS Participants. Currently, in addition to the Contractor, the other area participants are the City of Fountain, acting by and through its Electric, Water and Wastewater Utility Enterprise, Security Water District Enterprise, acting by and through its Water Activity Enterprise, and Pueblo West Metropolitan District, acting by and through its Water Enterprise hereinafter referred to collectively as the SDS Participants; and

n. WHEREAS, a proposed purpose for SDS is to provide additional yield and system redundancy for the SDS Participants; and

o. WHEREAS, the current proposal is to modify the existing Project river outlet works on Pueblo Dam in order to attach a pipeline to convey water north to the service areas of the SDS Participants while still maintaining the functionality and integrity of Pueblo Dam; and

p. WHEREAS, the modified outlet capacity from Pueblo Reservoir and other facilities to be constructed as part of SDS, in conjunction with potential future facility connections and agreements among the entities and others, subsequent to all appropriate environmental analyses and assessments, and applicable contracts could result in facility redundancy that could be of mutual benefit to the entities during future periods of emergency or other outlet outages; and

q. WHEREAS, SDS will be constructed by the SDS Participants at their sole expense; and

r. WHEREAS, contemporaneous with this Contract, the United States and the Contractor are executing Contract No. 11XX6C0005, to provide for the conveyance of water through the modified outlet works and each SDS Participant will be executing the following Excess Capacity contracts: the Security Water District Enterprise, acting by and through its Water Activity Enterprise, Contract No. 11XX6C0003, the City of Fountain, acting by and through its Electric, Water, and Wastewater Utility Enterprise Contract No. 11XX6C0004, and Pueblo West Metropolitan District acting by and through its Water Enterprise Contract No. 11XX6C0006.

NOW, THEREFORE, in consideration of the mutual and dependent covenants herein contained, it is hereby mutually agreed as follows:

#### **DEFINITIONS**

1. Where used herein, unless specifically expressed otherwise or obviously inconsistent with the intent hereof, the term:

a. "Contracting Officer" shall mean the Secretary of the Interior or a duly authorized representative. Unless stated otherwise, the Contracting Officer shall be deemed to be the Secretary's authorized representative.

b. "Contractor" shall mean the City of Colorado Springs, Colorado, acting by and through its Utility Enterprise.

c. "District" shall mean the Southeastern Colorado Water Conservancy District organized under the laws of the State of Colorado which is the repayment entity for the reimbursable water supply costs of the Project; pursuant to Contract No. 5-07-70-W0086 (January 21, 1965), as amended.

d. "Excess Capacity" shall mean capacity within Project facilities that is in excess of the needs of the Project, if and when available, as determined solely by the Contracting Officer, within the bounds of applicable laws and regulations, to store, convey and exchange water.

e. "Nonproject Water" shall mean all water that meets all of the following specifications: (i) water that is not defined as Project Water herein; (ii) water that was included in meeting the demands of the SDS Participants and was analyzed pursuant to the National Environmental Policy Act of 1969 (NEPA) (P.L. 91-190; 42 U.S.C § 4321) in the Final Environmental Impact Statement (FEIS) Numbered 08-63 and Record of Decision (ROD) Numbered GP-2009-01; and (iii) water that is listed on the table attached as Exhibit E which is hereby made a part of this Contract.

f. "North Outlet Works" shall mean those facilities as more fully described in Contract No. 11XX6C0005.

g. "Operating Principles" shall mean the Project Operating Principles set forth in House Document 130, 87<sup>th</sup> Congress, 1<sup>st</sup> Session, 1961.

h. "Project" shall mean the Fryingpan-Arkansas Project, Colorado.

i. "Project Water" shall mean the water available to the Project through the State of Colorado decreed water rights for the Project pursuant to the Operating Principles.

j. "Project Water Return Flows" shall mean the Project Water that is returned to the Project and accrues back to the Contractor for its reuse.

k. "Single Purpose SDS Works" shall mean those works constructed by the SDS Participants to convey SDS Water from the North Outlet Works to the SDS Participants' service areas.

l. "Southern Delivery System" (SDS) shall mean the non-federal regional water delivery project that consists of capacity in the North Outlet Works sufficient to deliver 96 million gallons per day (mgd) and the Single Purpose SDS Works.

m. "SDS Participants" shall mean the entities that will use SDS to meet their future water needs. The SDS Participants are the City of Colorado Springs, City of Fountain, Security Water District, and Pueblo West Metropolitan District.

n. "SDS Water" shall mean only the following types of water defined in this section as: (i) Project Water legally available to the Contractor; (ii) Non-Project Water; and (iii) Project Water Return Flows.

o. "Spill" shall mean evacuation from Pueblo Reservoir pursuant to the spill priorities described in Article 13 of Contract Number 5-07-70-W0086, as amended, between the District and the United States.

### **PURPOSE**

2. The purpose of this Contract is to provide for the use of Excess Capacity in Project facilities to store and exchange the Contractor's Nonproject Water and Project Water Return Flows for the Contractor's subsequent use and exchange pursuant to the terms and conditions of this Contract.

### **TERM OF CONTRACT**

3. a. This Contract will become effective on January 1, 2011, and shall remain in effect until December 31, 2049, unless terminated sooner in accordance with the provisions of Article 12.

b. The Contractor may request renewal of this Contract upon written request to the Contracting Officer on or before two years prior to the expiration of this Contract, Provided, That upon such renewal request, the Contracting Officer will enter into good faith negotiation which shall be upon mutually agreeable terms and conditions and shall be in accordance with the applicable federal laws and policies and State laws in effect at that time.

### **LIMITATIONS**

4. a. Nothing in this Contract is to be construed to affect any contractual commitments under any long-term contract in effect at the date of execution of this Contract concerning the Project, including, but not limited to Contract No. 5-07-70-W0086 dated January 21, 1965, as amended.

b. Nothing in this Contract is to be construed to increase the total quantity of water which the State of Colorado is entitled to use, and to which the State is limited, under applicable compacts, statutes and treaties. To the extent applicable, this Contract is subject to the following:

(1) The Boulder Canyon Project Act, approved December 21, 1928, (45 Stat. 1057; 43 U.S.C. §§ 617 *et seq.*).

(2) The Colorado River Compact signed November 24, 1922.

(3) The Upper Colorado River Basin Compact.

(4) The Boulder Canyon Project Adjustment Act, approved July 19, 1940 (54 Stat. 774, 43 U.S.C. §§ 681 *et seq.*).

(5) The Colorado River Storage Project Act, approved April 11, 1956 (70 Stat. 105, 43 U.S.C. §§ 620 *et seq.*).



(6) The Mexican Water Treaty.

(7) The Arkansas River Compact.

c. The Contracting Officer shall operate the Project in accordance with the Operating Principles.

d. Except as explicitly provided in this Contract nothing in this Contract is to be construed to require a change in Project operations, including, but not limited to, a change in the spill priorities as established in Article 13 of Contract No. 5-07-70-W0086 (January 21, 1965), as amended nor to effect the Contractor's rights thereunder.

e. Nothing in this Contract is to be construed to require the Contracting Officer to take any action which as determined solely by the Contracting Officer within the bounds of all applicable laws and regulations may cause harm to the Project.

f. Nothing in this Contract is to be construed to grant the Contractor any right, title, or interest other than that explicitly provided for in this Contract.

g. In accordance with Article 17, the Contractor's receipt of any benefit under this Contract is conditioned upon payment of charges due.

h. The Contractor shall not exchange water from Pueblo Reservoir to upstream locations as against releases made by Reclamation in support of the Upper Arkansas Voluntary Flow Management Program (Flow Program), or make any exchanges from Pueblo Reservoir which would require Reclamation to release additional water to meet the objectives of the Flow Program. In the event of a water shortage emergency condition in the Upper Arkansas Basin, the Contractor will utilize exchange opportunities under this Contract to the extent possible, if shortages still exist the Contractor will consult with Reclamation and the District to determine how to resolve the shortage emergency.

i. This Contract is to be construed to allow legally authorized discharges of water from Pueblo Reservoir into the Arkansas River.

### **CONTRACTED SERVICE**

#### **5. a. STORAGE**

(1) Pursuant to Reclamation law, the Contractor may store up to 28,000 acre-feet of Nonproject Water and Project Water Return Flows in Pueblo Reservoir at any one time pursuant to the terms and conditions of this Contract.

(2) The Contractor is authorized to utilize 17,000 acre-feet of storage in 2011 and to utilize 500 acre-feet of additional storage each year thereafter until the maximum 28,000 acre-feet per year is reached. The maximum amount of storage available to the Contractor in any year during this build-up schedule (the "Schedule") shall be known as the "Storage Floor". The Contractor may notify the Contracting Officer at any time that it wishes to utilize storage, up to the maximum 28,000 acre-feet, in advance of the Schedule. A storage amount requested in advance of the Schedule then becomes the Storage Floor

and cannot be decreased. The Storage Floor will only increase again when the storage amount established by the Schedule exceeds the then-current Storage Floor. Storage Floor increases will then resume according to the Schedule, unless the Contractor again requests storage in advance of the Schedule, until the maximum 28,000 acre-feet of storage is reached.

- (3) The Contracting Officer shall have sole authority, within the bounds of applicable laws and regulations, to determine if and when the Contractor may store Nonproject Water and Project Water Return Flows.
- (4) The Contracting Officer shall account for all the water stored through reservoir water accounting procedures and storage will be determined in accordance with the terms of this Contract.
- (5) If the Contracting Officer determines that Project operations may require a spill, the Contracting Officer shall notify the Contractor as soon as reasonably possible of the quantity and timing of the water that may be spilled.
- (6) The amount of Nonproject Water and Project Water Return Flows that is not delivered or spilled during the calendar year may be carried over to the next year while the Contract is in effect, but total Nonproject Water and Project Water Return Flows in the Project may not exceed the acre-feet established in Subarticle 5.a.(2) at any one time.

b. EXCHANGE

- (1) Based on Project water availability as determined solely by the Contracting Officer within the bounds of applicable laws and regulations, the Contractor may exchange up to 10,000 acre-feet per year of Nonproject Water and Project Water Return Flow water stored in Pueblo Reservoir for an equal amount of Project Water stored in Twin Lakes or Turquoise Reservoirs pursuant to the terms and conditions of this Contract. After the Contracting Officer notifies the Contractor of the amount of exchange that is available to the Contractor for the year, which shall occur on or about May 1<sup>st</sup>, the Contractor shall notify the Contracting Officer within 15 business days of the amount of exchange service that the Contractor requests for the year. The Contractor shall exchange no more than a total of 10,000 acre-feet in any year.
- (2) The Contracting Officer shall have sole authority within the bounds of applicable laws and regulations to determine if and when an exchange may occur.
- (3) The Contracting Officer shall execute the exchanges herein contemplated through its reservoir water accounting procedures.
- (4) On an annual basis, the Contracting Officer shall offer use of Excess Capacity for exchange to the Contractor and to other long-term contractors that will use the water within the boundaries of the District, regardless of the

date on which the contracts are executed. If demand for Excess Capacity for exchange exceeds the availability for the year, the Contracting Officer shall offer the Excess Capacity to the Contractor and other long-term contractors that will use the water within the boundaries of the District on a pro rata share based upon the amount of exchange requested by each contractor to the total amount of exchange requested for that year by all of the long-term contractors that will use the water within the boundaries of the District.

### PAYMENT CHARGES

#### 6. a. STORAGE

- (1) In the years 2011 through 2017, this Contract will be the instrument used to address payments for all of the SDS Participants. In year 2018, and from that time forward, each entity's individual Excess Capacity contract will be the instrument used to bill each respective entity. Initially upon execution of this Contract, the Contractor shall submit an advance non-refundable payment for the year 2011 in the amount of \$1,386, which will provide for payments established in this subarticle for the SDS Participants. The parties agree that the schedule in Subarticle 6(a)(1) accounts for any payments for the use of Project facilities that may have been made pursuant to temporary contracts in water year 2011. For the years 2011 through 2017, the total amount billed under this contract shall account for the SDS Participants' storage established in the following schedule: .

| Year | Colorado Springs | Fountain | Security | Pueblo West | Total Storage | Rate    | Storage Payment                           | Recognition of Oversized Pipe | Bill Amount   |
|------|------------------|----------|----------|-------------|---------------|---------|---|-------------------------------|---------------|
| 2011 | 17,000           | 400      | 250      | 8,000       | 25,650        | \$36.00 | \$ 923,400.00                             | \$ 236,000.00                 | \$ 1,386.00 * |
| 2012 | 17,500           | 400      | 250      | 8,000       | 26,150        | \$36.64 | \$ 958,136.00                             | \$ 955,000.00                 | \$ 3,136.00   |
| 2013 | 18,000           | 700      | 500      | 8,000       | 27,200        | \$37.30 | \$1,014,560.00                            | \$1,012,000.00                | \$ 2,560.00   |
| 2014 | 18,500           | 700      | 500      | 8,000       | 27,700        | \$37.97 | \$ 1,051,769.00                           | \$1,049,000.00                | \$ 2,769.00   |
| 2015 | 19,000           | 1,000    | 750      | 8,000       | 28,750        | \$38.65 | \$ 1,111,187.50                           | \$1,110,000.00                | \$ 1,187.50   |
| 2016 | 19,500           | 1,000    | 750      | 8,312.5     | 29,562.5      | \$39.34 | \$ 1,162,988.75                           | \$1,162,000.00                | \$ 988.75     |
| 2017 | 20,000           | 1,300    | 1,000    | 8,312.5     | 30,612.5      | \$40.04 | \$1,225,724.50                            | \$ 476,522.17                 | \$749,202.33  |
|      |                  |          |          |             |               |         | Total<br>Recognition of<br>Oversized Pipe | \$6,000,522.17                |               |

\*The SDS Participants collectively made payments under their 2011 temporary contracts in the amount of \$686,014, which left a balance of \$237,386 (Long Term Storage Payment less Temporary Storage Payment). \$236,000 was the recognition for the oversized pipe therefore \$1,386 was the remaining bill amount.

- (2) After the initial contract payment, subsequent advance nonrefundable payments will be due on or before November 1 of each year for the following calendar year. Beginning for water storage in 2012 and each year thereafter, the water storage rate, determined under Article 6, shall be increased annually at the rate of 1.79 percent. In 2018, the SDS Participants' billings shall be in accordance with their respective Excess Capacity contracts identified in whereas clause "r" of the Explanatory Recitals. For water storage in 2011, this charge shall be in the amount of \$36.00 per acre-foot multiplied by the amount of the Storage Floor, as that term is defined in Subarticle 5.a.(2), regardless of the amount stored by the Contractor with recognition of the oversized pipe. In the years 2011-2017 the Storage Floor is depicted above. Each year thereafter, the water



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storage charge shall be the rate per acre-foot shown on Exhibit A, which is attached to and made a part of this Contract, multiplied by the amount of that year's Storage Floor, plus any additional storage requested by the Contractor. When the maximum amount of storage specified by Article 5 reaches the full 28,000 acre feet, the annual charge thereafter shall be the applicable rate as shown in Exhibit A, multiplied by 28,000 acre-feet.

- (3) The Contractor shall not be relieved of the obligation to pay the annual storage charge described above for any reason, including the failure or inability to store water in any year.

**b. EXCHANGE:**

- (1) The Contractor shall notify the Contracting Officer, the requested exchange amount, if any, and pay in advance a non-refundable \$36.00 per acre-foot, beginning in year 2011 in the manner described in Subarticle 5.b.(1). This rate shall each be increased annually at the rate of 1.79 percent. These charges and rates are shown in "Exhibit B," which is attached to and made a part of this Contract.

- (2) The Contractor shall not be relieved of the obligation to pay, or entitled to any credit for or refund of, the annual exchange charge described above for any reason, including the failure or inability to exchange water in any year.

c. No further rate adjustment is required under this Contract because the charges for storage and exchange are already subject to annual upward adjustment.

d. Revenues from the storage and exchange charges described in Subarticles 6.a.(1) and 6.b.(1) will be credited in accordance with Section 2(b) of the Project Act, as amended by Section 9115, Title IX of Public Law 111-11.

e. If, in the future, Reclamation adopts criteria for a market-based pricing policy for use of Excess Capacity at either Fry-Ark Project facilities specifically or for Reclamation facilities generally, then at the request of either party, the price set forth in Article 6 of this Contract may be reevaluated and adjusted by the Contracting Officer to conform to that pricing policy. The decision to adopt a market-based pricing policy will rest solely with Reclamation, and it is understood that the policy may not require Reclamation to apply identical pricing for similar services. The terms of this article will expire five years from the date of Contract execution unless extended by the written, mutual consent of the Parties.

**NORTH OUTLET WORKS**

7. a. The Parties have executed Contract No. 11XX6C0005 for the North Outlet Works ("NOW Contract").

b. The Contractor shall receive recognition for over-sizing approximately the first 1,600 feet of pipe within the North Outlet Works to a 90-inch diameter which will be to the benefit of Project beneficiaries and the United States.

c. The Contracting Officer shall retain the option to adjust the schedule in Subarticle 6.a.(1) in the years 2011 through 2017 if additional payments for storage are made pursuant to Article 6 and/or through an increase in the Contractor's Storage Floor as determined in Subarticle 5(a)(2). A revised schedule shall be inserted above if the Contracting Officer's option described herein is exercised.

**MEASUREMENT AND ACCOUNTING FOR THE USE  
OF EXCESS CAPACITY**

8. a. If requested by the Contracting Officer, the Contractor shall submit and revise, if necessary, a written schedule of the anticipated monthly demands for the Excess Capacity of the Contractor's Nonproject Water and Project Return Flows.

b. The Contractor is solely responsible for making whatever arrangements are necessary for making water available to the Contractor under Colorado law, including but not limited to, obtaining approval of the State of Colorado's Division of Water Resources. The Contractor is solely responsible for any transportation losses assessed by the State of Colorado's Division of Water Resources and/or associated with the use of Excess Capacity for the Contractor's Nonproject Water and Project Water Return Flows. The Contractor shall account for Nonproject Water and Project Water Return Flows according to the limitations in the water rights listed in Exhibit E and provide the same to the Contracting Officer upon request. The Contracting Officer shall account for any such transit and evaporation losses assessed on Nonproject Water and Project Water Return Flows stored and conveyed under this Contract.

c. The Contracting Officer shall provide for the daily accounting of the Contractor's water showing:

- (1) The amount of water placed into storage in the Project;
- (2) The amount of the Contractor's water exchanged for Project Water stored upstream in either Twin Lakes or Turquoise Reservoirs;
- (3) The evaporation losses charged against the Contractor's water, which shall be on a proportional basis with all other water stored in Pueblo Reservoir; and
- (4) The amount of Contractor's water remaining in storage at the end of each day (Midnight).

d. The Contractor shall furnish the Contracting Officer, or the Contracting Officer's designee, without charge such Contractor records as may be required for such daily accounting.

**ENVIRONMENTAL COMPLIANCE AND COMMITMENTS**

9. a. The Contractor, acting as project manager for the SDS Participants, shall implement the environmental commitments set forth in the FEIS Numbered 08-63 and ROD Numbered GP-2009-01. The environmental commitments are described in Exhibit C, attached, and are made part of this Contract. The Contractor shall submit to the

Contracting Officer by January 31 of each year a report, satisfactory to the Contracting Officer, that certifies progress in the previous year regarding successfully implementing the commitments in a timely manner. If at any time during the term of this Contract, the Contractor fails to implement or comply with the environmental commitments, the Contracting Officer may immediately cease storage, conveyance, and exchange of Nonproject Water and Project Water Return Flows until the commitments are implemented and fulfilled to the satisfaction of the Contracting Officer. Failure to implement or comply with the environmental commitments may also result in the termination of this Contract by the United States in accordance with Article 12.

b. The Contractor shall be responsible for the costs of all current and future NEPA and Endangered Species Act (ESA) compliance and mitigation measures identified in the FEIS and the ROD associated with the use of the Excess Capacity described in this Contract.

### **PERMITS, APPROVALS, AND AGREEMENTS**

10. a. The Contractor and the SDS Participants, must obtain all Federal, State, and local permits, approvals, licenses and agreements necessary for the construction, implementation and operation of the SDS project ("licenses and approvals"). These licenses and approvals may include, as examples, a Section 404 permit under the Clean Water Act, appropriate 1041 permits, and consultation with the Colorado Division of Wildlife (CDOW) and the Colorado Water Conservation Board. The Contractor shall comply with all licenses and approvals.

b. The Contractor shall notify and provide copies to the Contracting Officer of all licenses and approvals as they are completed, issued or modified. The Contractor shall also notify the Contracting Officer within 72 hours of receipt of any notice of non-compliance of any license or approval.

c. If the Contractor fails to comply with this Article 10, the United States may terminate this Contract in accordance with Article 12.

### **CONTRACTOR'S USE OF WATER**

11. The Contractor may use SDS Water stored, conveyed or exchanged pursuant to this Contract and the NOW Contract only in those areas that are within both the Contractor's service area and the boundaries of the District, for all lawfully decreed purposes that are consistent with Reclamation laws and the laws of the State of Colorado and that are within the scope of all environmental documents, permits, approvals, licenses and agreements. Any sale, transfer, or assignment by the Contractor of the storage, conveyance or exchange rights under this Contract or the NOW Contract or any portion thereof, to store, convey, or exchange SDS Water is prohibited unless approved in advance and in writing by the Contracting Officer. Any such approval will require an appropriate level of environmental compliance prior to the Contracting Officer's determination.



**TERMINATION OF CONTRACT**

12. a. If at any time the Contracting Officer determines that the Contractor or any other SDS Participant was not able to obtain all permits, licenses and approvals necessary to construct and operate the SDS, the Contracting Officer shall provide notice of this determination to the Contractor and request the offending party to provide a written response to both the Contracting Officer and other SDS Participants within ninety (90) days of its receipt as to the reasons why the permit, license or approval was unable to be attained and how the offending party intends to fully commit to its contractual obligations hereunder. The Contracting Officer will consider the written response by the offending party, and determine whether the termination of this Contract is necessary to protect the Contracting Officer's or the United States' interests. The Contracting Officer may also consider steps to remedy the problem that may be taken by other SDS Participants. If Contracting Officer solely determines that the unattained license, permit, or approval impacts this Contract including any environmental commitments, the United States may terminate this Contract by providing notice of the termination to the Contractor.

b. The United States may, at any time, terminate this Contract for cause and cease the use of Excess Capacity hereunder upon failure of the Contractor: (i) to make any payment required by this Contract; (ii) to comply with any term or condition of this Contract; or (iii) to comply with any lawful notice, order, or final administrative or judicial determination that the Contractor has violated a law, rule, or regulation of the United States or the State of Colorado directly relating to this Contract; Provided, That this Contract shall not be terminated unless such failure or violation continues 60 days after the United States gives the Contractor written notice to correct the problem.

c. To the extent consistent with federal law, the Parties acknowledge that the version of Section 7-60 of the Colorado Springs City Charter in effect at the date of Contract execution applies to this Contract. The Parties further acknowledge that, notwithstanding the application of the Section 7-60 of the Colorado Springs City Charter, the United States retains all rights to challenge, in any judicial, administrative, or other forum, whether application of Section 7-60 of the Colorado Springs City Charter prevents the recovery of damages necessary to redress any injury incurred by the United States, including but not limited to recovery of benefits derived from the recognition of the oversized pipe to the benefit of the Contractor or other loss of economic benefit caused by early termination of this Contract by the Contractor.

d. If the Contractor is unable to pay pursuant to Subarticle c. above, then the Contractor shall have 30 days from the date of non-payment to request evacuation of any water stored pursuant to this Contract, and the Contracting Officer shall release such water upon a timely request.

e. The Contracting Officer reserves the option to consider the Contractor's termination in determining whether it will be suitable to enter into any future contracting actions with the Contractor for the use of Reclamation facilities, except where such consideration will be inconsistent with Contractor's rights under existing contracts.

f. No waiver at any time by either party of its rights with respect to default or any other matter arising in connection with this Contract will be deemed to be a waiver with respect to any subsequent default or matter.

**SEVERABILITY**

13. In the event that any one or more of the provisions contained herein is, for any reason, held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions of this Contract, but this Contract is to be construed as if such invalid, illegal or unenforceable provisions had never been contained herein, unless the deletion of such provision or provisions would result in such a material change so as to cause the fundamental benefits afforded the Parties by this Contract to become unavailable or materially altered.

**STANDARD CONTRACT ARTICLES**

**CONTRACT DRAFTING CONSIDERATIONS**

14. This Contract has been negotiated and reviewed by the Parties hereto, each of whom is sophisticated in the matters to which this Contract pertains. Articles 1 through 13 of this Contract have been drafted, negotiated, and reviewed by the Parties and no one party shall be considered to have drafted the stated articles.

**NOTICES**

15. Any notice, demand, or request authorized or required by this Contract shall be deemed to have been given, on behalf of the Contractor, when mailed postage prepaid, or delivered to the:

Regional Director  
Great Plains Region  
Bureau of Reclamation  
P.O. Box 36900  
Billings, Montana 59107-6900

or street address:  
316 North 26th Street  
Billings, Montana 59101

and on behalf of the United States, when mailed postage prepaid or delivered to the:

Chief Water Services Officer  
121 South Tejon Street,  
Mail Code 0950  
Colorado Springs, CO 80947-0950

The designation of the addressee or the address may be changed by notice given in the same manner as provided in this article for other notices.

**CHARGES FOR DELINQUENT PAYMENTS**

16. a. The Contractor shall be subject to interest, administrative, and penalty charges on delinquent payments. If a payment is not received by the due date, the Contractor shall pay an interest charge on the delinquent payment for each day the payment is delinquent beyond the due date. If a payment becomes 60 days delinquent the Contractor shall pay, in addition to the interest charge, an administrative charge to cover additional costs of billing and processing the delinquent payment. If a payment is delinquent 90 days or more the Contractor shall pay, in addition to the interest and administrative charges, a penalty charge for each day the payment is delinquent beyond the due date, based on the remaining balance of the payment due at the rate of 6 percent per year. The Contractor shall also pay any fees incurred for debt collection services associated with a delinquent payment.

b. The interest rate charged shall be the greater of either the rate prescribed quarterly in the Federal Register by the Department of the Treasury for application to overdue payments, or the interest rate of 0.5 percent per month. The interest rate charged will be determined as of the due date and remain fixed for the duration of the delinquent period.

c. When a partial payment on a delinquent account is received, the amount received shall be applied first to the penalty charges, second to the administrative charges, third to the accrued interest, and finally to the overdue payment.

**GENERAL OBLIGATION--BENEFITS CONDITIONED UPON PAYMENT**

17. a. The obligation of the Contractor to pay the United States as provided in this Contract is a general obligation of the Contractor notwithstanding the manner in which the obligation may be distributed among the Contractor's water users and notwithstanding the default of individual water users in their obligation to the Contractor.

b. The payment of charges becoming due pursuant to this Contract is a condition precedent to receiving benefits under this Contract. The United States shall not make Excess Capacity available to the Contractor through the Fryingpan-Arkansas Project facilities during any period in which the Contractor is in arrears in the advance payment of Excess Capacity due the United States.

**CONFIRMATION OF CONTRACT**

18. The Contractor has provided a letter dated April 25, 2011 (Exhibit D) that adequately demonstrates to the Contracting Officer evidence that pursuant to the laws of the State of Colorado, the Contractor is a legally constituted entity and the contract is lawful, valid and binding on the Contractor. This Contract shall not be binding on the United States until such evidence has been provided to the United States satisfaction. Exhibit D herein referenced is made part of this Contract. This fulfills the requirement for the following standard article:



*Promptly after the execution of this Contract, the Contractor shall provide evidence to the Contracting Officer that, pursuant to the laws of the State of Colorado, the Contractor is a legally constituted entity and the contract is lawful, valid, and binding on the Contractor. This Contract shall not be binding on the United States until such evidence has been provided to the United States satisfaction.*

**CONTINGENT UPON APPROPRIATION OR ALLOTMENT OF FUNDS**

19. The expenditure or advance of any money or the performance of any obligation of the United States under this Contract shall be contingent upon appropriation or allotment of funds. Absence of appropriation or allotment of funds shall not relieve the Contractor from any obligations under this Contract. No liability shall accrue to the United States in case funds are not appropriated or allotted.

**OFFICIALS NOT TO BENEFIT**

20. No Member of or Delegate to the Congress, Resident Commissioner, or official of the Contractor shall benefit from this Contract other than as a water user or landowner in the same manner as other water users or landowners.

**CHANGES IN CONTRACTOR'S ORGANIZATION**

21. While this Contract is in effect, no change may be made in the Contractor's organization, which may affect the respective rights, obligations, privileges, and duties of either the United States or the Contractor under this Contract including, but not limited to, dissolution, consolidation, or merger, except upon the Contracting Officer's written consent.

**ASSIGNMENT LIMITED--SUCCESSORS AND ASSIGNS OBLIGATED**

22. The provisions of this Contract shall apply to and bind the successors and assigns of the parties hereto, but no assignment or transfer of this Contract or any right or interest therein by either party shall be valid until approved in writing by the other party.

**BOOKS, RECORDS, AND REPORTS**

23. The Contractor shall establish and maintain accounts and other books and records pertaining to administration of the terms and conditions of this Contract, including the Contractor's financial transactions; water supply data; Project operation, maintenance, and replacement logs; Project land and rights-of-way use agreements; the water users' land-use, land-ownership, land-leasing, and water-use data; and other matters that the United States may require. Reports shall be furnished to the United States in such form and on such date or dates as the United States may require. Subject to applicable Federal laws and regulations, each party to this Contract shall have the right during office hours to examine and make copies of the other party's books and records relating to matters covered by this Contract.

**RULES, REGULATIONS, AND DETERMINATIONS**

24. a. The Parties agree that the delivery of water or the use of Federal facilities pursuant to this Contract is subject to Federal reclamation law, as amended and supplemented, and the rules and regulations promulgated by the Secretary under Federal reclamation law.

b. The United States shall have the right to make determinations necessary to administer this Contract that are consistent with its expressed and implied provisions, the laws of the United States and the State of Colorado, and the rules and regulations promulgated by the Secretary. Such determinations shall be made in consultation with the Contractor.

**PROTECTION OF WATER AND AIR QUALITY**

25. a. Project facilities used to make available and deliver water to the Contractor shall be operated and maintained in the most practical manner to maintain the quality of the water at the highest level possible as determined by the United States: Provided, That the United States does not warrant the quality of the water delivered to the Contractor and is under no obligation to furnish or construct water treatment facilities to maintain or improve the quality of water delivered to the Contractor.

b. The Contractor shall comply with all applicable water and air pollution laws and regulations of the United States and the State of Colorado; and shall obtain all required permits or licenses from the appropriate Federal, State, or local authorities necessary for the delivery of water by the Contractor; and shall be responsible for compliance with all Federal, State, and local water quality standards applicable to surface and subsurface drainage and/or discharges generated through the use of Federal or Contractor facilities or Project Water provided by the Contractor within the Contractor's Project Water Service Area.

c. This article shall not affect or alter any legal obligations of the Secretary to provide drainage or other discharge services.

**WATER CONSERVATION**

26. Prior to the delivery of water provided from or conveyed through federally constructed or federally financed facilities pursuant to this Contract, the Contractor shall develop a water conservation plan, as required by subsection 210(b) of the Reclamation Reform Act of 1982 (RRA) and 43 C.F.R. 427.1 (Water Conservation Rules and Regulations).

**EQUAL EMPLOYMENT OPPORTUNITY**

27. During the performance of this Contract, the Contractor agrees as follows:

a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, disability, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion,

sex, disability, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the United States setting forth the provisions of this nondiscrimination clause.

b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, disability, or national origin.

c. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the United States, advising the labor union or workers' representative of the Contractor's commitments under section 202 of Executive Order 11246 of September 24, 1965 (EO 11246), and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The Contractor will comply with all provisions of EO 11246, and of the rules, regulations, and relevant orders of the Secretary of Labor.

e. The Contractor will furnish all information and reports required by EO 11246, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Contracting Agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

f. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in EO 11246, and such other sanctions may be imposed and remedies invoked as provided in EO 11246 or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

g. The Contractor will include the provisions of this Contract article 27 in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of EO 11246, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.



**COMPLIANCE WITH CIVIL RIGHTS LAWS AND REGULATIONS**

28. a. The Contractor shall comply with Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352; 42 U.S.C. § 2000d), the Rehabilitation Act of 1973 (Pub.L. 93-112, Title V, as amended; 29 U.S.C. § 791, *et seq.*), the Age Discrimination Act of 1975 (Pub. L. 94-135, Title III; 42 U.S.C. § 6101, *et seq.*), Title III of the Americans with Disabilities Act of 1990 (Pub. L. 101-336; 42 U.S.C. § 12181, *et seq.*), and any other applicable civil rights laws, and with the applicable implementing regulations and any guidelines imposed by the U.S. Department of the Interior and/or Bureau of Reclamation.

b. These statutes prohibit any person in the United States from being excluded from participation in, being denied the benefits of, or being otherwise subjected to discrimination under any program or activity receiving financial assistance from the Bureau of Reclamation on the grounds of race, color, national origin, disability, or age. By executing this Contract, the Contractor agrees to immediately take any measures necessary to implement this obligation, including permitting officials of the United States to inspect premises, programs, and documents.

c. The Contractor makes this agreement in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property discounts, or other Federal financial assistance extended after the date hereof to the Contractor by the Bureau of Reclamation, including installment payments after such date on account of arrangements for Federal financial assistance which were approved before such date. The Contractor recognizes and agrees that such Federal assistance will be extended in reliance on the representations and agreements made in this article and that the United States reserves the right to seek judicial enforcement thereof.

d. Complaints of discrimination against the Contractor shall be investigated by the United States' Office of Civil Rights.

**MEDIUM FOR TRANSMITTING PAYMENTS**

29. a. All payments from the Contractor to the United States under this Contract shall be by the medium requested by the United States on or before the date payment is due. The required method of payment may include checks, wire transfers, or other types of payment specified by the United States.

b. Upon execution of this Contract, the Contractor shall furnish the United States with the Contractor's taxpayer's identification number (TIN). The purpose for requiring the Contractor's TIN is for collecting and reporting any delinquent amounts arising out of the Contractor's relationship with the United States.

**CONSTRAINTS ON THE AVAILABILITY OF WATER**

30. a. In its operation of the Project, the Contracting Officer will use all reasonable means to guard against a condition of shortage in the quantity of water to be made available to the Contractor pursuant to this Contract. In the event the Contracting Officer determines that a condition of shortage appears probable, the Contracting Officer will notify the Contractor of said determination as soon as practicable.

Contract No. 11XX6C0002

b. If there is a condition of shortage because of errors in physical operations of the Project, drought, other physical causes beyond the control of the Contracting Officer or actions taken by the Contracting Officer to meet current and future legal obligations, then no liability shall accrue against the United States or any of its officers, agents, or employees for any damage, direct or indirect, arising therefrom.

IN WITNESS WHEREOF, the Parties hereto have signed their names the day and year first above written.

THE UNITED STATES OF AMERICA

By

[Signature]  
Regional Director

CITY OF COLORADO SPRINGS, ACTING BY AND THROUGH ITS UTILITY ENTERPRISE

By

[Signature]  
Chief Executive Officer: Jerry Forte, P.E

APPROVED AS TO FORM FOR COLORADO SPRINGS,  
Acting by and through its Utility Enterprise

[Signature] 5/2/2011  
Special Counsel

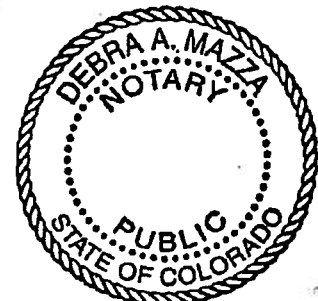
State of Colorado )  
County of El Paso )ss

The foregoing Contract was acknowledged before me this 2nd day of May, 2011 by Jerry Forte, Chief Executive Officer, for the City of Colorado Springs, acting by and through its Utility Enterprise.

Witness my hand and official seal

[Signature]  
Notary Public

My Commission Expires: 5/19/2013



My Commission Expires 05/19/2013

**Exhibit A**  
**Storage Payment**

| Number | Year | Acre-Feet | Index | Rate     | Total          |
|--------|------|-----------|-------|----------|----------------|
| 7      | 2018 | 20,500    | 1.79% | \$ 40.76 | \$835,580.00   |
| 8      | 2019 | 21,000    | 1.79% | \$41.49  | \$871,290.00   |
| 9      | 2020 | 21,500    | 1.79% | \$42.23  | \$907,945.00   |
| 10     | 2021 | 22,000    | 1.79% | \$42.99  | \$945,780.00   |
| 11     | 2022 | 22,500    | 1.79% | \$43.76  | \$984,600.00   |
| 12     | 2023 | 23,000    | 1.79% | \$44.54  | \$1,024,420.00 |
| 13     | 2024 | 23,500    | 1.79% | \$45.34  | \$1,065,490.00 |
| 14     | 2025 | 24,000    | 1.79% | \$46.15  | \$1,107,600.00 |
| 15     | 2026 | 24,500    | 1.79% | \$46.98  | \$1,151,010.00 |
| 16     | 2027 | 25,000    | 1.79% | \$47.82  | \$1,195,500.00 |
| 17     | 2028 | 25,500    | 1.79% | \$48.67  | \$1,241,085.00 |
| 18     | 2029 | 26,000    | 1.79% | \$49.54  | \$1,288,040.00 |
| 19     | 2030 | 26,500    | 1.79% | \$50.43  | \$1,336,395.00 |
| 20     | 2031 | 27,000    | 1.79% | \$51.33  | \$1,385,910.00 |
| 21     | 2032 | 27,500    | 1.79% | \$52.25  | \$1,436,875.00 |
| 22     | 2033 | 28,000    | 1.79% | \$53.19  | \$1,489,320.00 |
| 23     | 2034 | 28,000    | 1.79% | \$54.14  | \$1,515,920.00 |
| 24     | 2035 | 28,000    | 1.79% | \$55.11  | \$1,543,080.00 |
| 25     | 2036 | 28,000    | 1.79% | \$56.10  | \$1,570,800.00 |
| 26     | 2037 | 28,000    | 1.79% | \$57.10  | \$1,598,800.00 |
| 27     | 2038 | 28,000    | 1.79% | \$58.12  | \$1,627,360.00 |
| 28     | 2039 | 28,000    | 1.79% | \$59.16  | \$1,656,480.00 |
| 29     | 2040 | 28,000    | 1.79% | \$60.22  | \$1,686,160.00 |
| 30     | 2041 | 28,000    | 1.79% | \$61.30  | \$1,716,400.00 |
| 31     | 2042 | 28,000    | 1.79% | \$62.40  | \$1,747,200.00 |
| 32     | 2043 | 28,000    | 1.79% | \$63.51  | \$1,778,280.00 |
| 33     | 2044 | 28,000    | 1.79% | \$64.65  | \$1,810,200.00 |
| 34     | 2045 | 28,000    | 1.79% | \$65.81  | \$1,842,680.00 |
| 35     | 2046 | 28,000    | 1.79% | \$66.99  | \$1,875,720.00 |
| 36     | 2047 | 28,000    | 1.79% | \$68.18  | \$1,909,040.00 |
| 37     | 2048 | 28,000    | 1.79% | \$69.41  | \$1,943,480.00 |
| 38     | 2049 | 28,000    | 1.79% | \$70.65  | \$1,978,200.00 |



**Exhibit B**  
**Exchange Payment**

| Number | Year | Index | Rate    |
|--------|------|-------|---------|
| 0      | 2011 | 1.79% | \$36.00 |
| 1      | 2012 | 1.79% | \$36.64 |
| 2      | 2013 | 1.79% | \$37.30 |
| 3      | 2014 | 1.79% | \$37.97 |
| 4      | 2015 | 1.79% | \$38.65 |
| 5      | 2016 | 1.79% | \$39.34 |
| 6      | 2017 | 1.79% | \$40.04 |
| 7      | 2018 | 1.79% | \$40.76 |
| 8      | 2019 | 1.79% | \$41.49 |
| 9      | 2020 | 1.79% | \$42.23 |
| 10     | 2021 | 1.79% | \$42.99 |
| 11     | 2022 | 1.79% | \$43.76 |
| 12     | 2023 | 1.79% | \$44.54 |
| 13     | 2024 | 1.79% | \$45.34 |
| 14     | 2025 | 1.79% | \$46.15 |
| 15     | 2026 | 1.79% | \$46.98 |
| 16     | 2027 | 1.79% | \$47.82 |
| 17     | 2028 | 1.79% | \$48.67 |
| 18     | 2029 | 1.79% | \$49.54 |
| 19     | 2030 | 1.79% | \$50.43 |
| 20     | 2031 | 1.79% | \$51.33 |
| 21     | 2032 | 1.79% | \$52.25 |
| 22     | 2033 | 1.79% | \$53.19 |
| 23     | 2034 | 1.79% | \$54.14 |
| 24     | 2035 | 1.79% | \$55.11 |
| 25     | 2036 | 1.79% | \$56.10 |
| 26     | 2037 | 1.79% | \$57.10 |
| 27     | 2038 | 1.79% | \$58.12 |
| 28     | 2039 | 1.79% | \$59.16 |
| 29     | 2040 | 1.79% | \$60.22 |
| 30     | 2041 | 1.79% | \$61.30 |
| 31     | 2042 | 1.79% | \$62.40 |
| 32     | 2043 | 1.79% | \$63.51 |
| 33     | 2044 | 1.79% | \$64.65 |
| 34     | 2045 | 1.79% | \$65.81 |
| 35     | 2046 | 1.79% | \$66.99 |
| 36     | 2047 | 1.79% | \$68.18 |
| 37     | 2048 | 1.79% | \$69.41 |
| 38     | 2049 | 1.79% | \$70.65 |

**EXHIBIT C**

**Environmental Commitments**

The Parties agree that the Environmental Commitments as expressed herein are required in order to meet and discharge the obligations of this Contract. The Contracting Officer may invoke Article 12 (Termination of Contract) for failure to meet and discharge this obligation.

The ROD is attached in executed form to this Exhibit C and by this reference is made a part of the Contract.

# RECLAMATION

*Managing Water in the West*

## **Record of Decision For the Southern Delivery System Final Environmental Impact Statement**

**Record of Decision Reference No.: GP-2009-01**

**Approved:**



**Date:** MAR 20, 2009

Michael J. Ryan, Regional Director  
Great Plains Region  
Bureau of Reclamation



U.S. Department of the Interior  
Bureau of Reclamation  
Great Plains Region  
Billings, Montana

March 2009



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## Introduction

The U.S. Department of the Interior, Bureau of Reclamation, (Reclamation), has published a Final Environmental Impact Statement (FEIS) for the Southern Delivery System. The Southern Delivery System (SDS) Project is a proposed regional water delivery project designed to serve most or all future water needs through 2046 of the City of Colorado Springs, City of Fountain, Security Water District, and Pueblo West Metropolitan District (the "Participants"). As proposed, the SDS Project would deliver Fryingpan-Arkansas (Fry-Ark) Project water and non-Fry-Ark Project water from Pueblo Reservoir to the Participants for storage, treatment, and distribution to customers.

Three major federal actions by Reclamation were analyzed in the FEIS: (1) entering into excess capacity contracts with the Participants for use of Fry-Ark facilities, (2) issuance of a special use permit to connect to Fry-Ark facilities, (3) and an "administrative swap" of Fountain Valley Authority (FVA) water associated with SDS Project deliveries. Reclamation is responsible for managing Fry-Ark facilities, and is the lead agency for the purposes of compliance with the National Environmental Policy Act of 1969 (NEPA). The U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, U.S. Bureau of Land Management, and the U.S. Fish and Wildlife Service are cooperating agencies.

The Fry-Ark Project is an existing water supply project in Colorado, owned by the United States, operated by Reclamation, and authorized in 1962 to serve both agricultural and municipal entities. The Fry-Ark Project

transfers, stores, and delivers water from both the Western and Eastern Slopes of the Rocky Mountains to water users in the Arkansas River Basin.

The primary federal action analyzed in the FEIS involves Reclamation entering into up-to-40-year contracts with the Project Participants for use of the Eastern Slope System of the Fry-Ark Project in Colorado. The contracts would be for use of existing storage capacity in Pueblo Reservoir when this space is not filled with Fry-Ark Project water or water stored under the Winter Water Storage

### Major Federal Actions Approved in this ROD

1. Excess Capacity Contracts for Water Storage, Conveyance, and Exchange
2. Special Use Permit
3. Fountain Valley Authority Administrative "Swap"

Program, conveyance of water through facilities associated with Pueblo Reservoir, and for exchange of water between Pueblo Reservoir and Reclamation reservoirs in the upper Arkansas River Basin including Twin Lakes and Turquoise Lake. The use of

Fry-Ark facilities by entities other than Reclamation for water storage or conveyance requires a contract with Reclamation.

Pueblo West would participate in the proposed SDS Project infrastructure only if Reclamation selects an alternative that includes diverting water from facilities associated with Pueblo Reservoir. Pueblo West would construct its new water intake and pump station at its approved location on the Arkansas River downstream of Pueblo Dam if Reclamation selects an alternative that does not divert water from facilities associated with Pueblo Reservoir. Pueblo West has also requested excess capacity storage in Pueblo Reservoir in all Action Alternatives (SDS Project alternatives that require one or more of the major federal actions analyzed in the FEIS).

The second federal action analyzed in the FEIS is issuance of a special use permit or other agreement from Reclamation to connect the

SDS Project pipeline to Reclamation facilities. Pueblo West would continue to maintain its existing conveyance contract with Reclamation to use the joint use manifold from Pueblo Reservoir.

The third federal action analyzed in the FEIS is the approval of an administrative trade ("swap") of an equal amount of capacity in the Fountain Valley Authority (FVA) pipeline for capacity in the SDS Project untreated water pipeline and water treatment plant. This trade would allow Fountain to use a portion of Colorado Springs' FVA capacity in trade for Colorado Springs' use of an equal amount of Fountain's capacity in the proposed SDS Project.

In the FEIS, Reclamation identified the Participants' Proposed Action as the Agency Preferred Alternative. This Record of Decision (ROD) describes the alternative selected for implementation and the rationale for that decision. It also describes the alternatives considered in reaching the decision, and identifies those measures that will be taken to minimize environmental harm from implementation of the selected alternative in accordance with 40 CFR § 1502.2.

## The NEPA Process

The FEIS and this ROD have been prepared in accordance with the Council on Environmental Quality's (CEQ) NEPA regulations (40 CFR 1500-1508) and Department of the Interior policies. The Draft Environmental Impact Statement (DEIS) analyzing the environmental

consequences of the alternatives was released for public review on February 29, 2008. Public comments were received until June 13, 2008. Nearly 400 public comments raised a variety of topics. Comments related to water quality, dam safety, and the Western Slope, as

well as changes to the alternatives prompted Reclamation to release a Supplemental Information Report after publication of the DEIS. The Supplemental Information Report was released for public review from October 3, 2008 through November 24, 2008. A total of 40 public comments were received on the Supplemental Information Report. An

FEIS, which addressed public comment on both the DEIS and the SIR, was filed with the Environmental Protection Agency (EPA) (filing number FES 08-63) on December 12, 2008 and noticed by the EPA and Reclamation in the *Federal Register* on December 19, 2008. The decision documented in this ROD is based on the FEIS and public comment received on the FEIS.

In addition to NEPA, the Participants will need to obtain several permits or approvals from federal, state, and local agencies before implementing the SDS Project. Major permitting elements and consultation requirements for the alternatives may include but are not limited to:

- A Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers
- A Clean Water Act Section 401 certification and a Colorado Discharge permit from the Colorado Department of Public Health and Environment

**Firm yield** is the highest water demand that can be continuously fulfilled based on historical hydrologic conditions. The firm yield is the water demand fulfilled just prior to the level that produces system shortages.

**SMAPD** is the average annual increase in demand met for a project (such as SDS) at a specified annual demand level. For the purposes of this FEIS, SMAPD is always evaluated at a demand level equal to the 2046 demand from the Participants' Planning Demand Forecast.



- A National Historic Preservation Act Section 106 review from the Advisory Council on Historic Preservation
- A Section 7 consultation by the Fish and Wildlife Service
- A 1041 land use change permit from Pueblo or Chaffee county
- Land use approval from El Paso and/or Fremont county
- Special use permit or similar authorization from Fort Carson and/or Bureau of Land Management
- A Coordination Act Report pursuant to the Fish and Wildlife Coordination Act of 1958

## Alternatives Considered in Detail

The alternatives considered in detail are briefly summarized as follows (see Table 1).

### No Action Alternative (Alternative 1)

NEPA requires No Action to be considered in an EIS and represents the most likely future in the absence of a major federal action by Reclamation. It serves as a benchmark against which effects of the other alternatives are compared.

This alternative would not incorporate regional sharing of facilities. Each Project Participant would meet projected demands by independently developing other water supplies that would not require long-term contracts with Reclamation. Colorado Springs, Fountain, and

Security would expand ground water use. Colorado Springs would use Denver Basin ground water, Fountain would expand its Fountain Creek alluvial well field, and Security would acquire additional water rights in the Widefield Aquifer. No Action would not require a major federal action by Reclamation; therefore, the Participants would not use excess capacity storage contracts. Colorado Springs would construct a new untreated water intake from the Arkansas River at the Colorado 115 crossing near Florence. Due to requirements in existing water rights decrees, exchanges would be made from Fountain Creek to the upper Arkansas River Basin. Exchanges would be primarily diverted by the existing Ark-Otero untreated water intake near Buena Vista, which would be upgraded as part of the alternative. The Highway 115 untreated water intake would be supplied through releases from upper Arkansas River Basin storage reservoirs. An extension pipeline would be constructed from the existing FVA pipeline permitting both the SDS Project and

FVA water to be delivered to the proposed Jimmy Camp Creek Reservoir through the new untreated water pipeline. From the reservoir, water would be treated and distributed to customers. A portion of Colorado Springs' reusable return flows would be stored in the proposed Williams Creek Reservoir prior to

exchange down Fountain Creek. Pueblo West would meet projected future water demand by implementing the 18-mgd (million gallons per day) intake on the Arkansas River near Pueblo Reservoir, which was previously approved by Reclamation in 2003.

#### The seven alternatives are:

- No Action Alternative (Alternative 1)
- Participants' Proposed Action (Alternative 2)
- Wetland Alternative (Alternative 3)
- Arkansas River Alternative (Alternative 4)
- Fountain Creek Alternative (Alternative 5)
- Downstream Intake Alternative (Alternative 6)
- Highway 115 Alternative (Alternative 7)

Alternatives 2 through 7 are referred to as the "Action Alternatives"

**Table 1. Summary of Alternatives Components.**

| Alternative                                  |                  | Regulating Storage | Untreated Water Intake   | Untreated Water Alignment   | Terminal Storage and Water Treatment Plant†                                  | Return Flow Storage and Conveyance  |
|--|------------------|--------------------|--|---|--|---|
| Alternative 1: No Action                     | Colorado Springs | None               | Arkansas River at Lester & Attebery Ditch, FVA supply, Denver Basin Ground Water, and Ark-Otero Improvements | Ground Water Collection System<br>Colorado 115 Alignment<br>FVA Extension Pipeline    | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant               | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |
|  | Fountain         | None               | Fountain Creek Alluvial Well field Expansion   | Ground water Collection System Expansion  | No Storage, Expansion of Existing (planned) Water Treatment Plant            | None  |
|  | Security         | None               | Widefield Aquifer Wells (agricultural to municipal transfer)   | Existing  | Existing (disinfection only)   | None  |
|  | Pueblo West      | None               | Arkansas River Downstream of Pueblo Reservoir  | Pipeline to Existing River Pump Station   | Existing   | None  |
| Alternative 2: Participants' Proposed Action |                  | Pueblo Reservoir   | Joint Use Manifold and/or Pueblo Dam North Outlet Works  | Western Alignment, Including Conveyance to Pueblo West                                | Upper Williams Creek Reservoir, Conventional Water Treatment Plant           | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |
| Alternative 3: Wetland Alternative           |                  | Pueblo Reservoir   | Joint Use Manifold and/or Pueblo Dam North Outlet Works  | Western Alignment, Including Conveyance to Pueblo West                                | Upper Williams Creek Reservoir, Conventional Water Treatment Plant           | No Reservoir, Return Flow Pipeline to Arkansas River Near Highway 115   |
| Alternative 4: Arkansas River Alternative    |                  | Pueblo Reservoir   | Arkansas River Upstream of Fountain Creek  | Eastern Alignment, excluding Conveyance to Pueblo West                                | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant               | No Reservoir, Return Flow Pipeline to Arkansas River Near Highway 115   |
| Alternative 5: Fountain Creek Alternative    |                  | Pueblo Reservoir   | Joint Use Manifold and/or Pueblo Dam North Outlet Works  | Western Alignment, Including Conveyance to Pueblo West                                | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant               | Williams Creek Reservoir, Chilcotte Ditch and Pipeline In and Return Flow Pipeline to the confluence of Fountain Creek and the Arkansas River Out |
| Alternative 6: Downstream Intake Alternative |                  | Pueblo Reservoir   | Arkansas River Downstream of Fountain Creek  | Eastern Alignment, Excluding Conveyance to Pueblo West                                | Jimmy Camp Creek Reservoir, Conventional and Advanced‡ Water Treatment Plant | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |
| Alternative 7: Highway 115 Alternative       |                  | Pueblo Reservoir   | Arkansas River at Lester & Attebery Ditch, FVA Supply, and Ark-Otero Improvements                            | Colorado 115 Alignment, Excluding Conveyance to Pueblo West<br>FVA Extension Pipeline | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant               | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |

† Treated water alignments are not included in this table and would be constructed as proposed by the Participants.

‡ Advanced treatment in this alternative includes a reverse osmosis process.

### **Participants' Proposed Action (Alternative 2)**

The Participants' Proposed Action is the Participants' proposal to construct and operate the SDS Project. Untreated water would be stored in Pueblo Reservoir and diverted from Pueblo Dam. This water would be conveyed through a new pipeline and pump stations to the proposed Upper Williams Creek Reservoir, treated, and distributed to the Participants' customers. A portion of Colorado Springs' reusable return flows would be stored in the proposed Williams Creek Reservoir prior to exchange down Fountain Creek. Regulating storage in Pueblo Reservoir would be through one or more long-term excess capacity storage contracts with Reclamation. These contracts would allow the Participants to store non Fry-Ark Project water in existing Fry-Ark storage space when excess space is available. Water stored in this excess space would be subject to spill from the reservoir according to existing spill priorities. All Action Alternatives include one or more long-term excess capacity contracts.

### **Wetland Alternative (Alternative 3)**

The Wetland Alternative would address scoping issues about minimizing wetland impacts. The Wetland Alternative would disturb the least amount of wetlands by using the terminal storage reservoir site with the fewest wetlands and eliminating the need for the return flow reservoir by using a return flow pipeline. Untreated water would be stored in Pueblo Reservoir and diverted from Pueblo Dam. This water would be conveyed through a new pipeline and pump stations to the proposed Upper Williams Creek Reservoir, treated, and distributed to the Participants' customers. Colorado Springs' reusable return flows would be piped from its existing wastewater treatment plants to the Arkansas

River near Colorado 115. By conveying Colorado Springs' reusable return flows to a location upstream of Pueblo Reservoir, this alternative avoids the need for a new return flow reservoir such as the proposed Williams Creek Reservoir.

### **Arkansas River Alternative (Alternative 4)**

The Arkansas River Alternative would address scoping issues about maximizing low flows in the Arkansas River through the City of Pueblo, minimizing water quality effects on the lower Arkansas River, and minimizing the total surface acres disturbed. Stream flow in the Arkansas River through Pueblo would be maximized by diverting water from the Arkansas River downstream of Pueblo, and returning treated return flows to the Arkansas River upstream of Pueblo. Untreated water would be stored in Pueblo Reservoir, released to the Arkansas River from the dam, and diverted from the Arkansas River upstream of Fountain Creek. This water would be conveyed through a new pipeline and pump stations to the proposed Jimmy Camp Creek Reservoir, treated, and distributed to the Participants' customers. Colorado Springs' reusable return flows would be piped from its existing wastewater treatment plants to the Arkansas River near Colorado 115. Pueblo West would not participate in SDS Project infrastructure if this alternative were chosen.

### **Fountain Creek Alternative (Alternative 5)**

The Fountain Creek Alternative is designed to address significant issues concerning potential effects of return flows on Fountain Creek erosion, sedimentation, and water quality. Untreated water would be stored in Pueblo Reservoir and diverted from Pueblo Dam. This water would be conveyed to the proposed



Jimmy Camp Creek Reservoir, treated, and distributed to the Participants' customers. Colorado Springs' reusable return flows would be stored in the proposed Williams Creek Reservoir. Water delivered to the Arkansas River for exchanges would be conveyed in a new pipeline to the mouth of Fountain Creek, instead of in Fountain Creek.

#### **Downstream Intake Alternative (Alternative 6)**

The Downstream Intake Alternative addresses public interest in an alternative that uses an untreated water intake downstream of Fountain Creek. Untreated water would be stored in Pueblo Reservoir, released from the dam, and then diverted from the Arkansas River downstream of Fountain Creek. This water would be conveyed through a new pipeline and pump stations to the proposed Jimmy Camp Creek Reservoir, treated, and distributed to the Participants' customers. The water treatment plant would include advanced treatment and would require partial (50 percent) reverse osmosis to provide acceptable water quality to the Participants' customers. Colorado Springs' reusable return flows would be stored in the proposed Williams Creek Reservoir prior to exchange down Fountain Creek. Pueblo West would not participate in SDS Project infrastructure if this alternative were chosen.

#### **Highway 115 Alternative (Alternative 7)**

The Highway 115 Alternative would address public and Participant interest in an alternative that uses the Colorado 115 corridor for water conveyance and includes an excess capacity storage contract. As with the No Action Alternative, a new untreated water intake from the Arkansas River would be constructed at the Colorado 115 crossing near Florence. Colorado Springs' reusable return flows would be stored in the proposed Williams Creek

Reservoir prior to exchange releases down Fountain Creek. Exchanges would be made from Fountain Creek and Pueblo Reservoir to the upper Arkansas River Basin, and would be primarily diverted by the Ark-Otero untreated water intake. Excess exchanges would be stored in the upper Arkansas River Basin storage facilities or in Pueblo Reservoir regulating storage. The Highway 115 untreated water intake would be supplied by releases from upper Arkansas River Basin storage. An extension pipeline would be constructed from the existing Fountain Valley Authority pipeline, and would help increase system flexibility for Colorado Springs by permitting FVA water to be delivered to Jimmy Camp Creek Reservoir through the new untreated water pipeline. Pueblo West would not participate in SDS Project infrastructure if this alternative were chosen.

### **The Decision**

Based on the analyses contained in the FEIS including the information summarized in Table 24 (Summary of direct and indirect effects) in the FEIS, public comments received on the DEIS and Supplemental Information Report, and consideration of comments received on the FEIS, the Great Plains Regional Director has decided to select the Participants' Proposed Action for implementation.

This decision allows the following Federal actions to be approved by Reclamation to implement construction and operation of the Participants' Proposed Action:

- Execution of up-to-40-year contracts between Reclamation and the Project Participants for use of the Eastern Slope System of the Fry-Ark Project in Colorado for storage, conveyance and exchange

- Issuance of a special use permit or other agreement from Reclamation to the Participants allowing connection of the SDS Project pipeline to Reclamation facilities
- Approval of an administrative trade ("swap") between Colorado Springs and Fountain of an equal amount of capacity in the FVA pipeline for capacity in the SDS Project untreated water pipeline and water treatment plant

Approval of these Federal actions by Reclamation will allow the Project Participants to proceed with construction and operation of the selected alternative in a manner that is consistent with those actions as described and evaluated in the FEIS.

#### **Basis for Selection of the Agency Preferred Alternative for Implementation**

The FEIS describes the environmental effects of the alternatives analyzed in detail. This ROD selects the Agency Preferred Alternative for implementation. That decision is based on how well the alternatives addressed the significant issues identified during scoping, the environmental effects of the alternatives, and other technical factors, including economic and engineering considerations.

The environmental and technical evaluations performed as part of the FEIS indicate that all six of the Action Alternatives considered in detail are reasonable. Reclamation compared all of the alternatives in terms of how well they addressed the ten public scoping issues and other relevant environmental and non-environmental issues identified by Reclamation during the FEIS process, including energy use and estimated costs. Based upon these considerations, Reclamation

identified the Participants' Proposed Action as the Agency Preferred Alternative in the FEIS.

All alternatives would have adverse environmental effects. The Participants' Proposed Action would result in similar or fewer environmental effects when compared to the other alternatives. Additionally, this alternative would have the lowest total project cost and lowest energy use requirements, resulting in the lowest greenhouse gas emissions, of any Action Alternative. All of the Action Alternatives were developed to address specific environmental issues or meet public interest objectives. However, the other alternatives would have adverse environmental effects on other resources, would have a higher total cost, and would require at least as much or substantially more energy than the Participants' Proposed Action. There would be no impacts to Indian trust assets (ITA) and no unresolved ITA issues.

#### **Environmentally Preferred Alternative**

The CEQ regulations require the ROD to identify one or more environmentally preferred alternative. The environmentally preferred alternative is the alternative(s) that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historic, cultural, and natural resources. Because it will cause the least damage to the biological and physical environment, Reclamation has determined that the Participants' Proposed Action is the environmentally preferred alternative.

#### **Summary of Comments on the FEIS**

Two letters containing comments on the FEIS were received during the 30-day waiting period. Comments were considered substantive if they:

- Question, with reasonable basis, the accuracy of the information in the document
- Question, with reasonable basis, the adequacy of the environmental analysis
- Present reasonable alternatives other than those presented in the EIS
- Cause changes or revisions in the alternatives
- Provide new or additional information relevant to the analysis

The first comment letter was from Mr. Dave Miller, President of the Natural Energy Resources Company. His comments are briefly summarized with Reclamation's responses as follows:

1. Mr. Miller was concerned that transmountain diversion alternatives that would convey water from the Gunnison River Basin and Aspinall Unit reservoirs to the Arkansas River or South Platte River basins, including the proposed Central Colorado Project, were not considered in the FEIS. He suggested two options for delivering the Gunnison River transmountain water to Colorado Springs and provided a citation to additional information on the internet. Both options included construction of an up-to-1.2 million acre-foot reservoir in the Gunnison River Basin and a 42-mile-long pipeline from the Gunnison River Basin to the South Platte River Basin. Pipelines to other river basins as well as power generation facilities were also included. The first option included construction of a new pipeline originating in the upper South Platte River Basin and traversing South Park, Colorado to Colorado Springs. The second option was construction of a new diversion upstream of Cheeseman Reservoir in the South Platte River Basin and a pipeline to the divide between the

South Platte and Arkansas River basins near Monument, Colorado. In the second option water would presumably be conveyed in the South Platte River toward Cheeseman Reservoir, diverted, and then delivered to Colorado Springs by conveying it in Monument Creek.

Reclamation did consider potential alternatives involving a transmountain diversion from the Gunnison River Basin, including the proposed Central Colorado Project, in its alternatives analysis and the FEIS (please refer to page 92 of the FEIS and comment responses 2300 and 3181 in Appendix B of the FEIS). These alternatives were dismissed from detailed evaluation due to substantial logistical, technical, or environmental deficiencies, less favorable environmental characteristics, and purpose and need criteria, with cost issues also identified (refer to page 87 of Reclamation's 2006 Alternatives Analysis for additional details).

2. Mr. Miller suggested that Reclamation did not consider and respond its prior comments, which included descriptions of benefits of the proposed Central Colorado Project.

Reclamation reviewed all comments on the DEIS and Supplemental Information Report, including those submitted by the commenter, and provided a response to each substantive comment (please refer to FEIS Appendix B and C). The commenter's previous comments contained eight substantive issues (refer to FEIS Appendix B, page B-241), all of which were addressed in the FEIS.

3. Mr. Miller requested investigations of alleged state and federal policy violations and oversights that lead to the seven



alternatives that were retained for detailed evaluation in the EIS.

Reclamation prepared the EIS and supporting documents in compliance with applicable laws, regulations, and policies (refer to comment responses 3020, 5000, and 5200 in FEIS Appendix B and 5000 in FEIS Appendix C).

4. Mr. Miller suggested that the process for determining the scope of the SDS Project (presumably meaning the range of alternatives) used by Colorado Springs prior to and during preparation of the EIS was fatally flawed and should have been challenged by Reclamation.

Reclamation was not directly involved in alternatives evaluations that Colorado Springs performed prior to Reclamation's preparation of the EIS. During preparation of the EIS, Reclamation used the purpose and need for the proposed SDS Project and an array of logistical, technical, and environmental screening criteria to define a full range of reasonable alternatives for detailed evaluation in the EIS (refer to Reclamation's 2006 Alternatives Analysis report, Section 2.3 of the FEIS, and responses to comments 31-1, 1002, 1010, 1011, 1012, 2001, and 2003 in FEIS Appendix B).

5. Mr. Miller suggested that the FEIS did not include a long-term analysis of carbon footprint and pumping costs for the life of the project.

Estimated carbon emissions at 2046 water demand (highest emission scenario) were provided in Section 3.24.5 of the FEIS. Operational costs associated with pumping requirements of each alternative were considered in Reclamation's alternatives screening process (refer to Chapter 2 of the FEIS and comment response 2001 in FEIS

Appendix B) and in the alternatives effects analyses (refer to Sections 3.15 and 3.16 of the FEIS and comment response 2011 in FEIS Appendix B). Operational costs, including pumping, for all seven alternatives were evaluated for the 40-year life of the contracts requested by the Project Participants.

6. Mr. Miller suggested that stabilization of Pueblo Dam and enlargement of Pueblo Reservoir should be included in the cost of the SDS Project alternatives.

Pueblo Dam (or Pueblo Reservoir) is identified as an existing facility in the FEIS and Action Alternatives for the SDS Project would use only existing storage space in the existing conservation pool of this facility. Moreover, Reclamation's facilities must be operated and maintained safely, in order to protect our nation's security, economy, and environment. Reclamation ensures safety through inspections for safety deficiencies, analyses that use current technologies and designs, and corrective actions if needed based on current engineering practices. Costs to fund Reclamation's Dam Safety Program are provided by appropriations from Congress, and are not directly passed onto Project Participants (refer to comment responses 2011 and 3326 in FEIS Appendix B).

None of the SDS Project alternatives include enlargement of Pueblo Reservoir as a project component. Enlargement of Pueblo Reservoir is not needed to fulfill the project's purpose or needs (refer to comment response 2004 in FEIS Appendix B).

7. Mr. Miller requested a stay of the SDS Record of Decision pending analysis of the

alternatives and completion of the policy investigations described above.

Reclamation considered this request and determined that the alternatives suggested by the commenter were given appropriate consideration in the FEIS and supporting documents and that the suggested investigations are not warranted. Consequently, a stay of the Record of Decision is not necessary.

The second comments letter was received from the Environmental Protection Agency (EPA)-Region 8 and is summarized as follows:

The EPA commented that in general the FEIS was largely responsive to the issues it raised in its comments on the DEIS and SIR. EPA believes SDS is more environmentally protective as a result and commends Reclamation for addressing EPA's comments and concerns. EPA commends Reclamation for conducting additional water quality analysis for the FEIS and working to resolve differences on a range of other issues. EPA is very pleased to see that the "Modified Proposed Action" is the Agency-Preferred Alternative. EPA believes the FEIS is largely responsive to the issues it raised in its comments on the DEIS and SIR.

EPA expressed two areas of continuing concern. First, it has some remaining concerns about the project's impact on water quality; however, EPA is pleased with the addition of Section 5.0 in the FEIS Environmental Commitments. EPA supports implementation of water quality monitoring when construction begins to allow three years of baseline data to be collected before SDS becomes operational. EPA believes the water quality monitoring program is appropriate and will help ensure that any potential problems that SDS causes would be addressed in an effective and timely manner.

Second, EPA remains concerned about indirect impacts from induced growth on increased flows to Fountain Creek resulting from SDS have not been sufficiently addressed in the FEIS. EPA believes there should be a commitment that stormwater Best Management Practices be implemented for future growth in Colorado Springs.

Reclamation's view is that growth is not a direct or indirect effect of the proposed SDS Project, and effects associated with growth are disclosed within the cumulative effects Section of the FEIS. As disclosed in the FEIS, there will be minor increases in peak flows and floodplains for Fountain Creek. Average simulated stream flows on Fountain Creek at Pueblo change from 249 cubic feet per second (cfs) for the No Action Alternative to 253 cfs with the Participants Proposed Action. That is an increase of 4 cfs, and represents an increase of 2%. As a result, no commitments are proposed in the ROD to mitigate the effects on peak flows or floodplains on Fountain Creek.

The City of Colorado Springs Stormwater Enterprise is described as a reasonably foreseeable action on page 125 of the DEIS. As part of their stormwater discharge permit, the City of Colorado Springs is responsible for constructing capital stormwater projects and regulating stormwater infrastructure on private property necessary for managing water quantity and quality. These activities will occur no matter what alternative is constructed for the SDS project, and are not considered as mitigation for SDS.

Public comments on the FEIS were considered but did not result in changes to the proposed action or in the selection of the Preferred Alternative.

## **Environmental Commitments**

This section summarizes the environmental commitments that will be incorporated into the selected alternative. These commitments will be fully incorporated into all final design and project implementation activities. Reclamation will ensure that these measures are implemented through terms and conditions of any long-term contract between Reclamation and the Participants. Such contracts will, at a minimum, include a requirement for the Project Participants to submit to Reclamation an annual compliance report that certifies progress in successfully implementing these commitments in a timely manner as prescribed in this ROD and any contracts. All practicable means to avoid or minimize environmental harm from the selected alternative have been considered and adopted. The environmental commitments and mitigation measures in this section of the ROD are intended to avoid and/or minimize any environmental harm.

The Participants must obtain other significant Federal, State and local permits, approvals, and agreements for the SDS Project. These permits, approvals, and agreements may include, as examples, a Section 404 permit under the Clean Water Act, a 1041 permit from Pueblo County, and consultation with the Colorado Division of Wildlife (CDOW) and the Colorado Water Conservation Board. These permits, approvals, and agreements may trigger other environmental compliance requirements by Federal agencies which would also include significant environmental commitments (mitigation) to be undertaken by Participants as part of the SDS Project.

Comprehensive monitoring of the implementation of Participants' environmental commitments for the SDS Project will be coordinated between Reclamation, the Project Participants, and the authorities responsible for

these additional, separate permits, approvals, and agreements. This monitoring and coordination is intended to avoid redundant, inconsistent, or ineffective environmental commitments for the SDS Project. Reclamation will participate fully in this process of coordinating environmental commitments. A detailed and specific list of environmental commitments and plan for their implementation will emerge from this coordination process.

The timing of this process is important. Coordination of implementation of the environmental commitment plan will occur prior to executing any contracts for the SDS Project. Any long-term contract between Reclamation and the Participants will contain all specific environmental commitments and obligations by Participants that are determined by Reclamation to be required for the SDS Project. In the discussion below, significant environmental commitments by Participants and Reclamation are described in two forms. First, there are environmental commitments that Reclamation is responsible for implementing. Second, there are environmental commitments that will be required by Reclamation that the project Participants are responsible for implementing and that will be conducted during the broader coordination process with other permitting and approving authorities.

### **Reclamation's Commitments**

The following mitigation measures will be implemented:

- If Reclamation receives credible information that operations under the contract are causing a violation of the Arkansas River Compact, Reclamation will immediately initiate discussions among the parties, including the party alleging the Compact violation, to



develop a solution and remedy the violation.

- Reclamation will complete its coordination with the U.S. Fish and Wildlife Service under the Fish and Wildlife Coordination Act (FWCA) prior to implementation of the selected alternative. The U.S. Fish and Wildlife Service was a cooperating agency with Reclamation during preparation of the Final EIS and was consulted throughout the NEPA process for the SDS Project. A draft FWCA Report is on-file with Reclamation. Fish and wildlife conservation measures recommended in the final FWCA Report will be considered by Reclamation and those found to be appropriate will be implemented by Reclamation and/or the Project Sponsors through construction requirements, contract provisions, and terms and conditions of any long-term water-related contract between Reclamation and the Participants.

## **Participants' Commitments**

### ***General Commitments***

The following mitigation measures will be implemented:

- Comply with all applicable permits, regulations, and laws including but not limited to CDPHE, USCOE 404, and local land use permits obtained for the SDS project.
- Construct and operate the SDS Project in a manner that does not differ substantially from that evaluated in this FEIS, except under emergency conditions, and unless additional and appropriate environmental investigations are completed by

Reclamation and approval is then given to Participants to alter construction or operation of the SDS Project

- Develop and implement a head pressure monitoring program on the Joint Use Manifold to isolate effects attributable to the SDS Project and to mitigate those effects if they were to occur. This program will be developed over a 3-year period from the date that water is first delivered from the Joint Use Manifold for the SDS Project. Development of the monitoring program will include involvement of all other Joint Use Manifold users. This commitment will not be necessary if the intake for SDS is at the North River Outlet Works, and the Joint Use Manifold is not used for SDS.
- Develop an integrated adaptive management program for the project that will be coordinated with the Participants' existing monitoring programs and the Environmental Management System discussed in Appendix F of the FEIS. The integrated adaptive management program will be finalized prior to executing any contracts for the SDS Project.

### ***Surface Water***

The following mitigation measures will be implemented:

- Comply with the Upper Arkansas Voluntary Flow Management Program except during emergency conditions as defined in Section 2.b. of the Memorandum Of Understanding for Settlement of Case No. 04CW129, Water Division 2 (Chaffee County Recreational In-Channel Diversion)

- Comply with the Pueblo Flow Management Program pursuant to existing intergovernmental agreements. If Reclamation and the Participants receive credible information that project operations are impairing physical diversion of a senior water right, contrary to Colorado water law, the Participants will immediately initiate discussions among the parties, including the party alleging the impairment and Reclamation, to develop a solution and remedy the impairment in compliance with Colorado water law.
- Participants will consult with Reclamation each year on the average annual flow in Fountain Creek. If the average annual stream flow of Fountain Creek as measured at Pueblo (USGS gauge station number 071056500) exceeds the scope and range of the flow estimated and analyzed in the Final Environmental Impact Statement (see Table 33 of the FEIS), then Participants will coordinate with Reclamation, within their adaptive management plan, to evaluate the cause(s) for the change in flows and determine whether appropriate response actions, such as monitoring and/or mitigation measures, are warranted. Each year, Participants will report to Reclamation the average annual flow in Fountain Creek at Pueblo together with other relevant data.

Surface water mitigation measures will resolve adverse effects to physical diversions of senior water rights.

#### **Water Quality**

The following mitigation measures will be implemented:

- Include water quality monitoring and adaptive management within the integrated adaptive management program (see Participants' General Commitments)
- Begin implementing water quality monitoring when construction of the project begins. This will allow about three years of baseline data to be collected before project operations begin.
- Submit water quality monitoring data, including trend analyses, for the preceding calendar year to Reclamation by January 31<sup>st</sup> of the subsequent year
- If the Colorado Department of Public Health and Environment (CDPHE) determines that operation of the SDS Project is causing significant adverse water quality effects, the Participants will coordinate with Reclamation, CDPHE, and other interested parties to evaluate and select measures to mitigate adverse effects
- In the event that operation of the SDS Project causes, or threatens to cause, stream flows in the Arkansas River or other waterways to diminish to low levels that will contribute significantly to elevated concentrations/densities of dissolved selenium, *E. coli*, or sulfate, the Participants will coordinate with Reclamation, CDPHE, CDOW, and other interested parties to evaluate and select measures to mitigate adverse effects.

Development and implementation of a water quality monitoring and adaptive management plan will provide a means of detecting changes

in water quality, judging whether they are likely caused by operation of the SDS Project, and addressing actual effects in a systematic manner. Additionally, implementation of the geomorphology mitigation measures (below) will reduce suspended sediment and total recoverable iron concentrations in Fountain Creek and the lower Arkansas River.

### **Geomorphology**

The following mitigation measures will be implemented:

- Prepare a geomorphic mitigation plan and secure Reclamation approval prior to executing any contracts for the SDS Project. This plan could include, but is not limited to:
  - Evaluate and consider strategies to remove sediments that reduce the effectiveness of Corps levees located near Fountain Creek at its confluence with the Arkansas River
  - Evaluate and consider strategies to increase the sinuosity of Fountain Creek at appropriate locations in order to reduce undesirable erosion and sedimentation
  - Evaluate and consider strategies at appropriate locations along Fountain Creek to reduce undesirable erosion and sedimentation
  - Select geomorphic mitigation measures for SDS Project effects that are, to the extent practicable, consistent with priority projects identified in the Corps of Engineers' Fountain Creek Watershed Study and the Fountain Creek Corridor Master Plan. Locations where geomorphic mitigation projects
- could occur include, but are not limited to:
  - Fountain Creek at the Clear Spring Ranch site, directly upstream and downstream of the confluence of Little Fountain Creek and Fountain Creek (approximately 4 miles)
  - Fountain Creek from upstream of Fountain Boulevard to upstream of Colorado 85/87 at the Sand Creek confluence (approximately 3 miles)
- Complete pre-project geomorphic mitigation, including channel stabilization projects and non-structural options such as conservation easements, before the project is operational. Channel stabilization could include, but is not limited to, increasing stream sinuosity, flattening of steep side slopes, installation of grade control structures, and use of buried riprap, erosion blankets, and/or vegetative cover for channel stabilization in areas of high and/or erosive velocities.
- Design and construct an energy dissipation structure that will protect against erosion at the outlet of the pipeline from Williams Creek Reservoir to Fountain Creek
- Evaluate and implement appropriate future geomorphic stabilization projects, if such future projects are determined to be necessary after the project is operational.

When implemented, these recommendations will mitigate potential adverse effects on geomorphology by avoiding or minimizing effects of return flow discharges through an energy dissipation structure, compensating for anticipated effects, and responding to effects identified after project operations begin.



### *Aquatic Life*

The following mitigation measures will be implemented:

- Submit a proposed wildlife mitigation plan to the Colorado Wildlife Commission (Wildlife Commission) pursuant to C.R.S. § 37-60-122.2. This proposal will include actions the Participants propose to mitigate impacts that the SDS Project may have on fish and wildlife. As required by that statute, the Wildlife Commission will evaluate the probable impact of the project on fish and wildlife and, if the Participants and Wildlife Commission cannot agree upon reasonable mitigation, the Wildlife Commission will make recommendations to the Colorado Water Conservation Board (CWCB) regarding what it believes to be reasonable mitigation actions. If the Participants and the Wildlife Commission agree on a mitigation plan, the Wildlife Commission will submit that agreement to the CWCB, which must adopt the agreement as the state's official position. If the Participants and the Wildlife Commission do not reach agreement on a mitigation plan, the CWCB will consider the plan submitted by the Participants and the recommendations of the Wildlife Commission and either affirm the recommendations of the Wildlife Commission, which then becomes the State's official position, or submit its own recommendations to the Governor, who will ultimately determine the state's official position on the proposed wildlife mitigation plan.
- In the event that operation of the SDS Project causes, or threatens to cause, stream flows in Fountain Creek or the Arkansas River to diminish to low levels that could contribute significantly to impairment of aquatic life, coordinate with Reclamation, CDPHE, CDOW and other interested parties to evaluate and select measures to mitigate adverse effects
- Evaluate and consider participation in CDOW fish hatchery programs
- Monitor the effects of the operation of the SDS Project upon aquatic life in Fountain Creek and the Arkansas River between Pueblo Dam and the Las Animas Gage. Aquatic sampling will be conducted once per year at up to 10 locations. Monitoring methods and locations will be identified in the proposed wildlife mitigation plan that will be submitted to the Colorado Wildlife Commission pursuant to C.R.S. § 37-60-122.2. Use the information from this monitoring in the adaptive management program for the SDS Project.

When implemented, these recommendations will mitigate potential adverse effects on aquatic life by avoiding or minimizing effects, compensating for anticipated effects, and detecting and responding to effects identified after project operations begin.

### *Wetlands, Waters, and Riparian Vegetation*

The following mitigation measures will be implemented:

- Design final alignments and facilities to avoid and minimize wetland impacts
- Assess alternative construction methods for pipeline crossings (i.e., directional drilling v. open cut) to minimize wetland and stream impacts

- Mitigate impacts to jurisdictional and non-jurisdictional wetlands in areas of temporary, short-term effects such as pipeline crossings, on-site at the place of disturbance with similar wetlands and soils to replace existing wetland functions and values
- Mitigate all unavoidable, permanent impacts to jurisdictional and non-jurisdictional wetlands with compensatory wetlands that replace existing wetland functions and values. Compensatory wetland mitigation will likely occur at the Clear Spring Ranch site on Fountain Creek downstream of the city of Fountain.
- Control tamarisk that may establish around newly constructed reservoirs
- Evaluate and consider a strategy to increase the sinuosity of Fountain Creek at appropriate locations in order to create wetlands areas
- Evaluate and consider the construction and maintenance of new areas of wetlands along Fountain Creek in order to participate in wetlands banking programs. Evaluate and consider cooperation with Colorado agencies to expand such a wetlands creation process

Mitigation plans for jurisdictional and non-jurisdictional wetlands will be submitted for approval by the Corps of Engineers and Reclamation, respectively. All design and planning measures for wetlands, waters, and riparian vegetation will be completed before any contracts for the SDS Project.

By reviewing the location of wetlands during final design, effects on wetlands can be avoided and minimized. Specifically, the pipeline construction corridors through wetlands will be reduced to the minimum

width practicable. Similarly, construction methods that do not involve trenching through a wetland will avoid impacts. Wetlands mitigated in place and off-site will replace affected wetlands on a 1:1 ratio and will provide similar functions and values. The 404 permitting process is ongoing and the final off-site mitigation ration for jurisdictional wetlands for the 404 permit has not yet been determined.

### *Vegetation*

The following mitigation measures will be implemented:

- Prior to final design, review locations of Needle and Threadgrass -- Blue Grama Grasslands, high quality shrublands and woodlands, and other areas with desirable vegetation to determine design changes within the current study area that will avoid and minimize impacts
- Replace mature trees (diameter at breast height of 12 inches or greater) within construction areas at a 1:1 ratio with the same or similar native species with available nursery container stock or pole plantings as soon as practicable after construction activities have ended
- For 1 year after construction, monitor the construction areas to determine if appropriate native vegetation is establishing. If native vegetation is not establishing, the site will be reseeded with appropriate species
- In the appropriate season prior to construction, survey potential construction areas with known populations of dwarf milkweed and other plant species of concern, to locate areas where impacts can be avoided and minimized to the extent practicable

with design changes within the current study area. After identifying populations to avoid, mark populations within or nearby the construction easement as environmentally sensitive so that workers avoid inadvertent impacts.

- During construction, wash major construction equipment before it enters the site so that noxious weeds are not spread from other construction sites
- Use certified weed-free mulch after seeding construction areas
- Reseed construction areas with comparable native vegetation as soon as practicable after disturbance, using seed that does not contain any noxious weed seed
- Monitor construction areas for 3 years after construction to assess if noxious weeds have invaded the site. If noxious weeds are present, weed control plans will be formulated and completed.
- Because the project may indirectly increase the spread of tamarisk, the Participants will work with the Colorado Department of Agriculture's Colorado Noxious Weed Management Team on tamarisk issues in the Arkansas Valley including submitting a request for partnership evaluation.

Impacts to plant species and communities of concern and other sensitive vegetation areas can be avoided and minimized during final design and implementation. Because mitigation measures such as transplanting of individuals are often unsuccessful, avoidance and minimization will ensure survival, especially of plant species of concern. Seeding disturbed areas, replacing mature trees, and controlling noxious weeds will replace existing

vegetation types and structural diversity and will ensure that high quality habitat remained.

### **Wildlife**

The following mitigation measures will be implemented:

- Submit a proposed wildlife mitigation plan to the Colorado Wildlife Commission pursuant to C.R.S. § 37-60-122.2 as described above.
- Promptly revegetate all disturbed areas with native species that provide species diversity and food and cover for large game and wildlife habitat
- Conduct clearance surveys in suitable habitat for state-listed species following standard protocols, as available, prior to construction (e.g., CDOW undated)
- Conduct raptor nest surveys prior to construction and impose seasonal restrictions to surface activity within recommended buffers (generally ¼ to ½ mile) around active raptor nest sites and heron rookeries during construction
- Consult with CDOW and U.S. Fish and Wildlife Services' Migratory Permit Bird Office to develop mitigation for unavoidable loss of raptor nests. Options may include constructing artificial nests in suitable habitat or enhancing prey habitat
- Develop construction schedules to avoid impacts to nesting migratory birds. If construction is scheduled to occur during the nesting season (April 1 through August 31) in areas where migratory birds may nest, a qualified biologist will conduct a nesting bird survey prior to the commencement of construction activities to determine the presence of migratory birds and their nests. If an active nest is detected, a



buffer zone between the nest and the limit of construction will be flagged and avoided during the nesting season, or construction will be scheduled outside of the nesting season.

- Conduct pre-construction surveys for swift fox den sites within appropriate habitat along the pipeline corridor and proposed reservoir sites. Avoid surface disturbance within ¼ mile of active den sites while young are den-dependent (March 15 - June 15)
- Restrict pesticides for rodent control within swift fox overall range
- Mitigate impacts to state-listed amphibian species by avoiding, minimizing, and mitigating wetland effects as described above
- Impose seasonal restrictions on construction to avoid sensitive large game winter habitat (from first large snowfall to summer green-up)
- Install wildlife crossovers (trench plugs) during pipeline construction with ramps on each side at a maximum of ¼ mile intervals and at well-defined game trails
- Create additional nesting habitat or nest boxes in nearby trees for the Lewis' woodpecker when nest trees are destroyed.

By replacing vegetation including structural diversity, the long-term effects on wildlife will be reduced by allowing wildlife to return to disturbed areas. Pre-construction surveys will identify wildlife use at the time of construction and allow for planning for avoidance and minimization. Imposing seasonal and/or daily restrictions on construction will enable wildlife to use important habitat, especially during breeding and other critical periods. Wildlife crossovers installed within the pipeline trench

will facilitate wildlife passage and provide escape routes for wildlife trapped within the trench, thereby reducing mortality.

### *Recreation*

The following mitigation measures will be implemented:

- During short-term construction activities that require trail closures of developed recreational trails, designate a safe and reasonable detour around the project site. Post signs directing trail users.
- Work with the local municipality to establish alternate trails with consistent width, surfacing, and signage
- Within developed parks with temporary effects, commit to full reclamation of the impact area by replacing turf, irrigation systems, and other facilities that could be affected. Provide follow-up monitoring and maintenance for 1 year to ensure that reclamation efforts are successful.
- In developed park areas with permanent, above ground SDS Project facilities, reconfigure park facilities that will be directly affected and visually screen SDS Project facilities from other park uses with vegetation, berming, or attractive fencing
- Seek opportunities to enhance angling, boating, or other recreation opportunities at Lake Henry, Lake Meredith, and Holbrook Reservoir so that they are less vulnerable to water level fluctuations. Work with the CDOW to identify priority projects and include them in a proposed wildlife mitigation plan to the Colorado Wildlife Commission pursuant to C.R.S. § 37-60-122.2 as above.

The proposed mitigation measures will reduce the impact of project facility construction on trail users. They will also reduce the short- and long-term impacts of project facilities on park infrastructure, vegetation, aesthetics, and recreation experiences. Collaboration with the CDOW to enhance fishing and boating opportunities may result in such improvements to recreation at Lake Henry, Lake Meredith, and Holbrook Reservoir.

#### *Socioeconomics and Land Use*

The following mitigation measures will be implemented:

- Acquire properties and easements through voluntary, willing participant agreements to the maximum extent practicable
- Develop a construction management plan to outline best management practices to minimize impacts to surrounding properties and submit plan to Reclamation for approval prior to construction.

Adverse short-term effects on landowners with parcels that will contain SDS features will be offset through mutually agreed upon compensation. The land use mitigation measures will minimize disturbances to properties near the project during construction or minimize land use changes and conflicts.

#### *Cultural Resources*

The following mitigation measures will be implemented:

- Comply with the requirements of the Programmatic Agreement between Reclamation, the ACHP, Colorado Springs, and the Colorado SHPO (Appendix I of the FEIS)

Development of the project alternatives will result in impacts to non-renewable historic properties. As a result, it will be necessary to implement a mitigation plan in an effort to resolve any adverse effects. Mitigation may be accomplished through avoidance, implementation of protective measures, or data recovery. If avoidance and preservation are not possible, a data recovery plan may be used to collect and analyze significant information, thus preserving that information. Data collection as a mitigation measure should only be implemented when other means to protect or preserve historic properties have been exhausted or are not feasible. Within the data recovery plan, specific research problems concerning scientific, humanistic, and cultural concerns will be developed. Research also will focus on problems in prehistoric and historic archaeological methods and theory. Ultimately, the data collected likely will provide information regarding the cultures that have occupied the area in the past.

#### *Indian Trust Assets*

Continue consultation with Native American Tribes in accordance with the Programmatic Agreement. Under the Agreement, Reclamation and the Project Participants will coordinate with the tribes to identify and mitigate impacts to any traditional cultural properties or resources.

#### *Noise and Vibration*

The following mitigation measures will be implemented:

- Construction equipment used by contractors shall function as designed and shall conform to applicable noise emission standards
- Generally adhere to project work hour restrictions (7 a.m. to 7 p.m.) within

500 feet of residences, hospitals, schools, churches, and libraries. Work hours may need to be extended from time to time in order to expeditiously restore traffic flow or public access.

- Restrict access to construction areas so that the public could not be in close proximity to loud equipment or blasting
- House project operating equipment (e.g., pump stations) in structures designed to minimize radiated noise outside the structure, and will meet local noise ordinance requirements.

By following existing standards, restricting work hours and access to construction areas, and insulating new noise within structures, noise effects will be minimized by maintaining acceptable noise levels and limiting the number of people exposed to increased noise levels.

#### *Visual Resources*

The following mitigation measures will be implemented:

- Vegetate earthen dam faces with native herbaceous plants to match the adjacent undisturbed prairie plant communities
- Revegetate and/or landscape with plants, all disturbances associated with the construction of all facilities
- Restore as many existing grades as practicable following pipeline excavations
- Enclose pump stations and well equipment in structures matching the architectural characteristics of the surrounding structures
- Construct powerlines with non-specular (not shiny) wire, non-reflective and opaque insulators, and light-colored, non-reflective finished poles

- Reclaim construction access roads and staging areas by restoring existing grade and revegetating the area of disturbance
- Apply water with standard construction practices to control airborne fugitive dust within construction areas
- Install baffles on construction lighting fixtures to direct light onto the construction activity only in locations where safety is a concern, scenic quality will be affected, or near occupied homes and businesses.

Restoring existing grades, revegetating disturbed areas, using architectural styles consistent with the area, and designing powerlines to have low visibility will minimize the visual contrast between the surrounding areas and will reduce the visibility of disturbance or new structures from observation points. Reducing airborne fugitive dust and construction lighting will reduce the area affected during construction.

#### *Traffic*

The following mitigation measures will be implemented:

- Use trenchless construction to the extent practicable when construction features cross railroad lines, state highways, county roadways in densely populated areas, and major city roadways in densely populated areas.
- Prepare traffic control plans for approval by state and local traffic authorities and followed by contractors during construction
- Construct traffic signage, signals, acceleration, and deceleration lanes as directed by state and local traffic authorities for access to reservoir sites, treatment plants, and pump stations



- Construct improvements to existing access roads or construction of temporary alternate access roads to reservoir sites, treatment plants, and pump stations as directed by state and local traffic officials
- Modify or reconstruct bridges when the load limits are not adequate for construction of the SDS Project and other access routes are not reasonable.

When implemented, these recommendations will mitigate potential adverse effects on traffic by minimizing delays and promoting traffic safety.

### **Soils**

The following mitigation measures will be implemented:

- Minimize the area of disturbance to defined construction limits and limit the time bare soil is exposed
- Contain soils within the construction area through temporary sediment control measures such as silt fences, sediment logs, trenches, and sediment traps
- Remove woody vegetation prior to topsoil salvage and, to the extent possible, salvage topsoil within tree stump roots
- Use topsoil salvage methods including windrowing topsoil at the limits of construction and pulling the soil back on slopes during reclamation
- Apply topsoil, soil amendments, fertilizers, and mulches as appropriate, and seed selectively during favorable plant establishment climate conditions to match site conditions and revegetation goals

- To the extent practicable, avoid irrigated lands during final design
- To the extent practicable, allow continued use of lands crossed by project facilities after construction
- Where the proposed pipeline crosses prime farmland soils, develop a soils handling plan that separates the top 6 inches and the soils between 6 and 36 inches for subsequent reclamation

Proposed mitigation measures will reduce short-term and long-term losses of soil and soil productivity. Redistribution of topsoil to soil-deficient areas will increase soil productivity in those areas. Topsoil, soil amendments, fertilizers, and mulches will increase productivity and help establish cultivated vegetation and crops. A soils handling plan for prime farmland soils will ensure high quality topsoil is preserved and distributed properly.

### **Air Quality**

The following mitigation measures will be implemented:

- Develop and implement standard control practices, such as watering, to minimize particulate and dust emissions from construction work sites as specified in the fugitive dust control plan
- Ensure construction equipment (especially diesel equipment) meets opacity standards for operating emissions
- Promptly revegetate disturbed areas

The proposed mitigation measures will reduce both short-term and long-term effects on air quality by following standards on construction equipment and minimizing fugitive dust.

### ***Hazardous Materials***

The following mitigation measures will be implemented:

- Remove solid waste and properly dispose of at a permitted solid waste disposal facility prior to construction of project facilities at the site
- Inspect the ground surface beneath the solid waste for evidence of hazardous material or petroleum product spills such as soil staining and unusual odors or colors
- If evidence of a spill or spills is noted, delineate the extent of the spill by laboratory analysis and excavate any contaminated soils and properly dispose of at a permitted waste disposal facility
- If soil and/or ground water contamination is encountered during construction of project facilities, implement mitigation procedures to minimize the risk to construction workers and to the future operation of the project.

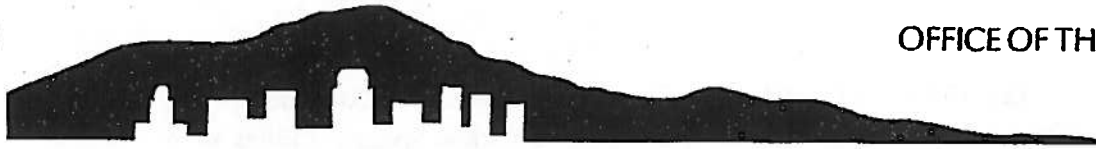
The proposed mitigation measures will identify areas of potential contamination from hazardous materials and will remediate the soil and ground water if any contamination was identified.

### **Implementation**

The decision to implement the Federal actions needed by Reclamation for the selected alternative will be effective immediately upon approval of this Record of Decision. Reclamation staff will proceed with all activities needed to commence negotiations with the Project Participants to: (1) enter into excess capacity contracts for use of Fry-Ark facilities; (2) issue a special use permit to

connect to Fry-Ark facilities, and; (3) approve an "administrative swap" of FVA water associated with SDS Project deliveries.

OFFICE OF THE CITY ATTORNEY



**CITY OF COLORADO SPRINGS**

April 25, 2011

Michael J. Ryan  
Regional Director  
Great Plains Region  
Bureau of Reclamation  
P.O. box 36900  
Billings, MT 59107

Dear Mr. Ryan:

I am City Attorney/Chief Legal Officer for the City of Colorado Springs and all its enterprises, including its Colorado Springs Utilities ("Colorado Springs"). Paragraph 19 of the final draft Contract Between the United States of America and the City of Colorado Springs for the Use of Excess Capacity in the Facilities of the Fryingpan-Arkansas Project ("Contract") requires that Colorado Springs provide evidence that it is a legally constituted entity and the Contract is lawful, valid, and binding on Colorado Springs. Pursuant to the Contract, I have been asked to render my opinion as to whether Colorado Springs is a legally constituted entity and whether the Contract is lawful, valid, and binding on Colorado Springs.

In order to render this opinion I have examined the following:

- A. Colorado Constitution Art. XX, which sets forth the requirements for incorporation of a home rule city and the powers granted to home rule cities.
- B. Sections 1-10, 1-20 and 6-30 of the Charter of the City of Colorado Springs ("City Charter"), which establish the formation of Colorado Springs and the powers assumed by Colorado Springs relating to the operation of public utilities and works and the execution of related contracts.
- C. Article X, § 20 of the Colorado Constitution and City Charter § 7-90, each of which define government owned businesses as "enterprises."

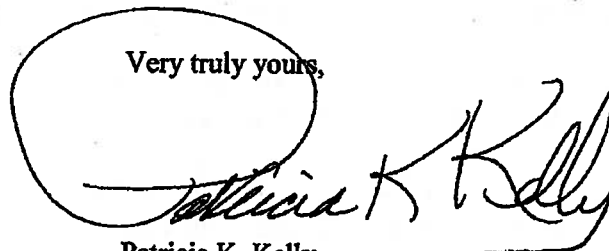


D. Sections 12.1.103 and 12.1.104 of the City Code of the City of Colorado Springs 2001, as amended ("City Code") which govern the operations of Colorado Springs Utilities as an enterprise of the City of Colorado Springs.

Based on my review of the foregoing, it is my opinion that:

1. Colorado Springs is a home rule municipal corporation organized by charter pursuant to Colo. Const. Art. XX, § 6, having the authority "to construct, condemn and purchase, purchase, acquire, lease, add to, maintain, conduct, and operate waterworks, light plants, power plants, transportation systems, heating plants, and any other public utilities or works . . ." City Charter § 1-20(d). The City has the authority to enter into a valid and binding contract with the United States for the lease of excess capacity in the facilities of the Fryingpan-Arkansas Project.
2. in addition, C.R.S. § 37-45.1-101 *et seq.*, provides that Colorado Springs has the power and authority to operate Colorado Springs Utilities as an enterprise.
3. Colorado Springs Utilities has been duly organized by the City of Colorado Springs and is a validly formed and existing "enterprise" within the meaning of Colo. Const. Art. X, § 20(2)(d) and City Charter § 7-90(b)(5). The City Council of Colorado Springs serves as the governing board of directors of Colorado Springs Utilities in accord with City Charter § 6-40(a). Thus, Colorado Springs Utilities is a legally constituted enterprise of the City.
4. Because the Contract will be executed directly by the City of Colorado Springs, the authority of Colorado Springs Utilities to enter into the Contract with the United States is irrelevant. Colorado Springs Utilities has the authority to execute business contracts in its own name and all such contracts are deemed to be executed by the City of Colorado Springs on behalf of its Utilities enterprise and are legally enforceable against the City of Colorado Springs through its Utilities enterprise. City Code § 12.1.108.

Very truly yours,

A handwritten signature in black ink, appearing to read "Patricia K. Kelly", is written over a large, hand-drawn oval. The signature is fluid and cursive.

Patricia K. Kelly  
City Attorney/Chief Legal Officer

cc: John Fredell

**Exhibit 2**  
**Contract No. 11XX6C0002**  
**Description of Water Rights Analyzed in the EIS**

| Decree No.  | Name  | Description  | Entities  | Amounts  | Type  | Approximate Geographic Extent (e)   |
|---|---|--|---|--|---|---|
| <b>Primary Sources of Supply</b>                                  |   |  |   |  |   |   |
| 1. Div. 2,<br>84CW203   | Colorado Springs<br>Arkansas River<br>Exchange<br>(Sewered Phase)   | Exchange of Colorado<br>Springs Sewered<br>Reusable Return<br>Flows within the<br>Arkansas River Basin   | Colorado<br>Springs                                 | 164 [1,000 (a)]<br><br>cfs   | Exchange of<br>Transmountain or<br>Consumptive Use<br>water | From Colorado Springs<br>on Fountain Ck to the<br>Arkansas River and<br>points upstream of<br>Pueblo Reservoir<br>including Otero Pump<br>Station Intake, Twin<br>Lakes, and Turquoise<br>Reservoirs, South Slope<br>System, Clear Creek<br>Reservoir, and the<br>Rosemont System |
| 2. Div. 2,<br>84CW202,<br>84CW203,<br>86CW118 (B),<br>and 89CW036 | Colorado Springs<br>Arkansas River<br>Exchange (Non-<br>Sewered Phase)  | Exchange of Colorado<br>Springs Non-Sewered<br>Reusable Return<br>Flows within the<br>Arkansas River Basin<br>and Groundwater<br>Augmentation Plan | Colorado<br>Springs                                 | 17[1,000 (a)]<br><br>cfs   | Exchange of<br>Transmountain or<br>Consumptive Use<br>water | From Colorado Springs<br>on Fountain Ck to the<br>Arkansas River and<br>points upstream of<br>Pueblo Reservoir<br>including Otero Pump<br>Station Intake, Twin<br>Lakes, and Turquoise<br>Reservoirs  |
| 3. Div. 2,<br>84CW62, 63,<br>& 64                                 | Colorado Canal<br>Companies<br>(Colorado Canal,<br>Lake Henry, Lake<br>Meredith) Change<br>of Water Rights<br>and Consumptive<br>Use Exchange | Exchange of Colorado<br>Springs and Pueblo<br>West Pro Rata<br>Ownership of<br>Transferred Colorado<br>Canal Companies'<br>Shares                  | Colorado<br>Springs,<br>Pueblo<br>West,<br>Fountain | Constrained by<br>available<br>exchange<br>potential and<br>release rate<br>from Lake<br>Meredith or 756<br>cfs. | Change and<br>Exchange of<br>Consumptive Use<br>water       | From Lake Meredith<br>Outlet near Rocky Ford<br>to points upstream of<br>Pueblo Reservoir<br>including Twin Lakes,<br>and Turquoise<br>Reservoirs.  |

E-1  
Excess Capacity

**Exhibit E**

**Contract No. 11XX6C0002**

**Description of Water Rights Analyzed in the EIS**

| Decree No.                            | Name   | Description  | Entities                                | Amounts  | Type   | Approximate Geographic Extent (e)  |
|---------------------------------------|--|--|---|--|--|--|
| 4. Div. 2, 86CW118 (A)                | Colorado Canal Companies (Colorado Canal, Lake Henry, Lake Meredith) Reusable Return Flow Exchange-Sewered Phase | Exchange of Colorado Springs and Pueblo West Reusable Return Flows from Transferred Colorado Canal Companies' Share  | Colorado Springs, Fountain, Pueblo West | 164 [1,000 (a)] cfs  | Change and Exchange of Consumptive Use water   | From Fountain Creek (From Storage in Terminal Storage Reservoir) including Pueblo Reservoir, Otero Pump Station Intake, Twin Lakes, and Turquoise Reservoirs |
| 5. Civil Action No. 4613 and W-829-76 | Fryingpan-Arkansas Project Decrees   | Decrees for Fryingpan-Arkansas Project Water   | Colorado Springs, Fountain, & Security  | According to Allocation Principles. Purchased Fry-Ark Return Flows may be exchanged under Fry-Ark Decrees or under No. 1 and No. 2 above | Trans-mountain imports from the Fryingpan R. to the upper Arkansas R. Basin and native east slope waters | Headwaters of the Fryingpan and Arkansas R. to Project storage including Pueblo, Twin Lakes, and Turquoise Reservoirs.                                       |
| 6. W-4396 and W-4559                  | City of Fountain - Plan for Augmentation including Exchange and Change of Water Rights (Augmentation Plan I)     | Change and exchange of Fountain's interests in several surface water rights in Fountain Ck. to wells as alternate points of diversion or augmentation of depletions caused by these wells. | Fountain                                | 221 Fountain Mutual shares; 0.55 cfs of Stubbs & Miller; partial interest in first 5 cfs of Womack Ditch                                 | Fountain Ck. native waters   | Fountain Ck. at or near the City of Fountain   |

**Exhibit E**  
**Contract No. 11XX6C0002**

**Description of Water Rights Analyzed in the EIS**

| <b>Decree No.</b>     | <b>Name</b>   | <b>Description</b>  | <b>Entities</b> | <b>Amounts</b>   | <b>Type</b>  | <b>Approximate Geographic Extent (e)</b>  |
|-----------------------|---|---|-----------------|--|--|---|
| 7. Div. 2,<br>85CW110 | City of Fountain –<br>Plan for<br>Augmentation<br>including<br>Exchange and<br>Change of Water<br>Rights<br>(Augmentation<br>Plan II) | Change and<br>exchange of<br>Fountain's interests in<br>Fountain Mutual<br>Irrigation Company<br>and Fry-Ark Return<br>Flows in Fountain Ck.<br>to wells as alternate<br>points of diversion or<br>augmentation of<br>depletions caused by<br>these wells | Fountain        | 137 additional<br>Fountain Mutual<br>shares  | Fountain Ck. native<br>waters and reusable<br>Fry-Ark return flows | Fountain Ck. at or near<br>the City of Fountain   |
| 8. Div. 2,<br>01CW108 | City of Fountain –<br>Plan for<br>Augmentation<br>including<br>Exchange and<br>Change of Water<br>Rights                              | Change and<br>exchange of<br>Fountain's interests in<br>Fountain Mutual<br>Irrigation Company<br>and Fry-Ark Return<br>Flows in Fountain Ck.<br>to Pueblo Reservoir<br>when not being used<br>for 6 & 7 above   | Fountain        | 358 Fountain<br>Mutual shares<br>studied in the<br>EIS   | Fountain Ck. native<br>waters and reusable<br>Fry-Ark return flows | Fountain Ck. at or near<br>the City of Fountain and<br>the Arkansas River between<br>the mouth of Fountain<br>Ck. and Pueblo<br>Reservoir |
| 9. Div. 2,<br>01CW146 | City of Fountain –<br>Plan for<br>Augmentation<br>including<br>Exchange and<br>Change of Water<br>Rights                              | Change and<br>exchange of<br>Fountain's interests in<br>Fountain Mutual<br>Irrigation Company<br>and Fry-Ark Return<br>Flows in Fountain Ck.<br>to Pueblo Reservoir<br>when not being used<br>for 6 & 7 above   | Fountain        | Additional<br>Fountain Mutual<br>- a total of 515<br>shares were<br>studied by<br>MWH in the EIS | Fountain Ck. native<br>waters and reusable<br>Fry-Ark return flows | Fountain Ck. at or near<br>the City of Fountain and<br>the Arkansas River between<br>the mouth of Fountain<br>Ck. and Pueblo<br>Reservoir |



Exhibit E

Contract No.11XX6C0002

Description of Water Rights Analyzed in the EIS

| Decree No.  | Name  | Description   | Entities         | Amounts             | Type   | Approximate Geographic Extent (e)   |
|---|---|---|------------------|---------------------|--|---|
| 10. 1936 Decree No. 284, W-1901, & Div. 5, 84CW162      | Independence Pass Transmountain Diversion System (Twin Lakes Reservoir and Canal Company) Decrees | Decrees for Pueblo West Shares in the Twin Lakes Reservoir and Canal Company      | Pueblo West      | 6,332 (f)           | Trans-mountain imports from the Roaring Fork R. to the upper Arkansas R. Basin | Headwaters of the Roaring Fork and Arkansas R. to east slope storage including Pueblo, Twin Lakes, and Turquoise Reservoirs                                   |
| 11. Div. 2, 81CW0056                                    | Wheel Ranch Ditch   | Diversion of Consumptive use portion of Wheel Ranch Ditch water right             | Pueblo West      | 1.5 cfs             | Change and Alternate Point-of-Diversion of Consumptive Use water               | Arkansas R. immediately upstream of Pueblo Reservoir and Pueblo Reservoir   |
| 12. Div. 2, 85CW134(b)                                  | PWMD - Plan For Reuse and Exchange  | Reuse and Exchange of Reusable Non-Sewered Return Flow                            | Pueblo West      | (g)                 | Reusable Sewered Return Flow   | Arkansas River from Pueblo Reservoir to Wildhorse Creek   |
| <b>Secondary Sources of Supply</b>                      |   |   |                  |                     |  |   |
| 13. 1936 Decree No. 284, W-1901, & Div. 5, 84CW162      | Independence Pass Transmountain Diversion System (Twin Lakes Reservoir and Canal Company) Decrees | Decrees for Colorado Springs Shares in the Twin Lakes Reservoir and Canal Company | Colorado Springs | 11,283 & 18,475 (b) | Trans-mountain imports from the Roaring Fork R. to the upper Arkansas R. Basin | Headwaters of the Roaring Fork and Arkansas R. to east slope storage including Pueblo, Twin Lakes, and Turquoise Reservoir, Northslope and Rampart Reservoirs |
| 14. Supreme Court Case No. 18855, Civil Action No. 1193 | Homestake Project Decrees   | Decrees for Homestake Project Water Delivered through Turquoise Reservoir         | Colorado Springs | 700/ 126,844 (c)    | Trans-mountain imports from the Eagle R. to the upper Arkansas R. Basin        | Headwaters of the Eagle R. and Homestake Ck. to east slope storage including Pueblo, Twin Lakes, Turquoise Reservoir, Northslope and Rampart Reservoirs       |

**Exhibit E**

**Contract No.11XX6C0002**

**Description of Water Rights Analyzed in the EIS**

| Decree No.             | Name              | Description   | Entities         | Amounts    | Type                                 | Approximate Geographic Extent (e)   |
|------------------------|-------------------|---|------------------|------------|--------------------------------------|---|
| 15. Div. 2,<br>86CW117 | CF&I Water Rights | Transfer Case for Use of Purchased CF&I Water Rights in the Arkansas R. and Turquoise Reservoir including Colorado Gulch Placer | Colorado Springs | 17,372 (d) | Changed Native Arkansas Water Rights | Headwaters of the Arkansas R. and Turquoise Reservoir to other east slope storage including Pueblo, Twin Lakes, Northslope and Rampart Reservoirs |

- (a) Maximum Rate of Exchange from Fountain Ck. Terminal Storage into Pueblo Reservoir or other decreed storage locations
- (b) Twin Lakes Reservoir Storage Decrees
- (c) Decreed Homestake Tunnel Flow Limitation and Homestake Reservoir Storage Decree
- (d) CF&I Sugarloaf Reservoir Storage Decree
- (e) Upon completion of the SDS Jimmy Camp Ck. Reservoir will become an additional terminal storage location
- (f) Pueblo West share of Twin Lakes Reservoir storage decrees at time of SDS EIS
- (g) Amount equal to the reusable portion of effluent from PWMD's wastewater treatment facility.

**Notes:**

- (1) Legal limitations of use are described in the terms and conditions of the respective decrees and administered according to the priority system by the Div. 2 Engineer. The rights have been decreed by original intent or through change of water rights proceedings for the municipal purposes including residential, commercial, industrial, and irrigation uses within the respective party's service areas.
- (2) Table originally compiled by Brett Gracely at Colorado Springs Utilities. Modified by MWH and WRC to include Pueblo West water sources. Modified by Gary Thompson to correct errors related to City of Fountain. Modified by MWH (9/14/2010) to correct water sources for Pueblo West and Fountain.

## **NOW Contract**

US DOI BoR Federal Contract No. 11XX6C0005

### **1. Section 6: Transfer of Ownership Process (includes joint inspection and Final transfer report).**

In Progress: X (1B) Complete: X (1A) Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: PDC1A & B need to be inspected per BoR

Due Date(s): Fall 2015

Closure Documentation (if any): Title Transfer Fall 2015; Final Transfer Report (Pending)

### **2. Section 10: Annual OM&R payment**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: X Post-Phase I: \_\_\_\_\_

Next Step: Payment upon receipt of invoice for 2015

Due Date(s): CSU is invoiced mid-year; payment due by Aug 1st

Closure Documentation (if any): Receipt; 2013 payment applied to 2014

### **3. Section 12: Measurement & Accounting of NOW use**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: X Post-Phase I: \_\_\_\_\_

Next Step: Final Transfer Report (PDC1B)

Due Date(s): Fall 2015

Closure Documentation (if any): Final Transfer Report (Pending)

#### **a. Compliance with Colorado law**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: X Post-Phase I: \_\_\_\_\_

Next Step: Compliance Ongoing

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Example

#### **b. Installation of measurement flow meter at NOW**

In Progress: \_\_\_\_\_ Complete: X Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: Submit Both Final Transfer Reports (PDC1B Pending)

Due Date(s): Fall 2015

Closure Documentation (if any): Final Transfer Report (Pending)

#### **c. Installation of flow meter for 90" pipe**

In Progress: X Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: Install complete, PDC1B final testing

Due Date(s): Anticipated Fall 2015

Closure Documentation (if any): Final Transfer Report (Pending)

#### 4. Section 30: Water Conservation Plan Complete

In Progress:   X   Complete:        Ongoing:        Post-Phase I:       

**Next Step: Document Final; Board Approval for Draft Water Efficiency Plan**

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): CSU has submitted an updated Plan to State for review



## Annual OM&amp;R Payment

2013

DIV VEND-ID 6 UNITED STATES DEPARTMENT OF INTERIOR BUREAU OF RECLAMATION PAGE: 1 OF 3 DOCUMENT-ID BD130560C002A

## BILL FOR COLLECTION

BILL DATE: 05/29/13  
DUE DATE: 07/01/13

MAIL TO: BUREAU OF RECLAMATION - GREAT PLAINS  
P.O. BOX 301506  
LOS ANGELES, CALIFORNIA 90030-1506

AMOUNT DUE \$18,000.00

PAYER: COLORADO SPRINGS UTILITIES  
ACCOUNTS PAYABLE SECTION  
MAIL CODE 530  
PO BOX 1103  
COLORADO SPRINGS CO 80947-0929

999001974

FOLD HERE

## -----DESCRIPTION-----

000 THIS BILL IS IN ACCORDANCE WITH CONTRACT NO. 11XX6C0005, ARTICLES 10A. AND B., DATED MAY 4, 2011, FOR 2013 NORTH OUTLET WORKS ADVANCE ORDER PAYMENT.

2013 ADVANCE ORDER FOR NORTH OUTLET WORKS \$18,000.00

IF YOU HAVE ANY QUESTIONS REGARDING THIS BILL, PLEASE CONTACT SHIRILA BRIG AT (970) 962-4352.

01

RECEIVED

MAY 31 2013

Colorado Springs Utilities  
Accounts Payable

PLEASE NOTE THE DUE DATE PRINTED ON THIS BILL. BILLS NOT PAID IN FULL BY THE DUE DATE WILL BE ASSESSED THE FOLLOWING:

TO ENSURE PROPER CREDIT PLEASE RETURN LOWER PORTION WITH YOUR PAYMENT

| LN# | TC | TT | PND | PROGRAM  | JOB NO. | ORGANIZ | RSRC | ---DESCRIPTION--- | AMOUNT---   |
|-----|----|----|-----|----------|---------|---------|------|-------------------|-------------|
| 001 | RD | RP | 511 | 03821231 | 0120401 | 6C10000 | 511  | OM&R              | \$18,000.00 |

|              |                            |                        |        |
|--------------|----------------------------|------------------------|--------|
| DOCUMENT ID: | BD130560C002A              | INTEREST               | \$ .00 |
| VEND-ID:     |                            | ADMINISTRATIVE CHARGES | \$ .00 |
| VENDOR NAME: | COLORADO SPRINGS UTILITIES | PENALTY                | \$ .00 |
| DOC TYPE:    | Q                          |                        |        |

AMOUNT DUE THIS BILL \$18,000.00

IMPORTANT INFORMATION ON REVERSE SIDE

## CO Law Compliance

## STATE OF COLORADO

John W. Hickenlooper, Governor  
Christopher F. Urbina, MD, MPH  
Executive Director and Chief Medical Officer

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. E. Laboratory Services Division  
Denver, Colorado 80246-1530 8100 Lowry Blvd.  
Phone (303) 692-2000 (Denver, Colorado 80230-6828  
Located in Glendale, Colorado (303) 682-3090  
<http://www.cdpre.state.co.us>



Colorado Department  
of Public Health  
and Environment

February 4, 2013

Jay Hardison  
Colorado Springs Utilities  
121 South Tejon St., Suite 300  
Colorado Springs, CO 80903

RE: Approval of Drinking Water Final Plans and Specifications for Construction  
Southern Delivery System Water Treatment Plant and Finished Water Pump Station  
Colorado Springs Utilities  
Surface Water Treatment Plant  
Public Water System Identification (PWSID) No. CO0121150, El Paso County

Dear Mr. Hardison:

The Water Quality Control Division (Division), Engineering Section has received and reviewed the Final Plans and Specifications for the Southern Delivery System Water Treatment Plant and Finished Water Pump Station in accordance with Article 1.11.2 of the *Colorado Primary Drinking Water Regulations (CPDWR)*. The design meets or exceeds the requirements of the *State of Colorado Design Criteria For Potable Water Systems* (Design Criteria) and is hereby approved.

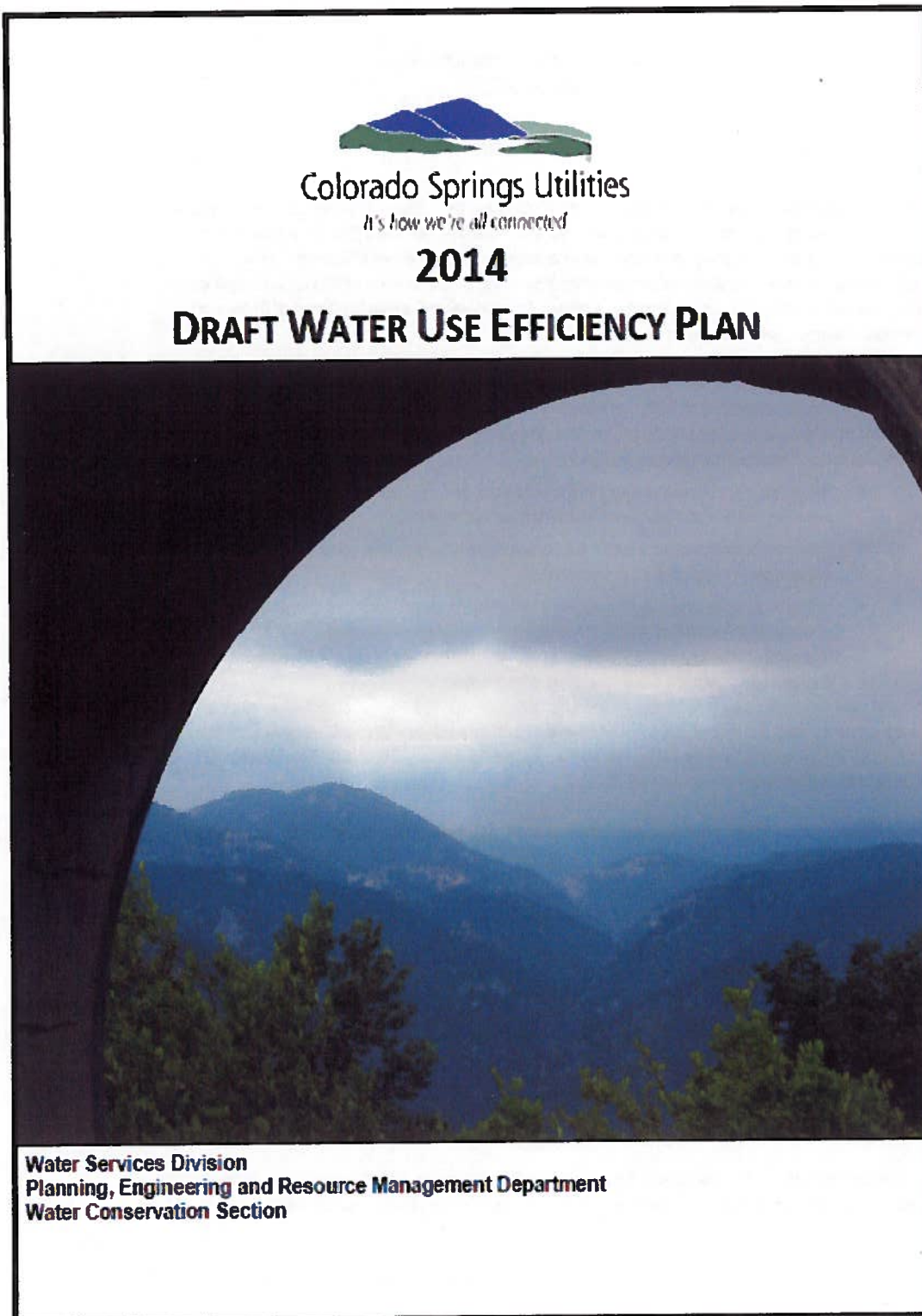
This approval is limited to the following:

- Raw Water Source – Surface Water (1N087)
  - Pueblo Reservoir
    - Raw water delivered to treatment plant via series of raw water pumping stations
    - Initial pumping station draws from the base of the Pueblo Reservoir Dam
- Southern Delivery System Water Treatment Plant (TP088)
  - Treatment for Pueblo Reservoir source
  - Maximum finished water production rate of 50 million gallons per day (MGD)
  - Dual train configuration, 25 MGD production capacity per train
  - Raw water storage
    - Ten (10) million gallon reinforced concrete circular tank
    - Receives flow from Pueblo Reservoir
    - Recycled process water is returned to the 84-inch raw water tank fill line from the backwash recovery lagoons
  - Influent flow measurement
    - Provided downstream of raw water tank
    - Dual train, each with a 30-inch magnetic flow meter (range 5 to 27.5 MGD) and 30-inch and 14-inch motorized flow control valves for high rate and low rate flow control
  - Flash mix
    - Dual train jet pump diffusion mixing system

**Water Conservation Plan**

**(now known as CSU 2014 Draft Water Use Efficiency Plan)**

Submitted to State Board for review in March 2015; Review in process.



## Introduction

## 2014 DRAFT WATER USE EFFICIENCY PLAN

October 20, 2014

## INTRODUCTION

The Colorado Water Conservation Board (CWCB) through the Office of Water Conservation and Drought Planning requires that water providers with total demand of 2,000 acre-feet or more develop and implement plans that encourage customers to use water efficiently. This requirement was first established through the Water Conservation Act of 1991. In compliance with the Act of 1991, Utilities submitted a Water Conservation Plan to the State of Colorado that was reviewed and accepted on March 23, 1998.

During the 2004 legislative session, the State of Colorado revised the minimum requirements of the Water Conservation Act of 1991. In March 2006, Utilities was notified by the CWCB that Utilities' plan was in need of revision to ensure compliance with the Water Conservation Act of 2004 and to include the following new plan elements:

- The steps the covered entity used to develop, and will use to implement, monitor, review and revise its water conservation plan;
- The time period, not to exceed seven years, after which the covered entity will review and update its adopted plan;
- Either as a percentage or in acre-foot increments, an estimate of the amount of water that has been saved through a previously implemented conservation plan and an estimate of the amount of water that will be saved through conservation when the plan is implemented.

In compliance with the Act of 2004, Utilities submitted an updated Water Conservation Plan to the State of Colorado that was reviewed and accepted on January 30, 2008. This Water Conservation Plan expires January 29, 2015.

In addition to the CWCB requirements, other factors that drive the need for an updated Plan include:

- Increased public awareness of the need to conserve due to regional drought and five years of water restrictions since 2002
- Higher customer expectations regarding Utilities' role in promoting water conservation
- Changes in statewide water appliance standards and advancements in water-efficient technologies
- Continued population growth and increased competition for state and regional water resources
- An updated Integrated Water Resource Plan is being written concurrently

In July of 2012, the CWCB introduced a new *Water Conservation Plan Development Guidance Document* and *Model Plan* for water providers interested in developing what are now referred



## 2014 DRAFT WATER USE EFFICIENCY PLAN

October 20, 2014

to as water efficiency plans. The 2014 Water Use Efficiency Plan (Plan) generally follows the Guidance Document and meets or exceeds all statutory requirements.

The scope of the Plan provides an overview of water use, the current water demand forecast and the water system, including ongoing system improvements. The Plan further describes how Utilities will implement and monitor individual programs. The Plan addresses the process by which Utilities identified, screened and selected programs for implementation. Finally, includes a statement of water conservation goals and an analysis and description of selected programs.

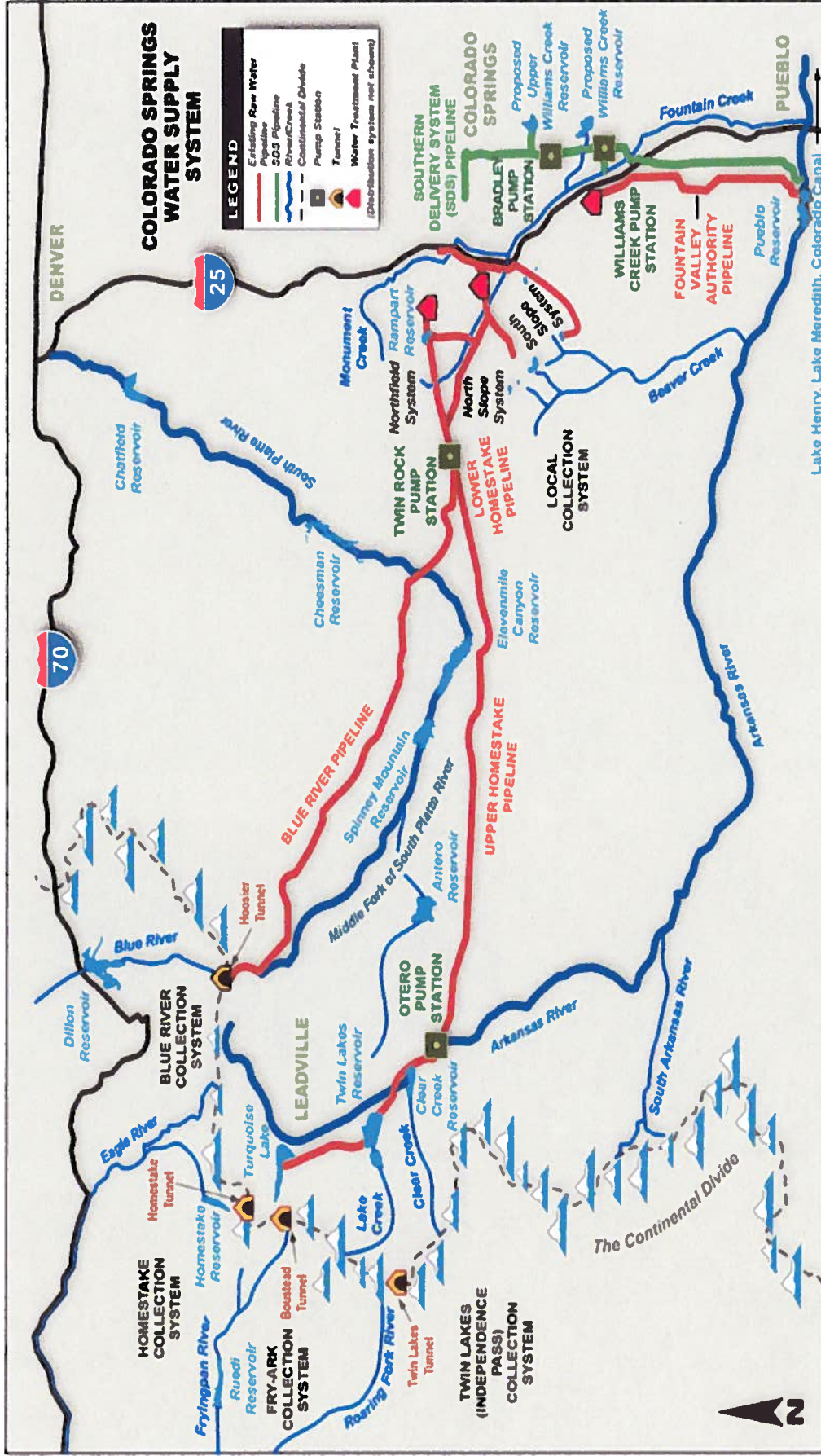
This Plan is not an integrated resource plan. However, it is being prepared in close coordination with an Integrated Water Resources Plan (IWRP) being developed concurrently. The IWRP is a long-term strategic plan that incorporates water supply and demand, water quality, infrastructure reliability, environmental protection, water reuse, financial planning, energy use, regulatory and legal concerns, and public participation. When the IWRP is completed in mid-2015, Utilities will compare the cost and yield of supply-side improvements and additions to determine the role of water conservation and demand-side activities.

This Plan does not address long-range plans related to water supply, delivery or treatment. Instead, the Plan focuses on customer-side or demand-side activities, such as education, rates, rebates, audits, regulations and distribution system water loss. Water supply plans, including drought response plans, are available upon request from Utilities.

The 2014 Water Use Efficiency Plan is a high-level strategic plan, designed to satisfy the diverse interests of multiple stakeholders. The plan is also designed to provide a foundation for Utilities to make sound business decisions related to water conservation and efficiency. The Plan is not intended to provide detail for any one program. Individual programs will be refined during the implementation phase. Many programs will be introduced as pilot projects during the first year of implementation in order to work through program details.

In summary, the Plan reflects the unique characteristics and the core values of the Colorado Springs community. It further demonstrates Utilities' long-standing and deep-rooted commitment to water conservation and efficient water use.

Water Conservation Plan





UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
Fryingpan-Arkansas Project, Colorado

**CONTRACT BETWEEN THE UNITED STATES OF AMERICA  
AND THE CITY OF COLORADO SPRINGS FOR CONVEYANCE AND FOR THE  
OPERATION, MAINTENANCE AND REPLACEMENT COSTS ASSOCIATED WITH  
THE NORTH OUTLET WORKS A FACILITY OF THE FRYINGPAN-ARKANSAS  
PROJECT**

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
Fryingpan-Arkansas Project, Colorado

**CONTRACT BETWEEN THE UNITED STATES OF AMERICA  
AND THE CITY OF COLORADO SPRINGS, COLORADO, FOR  
CONVEYANCE AND FOR THE OPERATION, MAINTENANCE AND  
REPLACEMENT COSTS ASSOCIATED WITH THE NORTH OUTLET  
WORKS—A FACILITY OF THE FRYINGPAN-ARKANSAS PROJECT**

THIS CONTRACT, made this 4<sup>TH</sup> day of MAY, 2011, pursuant generally to the Act of June 17, 1902 (32 Stat. 388; 43 U.S.C. § 391, et seq.), and acts amendatory thereof and supplementary thereto, particularly, but not limited to, Section 14 of the Reclamation Project Act of 1939 (53 Stat. 1197; 43 U.S.C. § 389) and the Fryingpan-Arkansas (Fry-Ark) Project Act of August 16, 1962 (76 Stat. 389; 43 U.S.C. § 616) as amended, all collectively known as the Federal Reclamation laws, is between the UNITED STATES OF AMERICA, hereinafter referred to as the "United States," represented by the Contracting Officer executing this Contract, and the CITY OF COLORADO SPRINGS, COLORADO, acting by and through its UTILITY ENTERPRISE, hereinafter referred to as the "Contractor." The Contractor is acting on its own behalf and on behalf of its partners, the Security Water District Enterprise, acting by and through its Water Activity Enterprise, the City of Fountain, acting by and through the City of Fountain Electric, Water and Wastewater Utility Enterprise, and the Pueblo West Metropolitan District acting by and through its Water Enterprise. The United States and the Contractor collectively are referred to as the "Parties."

**EXPLANATORY RECITALS**

The following statements are made in explanation:

a. WHEREAS, the Secretary of the Interior (Secretary), acting through the Bureau of Reclamation, was authorized by the Fry-Ark Project Act of August 16, 1962 (76 Stat. 389; 43 U.S.C. § 616) as amended, to construct, operate and maintain the Fry-Ark Project (Project), Colorado, in substantial accordance with the engineering plans set forth in House Document 187, 83rd Congress, 1<sup>st</sup> Session, as modified by House Document 353, 86th Congress, 2<sup>nd</sup> Session, and as further modified and described in the description of the proposal contained in the final environmental statement for the Fry-Ark Project; and

b. WHEREAS, Section 1 of the Fry-Ark Project Act states that the Secretary is authorized to construct, operate and maintain the Project for the purposes of supplying water for irrigation, municipal, domestic, industrial, hydroelectric power, flood control and other beneficial incidental uses including recreation and the conservation and development of fish and wildlife; and

c. WHEREAS, Section 3 of the Fry-Ark Project Act requires that the Project shall be operated in accordance with the Operating Principles as adopted by the State of Colorado on December 9, 1960 (House Document 130, 87<sup>th</sup> Congress, 1<sup>st</sup> Session); and

d. WHEREAS, the Project is a multipurpose project in Colorado that diverts water from the Colorado River Basin on the West Slope and transports it through the Continental Divide to the Arkansas River Basin on the East Slope; and

e. WHEREAS, Section 14 of the Reclamation Project Act of 1939 (53 Stat. 1197; 43 U.S.C. § 389) authorizes the Secretary to enter into contracts for the exchange or replacement of water as in the judgment of the Secretary are necessary and in the interests of the United States and the Project; and

f. WHEREAS, Southeastern Colorado Water Conservancy District (District) is the repayment entity for the reimbursable costs of the Project; pursuant to Contract No. 5-07-70-W0086 (January 21, 1965), as amended, with the United States; and

g. WHEREAS, the Contractor is the Project Manager under an Intergovernmental Agreement among the Southern Delivery System (SDS) Participants ("SDS IGA") and is entering into this Contract in its role as Project Manager on behalf of the SDS Participants; and

h. WHEREAS, the Contractor on behalf of the SDS Participants requested a long-term contract for conveyance in the amount of 96 million gallons per day (mgd) for delivery of SDS Water; and

i. WHEREAS, each of the SDS Participants operates a community-owned utility that provides water services to customers in their respective service areas in El Paso and Pueblo Counties, Colorado. Each SDS Participant is responsible for its water system, including formulation of policy, review and approval of the budget, setting rates, and long-range planning, to ensure that each of the SDS Participants' water system is operated and maintained in an efficient and cost-effective manner. As such, the SDS Participants have need and necessity for the conveyance contract that is the subject hereof for the purpose of supplying water for municipal and other uses to the present and future inhabitants of the SDS Participants and to those persons, firms, or corporations desiring water from the SDS Participants' water systems. The SDS Participants have also requested that the United States recognize the release of water to the river for augmentation purposes. The SDS Participants' service areas are within the Arkansas River basin and within the District's boundaries; and

j. WHEREAS, the Contractor and the other SDS Participants currently hold water rights, operate facilities and undertake other lawful transactions concerning water operations in the Arkansas River Valley; and

k. WHEREAS, the SDS is a proposed non-federal regional water delivery project that is designed to meet future water needs of the SDS Participants. Currently, in addition to the Contractor, the other area participants are the City of Fountain, acting by

and through its Electric, Water, and Wastewater Utility Enterprise, Security Water District Enterprise, acting by and through its Water Activity Enterprise, and Pueblo West Metropolitan District, acting by and through its Water Enterprise hereinafter referred to collectively as the SDS Participants; and

l. WHEREAS, a proposed purpose for SDS is to provide additional yield and system redundancy for the SDS Participants; and

m. WHEREAS, the current proposal is to modify the existing Project river outlet works on Pueblo Dam in order to attach a pipeline to convey water north to the service areas of the SDS Participants while still maintaining the functionality and integrity of Pueblo Dam; and

n. WHEREAS, the modified outlet capacity from Pueblo Reservoir and other facilities to be constructed as part of SDS, in conjunction with potential future facility connections and agreements among the entities, and others subsequent to all appropriate environmental analyses and assessments, and applicable contracts could result in facility redundancy that could be of mutual benefit to the entities during future periods of emergency or other outlet outages; and

o. WHEREAS, SDS will be constructed by the SDS Participants at their sole expense; and

p. WHEREAS, ownership of certain facilities constructed as a part of the SDS will be transferred upon completion to the United States, and the Contracting Officer will have responsibility for the operation, maintenance and replacement for these certain facilities; and

q. WHEREAS, the Contractor has agreed to reimburse the United States for all costs associated with the operation, maintenance and replacement of the facilities to be transferred to the United States as specified in this Contract; and

r. WHEREAS, the Parties desire to enter into a contract pursuant to applicable federal Reclamation laws and the laws of the State of Colorado for use of Project facilities to convey SDS Water pursuant to the terms and conditions set forth here; and

s. WHEREAS, contemporaneous with this Contract, each of the SDS Participants is executing the following Excess Capacity contracts: the Contractor's Contract No. 11XX6C0002, the Security Water District Enterprise, acting by and through its Water Activity Enterprise Contract No. 11XX6C0003, the City of Fountain, acting by and through its Electric, Water, and Wastewater Utility Enterprise Contract No. 11XX6C0004 and Pueblo West Metropolitan District acting by and through its Water Enterprise Contract No. 11XX6C0006.

NOW, THEREFORE, in consideration of the mutual and dependent covenants herein contained, it is hereby mutually agreed as follows:



**DEFINITIONS**

1. Where used herein, unless specifically expressed otherwise or obviously inconsistent with the intent hereof, the term:

a. "Contracting Officer" shall mean the Secretary of the Interior or a duly authorized representative. Unless stated otherwise, the Contracting Officer shall be deemed to be the Secretary's authorized representative.

b. "Contractor" shall mean the City of Colorado Springs, Colorado, acting by and through its Utility Enterprise, on its own behalf and acting as Project Manager on behalf of the SDS Participants.

c. "District" shall mean the Southeastern Colorado Water Conservancy District organized under the laws of the State of Colorado, which is the repayment entity for the reimbursable water supply costs of the Project pursuant to Contract No. 5-07-70-W0086 (January 21, 1965), as amended.

d. "Excess Capacity" shall mean capacity within Project facilities that is in excess of the needs of the Project, if and when available, as determined solely by the Contracting Officer, within the bounds of applicable laws and regulations, to store, convey and/or exchange water.

e. "Nonproject Water" shall mean all water that meets all of the following specifications: (i) water that is not defined as Project Water herein; (ii) water that was included in meeting the demands of the SDS Participants and was analyzed pursuant to the National Environmental Policy Act of 1969 (NEPA) (P.L. 91-190; 42 U.S.C § 4321) in the Final Environmental Impact Statement (FEIS) Numbered 08-63 and Record of Decision (ROD) Numbered GP-2009-01; and (iii) water that is listed on the table attached as Exhibit E and made a part of this Contract.

f. "North Outlet Works" shall mean those facilities constructed by the Contractor, including modifications to the existing Project river outlet works (commonly referred to as Butress 16) and a delivery manifold to connect the Single Purpose SDS Works to Pueblo Dam for the purpose of delivering SDS Water from Pueblo Dam to the Single Purpose SDS Works. The exact works included within the term "North Outlet Works" will be determined by future agreement of the Parties and is generally described in Exhibit A attached and made a part of this Contract. When agreed to by the Parties, descriptions of the North Outlet Works will be signed by both Parties, thereby becoming a revised Exhibit A and made part of this Contract. In the event the Parties are unable to agree, the Contracting Officer will then solely determine the works which will be included within the North Outlet Works.

g. "Operating Principles" shall mean the Project Operating Principles set forth in House Document 130, 87<sup>th</sup> Congress, 1<sup>st</sup> Session, 1961.

- h. "Operation, Maintenance and Replacement (OM&R) costs" ("OM&R costs") shall mean the costs incurred to operate, maintain, replace, or repair the North Outlet Works, including any administrative, overhead, or general expenses, either directly or indirectly, as necessary or to remedy conditions brought about by ordinary use of the North Outlet Works.
- i. "Project" shall mean the Fryingpan-Arkansas Project, Colorado.
- j. "Project Water" shall mean the water available to the Project through the State of Colorado decreed water rights for the Project pursuant to the Operating Principles.
- k. "Project Water Return Flows" shall mean the Project Water that is returned to the Project and accrues back to the Contractor for its reuse.
- l. "Single Purpose SDS Works" shall mean those works constructed by the Contractor to convey SDS Water from the North Outlet Works to the SDS Participants' service areas.
- m. "Southern Delivery System" (SDS) shall mean the non-federal regional water delivery project that consists of capacity in the North Outlet Works sufficient to deliver 96 mgd and the Single Purpose SDS Works.
- n. "SDS Participants" shall mean the entities that will use SDS to meet their future water needs. The SDS Participants are the City of Colorado Springs, City of Fountain, Security Water District, and Pueblo West Metropolitan District.
- o. "SDS Water" shall mean only the following types of water defined in this section as: (i) Project Water legally available to the Contractor, (ii) Non-Project Water; and (iii) Project Water Return Flows.

### **PURPOSE**

2. The purposes of this Contract are to provide for the conveyance of up to 96 mgd of SDS Water using Project facilities for the subsequent use by SDS Participants pursuant to the terms and conditions of this Contract and to specify ownership and OM&R responsibilities for the North Outlet Works.

### **TERM OF CONTRACT**

3. a. This Contract will become effective on May 4<sup>th</sup>, 2011 and shall remain in effect until December 31, 2049, unless terminated sooner in accordance with the provisions of Article 15.

b. The Contractor may request renewal of this Contract upon written request to the Contracting Officer on or before two years prior to the expiration of this Contract, Provided, That upon such renewal request, the Contracting Officer will enter into good faith negotiation which shall be upon mutually agreeable terms and conditions and shall be in accordance with the applicable federal laws and policies and state laws in effect at that time.

### LIMITATIONS

4. a. Nothing in this Contract is to be construed to affect any contractual commitments under any long-term contract in effect at the date of execution of this Contract concerning the Project, including, but not limited to Contract No. 5-07-70-W0086 dated January 21, 1965, as amended.

b. Nothing in this Contract is to be construed to increase the total quantity of water which the State of Colorado is entitled to use, and to which the State is limited, under applicable compacts, statutes and treaties. To the extent applicable, this Contract is subject to the following:

- (1) The Boulder Canyon Project Act, approved December 21, 1928, (45 Stat. 1057; 43 U.S.C. §§ 617 *et seq.*).
- (2) The Colorado River Compact signed November 24, 1922.
- (3) The Upper Colorado River Basin Compact.
- (4) The Boulder Canyon Project Adjustment Act, approved July 19, 1940 (54 Stat. 774, 43 U.S.C. §§ 681 *et seq.*).
- (5) The Colorado River Storage Project Act, approved April 11, 1956 (70 Stat. 105, 43 U.S.C. §§ 620 *et seq.*).
- (6) The Mexican Water Treaty.
- (7) The Arkansas River Compact.

c. The Contracting Officer shall operate the Project in accordance with the Operating Principles.

d. Except as explicitly provided in this Contract, nothing in this Contract is to be construed to require a change in Project operations, including, but not limited to, a change in the spill priorities as established in Article 13 of Contract No. 5-07-70-W0086 (January 21, 1965), as amended nor to effect the Contractor's rights thereunder.

e. Nothing in this Contract is to be construed to require the Contracting Officer to take any action which as determined solely by the Contracting Officer within the bounds of applicable laws and regulations may cause harm to the Project.

f. Nothing in this Contract is to be construed to grant the Contractor any right, title, or interest other than that explicitly provided for in this Contract.

g. In accordance with Article 20, the Contractor's receipt of any benefit under this Contract is conditioned upon payment of charges due.

h. The Contract is to be construed to allow legally authorized discharges of water from Pueblo Reservoir into the Arkansas River.

#### **TITLE OF THE NORTH OUTLET WORKS**

5. a. After final acceptance of completion of the North Outlet Works by the Contracting Officer in accordance with Article 6, the United States will hold title to the North Outlet Works, and it will be deemed a component of the Project.

b. Notwithstanding the United States holding title to the North Outlet Works the Contractor's right to conveyance of 96 mgd will remain under the terms and conditions of this Contract.

#### **ACCEPTANCE AND TITLE TRANSFER OF FACILITIES TO BE OWNED AND OPERATED BY UNITED STATES**

6. a. Upon completion of the North Outlet Works, or any portion of the North Outlet Works, the following process will be used to transfer ownership of those facilities from the Contractor to the United States.

(1) The Contracting Officer and the Contractor will conduct a joint above ground inspection and a functional test of the North Outlet Works to determine if the facilities to be transferred are in operating condition. After conclusion of the joint inspection, the Contracting Officer will furnish a written list of deficiencies to the Contractor.

(2) The Contracting Officer will perform a Risk Verification assessment.

(3) After addressing and correcting all deficiencies found during the transfer inspection, the Contractor shall submit two copies of the Final Transfer Report, provided in both paper form and in an electronic "word searchable pdf format" to the Contracting Officer, along with a written request that the North Outlet Works be transferred to OM&R status. If the Contracting Officer determines the Transfer Report is complete, the Contracting Officer will sign the Transfer Report and will provide a copy to the Contractor.

(4) Following the inspection, the Contractor will prepare a Final Transfer Report which will include the following information:



- i. A general description of the facilities being transferred, including associated equipment and buildings.
- ii. The effective date of the transfer agreed upon by the Contracting Officer and the Contractor.
- iii. The date of the transfer inspection.
- iv. Copies of the construction contract(s) and specifications.
- v. The OM&R history of the facilities being transferred.
- vi. A description of the general condition and sufficiency of the structures and equipment being transferred.
- vii. Copies of necessary instructions including the Designer's Operating Criteria, Design Summary, revised Standard Operating Procedures pages, revised Emergency Action Plan pages, and other appropriate operating documents.
- viii. Copies of "as-Built" drawings for the facilities to be transferred and construction inspection reports.
- ix. Deficiencies found during the transfer inspection including work items needing completion, recommendations made during the transfer inspection, and observations not considered construction deficiencies but which would be valuable information for future examiners.
- x. Photographs of newly constructed or modified river outlet works as well as other items noted in the inspection report for future reference.

(5) The Contracting Officer may at any time assume control and operation of any facility constructed or under construction as a part of the North Outlet Works, if the Contracting Officer determines, in the Contracting Officer's sole discretion within the bounds of applicable laws and regulations, that such action is necessary to prevent or correct any adverse impact to the Project. The Contractor shall reimburse the United States for all costs incurred under this subarticle.

b. In the event that the North Outlet Works, or any portion of the North Outlet Works, are not completed to the satisfaction of the Contracting Officer, or remain incomplete for a period greater than 90 days without a schedule for completion, the Contracting Officer may perform any work the Contracting Officer determines, in the Contracting Officer's sole discretion within the bounds of applicable laws and regulations, that is necessary to prevent or correct any adverse impact to the Project. The Contractor shall reimburse the United States for all costs incurred under this subarticle.

c. If at any time, including after title transfer, the Contracting Officer determines that the North Outlet Works are not functioning properly because of design flaws, the Contracting Officer may take the necessary corrective actions, including design work, determined necessary by the Contracting Officer's sole discretion within the bounds of applicable laws and regulations. The Contractor shall reimburse the United States for all costs incurred under this subarticle. This subarticle is limited to damages caused by

design flaws and does not address damages caused by normal wear and tear, by routine operation, or by improper OM&R.

**USE OF THE NORTH OUTLET WORKS**

7. a. The SDS Participants may convey water through the Project, including through the North Outlet Works, in accordance with the terms and conditions of this Contract.

b. The United States shall not grant or permit use of 96 mgd of the capacity to the North Outlet Works to any entity that is not an SDS Participant. SDS Participants may convey up to 96 mgd of SDS Water through the North Outlet Works at any time, unless one or more of the following apply: (i) the Contracting Officer has determined that deliveries during a certain period or of a certain quantity would adversely impact the operations of the Project, as determined solely by the Contracting Officer within the bounds of applicable laws and regulations; (ii) an SDS Participant fails to implement or comply with the environmental commitments as determined under Article 13; (iii) this Contract is terminated or no longer remains in effect and a renewal or successor contract has not been executed by the Parties.

c. From time to time, OM&R of the North Outlet Works or other facilities of the Project may require interruptions in the conveyance of water through the North Outlet Works. The Contracting Officer shall notify the Contractor at least sixty (60) days prior to any scheduled OM&R or other activities that could interrupt water conveyance through the North Outlet Works, unless the Contracting Officer's sole discretion determines that a safety or emergency condition requires immediate interruption of water conveyance. The United States is not liable for any damages that the Contractor or any SDS Participant may suffer due to any interruption of water conveyance through the North Outlet Works, and any such interruption shall not relieve the Contractor of any charges or payments due under this Contract.

d. The SDS Participants may use SDS Water conveyed pursuant to this Contract only in those areas that are within both the SDS Participants' service areas and the boundaries of the District, for all lawfully decreed purposes that are consistent with Reclamation laws and the laws of the State of Colorado and that are within the scope of the ROD and all other environmental documents, permits, approvals, licenses and agreements required for the construction and OM&R of the SDS. Any sale, transfer, or assignment by any SDS Participant of the conveyance rights under this Contract or any portion thereof, to convey SDS Water is prohibited unless approved in advance and in writing by the Contracting Officer. Any such approval will require an appropriate level of environmental compliance prior to the Contracting Officer's determination.

e. Nothing in this Contract is to be construed to (i) grant the Contractor or any SDS Participant any right to use the North Outlet Works except as specifically provided for in this Contract or (ii) imply any expectation of the grant of additional rights to the Contractor or to any SDS Participant to use the North Outlet Works.

f. There is no charge assessed in this Contract for the conveyance of water through the SDS to any SDS Participant.

### **UNITED STATES RESPONSIBILITIES**

8. The United States will retain the responsibility for the OM&R for the Fry-Ark Project. The United States will also have responsibility for the OM&R of the North Outlet Works for the SDS upon transfer of ownership of those facilities to the United States. The Contracting Officer shall determine, in the Contracting Officer's sole discretion within the bounds of applicable laws and regulations, the OM&R to be performed for the North Outlet Works each year.

### **OPERATION, MAINTENANCE, AND REPLACEMENT COSTS**

9. a. The Contractor shall be responsible for OM&R costs of the North Outlet Works as set forth in this Contract, in addition to being responsible for all OM&R costs of the entire Single Purpose SDS Works.

b. For the purposes of this Contract, the Contractor's responsibility for the OM&R costs of the North Outlet Works begins at the downstream face of the existing four-foot regulating gate and includes all North Outlet Works facilities downstream of that point. The Contractor's OM&R costs shall not include the river outlet works existing prior to modification, including the existing gate chamber, trashrack, intake piping and the two four-foot slide gates.

c. The SDS Participants have executed the SDS IGA which specifies the SDS Participants' financial obligations and other respective rights and obligations relating to the North Outlet Works owed to the Contractor for OM&R costs for the North Outlet Works. In addition, the Contractor and other SDS Participants, with concurrence from the Contracting Officer, may execute other agreements or make arrangements with the other entities to cover appropriate shares of the OM&R costs for North Outlet Works. Neither the SDS IGA nor any other such agreement or arrangement, shall be construed in any way to alter the Contractor's obligations to the United States as described in this Contract. Therefore, failure by any SDS Participant or another party to perform any obligation owed to the Contractor will not excuse a failure by the Contractor to perform any obligation under this Contract.

d. If the United States enters into an agreement with an entity other than an SDS Participant that allows that entity to convey water through the North Outlet Works, the United States shall collect OM&R costs from that entity. The entity's share of the OM&R costs shall be based on the proportion of that entity's maximum contract amount of the North Outlet Works compared to the maximum contract amount of all other users. If such an agreement is entered into, the Contractor's responsibility to pay OM&R costs of the North Outlet Works shall be diminished by the amount to be paid by the other entity.

**PAYMENT FOR OM&R**

10. a. Each year for the term of the Contract, the Contractor shall make an annual advance non-refundable payment for that year to the Contracting Officer for the OM&R costs of the North Outlet Works. Therefore, by June 1, 2013, or upon transfer of ownership to the United States of the North Outlet Works, whichever occurs first, the Contractor shall submit to Reclamation an estimated OM&R payment in the amount of \$18,000 to cover the anticipated OM&R for the year.

b. Each year thereafter, the estimated annual OM&R charges for the North Outlet Works shall be based on the prior year's actual OM&R costs. Payment for any year shall be equal to the actual OM&R costs for the North Outlet Works, for the preceding year, adjusted by any credit or debit that reflects the difference between the actual OM&R costs for the preceding year compared to the payment made by the Contractor for that year.

c. The Contracting Officer shall provide a notice of a Bill for Collection to the Contractor each year by August 31 of the OM&R charge due for the following year, and the Contractor shall submit to the Contracting Officer that amount for the annual OM&R payment for the North Outlet Works by October 1 of each year.

d. By November 1 each year, the Contracting Officer shall provide to the Contractor a report itemizing the actual OM&R costs for the preceding year and an accounting of those costs compared to the OM&R payment submitted by Contractor.

e. The Contractor shall pay all OM&R costs specified in this Contract, notwithstanding any obligation by the District to pay for the costs to OM&R Project facilities, as specified by Contract No. 5-07-70-W0086 (January 21, 1965), as amended.

**SUBAGREEMENT BETWEEN FOUNTAIN VALLEY AUTHORITY MEMBERS**

11. The Contracting Officer and the District are parties to Contract No. 9-07-70-W0315 (FVA Contract), which allows for the conveyance of water through the Fountain Valley Conduit to the Contractor and the City of Fountain. The Contractor and the City of Fountain have requested that the Contracting Officer give concurrence to a separate agreement which will allow the City of Fountain to convey SDS Water that would otherwise be conveyed through the SDS subject to the terms of this Contract through the Fountain Valley Conduit and in exchange will allow the Contractor to convey an equivalent amount of water through the SDS under this Contract. The Contracting Officer acknowledges this requested exchange of capacity between the Contractor and the City of Fountain and agrees to work expeditiously toward execution of the separate agreement titled "Subagreement between the Cities of Colorado Springs and Fountain for a Trade of Capacity within the Fountain Valley Conduit and the Southern Delivery System Pipeline, Fryingpan-Arkansas Project" (Subagreement). The Subagreement will be attached to this Contract as Exhibit F upon its execution by the Contractor and the City of Fountain and concurrence by the Contracting Officer and the District.



**MEASUREMENT AND ACCOUNTING FOR THE USE  
OF THE NORTH OUTLET WORKS**

12. a. If requested by the Contracting Officer, the Contractor shall submit and revise, if necessary, a written schedule of the anticipated monthly demands for the conveyance of SDS Water.

b. The Contractor is solely responsible for making whatever arrangements are necessary for making water available to the Contractor under Colorado law, including but not limited to, obtaining approval of the State of Colorado's Division of Water Resources. The Contractor shall account for Nonproject Water and Project Water Return Flows according to the limitations in the water rights listed in Exhibit E and provide the same to the Contracting Officer upon request. The Contracting Officer shall account for any such transit and evaporation losses assessed on Nonproject Water and Project Water Return Flows stored and conveyed under this Contract.

c. The Contractor shall install, at its sole expense, a water measurement device ("flow meter") that allows the Contracting Officer to measure all water conveyed through the North Outlet Works. During any outage or malfunction of the flow meter, the Contracting Officer shall estimate, based on the Contracting Officer's sole discretion, the amount of water conveyed during the outage or malfunction.

d. The Contractor shall design a flow meter for the 90 inch pipe to provide daily reporting to the Contracting Officer showing the amount of SDS Water conveyed through the North Outlet Works. In addition, the Contractor shall report daily the amounts of SDS Water delivered to each SDS Participant reconciled with the readings from the flow meter.

e. The Contractor shall furnish the Contracting Officer without charge such Contractor records as may be required for such daily accounting.

**ENVIRONMENTAL COMPLIANCE AND COMMITMENTS**

13. a. The Contractor, acting as Project Manager for the SDS Participants, shall implement the environmental commitments set forth in the FEIS Numbered 08-63 and ROD Numbered GP-2009-01. The environmental commitments are described in Exhibit C, attached, and are made part of this Contract. If at any time during the term of this Contract, the Contractor fails to implement or comply with the environmental commitments, the Contracting Officer may immediately cease conveyance of SDS Water until the commitments are implemented and fulfilled to the satisfaction of the Contracting Officer. Failure to implement or comply with the environmental commitments may also result in the termination of this Contract by the United States in accordance with Article 15.

b. The Contractor shall be responsible for the costs of all current and future NEPA and Endangered Species Act (ESA) compliance and mitigation measures identified in the FEIS and the ROD associated with the SDS Participants' construction and use of the North Outlet Works and other facilities constructed as a part of the SDS.

#### **PERMITS, APPROVALS, AND AGREEMENTS**

14. a. The SDS Participants, through the Contractor as Project Manager, must obtain all Federal, State, and local permits, approvals, licenses and agreements necessary for the construction, implementation and operation of the SDS project ("licenses and approvals"). These licenses and approvals may include, as examples, a Section 404 permit under the Clean Water Act, appropriate 1041 permits, and consultation with the Colorado Division of Wildlife (CDOW) and the Colorado Water Conservation Board. The Contractor shall comply with all licenses and approvals.

b. The Contractor, as Project Manager, shall notify and provide copies to the Contracting Officer of all licenses and approvals as they are completed, issued or modified. The Contractor shall also notify the Contracting Officer within 72 hours of receipt of any notice of non-compliance of any license or approval.

c. If the Contractor fails to comply with this Article 14, the United States may terminate this Contract in accordance with Article 15.

#### **TERMINATION OF CONTRACT**

15. a. If at any time the Contracting Officer determines that the Contractor or any other SDS Participant was not able to obtain all permits, licenses and approvals necessary to construct and operate the SDS, the Contracting Officer shall provide notice of this determination to the Contractor and request the offending party to provide a written response to both the Contracting Officer and other SDS Participants within ninety (90) days of its receipt as to the reasons why the permit, license or approval was unable to be attained and how the offending party intends to fully commit to its contractual obligations hereunder. The Contracting Officer will consider the written response by the offending party, and determine whether the termination of this Contract is necessary to protect the Contracting Officer's or the United States' interests. The Contracting Officer may also consider steps to remedy the problem that may be taken by other SDS Participants. If Contracting Officer solely determines that the unattained license, permit, or approval impacts this Contract including any environmental commitments, the United States may terminate this Contract by providing notice of the termination to the Contractor.

b. The United States may, at any time, terminate this Contract for cause and cease the use of Excess Capacity hereunder upon failure of the Contractor: (i) to make any payment required by this Contract; (ii) to comply with any term or condition of this Contract; or (iii) to comply with any lawful notice, order, or final administrative or judicial determination that the Contractor has violated a law, rule, or regulation of the United States or the State of Colorado directly relating to this Contract; Provided, That

this Contract shall not be terminated unless such failure or violation continues 60 days after the United States gives the Contractor written notice to correct the problem.

c. To the extent consistent with federal law, the Parties acknowledge that the version of Section 7-60 of the Colorado Springs City Charter in effect at the date of Contract execution applies to this Contract. The Parties further acknowledge that, notwithstanding the application of the Section 7-60 of the Colorado Springs City Charter, the United States retains all rights to challenge, in any judicial, administrative, or other forum, whether application of Section 7-60 of the Colorado Springs City Charter prevents the recovery of damages necessary to redress any injury incurred by the United States, including but not limited to recovery of benefits derived from the recognition of the oversized pipe to the benefit of the Contractor or other loss of economic benefit caused by early termination of this Contract by the Contractor.

d. If the Contractor is unable to pay pursuant to Subarticle c. above, then the Contractor shall have 30 days from the date of non-payment to request evacuation of any water stored pursuant to this Contract, and the Contracting Officer shall release such water upon a timely request.

e. The Contracting Officer reserves the option to consider the Contractor's termination in determining whether it will be suitable to enter into any future contracting actions with the Contractor for the use of Reclamation facilities, except where such consideration will be inconsistent with Contractor's rights under existing contracts.

f. No waiver at any time by either Party of its rights with respect to default or any other matter arising in connection with this Contract will be deemed to be a waiver with respect to any subsequent default or matter.

#### **SEVERABILITY**

16. In the event that any one or more of the provisions contained herein is, for any reason, held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions of this Contract, but this Contract is to be construed as if such invalid, illegal or unenforceable provisions had never been contained herein, unless the deletion of such provision or provisions would result in such a material change so as to cause the fundamental benefits afforded the Parties by this Contract to become unavailable or materially altered.

#### **STANDARD CONTRACT ARTICLES**

#### **CONTRACT DRAFTING CONSIDERATIONS**

17. This Contract has been negotiated and reviewed by the Parties hereto, each of whom is sophisticated in the matters to which this Contract pertains. Articles 1 through 16 of this Contract have been drafted, negotiated, and reviewed by the Parties and no one party shall be considered to have drafted the stated articles.

**NOTICES**

18. Any notice, demand, or request authorized or required by this Contract shall be deemed to have been given, on behalf of the Contractor, when mailed postage prepaid, or delivered to the:

Regional Director  
Great Plains Region  
Bureau of Reclamation  
P.O. Box 36900  
Billings, Montana 59107-6900

or street address:  
316 North 26th Street  
Billings, Montana 59101

and on behalf of the United States, when mailed postage prepaid or delivered to the:

Chief Water Services Officer  
121 South Tejon Street,  
Mail Code 0950  
Colorado Springs, CO 80947-0950

The designation of the addressee or the address may be changed by notice given in the same manner as provided in this article for other notices.

**CHARGES FOR DELINQUENT PAYMENTS**

19. a. The Contractor shall be subject to interest, administrative, and penalty charges on delinquent payments. If a payment is not received by the due date, the Contractor shall pay an interest charge on the delinquent payment for each day the payment is delinquent beyond the due date. If a payment becomes 60 days delinquent the Contractor shall pay, in addition to the interest charge, an administrative charge to cover additional costs of billing and processing the delinquent payment. If a payment is delinquent 90 days or more the Contractor shall pay, in addition to the interest and administrative charges, a penalty charge for each day the payment is delinquent beyond the due date, based on the remaining balance of the payment due at the rate of 6 percent per year. The Contractor shall also pay any fees incurred for debt collection services associated with a delinquent payment.

b. The interest rate charged shall be the greater of either the rate prescribed quarterly in the Federal Register by the Department of the Treasury for application to overdue payments, or the interest rate of 0.5 percent per month. The interest rate charged will be determined as of the due date and remain fixed for the duration of the delinquent period.



c. When a partial payment on a delinquent account is received, the amount received shall be applied first to the penalty charges, second to the administrative charges, third to the accrued interest, and finally to the overdue payment.

**GENERAL OBLIGATION--BENEFITS CONDITIONED UPON PAYMENT**

20. a. The obligation of the Contractor to pay the United States as provided in this Contract is a general obligation of the Contractor notwithstanding the manner in which the obligation may be distributed among the Contractor's water users and notwithstanding the default of individual water users in their obligation to the Contractor.

b. The payment of charges becoming due pursuant to this Contract is a condition precedent to receiving benefits under this Contract. The United States shall not make conveyance available to the Contractor through the Fryingpan-Arkansas Project facilities during any period in which the Contractor is in arrears in the advance payment of conveyance or OM&R charges due the United States.

**EMERGENCY RESERVE FUND**

21. The Contractor has provided a letter dated April 20, 2011 (Exhibit B) that adequately demonstrates to the Contracting Officer that sufficient funds are available for the Contractor to use to meet its obligations under the Contract in the event of an emergency. Exhibit B herein referenced is made part of this Contract. The Contractor shall maintain unencumbered cash balances to meet costs incurred during periods of special stress caused by damaging droughts, storms, earthquakes, floods, or other emergencies threatening or causing interruption of water service. Funding that is to be provided from the Contractor's unencumbered cash balances shall be available within a reasonable time to meet expense for the purposes described in this Contract. This fulfills the requirement for the following standard article:

*a. Commencing on the effective date of this Contract, the Contractor shall establish and maintain a reserve fund or demonstrate to the satisfaction of the Contracting Officer that other funds are available for use as an emergency reserve fund. The Contractor shall establish and maintain that emergency reserve fund to meet costs incurred during periods of special stress caused by damaging droughts, storms, earthquakes, floods, or other emergencies threatening or causing interruption of water service.*

*b. The Contractor shall accumulate the reserve fund with a one-time deposit or investment of not less than \$ \_\_\_\_\_ to a Federally insured, interest- or dividend-bearing account or in securities guaranteed by the Federal Government: Provided, That money in the reserve fund, including accrued interest, shall be available within a reasonable time to meet expenses for such purposes as those identified in Subarticle (d) herein. Following an emergency expenditure from the fund, annual deposits of \$ \_\_\_\_\_ shall continue from the year following the emergency expenditure until the previous balance is restored. After the previous balance is restored, the annual deposits*

*may be discontinued and the interest earnings shall continue to accumulate and be retained as part of the reserve fund.*

*c. Upon mutual written agreement between the Contractor and the Contracting Officer, the accumulated reserve fund may be adjusted to account for risk and uncertainty stemming from the size and complexity of the Project; the size of the annual operation and maintenance budget; additions to, deletions from, or changes in Project Works; and operation and maintenance costs not contemplated when this Contract was executed.*

*d. The Contractor may make expenditures from the reserve fund only for meeting routine or recurring operation and maintenance costs incurred during periods of special stress, as described in Subarticle (a) herein; for meeting unforeseen extraordinary operation and maintenance costs; or for meeting unusual or extraordinary repair or replacement costs; or for meeting betterment costs (in situations where recurrence of severe problems can be eliminated) during periods of special stress. Proposed expenditures from the fund shall be submitted to the Contracting Officer in writing for review and written approval prior to disbursement. Whenever the reserve fund is reduced below the current balance by expenditures therefrom, the Contractor shall restore that balance by annual deposits as specified in Subarticle (b) herein.*

*e. During any period in which any of the Project Works are operated and maintained by the United States, the Contractor agrees the reserve fund shall be available for like use by the United States.*

*f. On or before \_\_\_\_\_ of each year, the Contractor shall provide a current statement of the principal and accumulated interest of the reserve fund account to the Contracting Officer.*

#### **CONFIRMATION OF CONTRACT**

22. The Contractor has provided a letter dated April 25, 2011 (Exhibit D) that adequately demonstrates to the Contracting Officer evidence that pursuant to the laws of the State of Colorado, the Contractor is a legally constituted entity and the contract is lawful, valid and binding on the Contractor. This Contract shall not be binding on the United States until such evidence has been provided to the United States satisfaction. Exhibit D herein referenced is made part of this Contract. This fulfills the requirement for the following standard article:

*Promptly after the execution of this Contract, the Contractor shall provide evidence to the Contracting Officer that, pursuant to the laws of the State of Colorado, the Contractor is a legally constituted entity and the Contract is lawful, valid, and binding on the Contractor. This Contract shall not be binding on the United States until such evidence has been provided to the United States satisfaction.*

**CONTINGENT UPON APPROPRIATION OR ALLOTMENT OF FUNDS**

23. The expenditure or advance of any money or the performance of any obligation of the United States under this Contract shall be contingent upon appropriation or allotment of funds. Absence of appropriation or allotment of funds shall not relieve the Contractor from any obligations under this Contract. No liability shall accrue to the United States in case funds are not appropriated or allotted.

**OFFICIALS NOT TO BENEFIT**

24. No Member of or Delegate to the Congress, Resident Commissioner, or official of the Contractor shall benefit from this Contract other than as a water user or landowner in the same manner as other water users or landowners.

**CHANGES IN CONTRACTOR'S ORGANIZATION**

25. While this Contract is in effect, no change may be made in the Contractor's organization, which may affect the respective rights, obligations, privileges, and duties of either the United States or the Contractor under this Contract including, but not limited to, dissolution, consolidation, or merger, except upon the Contracting Officer's written consent.

**ASSIGNMENT LIMITED--SUCCESSORS AND ASSIGNS OBLIGATED**

26. The provisions of this Contract shall apply to and bind the successors and assigns of the parties hereto, but no assignment or transfer of this Contract or any right or interest therein by either party shall be valid until approved in writing by the other party.

**BOOKS, RECORDS, AND REPORTS**

27. The Contractor shall establish and maintain accounts and other books and records pertaining to administration of the terms and conditions of this Contract, including the Contractor's financial transactions; water supply data; Project operation, maintenance, and replacement logs; Project land and rights-of-way use agreements; the water users' land-use, land-ownership, land-leasing, and water-use data; and other matters that the United States may require. Reports shall be furnished to the United States in such form and on such date or dates as the United States may require. Subject to applicable Federal laws and regulations, each party to this Contract shall have the right during office hours to examine and make copies of the other party's books and records relating to matters covered by this Contract.

**RULES, REGULATIONS, AND DETERMINATIONS**

28. a. The Parties agree that the delivery of water or the use of Federal facilities pursuant to this Contract is subject to Federal reclamation law, as amended and supplemented, and the rules and regulations promulgated by the Secretary of the Interior under Federal reclamation law.

b. The United States shall have the right to make determinations necessary to administer this Contract that are consistent with its expressed and implied provisions, the laws of the United States and the State of Colorado, and the rules and regulations promulgated by the Secretary of the Interior. Such determinations shall be made in consultation with the Contractor.

### **PROTECTION OF WATER AND AIR QUALITY**

29. a. Project facilities used to make available and deliver water to the Contractor shall be operated and maintained in the most practical manner to maintain the quality of the water at the highest level possible as determined by the United States: Provided, That the United States does not warrant the quality of the water delivered to the Contractor and is under no obligation to furnish or construct water treatment facilities to maintain or improve the quality of water delivered to the Contractor.

b. The Contractor shall comply with all applicable water and air pollution laws and regulations of the United States and the State of Colorado; and shall obtain all required permits or licenses from the appropriate Federal, State, or local authorities necessary for the delivery of water by the Contractor; and shall be responsible for compliance with all Federal, State, and local water quality standards applicable to surface and subsurface drainage and/or discharges generated through the use of Federal or Contractor facilities or Project Water provided by the Contractor within the Contractor's Project Water Service Area.

c. This article shall not affect or alter any legal obligations of the Secretary to provide drainage or other discharge services.

### **WATER CONSERVATION**

30. Prior to the delivery of water provided from or conveyed through federally constructed or federally financed facilities pursuant to this Contract, the Contractor shall develop a water conservation plan, as required by subsection 210(b) of the Reclamation Reform Act of 1982 (RRA) and 43 C.F.R. 427.1 (Water Conservation Rules and Regulations).

### **EQUAL EMPLOYMENT OPPORTUNITY**

During the performance of this Contract, the Contractor agrees as follows:

31. a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, disability, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, disability, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and



selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the United States setting forth the provisions of this nondiscrimination clause.

b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, disability, or national origin.

c. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the United States, advising the labor union or workers' representative of the Contractor's commitments under section 202 of Executive Order 11246 of September 24, 1965 (EO 11246), and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The Contractor will comply with all provisions of EO 11246, and of the rules, regulations, and relevant orders of the Secretary of Labor.

e. The Contractor will furnish all information and reports required by EO 11246, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Contracting Agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

f. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in EO 11246, and such other sanctions may be imposed and remedies invoked as provided in EO 11246 or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

g. The Contractor will include the provisions of this Contract article 31 in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of EO 11246, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

**COMPLIANCE WITH CIVIL RIGHTS LAWS AND REGULATIONS**

32. a. The Contractor shall comply with Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352; 42 U.S.C. § 2000d), the Rehabilitation Act of 1973 (Pub. L. 93-112, Title V as amended; 29 U.S.C § 791, *et seq.*), the Age Discrimination Act of 1975 (Pub. L. 94-135, Title III; 42 U.S.C. § 6101, *et seq.*), Title III of the Americans with Disabilities Act of 1990 (Pub. L. 101-336; 42 U.S.C. § 12181, *et seq.*), and any other applicable civil rights laws, and with the applicable implementing regulations and any guidelines imposed by the U.S. Department of the Interior and/or Bureau of Reclamation.

b. These statutes prohibit any person in the United States from being excluded from participation in, being denied the benefits of, or being otherwise subjected to discrimination under any program or activity receiving financial assistance from the Bureau of Reclamation on the grounds of race, color, national origin, disability, or age. By executing this Contract, the Contractor agrees to immediately take any measures necessary to implement this obligation, including permitting officials of the United States to inspect premises, programs, and documents.

c. The Contractor makes this agreement in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property discounts, or other Federal financial assistance extended after the date hereof to the Contractor by the Bureau of Reclamation, including installment payments after such date on account of arrangements for Federal financial assistance which were approved before such date. The Contractor recognizes and agrees that such Federal assistance will be extended in reliance on the representations and agreements made in this article and that the United States reserves the right to seek judicial enforcement thereof.

d. Complaints of discrimination against the Contractor shall be investigated by the United States' Office of Civil Rights.

**MEDIUM FOR TRANSMITTING PAYMENTS**

33. a. All payments from the Contractor to the United States under this Contract shall be by the medium requested by the United States on or before the date payment is due. The required method of payment may include checks, wire transfers, or other types of payment specified by the United States.

b. Upon execution of this Contract, the Contractor shall furnish the United States with the Contractor's taxpayer's identification number (TIN). The purpose for requiring the Contractor's TIN is for collecting and reporting any delinquent amounts arising out of the Contractor's relationship with the United States.

**CONSTRAINTS ON THE AVAILABILITY OF WATER**

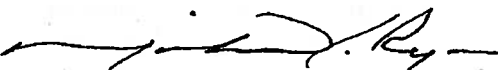
34. a. In its operation of the Project, the Contracting Officer will use all reasonable means to guard against a condition of shortage in the quantity of water to be made available to the Contractor pursuant to this Contract. In the event the Contracting Officer

determines that a condition of shortage appears probable, the Contracting Officer will notify the Contractor of said determination as soon as practicable.

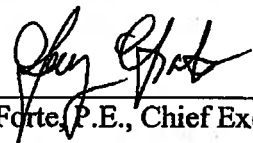
b. If there is a condition of shortage because of errors in physical operations of the Project, drought, other physical causes beyond the control of the Contracting Officer or actions taken by the Contracting Officer to meet current and future legal obligations, then no liability shall accrue against the United States or any of its officers, agents, or employees for any damage, direct or indirect, arising therefrom.

IN WITNESS WHEREOF, the Parties hereto have signed their names the day and year first above written.

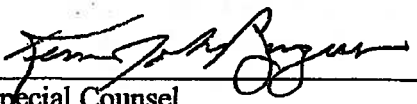
**THE UNITED STATES OF AMERICA**

By   
Regional Director

**CITY OF COLORADO SPRINGS, ACTING BY AND THROUGH ITS UTILITY ENTERPRISE**

By:   
Jerry Forte, P.E., Chief Executive Officer

APPROVED AS TO FORM FOR COLORADO SPRINGS,  
Acting by and through its Utility Enterprise

 5/2/2011  
Special Counsel

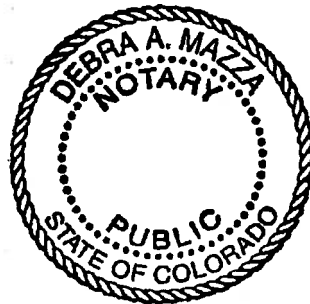
State of Colorado )  
County of El Paso )ss

The foregoing Contract was acknowledged before me this 2nd day of May, 2011 by Jerry Forte, Chief Executive Officer of the City of Colorado Springs, acting by and through its Utility Enterprise.

Witness my hand and official seal

Debra A. Mazza  
Notary Public

My Commission Expires: 5/19/2013



My Commission Expires 05/19/2013



## **Fish and Wildlife Mitigation Plan**

## CDOW Mitigation Commitments

- 1. Fish Stocking (stock Pueblo Reservoir, Henry, Meredith and SDS Reservoirs through cooperative funding)**

In Progress:   X   Complete:            Ongoing:            Post-Phase I:           

**Next Step: Continued collaboration with CPW on comprehensive agreement**

**Due Date(s): Payments over 2 years 2015 (pending) and 2016**

Closure Documentation (if any): (Pending) signed letter from CPW and payment receipts

- 2. Fish Habitat Improvement (funding or materials to construct fish habitat structures in Henry, Meredith, and Pueblo Reservoir)**

**In Progress:** \_\_\_\_\_ **Complete:** \_\_\_\_\_ **Ongoing:** \_\_\_\_\_ **Post-Phase I:**   X  

**Next Step: Continued coordination with CPW and agencies on comprehensive agreement**

**Due Date(s):** Phase II

Closure Documentation (if any): (Pending) signed letter from CPW and payment receipts

- ### **3. Fish Retention Structures** (install fish screens at Lake Henry; walkways at Meredith outlet)

In Progress:   X   Complete:            Ongoing:            Post-Phase I:           

**Next Step: Initiate coordination with CPW and agencies on comprehensive agreement**

**Due Date(s): End of Phase I**

Closure Documentation (if any): (Pending) signed letter from CPW and payment receipts

- 4. Aquatic Research** (research on representative species to determine life history factors and relationship to flow, water quality and habitat parameters influenced by SDS)

In Progress:   X   Complete:            Ongoing:            Post-Phase I:   X  

**Next Step: Received final documentation from student defense April 2015**

**Due Date(s):** Additional research pending Phase II

**Closure Documentation (if any):** Final Report, Payment to CPW for CSU study

- 5. Clear Spring Ranch (consider developing small game hunting opportunities and trails/wildlife viewing)**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

**Next Step:** \_\_\_\_\_

**Due Date(s):** \_\_\_\_\_

**Closure Documentation (if any): Land use change per Master Plan (Pending)**

- 6. UWCR ( develop angling and other wildlife recreational opportunities; include spawning habitat and two jetties)**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I:   X  

**Next Step:** \_\_\_\_\_

Due Date(s): Phase II

**Closure Documentation (if any): Integrated Water Resources Plan**

**7. WCR (develop small game hunting opportunities and trails/wildlife viewing)**In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I:   X  

Next Step: \_\_\_\_\_

Due Date(s): Phase IIClosure Documentation (if any): Integrated Water Resources Plan**8. Improve Fish Habitat (seek opportunities to preserve or develop Arkansas darter habitat along Fountain Creek and tributaries)**In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I:   X  Next Step: Cooperative venture (tbd)Due Date(s): Phase II

Closure Documentation (if any): \_\_\_\_\_

**9. Relocate Terminal Storage (avoid wetland and Arkansas darter impacts by re-locating terminal storage to WCR; avoid Needle and Threadgrass-Blue Gamma grasslands at north end of Jimmy Camp Creek Reservoir)**In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I:   X  Next Step: 30% Design scheduled end of 2015; remainder in Phase II

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Moved Jimmy Camp Creek location to UWC to minimize impacts**10. Discharge WCR Return Flows to Ft. Creek (avoid impacts to wetlands and darter habitat by routing return flows from WCR to Ft. Creek through pipeline)**In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I:   X (Pending)  Next Step: Phase II design for ongoing flow componentDue Date(s): Phase IIClosure Documentation (if any): Conceptual Design Complete; Full Design Pending**11. Bradley Road Realignment (realign road to avoid eagles)**In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I:   X (Pending)  Next Step: Phase II Design and ongoing collaboration with El Paso CountyDue Date(s): Phase IIClosure Documentation (if any): Full Design Pending**12. Design Review for Vegetation Impacts (make design changes to avoid and minimize impacts to desirable vegetation)**In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I:   X (Pending)  Next Step: Complete Phase I; Phase II Pending

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): ERO Pre-construction reports

**13. Design Review for Wetland/Stream Impacts (minimize wetland impacts in final pipeline and facility designs and assess construction methods for pipeline crossings)**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I:   X  

Next Step: Complete Phase I; Phase II Pending

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Wetlands accounting worksheet

**14. Construction Planning to Minimize Wildlife Habitat Disturbance (conduct wildlife surveys to minimize disturbance and seasonally restrict disturbance of sensitive habitat)**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I:   X  

Next Step: Complete Phase I; Phase II Pending

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): ERO Pre-construction reports

**Fish and Wildlife Mitigation**

**15. UAVFMP (participate in Upper Arkansas Voluntary Flow Management Plan)**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I:   X  

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): IGA commitment

**16. PFMP (participate in Pueblo Flow Management Plan; maintenance of target flows)**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I:   X  

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): CSU Water Resources actively participating

**17. ARLFP (participate in Arkansas River Low Flow Program-50cfs)**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): CSU Water Resources actively participating

**18. Fountain Creek Mitigation (provide money to FCWFCD for projects; support CDOW efforts on darter habitat)**

In Progress:   X   Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: Budgeted 2016 – First Payment

Due Date(s): Triggered by water delivery

Closure Documentation (if any): Pending payment receipt

**19. Aquatic Life Monitoring (monitor project impacts on Ft. Creek and Arkansas River; aquatic life monitoring 1x per yr. at 13 locations; incorporate information into adaptive management plan)**

In Progress: **X** Complete: \_\_\_\_\_ Ongoing: **X** Post-Phase I: \_\_\_\_\_

### Next Step: Monitoring Reports after operations

**Due Date(s): Triggered by water delivery**

**Closure Documentation (if any): Pending Monitoring Reports**

**20. Aquatic Invasive Species Control (future mussel control if needed)**

In Progress: \_\_\_\_\_ Complete: **X** Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

**Next Step:** \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Mussel control design documents for JPS and PDC1A

**21. Vegetation – wildlife habitat (meet vegetation related construction and post-construction monitoring conditions)**

In Progress: **X**      Complete:      Ongoing:      Post-Phase I: **X**

**Next Step: Continued monitoring of noxious weeds; post-construction vegetation monitoring**

**Due Date(s): 3 years after final work package is complete**

Closure Documentation (if any): ERO Pre-con reports, CNHP reports, noxious weed reports

**22. Wildlife** (meet wildlife construction conditions, e.g., raptor nest surveys, seasonal restrictions, wildlife crossovers, etc.)

In Progress: \_\_\_\_\_ Complete: **X (Phase I)** Ongoing: \_\_\_\_\_ Post-Phase I: **X**

**Next Step:** \_\_\_\_\_

**Due Date(s): Phase II**

Closure Documentation (if any): ERO Pre-construction reports

### 23. Wetlands (increase Ft. Creek sinuosity)

In Progress: **X** Complete: **X (Project)** Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

## Next Step: Assess 2015 Storm Impacts

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): USACE sign off and Pending BOR acceptance

**24. Clear Springs Ranch** (compensatory wetlands mitigation; stabilization of locations along Fountain Creek; erosion and sediment reduction)

In Progress: **X** Complete: **X (Project)** Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

## Next Step: Assess 2015 Storm Impacts

**Due Date(s):** \_\_\_\_\_

Closure Documentation (if any): Pending USACE sign off and Pending BOR acceptance



**25. Water Quality (monthly sampling of 4 parameters; monitor WCR inlet & outlet for 4 years)**In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I:   X  Next Step: Continue MonitoringDue Date(s): Phase II on WCR (Pending)Closure Documentation (if any): PCAR**26. Geomorphic Mitigation (prepare geomorphic monitoring plan; remove and reduce sediment, increase sinuosity; perform stabilization projects)**In Progress: \_\_\_\_\_ Complete:   X   Ongoing:   X   Post-Phase I: \_\_\_\_\_Next Step: GMP is complete; mitigation ongoing

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Correspondence from BOR & Pueblo County**27. Sediment Load Reductions (dredging and sediment collection in Lower Fountain Creek (Pueblo); geomorphic monitoring at ten cross-sections)**In Progress: \_\_\_\_\_ Complete:   X   Ongoing:   X   Post-Phase I: \_\_\_\_\_Next Step: Dredging complete; Monitoring ongoing

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Payment receipt**28. Adaptive Management Plan (adopt EMS; be capable of addressing unforeseen conditions)**In Progress: \_\_\_\_\_ Complete:   X   Ongoing:   X   Post-Phase I:   X  Next Step: IAMP complete; Maintain EMS

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): EMS database and reports**29. UWCR (enhance angling, boating and other rec opportunities at UWCR)**In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I:   X  

Next Step: \_\_\_\_\_

Due Date(s): Phase II

Closure Documentation (if any): \_\_\_\_\_

**30. Lakes Henry and Meredith (enhance angling and boating and rec opportunities so as to be less vulnerable to water level fluctuations)**In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I:   X  

Next Step: \_\_\_\_\_

Due Date(s): Phase II

Closure Documentation (if any): \_\_\_\_\_

## Contract

**CONTRACT**  
**COLORADO SPRINGS UTILITIES**  
**PROCUREMENT & CONTRACT SERVICES**  
**PO BOX 1103**

Colorado Springs, Colorado 80947-0920  
 Phone (719) 668-3862 Fax (719) 668-3867

CONTRACT# 201111339

SELLER NAME Department of Natural Resources, Colorado Division of Wildlife PHONE 719-227-5202 FAX 719-227-5297

ADDRESS 6060 Broadway, Denver, CO ZIP 80216

SELLER EMAIL doug.krieger@state.co.us

REQUESTOR, DEPT. & ADDRESS Keith Riley, Southern Delivery System, P.O. Box 1103, MC 930, Colorado Springs, CO 80903

BUYER & PHONE Amy M. Watson, J.D. (719) 668-3081

This contract is made and entered into by and between Colorado Springs Utilities, an enterprise of the City of Colorado Springs, a Colorado home rule municipal corporation ("UTILITIES") and Department of Natural Resources, Colorado Division of Wildlife as an independent contractor ("SELLER") as follows:

1. SELLER shall perform the following Work to Colorado Springs Utilities: SELLER shall study and provide information regarding the reproductive biology and recruitment of flathead chub in Fountain Creek as it relates to flow, which will address the need to consider future operations of the Southern Delivery System Program in establishing conservation priorities for the species according to the attached Exhibit A - Scope of Work.

2. COMPENSATION. In consideration of the Work provided hereto, UTILITIES agrees to pay SELLER the sum of:

NOT TO EXCEED FEE: ( \$225,000.00 ) Two Hundred Twenty-Five Thousand Dollars and No Cents

UTILITIES shall pay SELLER on a time and materials basis according to the rates provided in the attached Exhibit B - Rates.

Payment of undisputed invoices at the prices stipulated herein is due and payable Net Thirty (30) Days from UTILITIES receipt of a complete and accurate invoice for supplies or services accepted by UTILITIES. Each invoice shall be accompanied by supporting documentation as required by UTILITIES.

3. TERM OF CONTRACT. The term of this Contract shall commence on the 22nd day of August, 2011.

and shall terminate on the 30th day of June, 2014, unless earlier terminated under this Contract, or otherwise agreed in writing by the parties. Specific delivery schedules are included in Article 1 above as applicable.

4. NOTICE. Any notice to either party necessary or required under this Contract shall be in writing, delivered to the person designated below at the indicated address unless otherwise designated in writing. All notices shall be personally delivered, sent by overnight delivery service, or mailed by certified mail, postage prepaid and return receipt requested. Notice given by personal delivery, overnight delivery, or mail shall be effective upon actual receipt.

**FOR UTILITIES:**

Name Procurement and Contract Services Manager

Address P.O. Box 1103, MC 940

City, State COLORADO SPRINGS, CO 80903

IN WITNESS WHEREOF, the parties have executed this contract:

FOR UTILITIES:

Amy M. Watson, J.D.  
 Signature

Typed name Amy M. Watson, J.D.

Typed title Procurement Contracting Agent

**FOR SELLER:**

Name Mr. Doug Krieger, Division of Wildlife

Address 4255 Sinton Road

City, State COLORADO SPRINGS, CO 80907

FOR SELLER:

Marilyn Gallegos Ramirez  
 Signature

Typed name Marilyn Gallegos Ramirez

Typed title Assistant Director, Summer Session

## Payment

**DIRECT PAY CHECK REQUEST**

See QBD Document 10874 or call Accounts Payable 688-8550

Please send this form with supporting documentation / Itemized receipt attached to: Accounts Payable - Mail Code 929

**\*\*\* IF YOU HAVE AN INVOICE, PLEASE DO NOT USE THIS FORM \*\*\***  
 Please write the account number and the approval signature directly on the invoice.

|   |   |
|---|---|
| <b>Date the check is needed:</b>  | 10/17/2011<br><i>Colorado</i>   |
| <b>Make check payable to:</b>   | Department of Wildlife  |
| <b>Indicate Remit vendor number:</b><br>Include number only if known  |   |
| <b>Vendor's remit address:</b><br>You must provide the full mailing address with the city, state and zip code   | 34255 Sinton Road<br>Colorado Springs, CO 80907   |
| <b>Amount of check:</b>   | \$225,000.00  |
| <b>Description to appear on check:</b><br>(Reason for check):<br>Please attach supporting documentation or a copy of form to be mailed with check   | CDOW Aquatic Research   |
| <b>The check will be mailed to the vendor</b><br>unless you provide name of the person to contact when the check is ready to be picked up   | Name: Allison Guinn<br>Phone: 688-8747  |
| <b>Do you have an attachment you want sent with the check?</b><br>Include attachment with this form   | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |
| <b>Requested by:</b><br><b>Phone number:</b>  | Scott Shewey<br>x88515  |
| <b>Approval Signature:</b><br><b>AND Name Printed:</b><br>Your supervisor or manager's name and their signature. Approver must be set up for signature authority in RMS. Manager needs to call TSC to set up authorization. | <br>Type Name: Keith Riley  |
| <b>Date Approved:</b>   | 10/14/11  |
| <b>Debit *G/L Account Number:</b><br>A minimum 19-digit number or a 30-digit number if Account number 107000 is used  | 100-305180-107000-0090 394377-33039<br>Example: 000-000000-000000-0000 (NO question marks allowed)<br><br>* Also include the Activity and Account Category number when Account number 107000 is used<br>Example: 000-000000-107000-0000 000000-000000 |

## IWRP



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ENVIRONMENT ▾

SAFETY ▾

ABOUT US ▾

## Integrated Water Resource Plan

Maintaining a dependable water supply for Colorado Springs residents and businesses is one of our community's greatest challenges. Continuous, long-term water planning is the reason Colorado Springs has an excellent and reliable water system today that supports our economy and quality of life.

An Integrated Water Resource Plan (IWRP) is being developed to serve as our community's roadmap for ensuring a reliable, cost-effective water supply for the next 50 years and beyond.

Colorado Springs' last water resource plan was done almost 20 years ago and we have already implemented or are continuing to implement all four major components recommended in that plan, including conservation efforts, nonpotable water development, existing infrastructure improvements and the Southern Delivery System, a new major water delivery system. Adding new supplies or infrastructure can take several decades, so the time to plan is now. Recent drought, wildfires and flooding exemplify the need for continued water resources planning.

### Goal of the new plan

The goals of the IWRP are to sustainably address water supply and demand issues, while reflecting our community values, and to be adaptable to changing conditions. Through the IWRP process, we can prepare for changing conditions and uncertainties related to climate variability, hydrology, water rights, aging infrastructure, environmental/recreational water demands, political positions, social values, and environmental regulations. The plan will be developed in three phases:

Phase 1: Identify issues, risks and opportunities

Phase 2: Define strategies to address those issues, risks and opportunities

Phase 3: Finalize a strategic plan

### How will the public be involved?

Over the course of this year, Colorado Springs Utilities

### The source of our water



### Related links

- [Project fact sheet](#)
- [Contact us](#)
- [Public outreach/comments](#)
- [Customer survey results](#)
- [Water system map](#)
- [Water Planning Advisory Group](#)
- [Ensuring the Resiliency of Our Future Water and Energy Systems \(Energy.gov\)](#)
- [Video: The Water Cycle \(NBC Learn\)](#)
- [Climate change in Colorado \(Colorado Water Conservation Board\)](#)

### Frequent questions/answers

- [Graywater use and rainwater harvesting: Can these practices stretch our supply?](#)
- [The Colorado River: Why is it so important to us?](#)
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## Integrated Water Resource Plan Fact Sheet

Maintaining a dependable water supply for Colorado Springs is one of our community's greatest challenges, and one of our great success stories. Because we are the largest city in Colorado not located on a major water source, we rely upon a complex system to transport water to nearly 450,000 people. Continuous, long-term water planning is the reason Colorado Springs enjoys an excellent and reliable water system today; a system necessary for a healthy economy and quality of life.

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**Conservation:** Colorado Springs is a leader in water conservation and has achieved some of the lowest per capita residential water use in the state for similar communities.

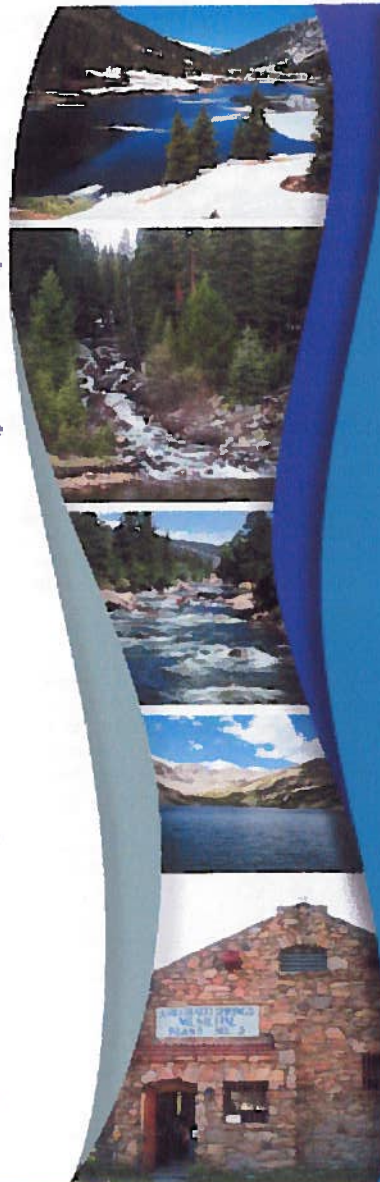
**Nonpotable Water Development:** Utilities pioneered the use of treated wastewater for irrigation and has one of the largest nonpotable water systems in Colorado.

**Existing System Improvements:** Investments in local system improvements have increased the system's effectiveness and enhanced the water system's firm yield. Utilities invested in water rights and infrastructure to recapture much of its reusable wastewater and outdoor irrigation return flows through exchanges on the Arkansas River.

**New Major Delivery System:** Colorado Springs is one of the few cities in the west successfully constructing a new major water project to assist in meeting current and future water needs. Phase 1 of the Southern Delivery System (SDS) project will be completed in 2016. When Phase 1 is finished, SDS will provide a more reliable means to deliver our water. The construction of the future SDS reservoirs will increase local water storage, as well as stretch existing water supplies by expanding water exchange opportunities.

### The Goal of the New Plan

Particularly with the construction of SDS, Colorado Springs is well positioned to meet its future water supply needs. However, the water supply landscape is constantly evolving and we must continue to adapt to address risks and maximize opportunities in the region. The goals of the IWRP are to sustainably address water supply and demand issues, while remaining adaptable to changing conditions. Through the IWRP process, we can prepare for changing conditions and uncertainties related to climate variability, hydrology, water rights, aging infrastructure, environmental/recreational water demands, political positions, social values, and environmental regulations.





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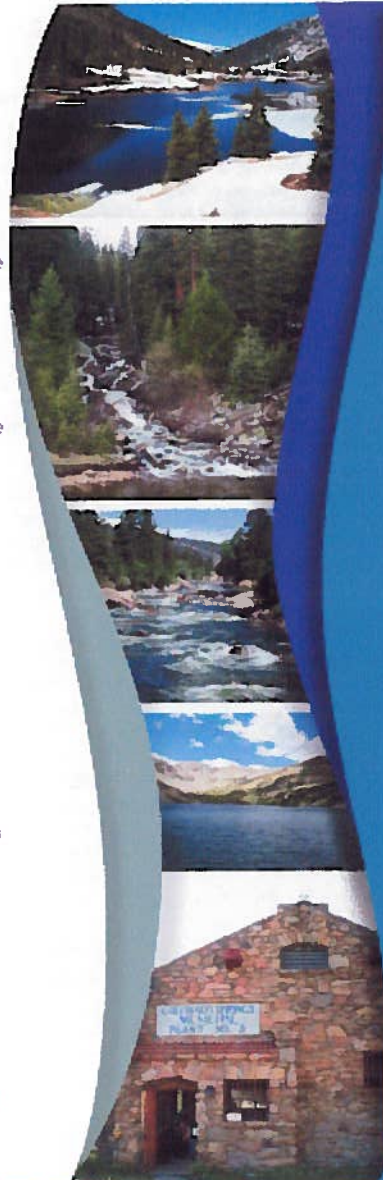
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SIR

# RECLAMATION

*Managing Water in the West*

## **Southern Delivery System Supplemental Information Report**

**Great Plains Region**



U.S. Department of the Interior  
Bureau of Reclamation  
Eastern Colorado Area Office  
Loveland, Colorado

October 2008



## Southern Delivery System Supplemental Information Report

Prepared by the U.S. Department of the Interior, Bureau of Reclamation

### Cooperating Agencies:

- U.S. Army Corps of Engineers
- U.S. Bureau of Land Management
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service

### Abstract:

This Supplemental Information Report provides supplemental information on effects of contracts requested by the City of Colorado Springs, City of Fountain, Security Water District, and Pueblo West Metropolitan District (collectively referred to as the Participants) with the U.S. Department of the Interior, Bureau of Reclamation. The contracts would allow the development of a water supply project known as the Southern Delivery System (SDS) Project.

The purpose of the SDS Project is to provide a safe, reliable, and sustainable water supply for the Participants through the foreseeable future. The primary major federal action analyzed in the DEIS is the execution of up to 40-year contracts with the Bureau of Reclamation, for the use of Fryingpan-Arkansas Project (Fry-Ark Project) facilities. To operate the SDS Project, the Participants require contracts that provide for use of excess storage capacity in Pueblo Reservoir (part of the Fry-Ark Project), conveyance of water through facilities associated with Pueblo Reservoir, and exchange of water between Pueblo Reservoir and Fry-Ark Project reservoirs in the upper Arkansas River Basin. A Draft Environmental Impact Statement (DEIS) was issued on February 29, 2008. The DEIS described and analyzed the potential effects of seven SDS Project alternatives, including a no action alternative, on environmental and human resources in the Arkansas River Basin in Colorado. This Supplemental Information Report provides additional effects information in light of changes to the alternatives and additional analyses since the DEIS was issued. This report has been prepared in compliance with the National Environmental Policy Act.

### For Further Information Contact:

Ms. Kara Lamb,  
Bureau of Reclamation, Eastern Colorado Area Office  
11056 W. County Road 18E, Loveland, CO 80537-9711  
Telephone: (970) 962-4326  
Facsimile: (970) 663-3212  
e-mail: [klamb@ep.usbr.gov](mailto:klamb@ep.usbr.gov)

## Wildlife & Revegetation

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### PRECONSTRUCTION WILDLIFE AND VEGETATION RESOURCES SURVEY SOUTHERN DELIVERY SYSTEM— JUNIPER, WILLIAMS CREEK, AND BRADLEY PUMP STATIONS EL PASO AND PUEBLO COUNTIES, COLORADO

*Prepared for—*

Colorado Springs Utilities  
121 South Tejon Street  
Colorado Springs, Colorado 80947

*Prepared by—*

ERO Resources Corporation  
1842 Clarkson Street  
Denver, Colorado 80218  
(303) 830-1188

May 8, 2013

**ERO**

ERO Resources Corp.  
1842 Clarkson Street

**PRECONSTRUCTION WILDLIFE AND VEGETATION RESOURCES SURVEY  
SOUTHERN DELIVERY SYSTEM –  
JUNIPER, WILLIAMS CREEK, AND BRADLEY PUMP STATIONS  
EL PASO AND PUEBLO COUNTIES, COLORADO**

**MAY 8, 2012**

### **Introduction**

The Southern Delivery System (SDS) Project will convey water from a source location near Pueblo, Colorado to end users in Colorado Springs, Fountain, Security, and Pueblo West. Raw water will be piped from Pueblo Reservoir to a water treatment plant in Colorado Springs. Three pump stations – Juniper, Williams Creek, and Bradley – will be constructed at three separate locations along the pipeline (Figure 1). This report describes the vegetation and wildlife species of concern and noxious weeds found within each of the three pump station study areas. The study areas for vegetation and most wildlife include all areas of potential land disturbance and a 100-meter buffer. The study areas for swift fox den and raptor nest surveys extend out  $\frac{1}{4}$  and  $\frac{1}{2}$  mile from the study area boundaries, respectively.

### **Purpose and Objectives**

ERO Resources Corporation (ERO) conducted vegetation and wildlife resource surveys consistent with Colorado Springs Utilities' commitment to build an environmentally responsible project, and to comply with the mitigation requirements specified in the following environmental review and permitting documents:

- Bureau of Reclamation's (Reclamation) Record of Decision (ROD) for the Southern Delivery System Final Environmental Impact Statement (Reclamation 2009).
- Colorado Springs Utilities' Fish and Wildlife Mitigation Plan for the Southern Delivery System (Colorado Springs Utilities 2010).
- Pueblo County 1041 Permit No. 2008-002 - Southern Delivery System. As adopted in Resolution 94-09 by the Pueblo County Board of County Commissioners (Pueblo County 2009).
- Colorado Weed Management Act, Title 35, Article 5 (Colorado Department of

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**ERO**

**DRAFT**

**NOXIOUS WEED ASSESSMENT REPORT  
SOUTHERN DELIVERY SYSTEM –  
SEGMENT S1  
PUEBLO COUNTY, COLORADO**

*Prepared for—*

Colorado Springs Utilities  
121 South Tejon Street  
Colorado Springs, Colorado 80947

*Prepared by—*

ERO Resources Corporation  
1842 Clarkson Street  
Denver, Colorado 80218  
(303) 830-1188

July 20, 2011



## Wetlands Accounting

| Project Component              | Work Package  | Wetland Identification | 404 Evaluation             |           |                                |           | Post-Construction Wetland Variance (2014) |           |                                |                   | Notes  |   |
|--------------------------------|---|------------------------|----------------------------|-----------|--------------------------------|-----------|---|-----------|--------------------------------|-------------------|--|---|
|                                |   |                        | Jurisdictional<br>Temporal | Permanent | Non-Jurisdictional<br>Temporal | Permanent | Jurisdictional<br>Temporal                | Permanent | Non-Jurisdictional<br>Temporal | Permanent         |  |   |
| 1                              | Finished Water Pipelines  | FW2 CSPW-1             | 0.000                      | 0.000     | 0.400                          | 0.000     | ---                                       | ---       | ---                            | ---               | Excluded from SDS                              |   |
|                                |   | FW3 WUS 3              | 0.500                      | 0.000     | 0.000                          | 0.000     | ---                                       | ---       | ---                            | ---               | Avoided by trenchless crossing                 |   |
|                                |   | FW3 WUS 2              | 0.060                      | 0.000     | 0.000                          | 0.000     | ---                                       | ---       | ---                            | ---               | Avoided by trenchless crossing                 |   |
|                                |   | FW3                    | ---                        | ---       | ---                            | ---       | 0.000                                     | 0.000     | -0.16                          | 0.000             | Wetland Impact in Pond - Not identified in 404 |   |
|                                |   | FW3B WUS 9             | 0.592                      | 0.000     | 0.000                          | 0.000     | ---                                       | ---       | ---                            | ---               | No Wetland (WUS)                               |   |
| Total for Project Component 1  |   |                        | 1.152                      | 0         | 0.4                            | 0         | 0   | 0         | -0.16                          | 0                 | No disturbance in 2014 - UWCR, BPS, WTP        |   |
| Total for Project Component 2  |   |                        | 0                          | 0         | 0                              | 0.19      | 0   | 0         | 0                              | 0                 | No disturbance in 2014 - WCR Return Flow Pipe  |   |
| Total for Project Component 3  |   |                        | 0.573                      | 0.212     | 0.3                            | 0         | 0   | 0         | 0                              | 0                 | 0  |   |
| 4a                             | Pueblo Reservoir Outfall Structure and Untreated Water Pipeline - North     | EPN3-1                 | 0.000                      | 0.000     | 0.117                          | 0.054     | 0.000                                     | 0.000     | 0.000                          | 0.003             |  |   |
|                                |   | EPN4-1                 | 0.000                      | 0.000     | 0.074                          | 0.033     | 0.000                                     | 0.000     | 0.000                          | -0.095            | -0.010   |   |
|                                |   | S4B/NIB EPN4-5         | 0.000                      | 0.000     | 0.087                          | 0.054     | 0.000                                     | 0.000     | 0.000                          | -0.150            | 0.000  |   |
|                                |   | S4B/NIB EPN4-10        | 0.000                      | 0.000     | 0.229                          | 0.138     | 0.000                                     | 0.000     | 0.000                          | 0.000             | 0.043  |   |
|                                |   | S4B/NIB EPN4-20        | 0.000                      | 0.000     | 0.025                          | 0.015     | 0.000                                     | 0.000     | 0.000                          | -0.130            | -0.010   |   |
| Total for Project Component 4a |   |                        | 0.000                      | 0.000     | 0.447                          | 0.261     | 0.000                                     | 0.000     | -0.012                         | -0.003            |  |   |
| 4b                             | Pueblo Reservoir Outfall Structure and Untreated Water Pipeline - South     | EPW1-1                 | 0.000                      | 0.000     | 0.074                          | 0.070     | 0.000                                     | 0.000     | 0.000                          | 0.009             |  |   |
|                                |   | EPW1-5                 | 0.126                      | 0.000     | 0.000                          | 0.000     | 0.000                                     | -0.183    | 0.000                          | 0.000             | 0.000  |   |
|                                |   | EPW1-6                 | 0.000                      | 0.000     | 0.000                          | 0.000     | 0.000                                     | -0.065    | 0.000                          | 0.000             | 0.000  |   |
|                                |   | WCN-1                  | 0.237                      | 0.000     | 0.000                          | 0.000     | 0.000                                     | -0.183    | 0.000                          | 0.000             | 0.000  |   |
|                                |   | EPVNEPV1               | 0.692                      | 0.000     | 0.000                          | 0.000     | 0.000                                     | ---       | ---                            | ---               | ---  | Avoided by trenchless crossing                    |
|                                |   | EPWS-EPW1              | 0.928                      | 0.000     | 0.000                          | 0.000     | 0.000                                     | ---       | ---                            | ---               | ---  | Avoided by trenchless crossing                    |
|                                |   | WUS14                  | 0.085                      | 0.000     | 0.000                          | 0.000     | 0.000                                     | ---       | ---                            | ---               | ---  | No Wetland (WUS)                                  |
|                                |   | WUS15                  | 0.100                      | 0.000     | 0.000                          | 0.000     | 0.000                                     | ---       | ---                            | ---               | ---  | No Wetland (WUS)                                  |
|                                |   | WUS16                  | 0.155                      | 0.000     | 0.000                          | 0.000     | 0.000                                     | ---       | ---                            | ---               | ---  | No Wetland (WUS)                                  |
|                                |   | EPW1-11                | 0.005                      | 0.000     | 0.000                          | 0.000     | 0.000                                     | -0.207    | 0.000                          | 0.000             | 0.000  |   |
|                                |   | PW2-1                  | 0.111                      | 0.000     | 0.000                          | 0.000     | 0.000                                     | 0.000     | 0.000                          | 0.000             | 0.000  | Wetlands did no exist at time of pre-construction |
|                                |   | PW2-2                  | 0.005                      | 0.000     | 0.000                          | 0.000     | 0.000                                     | -0.011    | 0.000                          | 0.000             | 0.000  |   |
| PDC PW3-4                      | 1.290   | 0.026                  | 0.000                      | 0.000     | 0.000                          | ---       | ---                                       | ---       | ---                            | Impacts avoided   |  |   |
| JUM PW3-5                      | 0.540   | 0.000                  | 0.000                      | 0.000     | 0.000                          | ---       | ---                                       | ---       | ---                            | Excluded from SDS |  |   |
| Total for Project Component 4b |   |                        | 4.853                      | 0.026     | 0.074                          | 0.07      | -0.629                                    | 0         | 0                              | 0.003             |  |   |
| 4c                             | Untreated Water Pipeline from Upper Williams Creek Reservoir to the SDS WTP | LUC8                   | 1.472                      | 0.000     | 0.000                          | 0.000     | ---                                       | ---       | ---                            | ---               | Wetland removed from 404                       |   |
|                                |   | None                   | 0.060                      | 0.000     | 0.000                          | 0.000     | ---                                       | ---       | ---                            | ---               | Wetland removed from 404                       |   |
|                                |   | WUS7                   | 0.064                      | 0.000     | 0.000                          | 0.000     | ---                                       | ---       | ---                            | ---               | No Wetland (WUS)                               |   |
|                                |   | WUS4N                  | 0.675                      | 0.000     | 0.000                          | 0.000     | ---                                       | ---       | ---                            | ---               | Avoided by re-alignment                        |   |
|                                |   | WUS4S                  | 0.643                      | 0.000     | 0.000                          | 0.000     | ---                                       | ---       | ---                            | ---               | Avoided by re-alignment                        |   |
| Total for Project Component 4c |   |                        | 3.438                      | 0         | 0                              | 0         | ---                                       | ---       | ---                            | ---               | No Wetland (WUS)                               |   |
| Total for Project Component 4d |   |                        | 0                          | 0         | 0                              | 0         | 0   | 0         | 0                              | 0                 | No disturbance in 2014 - WCR                   |   |
| Total for Project Component 5  |   |                        | 2.551                      | 0         | 0                              | 0.343     | 0   | 0         | 0                              | 0                 | No disturbance in 2014 - CHL                   |   |
| Total for Project Component 6  |   |                        | 12.4                       | 0.24      | 15.00                          | 12        | -0.623                                    | 0         | -0.65                          | 0.027             |  |   |
| Total Impact                   |   |                        | 12.379                     | 0.238     | 13.83                          | 11.793    | -0.629                                    | 0         | -0.547                         | 0.027             |  |   |

## Avoid Wildlife



390 Interlocken Crescent, Suite 800  
Broomfield, Colorado 80021  
P. 303.835.1220  
F. 303.835.1373

### PROJECT MEMORANDUM

|                      |  |                                 |
|----------------------|--|---------------------------------|
| <b>Project Name:</b> | SDS WTP and Finished Pump Station  | <b>Date:</b> August 11, 2011    |
| <b>Client:</b>       | Colorado Springs Utilities   | <b>Project Number:</b> 8790A.40 |
| <b>Prepared By:</b>  | Vincent Hart   |                                 |
| <b>Subject:</b>      | FAA Wildlife Attractants   |                                 |
| <b>Distribution:</b> | Jay Hardison, Kirk Olds (Colorado Springs Utilities)<br>Steve Gotschal, Paul Laufer (McCarthy)<br>Bart Giles (Carollo) |                                 |

#### 1.0 BACKGROUND

The original 30% design and the proposed design for the Southern Delivery System Water Treatment Plant and Finished Water Pump Station (SDS WTP) includes features that would produce uncovered areas of standing water. The proposed features include a stormwater pond and engineered sludge lagoons.

The stormwater pond is necessary to meet the City of Colorado Springs and El Paso County drainage requirement that site stormwater flows from 10-year and 100-year design storm events are released at or below historical flow rates. The stormwater pond would also serve as an overflow location for the raw water storage tank, finished water storage tank, and main water treatment building.

The engineered sludge lagoons are a proposed value engineering item that would accommodate solids blowdown and backwash wastewater from the water treatment process. The engineered sludge lagoons have a large volume which can handle the processing of both backwash wastewater and sludge blowdown at the same time. This simplification eliminates the solids equalization basin (open basin) and associated mixing, pumping, and piping proposed by the 30% design of the SDS WTP. It also eliminates the operations and maintenance intensive filter drying process.

#### 2.0 FAA GUIDANCE DOCUMENT AND NEARBY AIRPORTS

The Federal Aviation Administration (FAA) has produced a guidance document (AC No. 150/5200-33B) outlining recommendations for land uses that have potential to attract hazardous wildlife (wildlife that are associated with aircraft strike problems) on or near public-use airports. The document is attached as Appendix A. Water management facilities, including the proposed lagoons and stormwater pond for the SDS WTP, are considered to have potential to attract hazardous wildlife per the FAA guidance document.

1

\\fs1\Carollo\documents\Error! Unknown document property name.\Error! Unknown document property name.

**INTERGOVERNMENTAL AGREEMENT AMONG  
THE CITY OF PUEBLO, THE CITY OF COLORADO SPRINGS  
AND THE BOARD OF WATER WORKS OF PUEBLO, COLORADO**

THIS INTERGOVERNMENTAL AGREEMENT ("Agreement") is entered into as of the 1<sup>st</sup> day of March, 2004, among the City of Pueblo, Colorado ("Pueblo"), the Board of Water Works of Pueblo, Colorado ("Board") and the City of Colorado Springs, on behalf of its utility enterprise known as Colorado Springs Utilities ("Colorado Springs"). The three entities together are referred to as "the Parties."

**RECITALS**

- A. This Agreement is entered into pursuant to sections 29-1-201 through 203, C.R.S. Each of the Parties is a political subdivision of the State of Colorado within the meaning of section 29-1-202(2), C.R.S., and therefore each are governments within the meaning of section 29-1-202(1). Both Pueblo and Colorado Springs are home rule cities pursuant to Article XX, Section 6 of the Colorado Constitution. The Board is established by the charter of the City of Pueblo, which was adopted pursuant to Article XX of the Colorado Constitution.
- B. The conditions of this Agreement are based upon principles of comity and the long-standing mutual respect of and between the Parties.
- C. Pueblo Reservoir and its dam ("Pueblo Dam") are features of the Frylingpan-Arkansas Project ("Project") constructed by the United States Bureau of Reclamation ("Reclamation") pursuant to Congressional authorization. Public Law 87-490. The Parties are each located within the boundaries of the Southeastern Colorado Water Conservancy District ("District"), established pursuant to 37-45-101 C.R.S. *et seq.*, and the Parties, along with the residents of Colorado Springs and Pueblo, are beneficiaries of the Project and pay taxes and user fees to support the operation of the Project.
- D. The Parties acknowledge that the development and adoption into law of certain recommendations of the "Preferred Storage Options Plan" report relating to the Project, prepared for the District and dated September 21, 2000 ("PSOP"), are important to many municipalities and agricultural interests in the Arkansas River Basin.
- E. Pueblo has begun implementation of the Arkansas River Corridor Legacy Project ("Legacy Project"), significant aspects of which have been developed and are being constructed in partnership with the United States Army Corps of Engineers ("Corps"). The Legacy Project is intended to restore and improve the Arkansas River through the City of Pueblo. Among other goals, the Legacy Project will restore riparian habitat, and improve recreational opportunities in and along the Arkansas River, including through the construction of in-channel water diversion and control structures. To further the goals of the Legacy Project,

# ORIGINAL

## INTERGOVERNMENTAL AGREEMENT AMONG THE CITY OF PUEBLO, THE CITY OF AURORA, THE SOUTHEASTERN COLORADO WATER CONSERVANCY DISTRICT, THE CITY OF FOUNTAIN, THE CITY OF COLORADO SPRINGS, AND THE BOARD OF WATER WORKS OF PUEBLO, COLORADO

This Intergovernmental Agreement ("Agreement") is entered into by and among the City of Pueblo, a municipal corporation ("Pueblo"), the City of Aurora, Colorado, acting by and through its Utility Enterprise ("Aurora"), the Southeastern Colorado Water Conservancy District ("the District"), the City of Fountain ("Fountain"), the City of Colorado Springs ("Colorado Springs"), and the Board of Water Works of Pueblo, Colorado ("the Board"). Together these entities are referred to as the "Parties."

### RECITALS

- A. This Agreement is entered into pursuant to sections 29-1-201-203 C.R.S. Each of the Parties is a political subdivision of the State of Colorado within the meaning of section 29-1-202(2) C.R.S., and therefore each is a government within the meaning of section 29-1-202(1). Pueblo, the City of Aurora, Colorado Springs and Fountain are home rule cities pursuant to Article XX of the Colorado Constitution. The District is a Colorado Water Conservancy District established under section 37-45-101 et seq., C.R.S. The Board is established by the charter of the City of Pueblo, which was adopted pursuant to Article XX of the Colorado Constitution.
- B. This Agreement is based upon principles of comity and the desire for cooperation among the Parties.
- C. Pueblo Reservoir and dam ("Pueblo Dam") are features of the Fryingpan-Arkansas Project ("Project") constructed by the United States Bureau of Reclamation ("Reclamation") pursuant to Congressional authorization. Public Law 87-490.
- D. The Parties acknowledge that the development and adoption into law of certain recommendations of the September 21, 2000 "Preferred Storage Options Plan" ("PSOP") report relating to the Project are important to many municipalities and agricultural interests in the Arkansas River Basin and to Aurora.
- E. In partnership with the United States Army Corps of Engineers, Pueblo has begun construction on the Arkansas River Corridor Legacy Project ("Legacy Project"). The Legacy Project is intended to restore riparian habitat and provide enhancements to improve recreational opportunities in and along the Arkansas River through Pueblo. To help achieve the Legacy Project goals, Pueblo desires to protect and



Mussels



## TRANSMITTAL OF CONTRACTOR'S SUBMITTAL

(ATTACH TO EACH SUBMITTAL)

DATE: 06/19/2012

TO: Greg Minnick  
121 S. Tejon, 3rd Floor  
Colorado Springs, CO 80947

Submittal No. 099714-008 Rev. 1☐ New Submittal ☒ Re-submittalProject: SDS - Pueblo Dam ConnectionsProject No.: 201008532Specification Section No.: 099714

(Cover only one section with each transmittal)

FROM: ASI Constructors, Inc.  
Contractor  
1850 E. Platteville Blvd.  
Pueblo West, CO 81007

Schedule Date of Submittal:

06/01/2012SUBMITTAL TYPE: ☐ Shop Drawing ☐ Sample ☒ Informational

The following items are hereby submitted:

| Number of Copies | Description of Item Submitted (Type, Size, Model Number, Etc.)                                      | Spec. and Para. No. | Drawing or Brochure Number | Contains Variation to Contract |     |
|------------------|---|---------------------|----------------------------|--------------------------------|-----|
|                  |   |                     |                            | No                             | Yes |
| 1                | Mussel Control Lining   | 099714              |                            | x                              |     |
|                  | COPIES  |                     |                            |                                |     |
|                  | ASI Constructors, Inc.  |                     |                            |                                |     |
|                  | SDS - Pueblo Dam Connections  |                     |                            |                                |     |
|                  | Submittal No. 099714-008 Rev. 1   |                     |                            |                                |     |
|                  | Spec. No. 097714  |                     |                            |                                |     |
|                  | Reviewer: Pete Dobbs  |                     |                            |                                |     |
|                  | Date Approved: 06/19/2012   |                     |                            |                                |     |
|                  | This submittal has been reviewed, checked, and approved for compliance with the contract documents. |                     |                            |                                |     |

CONTRACTOR hereby certifies that (i) CONTRACTOR has complied with the requirements of Contract Documents in preparation, review, and submission of designated Submittal and (ii) the Submittal is complete and in accordance with the Contract Documents and requirements of laws and regulations and governing agencies.

By: Pete Dobbs  
 CONTRACTOR (Authorized Signature)

PAGE 1 OF 1

REVISED

**Vegetation**

*Consultants in  
Natural  
Resources and  
the Environment*

*Denver, Durango, Hatcher Pass, Idaho*

**PRECONSTRUCTION WILDLIFE AND  
VEGETATION RESOURCES SURVEY  
SOUTHERN DELIVERY SYSTEM –  
SEGMENT N2B  
EL PASO COUNTY, COLORADO**

*Prepared for—*

**Colorado Springs Utilities  
121 South Tejon Street  
Colorado Springs, Colorado 80947**

*Prepared by—*

**ERO Resources Corporation  
1842 Clarkson Street  
Denver, Colorado 80218  
(303) 830-1188**

**May 16, 2014**

**ERO**

ERO Resources Corp.

1842 Clarkson St.

Denver, CO 80218

303.830.1188

From: Ron Beane [mailto:rbeane@erogresources.com]  
 Sent: Tuesday, January 29, 2013 3:30 PM  
 To: Allison Mosser  
 Subject: WTP and Sewerline shape files

Allison,

The only thing of note within the WTP and sewerline project areas is a small prairie dog town (See shape files attached). The vegetation community I was concerned about is east of the WTP. The seed mix for both these areas is the same mix proposed for N2B:

#### Sandhills North of Highway 94

| Common Name            | Scientific Name                | Lbs PLS/<br>Acre |
|------------------------|--------------------------------|------------------|
| Blue grama             | <i>Bouteloua gracilis</i>      | 0.6              |
| Sand dropseed          | <i>Sporobolus cryptandrus</i>  | 0.1              |
| Little bluestem        | <i>Schizachyrium scoparium</i> | 0.5              |
| Needle-and-threadgrass | <i>Hesperostipa comata</i>     | 4                |
| Prairie sandreed       | <i>Calamovilfa longifolia</i>  | 0.8              |
| Western wheatgrass     | <i>Pascopyrum smithii</i>      | 2                |
| Sideoats grama         | <i>Bouteloua curtipendula</i>  | 3                |
| Totals                 |                                | 11               |

We have not yet conduct pre-construction surveys of these areas to specifically map weeds, but there were a few patches of the usual suspects (thistles, knapweed) particularly along the sewerline, so I am including our standard weed control language below:

#### Noxious Weed Control

The following best management practices (BMPs) should be implemented to prevent the spread of the two List C species found within the alignment and to prevent the invasion of other noxious weed species. Preventing the spread of noxious weeds will have the most significant long-term benefit for minimizing the impacts of noxious weeds in the alignment. Prevention is proactive rather than reactive and is the most cost-effective management action. Restoring and maintaining healthy native plants also can prevent noxious weed invasion. The following actions should be used in the alignment:

- Major equipment (e.g., track equipment, rubber tire loaders, and backhoes) should be cleaned by high pressure air or water spray before being delivered to the alignment to avoid introducing undesirable plants and noxious weeds.
- Topsoil containing any noxious weeds should be removed or strictly managed to preclude the spread of seeds and noxious weed species.
- All imported topsoil should be weed free.
- Do not use fertilizer or other soil amendments unless recommended by a re-vegetation specialist based on specific site conditions. The use of fertilizers should be restricted because they can promote noxious weeds and can be detrimental to the native species in the seed mix.
- Disturbed areas should be reclaimed as soon as practicable after completion of construction and seeded with an appropriate native seed mix (certified as noxious weed-free). In areas where construction is complete but seeding cannot immediately occur due to the time of year, mulch and mulch tackifier should be used for temporary erosion control until seeding can occur. Do not use cover crops.

Consultants in  
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ERO

**DRAFT**

**NOXIOUS WEED ASSESSMENT REPORT  
SOUTHERN DELIVERY SYSTEM –  
SEGMENT S1  
PUEBLO COUNTY, COLORADO**

*Prepared for—*

Colorado Springs Utilities  
121 South Tejon Street  
Colorado Springs, Colorado 80947

*Prepared by—*

ERO Resources Corporation  
1842 Clarkson Street  
Denver, Colorado 80218  
(303) 830-1188

July 20, 2011



## Bird Surveys



Colorado Springs Utilities  
It's how we're all connected

## Nest Clearance Survey Report

Client: ☒ CSU ☐ COCS Date: 03/16/2013 Time: 930-1130 ☒ am ☐ pm  
 Surveyed by: Ron Beane Accompanied by: \_\_\_\_\_

## Project Information

Project name: Upper Williams Creek WTP Work Order #: \_\_\_\_\_  
 Location: Hwy 94 and Marksheffel Rd, Colorado Springs  
 County: El Paso  
 Contact name: Allison Mosser  
 Contact phone number: 719.668-8667  
 Contact e-mail: amosser@csu.org

## Summary of Findings

☒ No active\* migratory bird nests were observed.

☐ Yes, inactive migratory bird nest(s) were observed.  
 (Please refer to attached CSU Nest Report for details.)

Species: \_\_\_\_\_  
 GPS Coordinates: \_\_\_\_\_

Species: \_\_\_\_\_  
 GPS Coordinates: \_\_\_\_\_

☐ Yes, active\* migratory bird nest(s) were observed.  
 (Please refer to attached CSU Nest Report for details.)

Species: \_\_\_\_\_  
 GPS Coordinates: \_\_\_\_\_

Species: \_\_\_\_\_  
 GPS Coordinates: \_\_\_\_\_

\* Active nest — nest containing eggs or young.

## Additional Comments

Winter resident or migrating birds observed included:

Horned larks

Lark sparrows

## Management Recommendations

☒ No permit under the MBTA is necessary. Proceed with proposed project work.

☐ Coordinate with CSU EVS Division regarding project schedule, possible nest removal, and agency reporting.

☐ Other (describe): \_\_\_\_\_

Rev. 3/2013



## Nest Clearance Survey Report

Client: ☒ CSU ☐ COCS Date: 11 April 2013 Time: 12:30 – 3:30 ☐ am ☒ pm  
 Surveyed by: Ron Beane Accompanied by: \_\_\_\_\_

### Project Information

Project name: Southern Delivery System Work Order #: \_\_\_\_\_  
 Location: Williams Creek Pump Station  
 County: El Paso  
 Contact name: Allison Mosser  
 Contact phone number: (719) 668-8667  
 Contact e-mail: amosser@csu.org

### Summary of Findings

- ☒ No active\* migratory bird nests were observed.
- ☐ Yes, inactive migratory bird nest(s) were observed.  
 (Please refer to attached CSU Nest Report for details.)
- ☐ Yes, active\* migratory bird nest(s) were observed.  
 (Please refer to attached CSU Nest Report for details.)

Species: \_\_\_\_\_  
 GPS Coordinates: \_\_\_\_\_

Species: \_\_\_\_\_  
 GPS Coordinates: \_\_\_\_\_

Species: \_\_\_\_\_  
 GPS Coordinates: \_\_\_\_\_

Species: \_\_\_\_\_  
 GPS Coordinates: \_\_\_\_\_

\* Active nest — nest containing eggs or young.

### Additional Comments

No breeding migratory birds and no active nests were observed. Particular attention was paid to surveying for burrowing owls and burrowing owl sign (droppings) within shortgrass prairie and scanning all trees within 1/3 mile for active raptor nests. No burrowing owls or raptor nests (active or inactive) were observed.

The only non-nesting birds observed were horned larks.

### Management Recommendations

- ☒ No permit under the MBTA is necessary. Proceed with proposed project work.
- ☐ Coordinate with CSU EVS Division regarding project schedule, possible nest removal, and agency reporting.
- ☐ Other (describe): \_\_\_\_\_

Consultants in  
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resources and  
the environment

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**ERO**

ERO Resources Corp.  
1842 Clarkson Street  
Denver, CO 80218  
(303) 830-1188

**SENSITIVE WILDLIFE SPECIES SURVEY  
SOUTHERN DELIVERY SYSTEM  
S1 RAW WATER PIPELINE  
PUEBLO COUNTY, COLORADO**

*Prepared for—*

Southern Delivery System  
Colorado Springs Utilities  
121 South Tejon Street  
Colorado Springs, Colorado 80947

*Prepared by—*

ERO Resources Corporation  
1842 Clarkson Street  
Denver, Colorado 80218  
(303) 830-1188

June 30, 2011

## Wetlands Letter

REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS  
SOUTHERN COLORADO REGULATORY OFFICE  
200 S. SANTA FE AVENUE, SUITE 301  
PUEBLO, COLORADO 81003

January 22, 2015

## Regulatory Division

**SUBJECT:** Mitigation compliance for impacts to jurisdictional waters of the United States for the Southern Delivery System- Action No. SPA-2005-00131-SCO

Allison Mosser  
Colorado Springs Utilities  
P.O. Box 1103 MC940  
Colorado Springs, CO 80902

Ms. Mosser:

I am writing this letter concerning your Department of the Army Permit No. SPA-2005-00131-SCO for the required jurisdictional mitigation for the Southern Delivery System on the Clear Spring Ranch property in El Paso County, Colorado.

We have determined that the required mitigation for impacts in jurisdictional waters of the United States is established and complete. Thus, no further monitoring or annual reports are required for the mitigation within our jurisdiction.

If you have any questions concerning this matter, please contact me at 719-543-6915 or by e-mail at [van.a.truan@usace.army.mil](mailto:van.a.truan@usace.army.mil).

Sincerely,

A handwritten signature in black ink, appearing to read "Van A. Truan", written over a horizontal line.

Van Truan  
Chief, Southern Colorado  
Regulatory Office



## Wetlands Letter

REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS  
SOUTHERN COLORADO REGULATORY OFFICE  
200 S. SANTA FE AVENUE, SUITE 301  
PUEBLO, COLORADO 81003

January 22, 2015

## Regulatory Division

SUBJECT: Mitigation compliance for impacts to jurisdictional waters of the United States for the Southern Delivery System- Action No. SPA-2005-00131-SCO

Allison Mosser  
Colorado Springs Utilities  
P.O. Box 1103 MC940  
Colorado Springs, CO 80902

Ms. Mosser:

I am writing this letter concerning your Department of the Army Permit No. SPA-2005-00131-SCO for the required jurisdictional mitigation for the Southern Delivery System on the Clear Spring Ranch property in El Paso County, Colorado.

We have determined that the required mitigation for impacts in jurisdictional waters of the United States is established and complete. Thus, no further monitoring or annual reports are required for the mitigation within our jurisdiction.

If you have any questions concerning this matter, please contact me at 719-543-6915 or by e-mail at [van.a.truan@usace.army.mil](mailto:van.a.truan@usace.army.mil).

Sincerely,

A handwritten signature in dark ink, appearing to read "Van A. Truan", is written over a horizontal line.

Van Truan  
Chief, Southern Colorado  
Regulatory Office

## WQ Monitoring Data from PCAR:

| Location                                       | Date     | Flow | Barometric pressure | Dissolved oxygen | pH  | Specific conductance | Temperature | Turbidity | Estuaries col | New Tryptocarium | Ammonia | New Selenium | New |
|--|----------|------|---------------------|------------------|-----|----------------------|-------------|-----------|---------------|------------------|---------|--------------|-----|
| Standards (if applicable)                      |          |      |                     |                  |     |                      |             |           | 126           | See Note         |         | 17.4         |     |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20131021 | 141  | 646                 | 9.4              | 8.4 | 342                  | 12.8        | 16        | 24            | 1700             | 0.02    | 8.8          |     |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20131113 | 103  | 649                 | 10.6             | 8.4 | 481                  | 9.1         | 4.7       | 18            | 650              | 0.02    | 7.1          |     |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20131204 | 55   | 639                 | 11.9             | 8.7 | 639                  | 4.7         | 0.2       | 6             | 190              | 0.02    | 15.8         |     |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20140113 | 58   | 646                 | 13.5             | 8.8 | 639                  | 3.3         | 2.1       | 3             | 100              | <0.02   | 20.3         |     |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20140219 | 67   | 638                 | 13.1             | 8.6 | 621                  | 8           | 4.2       | 4             | 47               | <0.02   | 12.7         |     |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20140320 | 70   | 644                 | 13.1             | 8.7 | 604                  | 2.9         | 7.6       | 1             | 110              | 0.03    | 13.9         |     |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20140521 | 159  | 638                 | 11.5             | 8.7 | 546                  | 8.3         | 3.3       | 1             | 130              | <0.02   | 11.9         |     |
| Selenium Standard @ range: 0.1 ug/L to 10 ug/L |          |      |                     |                  |     |                      |             |           |               |                  |         |              |     |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20140512 | 104  | 649                 | 11.1             | 8.6 | 472                  | 9.4         | 0.2       | 13            | 2400             | <0.02   | 8.5          |     |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20140520 | 460  | 642                 | 9.3              | 8.3 | 407                  | 13.4        | 13        | 11            | 1400             | 0.099   | *12          | 5   |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20140520 | 1360 | 651                 | 8.7              | 8.4 | 271                  | 16.5        | 15        | 44            | 2400             | <0.02   | 2.6          |     |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20140812 | 867  | 649                 | 8.3              | 8.2 | 322                  | 19.6        | 14        | 26            | >1400            | 0.02    | 4.5          |     |
| ARKANSAS RIVER AT MORFAT STREET AT PUEBLO, CO  | 20140922 | 343  | 643                 | 8.6              | 8.7 | 348                  | 21.7        | 5.5       | 14            | >1400            | 0.05    | *13          | 4.7 |
| Selenium (if applicable)                       |          |      |                     |                  |     |                      |             |           |               |                  |         |              |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20111022 | 25.0 | 614                 | 10.9             | 8.1 | 288                  | 8.2         | 45        | 110           | 520              | <0.02   | 0.2          |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20131112 | 31.0 | 621                 | 10.5             | 8.2 | 339                  | 4.7         | 63        | 54            | 2400             | 0.02    | 0.2          |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20131203 | 15   | 599                 | 10.4             | 8.1 | 351                  | 4.2         | 0.3       | 66            | 170              | <0.02   | 0.17         |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20140109 | 11   | 604                 | 10.9             | 8.2 | 360                  | 2.2         | 0.2       | 330           | 290              | <0.02   | 0.2          |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20140211 | 5.9  | 609                 | 10.7             | 8.2 | 487                  | 2.1         | 8.6       | 44            | 170              | <0.02   | 0.24         | *10 |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20140524 | 8.1  | 606                 | 10.6             | 8.4 | 437                  | 4.5         | 7.2       | 370           | 960              | 0.02    | 0.2          |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20140630 | 6.9  | 602                 | 10.1             | 8.3 | 445                  | 5.6         | 2.6       | 38            | 140              | <0.02   | 0.2          |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20140628 | 10   | 606                 | 9.1              | 8.3 | 383                  | 9.4         | 57        | 770           | 2400             | <0.02   | 0.2          |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20140626 | 9.9  | 611                 | 8.1              | 8.7 | 329                  | 13.9        | 60        | 270           | 10000            | <0.02   | 0.16         |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20140710 | 8.5  | 611                 | 7.7              | 8.3 | 430                  | 16          | 22        | 1000          | 8700             | <0.02   | 0.16         |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20140811 | 20   | 618                 | 8.5              | 8.2 | 298                  | 12.3        | 180       | 1700          | 24000            | 0.07    | 0.16         |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO.      | 20140920 | 9.9  | 608                 | 7.5              | 8.3 | 444                  | 17.3        | 15        | *             | *                | <0.02   | 0.17         |     |

GMP

# **Southern Delivery System Geomorphic Mitigation Plan**

Prepared for:  
**Bureau of Reclamation**

Submitted by:  
**Colorado Springs Utilities, SDS Project Manager  
on behalf of the SDS Participants**

March 15, 2011

## Executive Summary

---

The Southern Delivery System Project (SDS Project) is a proposed regional water delivery system that will serve the City of Colorado Springs, the City of Fountain, Security Water District, and Pueblo West Metropolitan District (SDS Participants). The SDS Project is designed to serve all or most of the future water needs of the citizens of the SDS Participants through the year 2046. The first phase of the SDS Project is scheduled to be in service in 2016.

A Final Environmental Impact Statement (FEIS) (Bureau of Reclamation 2009) was developed for the SDS Project. The FEIS listed various impacts, including some geomorphic impacts that were identified as ranging from beneficial to adverse. A series of geomorphic mitigation measures were stated in the FEIS that are designed to address the potential adverse impacts associated with the SDS Project.

Consistent with good practice, the SDS Project geomorphic mitigation approach is to first attempt to avoid or minimize potential adverse impacts. When avoidance and minimization are not possible, additional mitigation measures will be employed, including energy dissipation structures that reduce the erosion potential of return flow discharges, channel and streambank modifications that compensate for anticipated effects of increased return flows, and measures that address areas of existing sediment deposition. In addition, unexpected adverse impacts of SDS Project operations identified after the construction of the SDS Project, should they occur, will be addressed in accordance with the processes defined in the SDS Project Integrated Adaptive Management Plan (IAMP).

This Geomorphic Mitigation Plan (GMP) describes the geomorphic mitigation measures that the SDS Project will implement to mitigate impacts of the SDS Project. Many of these mitigation measures have been incorporated as part of commitments made to secure other permits or approvals required to construct and operate the SDS Project. This GMP has been prepared in accordance with the requirements of the U.S. Bureau of Reclamation's (Reclamation) Record of Decision (ROD). The SDS Project GMP is designed to be a companion to the SDS Project's IAMP, which is also consistent with the requirements of the ROD.

Several specific mitigation measures are proposed in the GMP. These address issues raised in the ROD. The specific geomorphic mitigation measures proposed in the GMP that address the issues raised in the ROD are:

- Payment of two million, two hundred and two thousand dollars (\$2,202,000) made to Pueblo County to allow it to implement projects that provide for the removal of sediments, through dredging and the installation of sediment collection devices, that reduce the effectiveness of U.S. Army Corps of Engineers' levees located near Fountain Creek at its confluence with the Arkansas River
- Implementation of a project at Clear Spring Ranch that increases the sinuosity of Fountain Creek and mitigates impacts to jurisdictional and non-jurisdictional wetlands



At its August 23, 2013 meeting, following discussion, upon motion duly made, seconded and carried, the District Board adopted/ratified the following Resolution by a vote of

8-0

**RESOLUTION NO. 2013-05—LAND USE**

**BOARD OF DIRECTORS  
FOUNTAIN CREEK WATERSHED, FLOOD CONTROL,  
AND GREENWAY DISTRICT**

**A RESOLUTION APPROVING/RATIFYING THE DISTRICT BOARD'S APPROVAL OF THE LAND USE APPLICATION BY COLORADO SPRINGS UTILITIES PROJECT MANAGER, ON BEHALF OF THE SOUTHERN DELIVERY SYSTEM PROJECT PARTICIPANTS, FOR THE FOUNTAIN CREEK STREAM REALIGNMENT MITIGATION PROJECT LOCATED WITHIN THE FOUNTAIN CREEK CORRIDOR.**

**WHEREAS**, Colorado Springs Utilities as Applicant and on behalf of the City of Colorado Springs, City of Fountain, Security Water District and Pueblo West Metropolitan District ("Project Participants") (collectively referred to herein as "CSU") did request review and approval of the Southern Delivery System (SDS) Fountain Creek Stream Realignment Mitigation Project ("the Project") in response to the requirements of C.R.S. §§32-11.5-101, et seq., which gives the Fountain Creek Watershed, Flood Control, and Greenway District ("District") full land use authority within the Fountain Creek Corridor, defined generally as the FEMA 100-Year Floodplain boundaries between the City of Fountain and the City of Pueblo, and recommending authority for areas outside of the Corridor and within the Fountain Creek Watershed Management Area ; and

**WHEREAS**, the Project consists of two (2) energy dissipation structures and riprap within the banks of Fountain Creek, located within the Fountain Creek floodplain and construction of approximately three (3) acres of wetlands and is on Clear Spring Ranch; and

**WHEREAS**, public hearings on CSU's applications were held by the District Technical Advisory Committee ("TAC") on August 7, 2013, and by the District Citizens' Advisory Group ("CAG") on August 9, 2013; and

**WHEREAS**, a public hearing on CSU's land use application for the Project was held by the District Board on August 23, 2013; and

**WHEREAS**, based on the evidence, testimony, exhibits, presentation by CSU, comments of all interested parties and the public, and comments by the Directors, the District Board found/finds as follows:

**Dredging & Geomorphic**

Colorado Springs Utilities

*At home with all emergency*

September 29, 2010

Board of County Commissioners of Pueblo County  
215 West 10<sup>th</sup> Street  
Pueblo, CO 81003

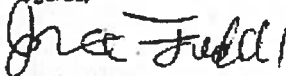
**Re: Pueblo County 1041 Permit for SDS**

Dear Commissioners:

On Monday, September 27, 2010, I hand-delivered a check to Pueblo County in the amount of \$2,202,000.00. The payment represented by this check is in fulfillment of the SDS participants' obligations to comply with Condition No. 8 of 1041 Permit No. 2008-002 for the Southern Delivery System. The payment has been made in accordance with our mutual understandings and agreements set forth in letters from Colorado Springs dated August 19, 2010 and from Pueblo County dated August 30, 2010. In accordance with the terms of these letters we understand that the SDS participants have now completely fulfilled their obligations to comply with Condition No. 8.

Thank you for your cooperation in arriving at this resolution.

Regards,



John A. Fendall  
Southern Delivery System Program Director

- c: Kim Headley, Director, Pueblo County Department of Planning and Development  
Jerry Forte, Chief Executive Officer, Colorado Springs Utilities  
Bruce McCormick, Chief Water Services Officer, Colorado Springs Utilities  
Keith Riley, SDS Planning and Permitting Program Manager, Colorado Springs Utilities

121 South Tejon Street, Third Floor  
P.O. Box 1103, Mail Code 930  
Colorado Springs, CO 80947-0930

Phone 719/668-4800  
Fax 719/668-8774  
<http://www.csu.org>



U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
CP-41101  
W-11K-5.023

## United States Department of the Interior

BUREAU OF RECLAMATION  
Great Plains Region  
P.O. Box 26900  
Billings, Montana 59107-6900



SEP 24 2010

Mr. Jerry Forte, Chief Executive Officer  
Colorado Springs Utilities  
121 South Tejon Street, Fifth Floor  
P.O. Box 1103, Mail Code 950  
Colorado Springs, CO 80947-0950

Subject: Mitigation Conditions for the Preferred Alternative for the Southern Delivery System (SDS) Specifically Condition 8 to the Pueblo County 1041 Permit, Fryingpan-Arkansas Project, Colorado

Dear Mr. Forte:

In your letter dated September 3, 2010, you request confirmation that the arrangement between Pueblo County and Colorado Springs Utilities (Springs Utilities) is acceptable to the Bureau of Reclamation. You explain that the SDS project participants will be making a payment to Pueblo County in lieu of the actual dredging activity described in Condition 8 of the Pueblo County 1041 Permit. Additionally, you sent us a copy of Pueblo County's letter signed by Kim H. Hendley, the Director of Pueblo County Planning and Development, dated August 30, 2010. In this letter he states that the County Commissioners have agreed to accept payment in lieu of dredging in order to meet the requirement of Condition 8.

The current proposed Excess Capacity Contract No. 11XN6C0002 with Spring Utilities has an article titled "Environmental Compliance and Commitments" which ensures that the mitigation measures identified in the Record of Decision are complied with for the life of the contract. Reclamation recognizes that this payment arrangement in lieu of dredging is consistent with those contract requirements with the understanding that Pueblo County will undertake other satisfactory mitigation efforts to protect the 100 year flood capacity of Fountain Creek through the City of Pueblo.

If you have any questions, please contact Michael Collins at 970-962-4300.

Sincerely,

Michael J. Ryan  
Regional Director

cc: Mr. Jerry Forte  
P.O. Box 1103, Mail Code 950  
Colorado Springs, CO 80947-0950

10100 Fryingpan Project 1041 Permit 1041-0002

V. Sharda/Reclamation Reclamation/10100 Fryingpan Project/1041-0002  
10100 Fryingpan Project/1041 Permit 1041-0002  
County dredging 1041-0002

J.E. CHOSTNER  
CHAIRMAN  
DISTRICT 3

JOHN B. CORDOVA, SR.  
DISTRICT 2



ANTHONY NUÑEZ  
DISTRICT 1

KIM B. HEADLEY  
DIRECTOR  
planning@co.pueblo.co.us

August 30, 2010  
DEPARTMENT OF PLANNING AND DEVELOPMENT

John A. Fredell  
Southern Delivery System Program Director  
Colorado Springs Utilities  
P. O. Box 1103, Mail Code 930  
Colorado Springs, CO 80947-0930

**RE: SOUTHERN DELIVERY SYSTEM, PUEBLO COUNTY 1041 PERMIT  
NO. 2008-002; CONDITION 8: SEDIMENT CONTROL/DREDGING**

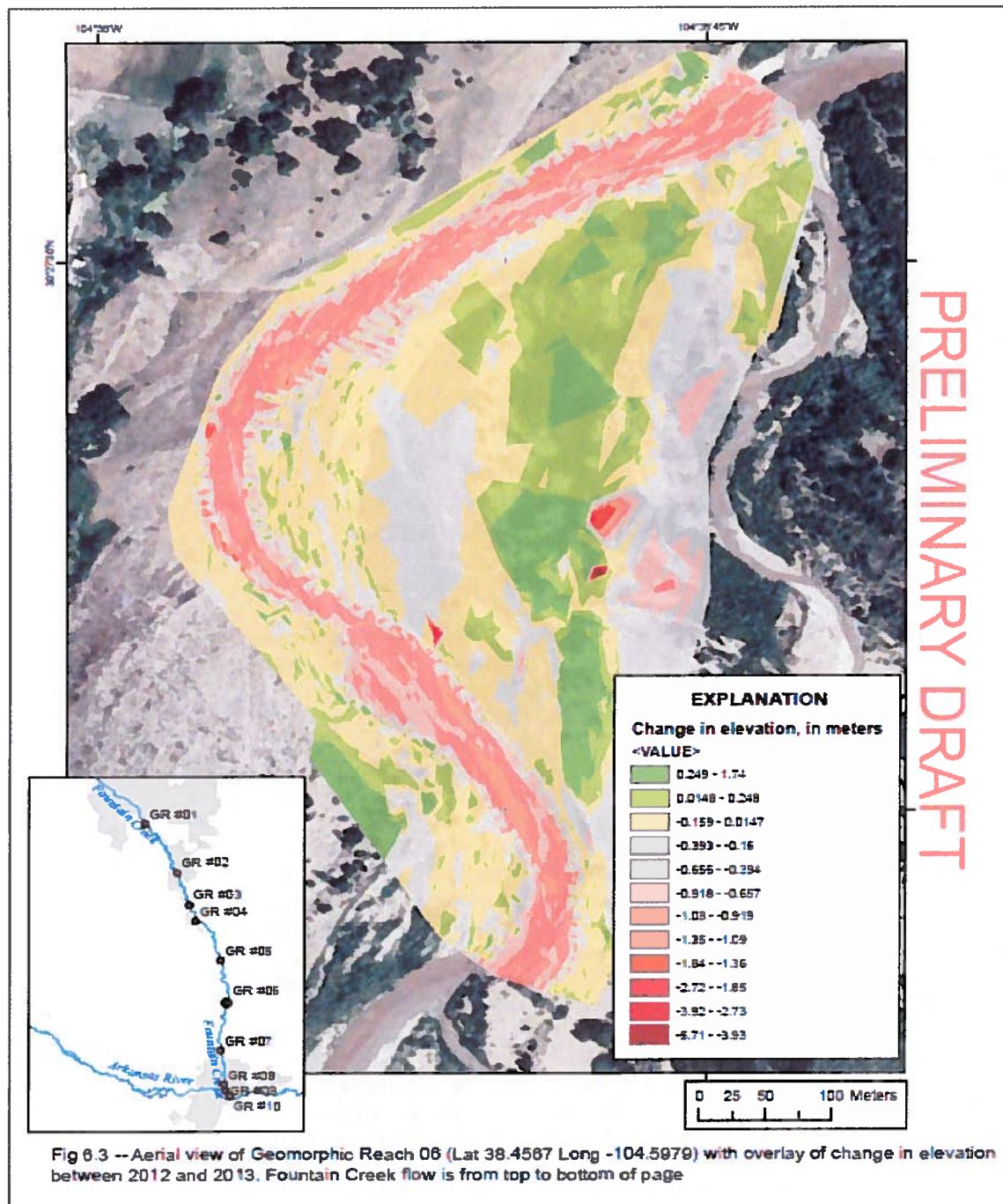
Dear Mr. Fredell:

I have reviewed your letter of August 19, 2010, concerning the above-referenced matter and have shared the same with the Board of County Commissioners. The purpose of my letter is to respond to your request for direction from Pueblo County on how it intends for Colorado Springs Utilities to proceed on the subject of compliance with Condition No. 8 of the SDS Permit.

The Board of County Commissioners has requested that I confirm its determination that a payment in lieu of dredging and installation of sediment collection devices is an acceptable approach to satisfying the requirement of Condition No. 8. It is the Board's determination that this approach, i.e. the acceptance of a payment in lieu of actual construction, is not a material change that would require a permit amendment pursuant to Condition No. 5 of the SDS Permit. Given the determination of the Board on each of these issues, it is our understanding that Colorado Springs Utilities will present funds in the amount of \$2,202,000.00 payable to Pueblo County within a reasonable period of time not to exceed thirty (30) days from the date of this letter.

Our interpretation of Condition No. 8 is that the funds so received will be used for another project designed to assist the City of Pueblo in restoring and maintaining sufficient flood protection to allow its existing levy systems to withstand a 100-year flood and, further, that any such project will be subject to the approval of the Bureau of Reclamation. As to whether or not that project meets the conditions of Section 5.2.4 of the FEIS will be a matter left to the Bureau of Reclamation and to Colorado Springs Utilities. While the Board of County Commissioners will fully commit to expending funds on a project, subject to BOR approval, which meets the language of Condition No. 8, the Board is not, through the acceptance of these funds, making any representation that





PRELIMINARY DRAFT

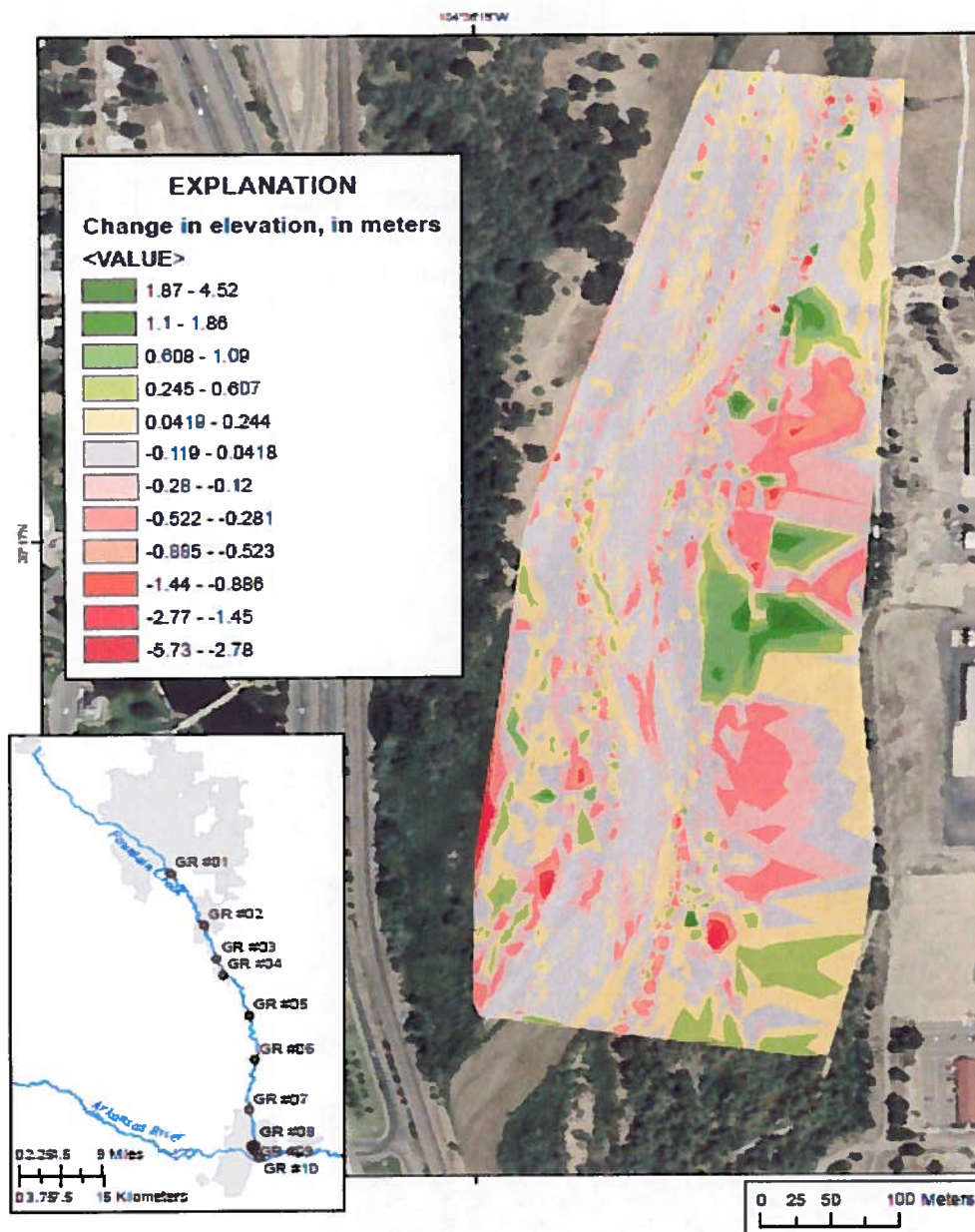
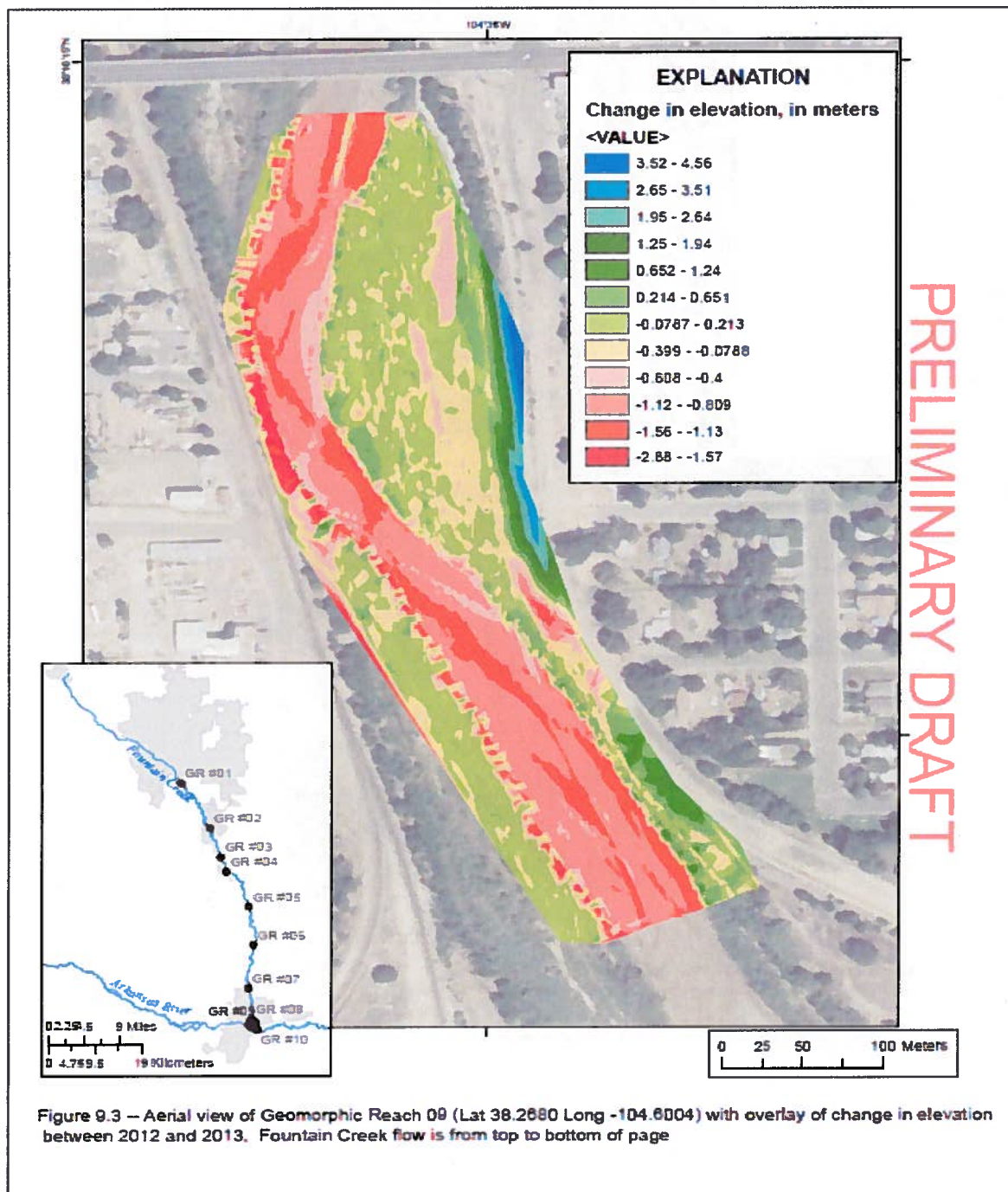
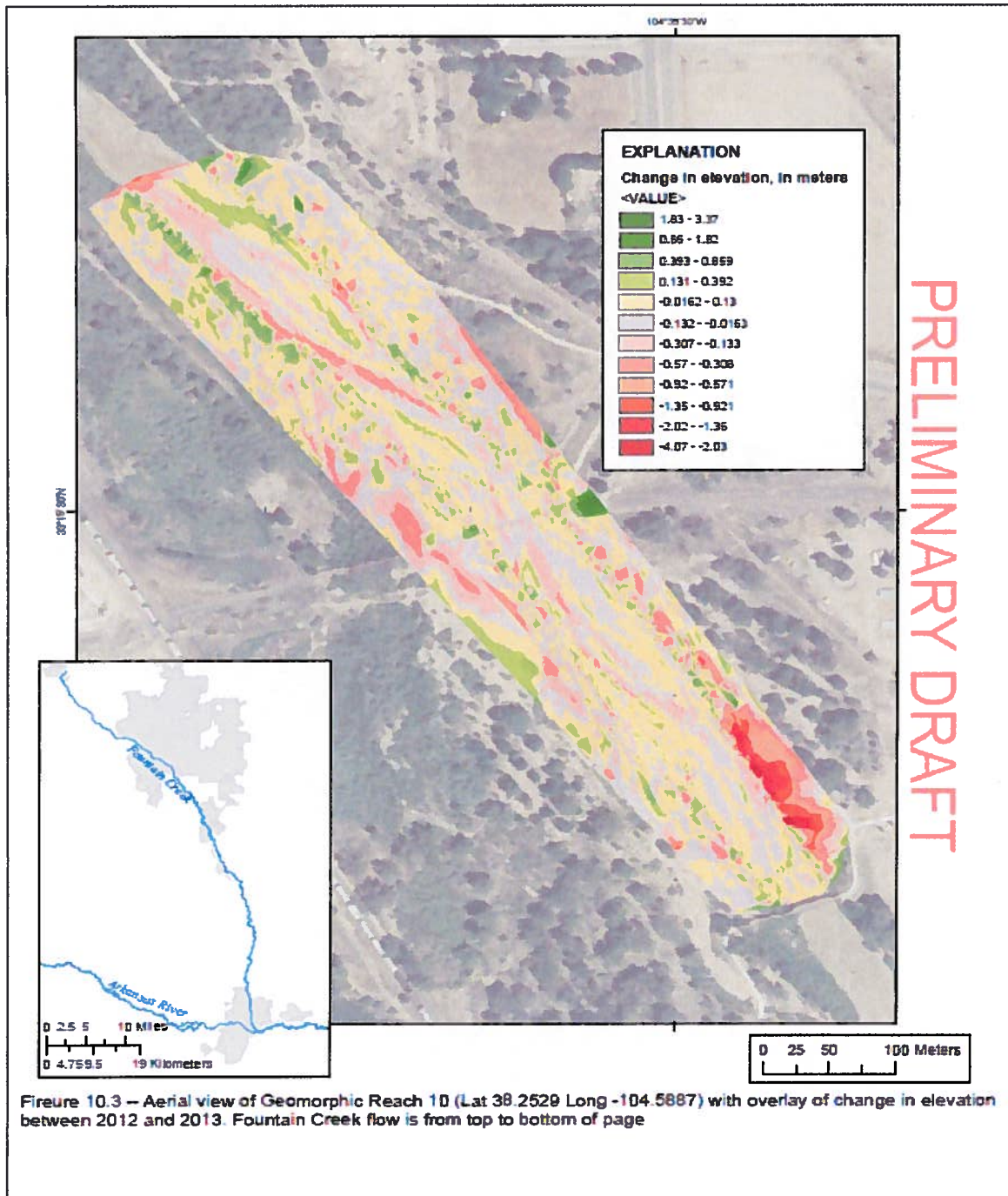


Fig 8.3 -- Aerial view of Geomorphic Reach 08 (Lat 38.2828 Long -104.6032) with overlay of change in elevation between 2012 and 2013. Fountain Creek flow is from top to bottom of page









**MetricStream**      Welcome: Olivia Williams      My Tests: [None] Failed      Help      Universal Search

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Compliance Management    Access    SVE    Task Owner    Manager    Approver    System


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### Compliance Management

Airport Incidents  
Be sure to update system status for any issues weekly.

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**EMS**



## Environmental Management Systems (EMS)

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---

## Environmental Management Systems (EMS)

An Environmental Management System (EMS) is a set of processes and practices that enable an organization to reduce its environmental impacts and increase its operating efficiency. This Web site provides information and resources related to EMS for businesses, associations, the public, and state and federal agencies.

### What is an EMS?

[EMS Home](#)  
[What is EMS and an EMS](#)  
[Training and Resources](#)

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|   |   |
|---|---|
| <b>Reports</b><br><br><a href="#">Annual Tracking Report</a><br><br><a href="#">List of Available Annual Reports</a><br><br><a href="#">Tools &amp; Data Report</a><br><br><a href="#">Declaration Tracking Report</a><br><br><a href="#">Self-Audit Report</a> | <b>Dashboards</b><br><br><a href="#">Executive Dashboard</a><br><br><a href="#">Plant Dashboard</a><br><br><a href="#">System Metrics Dashboard</a><br><br><a href="#">Task and Issue Dashboard</a><br><br><a href="#">Work Package Dashboard</a> |
|---|---|

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Page 1 of 3    Navigation icons

# SDS EMS Table of Contents

| Key Elements                         | File(s)   | Location                           | Communication Notes   |
|--------------------------------------|---|------------------------------------|---|
| 1 Environmental Policy               | Following CSU's published environmental policy see Colorado Springs SDS Environmental Management System (EMS) Policy Statement.docx                             | SDS SharePoint                     | <b>Environmental Policy</b>   |
| 2 Environmental Aspects              | <input checked="" type="checkbox"/> <a href="http://www.sdwater.org">www.sdwater.org</a>  | Web                                | Environmental Aspects of SDS have been published on website   |
| 3 Legal Requirements                 | <input checked="" type="checkbox"/> See individual permits as well as FEIS and ROD at <a href="http://www.sdwater.org">www.sdwater.org</a>                      | SDS SharePoint & Web               | FEIS and ROD have been published on website.  |
| 4 Objectives and Targets             | <input checked="" type="checkbox"/> <a href="http://www.sdwater.org">www.sdwater.org</a>  | Web                                | Environmental Objectives and Targets for SDS have been published on website.  |
| 5 Environmental Management Program   | <input checked="" type="checkbox"/> See SDS Environmental Commitments Plan  | SDS SharePoint                     | <b>Environmental Commitments Plan</b>   |
| 6 Structure and Responsibility       | <input checked="" type="checkbox"/> See SDS Organizational Chart  | SDS SharePoint                     | <b>SDS Organizational Chart</b>   |
| 7 Training and Awareness             | <input checked="" type="checkbox"/> See specific EMS Training Materials   | SDS SharePoint                     | <b>EMS Training Toolkit</b>   |
| 8 Communication                      | <input checked="" type="checkbox"/> See EMS Dashboard Announcements & SDS SharePoint  | SDS SharePoint                     | <b>Environmental Team Site Announcements</b>  |
| 9 EMS Documentation                  | <input checked="" type="checkbox"/> See EMS Document Library  | SDS SharePoint                     | See Environmental Team Site Permit Documents/Minutemen Environmental Management System - EMS Current Index of Files (This file)   |
| 10 Document Control                  | <input checked="" type="checkbox"/> EMS Document Management Plan  | SDS SharePoint                     | SDS Document Management Plan is undergoing revision. All EMS Documents will reside in SharePoint regardless. 02/01/2012, <a href="http://owilliams@csu.org">owilliams@csu.org</a> |
| 11 Operational Control               | <input checked="" type="checkbox"/> See SDS Program Management Plan (PMP)   | SDS SharePoint                     | <b>Program Management Plan</b>  |
| 12 Emergency Preparedness            | <input checked="" type="checkbox"/> See SDS HASP  | SDS SharePoint                     | <b>SDS Health and Safety Plan</b>   |
| 13 Evaluation of Compliance          | <input checked="" type="checkbox"/> For NEPA compliance, see individual permits as well as FEIS and ROD at <a href="http://www.sdwater.org">www.sdwater.org</a> | SDS SharePoint & Web               | FEIS and ROD have been published on website.  |
| 14 Monitoring and Measurement        | <input checked="" type="checkbox"/> See EMS Dashboard and Other Metrics   | SDS SharePoint & MetricsStream GRC | See this workbook's EMS Metric Report tab.  |
| 15 Corrective and Preventive Actions | <input checked="" type="checkbox"/> See Audit Form(s)   | SDS SharePoint & MetricsStream GRC | <b>Internal EMS Audit Form</b>  |
| 16 Records                           | <input checked="" type="checkbox"/> See SharePoint Environmental Page for Various Libraries   | SDS SharePoint & MetricsStream GRC | All records will be archived in SDS SharePoint. 10/23/2011, <a href="http://owilliams@csu.org">owilliams@csu.org</a>  |
| 17 EMS Auditing                      | <input checked="" type="checkbox"/> See Audit Form(s)   | SDS SharePoint                     | <b>SDS EMS Management Review Form</b>   |
| 18 Management Review                 | <input checked="" type="checkbox"/> See Management Review Form & Meeting Minutes  | SDS SharePoint                     | <b>Management Review Form - Completed 1/24/11</b>   |

EMS Content Index of Files

3/13/2015

# **Southern Delivery System**

## **Integrated Adaptive Management Plan**

Prepared for:

**Bureau of Reclamation**

Submitted by:

**Colorado Springs Utilities, SDS Project Manager  
on behalf of the SDS Participants**

**CH2MHILL**

March 18, 2011

FWMP

# **Southern Delivery System Fish and Wildlife Mitigation Plan**

Prepared for:

**The Colorado Wildlife Commission  
in accordance with C.R.S. 37-60-122.2**

In Partnership:

**Colorado Springs Utilities  
City of Fountain  
Security Water District  
Pueblo West Metropolitan District  
Colorado Division of Wildlife**

March 11, 2010



## SCMP

# Southern Delivery System Socioeconomic Construction Management Plan

PREPARED FOR: U.S. Bureau of Reclamation  
 PREPARED BY: Colorado Springs Utilities  
 DATE: March 15, 2011

## Introduction

This Socioeconomic Construction Management Plan (SCMP) summarizes the approach by the Southern Delivery System Project (SDS Project) to minimize SDS Project construction impacts to local residents and the economies of El Paso and Pueblo Counties. This SCMP has been prepared by Colorado Springs Utilities, the SDS Project Manager, on behalf of the SDS Participants (City of Colorado Springs, the City of Fountain, Security Water District, and Pueblo West Metropolitan District) and is consistent with the requirements of the U.S. Bureau of Reclamation's (Reclamation) Record of Decision (ROD) for the SDS Project (Reclamation 2009).

## Regulatory Requirement

The Socioeconomics and Land Use section of the SDS Project ROD states the following:

"The following mitigation measures will be implemented:

- Acquire properties and easements through voluntary, willing participant agreements to the maximum extent practicable
- Develop a construction management plan to outline best management practices to minimize impacts to surrounding properties and submit plan to Reclamation for approval prior to construction.

Adverse short-term effects on landowners with parcels that will contain SDS features will be offset through mutually agreed upon compensation. The land use mitigation measures will minimize disturbances to properties near the project during construction or minimize land use changes and conflicts." (Reclamation 2009)

## Construction Management Plan

### Property and Easement Acquisition

Colorado Springs Utilities will work cooperatively with property owners to obtain the easements and land required for the SDS Project. Colorado Springs Utilities, the SDS Participant responsible for purchasing easements and land on behalf of the SDS Project, will strictly adhere to the established guidelines detailed in the City of Colorado Springs' Procedure Manual for the Acquisition and Disposition of Real Property Interests (City of Colorado Springs 2007). This Procedure Manual is derived from the Federal Uniform

PA



March 27, 2012

Ms. Belinda C. Mollard  
 Archaeologist  
 Eastern Colorado Area Office  
 Bureau of Reclamation  
 11056 West County Road 18E  
 Loveland, CO 80537-9711

Dear Belinda:

Enclosed please find a copy of the Programmatic Agreement (PA), Amendment 2 and the accompanying Area of Potential Effect (APE) map and Individual Area Maps USGS, 1:24,000 scale, to include new areas for addition to the Southern Delivery System (SDS) project. We have supplied 16 copies for distribution to the Colorado Historic Preservation Office (one copy), 14 interested Tribes (14 copies), and the Bureau of Reclamation (one copy):

- *SDS Programmatic Agreement, Amendment 2;*
- *Updated Area of Potential Effects Map; and*
- *Individual Area Maps, USGS 1:24,000.*

New additions to the APE include activities associated with the following:

- Juniper Pump Station Power Supply
- Williams Creek Pump Station Power Supply
- Bradley Pump Station Relocation and Power Supply
- Bradley Road Realignment
- Water Treatment Plant Sanitary Sewer Line Tie-in and Relocation of the Portions of the Raw Water Pipeline in the Northern Alignment from the north end of Work Package N2A to the Water Treatment Plant
- Finished Water 3.

These versions have been placed on the SDS SharePoint site.

**PROGRAMMATIC AGREEMENT  
AMONG  
THE BUREAU OF RECLAMATION, EASTERN COLORADO AREA OFFICE,  
COLORADO SPRINGS UTILITIES, AND  
THE COLORADO STATE HISTORIC PRESERVATION OFFICER  
REGARDING  
THE SOUTHERN DELIVERY SYSTEM PROJECT**

WHEREAS, Colorado Springs Utilities, the City of Fountain, Security Water District, and Pueblo West Metropolitan District (Project Participants) intend to develop and construct a water delivery system from Pueblo, Colorado or Fremont County to Colorado Springs, Colorado, for the purpose of providing water to the Project Participants' service areas, called the Southern Delivery System (Project); and

WHEREAS, the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) which owns and operates the Fryingpan-Arkansas Project, proposes to issue long term storage, conveyance, and exchange contracts with the Project Participants to use Fryingpan-Arkansas Project facilities, and is acting as lead Federal Agency for purposes of complying with Section 106 of the National Historic Preservation Act (NHPA); and

WHEREAS, the project represents a series of undertakings with similar, repetitive effects to historic properties, the effects usually can not be determined before final siting, and the Advisory Council on Historic Preservation (ACHP) was invited but declined to participate in the consultation leading to this agreement, and Reclamation has consulted with the Colorado State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 14; and

WHEREAS, Reclamation has identified and notified the Apache Tribe of Oklahoma, the Cheyenne and Arapaho Tribes of Oklahoma, the Comanche Nation of Oklahoma, the Fort Sill Apache Tribe, the Jicarilla Apache Nation, the Kiowa Tribe of Oklahoma, the Mescalero Apache Tribe, the Northern Arapaho Tribe, the Northern Cheyenne Tribe, the Northern Ute Tribe, the Pawnee Nation of Oklahoma, the Shoshone Tribe (Eastern Band), the Shoshone-Bannock Tribe, the Southern Ute Indian Tribe, the Ute Indian Tribe, and the Ute Mountain Ute Tribe as Native American Tribes that may attach religious and cultural significance to historic properties in the Area of Potential Effect (APE); and

WHEREAS, The Cheyenne and Arapaho Tribes of Oklahoma, the Comanche Nation, the Jicarilla Apache Nation, the Kiowa Tribe of Oklahoma, the Northern Cheyenne Tribe, Northern Arapaho Tribe, the Northern Ute Tribe, the Pawnee Nation of Oklahoma, the Southern Ute Indian Tribe, and the Ute Mountain Ute Tribe have requested to be Consulting Parties for this undertaking, according to 36 CFR 800.2(c)(2) and 800.3(f)(2); and these Tribes have indicated their interest in this PA and have been invited to sign as Concurring Parties, pursuant to 36CFR 800.6(c)(3); and

WHEREAS, Colorado Springs Utilities will be responsible for constructing the Project, will

PA



March 27, 2012

Ms. Belinda C. Mollard  
 Archaeologist  
 Eastern Colorado Area Office  
 Bureau of Reclamation  
 11056 West County Road 18E  
 Loveland, CO 80537-9711

Dear Belinda:

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New additions to the APE include activities associated with the following:

- Juniper Pump Station Power Supply
- Williams Creek Pump Station Power Supply
- Bradley Pump Station Relocation and Power Supply
- Bradley Road Realignment
- Water Treatment Plant Sanitary Sewer Line Tie-in and Relocation of the Portions of the Raw Water Pipeline in the Northern Alignment from the north end of Work Package N2A to the Water Treatment Plant
- Finished Water 3.

These versions have been placed on the SDS SharePoint site.



**PROGRAMMATIC AGREEMENT  
AMONG  
THE BUREAU OF RECLAMATION, EASTERN COLORADO AREA OFFICE,  
COLORADO SPRINGS UTILITIES, AND  
THE COLORADO STATE HISTORIC PRESERVATION OFFICER  
REGARDING  
THE SOUTHERN DELIVERY SYSTEM PROJECT**

WHEREAS, Colorado Springs Utilities, the City of Fountain, Security Water District, and Pueblo West Metropolitan District (Project Participants) intend to develop and construct a water delivery system from Pueblo, Colorado or Fremont County to Colorado Springs, Colorado, for the purpose of providing water to the Project Participants' service areas, called the Southern Delivery System (Project); and

WHEREAS, the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) which owns and operates the Fryingpan-Arkansas Project, proposes to issue long term storage, conveyance, and exchange contracts with the Project Participants to use Fryingpan-Arkansas Project facilities, and is acting as lead Federal Agency for purposes of complying with Section 106 of the National Historic Preservation Act (NHPA); and

WHEREAS, the project represents a series of undertakings with similar, repetitive effects to historic properties, the effects usually can not be determined before final siting, and the Advisory Council on Historic Preservation (ACHP) was invited but declined to participate in the consultation leading to this agreement, and Reclamation has consulted with the Colorado State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 14; and

WHEREAS, Reclamation has identified and notified the Apache Tribe of Oklahoma, the Cheyenne and Arapaho Tribes of Oklahoma, the Comanche Nation of Oklahoma, the Fort Sill Apache Tribe, the Jicarilla Apache Nation, the Kiowa Tribe of Oklahoma, the Mescalero Apache Tribe, the Northern Arapaho Tribe, the Northern Cheyenne Tribe, the Northern Ute Tribe, the Pawnee Nation of Oklahoma, the Shoshone Tribe (Eastern Band), the Shoshone-Bannock Tribe, the Southern Ute Indian Tribe, the Ute Indian Tribe, and the Ute Mountain Ute Tribe as Native American Tribes that may attach religious and cultural significance to historic properties in the Area of Potential Effect (APE); and

WHEREAS, The Cheyenne and Arapaho Tribes of Oklahoma, the Comanche Nation, the Jicarilla Apache Nation, the Kiowa Tribe of Oklahoma, the Northern Cheyenne Tribe, Northern Arapaho Tribe, the Northern Ute Tribe, the Pawnee Nation of Oklahoma, the Southern Ute Indian Tribe, and the Ute Mountain Ute Tribe have requested to be Consulting Parties for this undertaking, according to 36 CFR 800.2(c)(2) and 800.3(f)(2); and these Tribes have indicated their interest in this PA and have been invited to sign as Concurring Parties, pursuant to 36CFR 800.6(c)(3); and

WHEREAS, Colorado Springs Utilities will be responsible for constructing the Project, will

Noise



May 10, 2011  
Kleinfelder Job No.: 117689-1

Mr. Steve Duling  
Southern Delivery System Program  
121 South Tejon Street, Plaza of the Rockies, 3<sup>rd</sup> Floor  
Colorado Springs, Colorado 80903

**Subject: Baseline Noise Monitoring Results**  
**Southern Delivery System, Pueblo Dam Connection 1A**  
**Pueblo Reservoir**  
**Pueblo, Colorado**

Dear Mr. Minnick:

On May 3<sup>rd</sup>-6<sup>th</sup>, 2011, Kleinfelder performed noise monitoring services for the SDS Pueblo Dam Connection 1A under Colorado Springs Utilities Task Order #201106569. The Dam Connection 1A location (the Site) is located on the west side of the dam structure in Pueblo, Colorado. The purpose of the noise monitoring services was to measure baseline noise conditions prior to the commencement of construction activities at the Site.

Kleinfelder installed a Metrosonics db-3080 Noise Monitor along the Bureau of Land Management fence-line and conducted three (3) twenty-four (24) hour monitoring periods in which noise levels were logged each minute. The monitoring was conducted from May 3<sup>rd</sup> through May 6<sup>th</sup> using a db-3080 Noise Monitor.

The results of the 24-hour averages are summarized in Table 1 below. Detailed data is included on the attached graphs.

**Table 1 – Baseline Noise Monitoring Results Summary**

|  |       |                                  |       |
|--|-------|----------------------------------|-------|
| Monitoring Start Date: May 3, 2011           |       | Monitoring End Date: May 6, 2011 |       |
| Equipment: Metrosonics db-3080 Noise Monitor |       |                                  |       |
|  | Day 1 | Day 2                            | Day 3 |
| 24-hour Average Noise Level (dB)             | 67.7  | 69.2                             | 69.3  |

PCAR

# **Southern Delivery System Permit Compliance Annual Report Calendar Year 2014**

Prepared for:

**Bureau of Reclamation**

**Colorado Department of Public Health and  
Environment**

**Colorado Division of Parks and Wildlife**

**El Paso County**

**Pueblo County**

**Fountain Creek Watershed Flood Control and  
Greenway District**

Submitted by:

**Colorado Springs Utilities, SDS Project Manager  
on behalf of the SDS Participants**

January 2015

Site Access

Southern Delivery System Contractor Minimum Safety Requirements



Colorado Springs Utilities  
It's how we're all connected

# ***Minimum Standard for Contractor Site Safety Plan (MSSSP)***

Prepared for: **SDS**  
**Content Requirements  
For Contractor MSSSP  
Version 2.0  
April 1, 2011**



PS

MEETING SUMMARY



# **Southern Delivery System Juniper Pump Station Architectural Definition Workshop**

**ATTENDEES:** Beth Boaz/Reclamation/Loveland  
Tom Musgrove/Reclamation/Pueblo  
Larry Bean/Reclamation/Billings  
Mike French/State Parks  
Mike Dowd/State Parks  
Bob Robler/Colorado Springs Utilities  
Russ Nicklin/Colorado Springs Utilities  
Bruce Lintjer/Lintjer + Haywood Architects  
Kevin Heffernan/CH2M HILL

**COPIES:** Bruce Spiller/CH2M HILL  
Juniper Pump Station Design Team

**NOTES TAKEN BY:** Bruce Lintjer/ Lintjer + Haywood Architects

**MEETING DATE:** January 27, 2005

**LOCATION:** State Parks Visitor Center, Lake Pueblo State Park

The meeting was started with a brief introduction by each attendee. Kevin Heffernan explained the primary purpose of the meeting was to convene together Reclamation and State Parks, with Colorado Springs Utilities and the design team, to establish the architectural design schemes and approaches mutually acceptable for Juniper Pump Station. A copy of the meeting agenda and sign-in sheet is attached following the meeting summary.

Beth Boaz qualified the meeting today was independent of the current NEPA study. The final recommendation for Southern Deliver System (SDS) project components will be made in the Record of Decision (ROD). Bob Robler indicated the current design work taking place was at-risk for Colorado Springs Utilities.

Bob Robler questioned what agency had the authority to approve architectural approaches for Juniper Pump Station. Beth Boaz and Larry Bean indicated the agency is Reclamation.

## **Southern Delivery System Overview:**

- A brief description of SDS was provided, with particular emphasis on the proposed source water location, pump station, and pipelines. All of which are on Reclamation's property at Lake Pueblo State Park.
- The current SDS project schedule was discussed. The ROD is expected in early 2007. Construction will start shortly thereafter. The SDS project is planned to be operational in early 2010.

# Colorado Springs Utilities Southern Delivery System

*Restored Vegetation Cover Monitoring – Work Segment S3-13N*



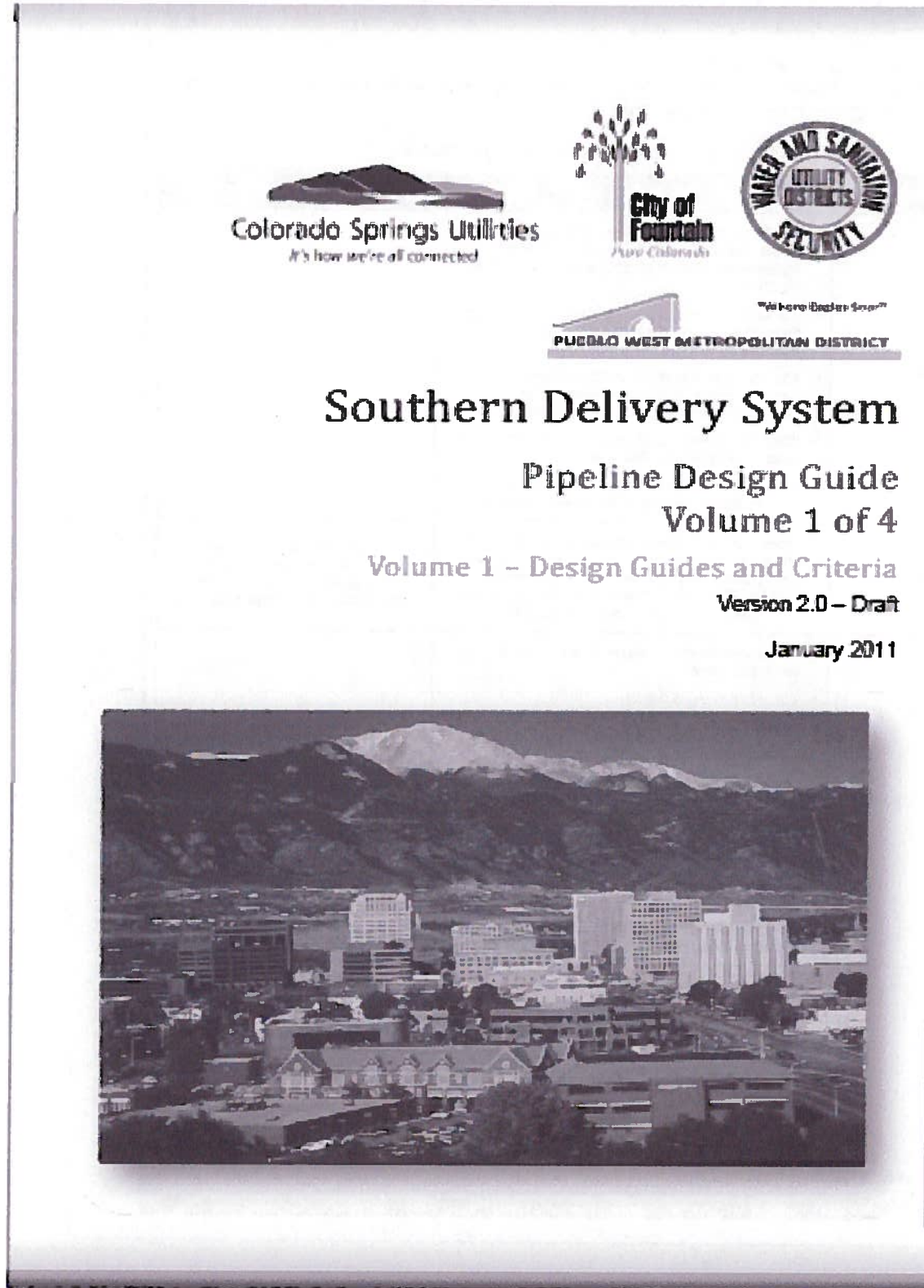
*Prepared for:*  
Colorado Springs Utilities  
Southern Delivery System  
Colorado Springs, CO 80947

*Prepared by:*  
Colorado Natural Heritage Program  
Colorado State University  
Fort Collins, CO 80523

September, 2014

**Colorado**

Design Guide



PS

MEETING SUMMARY



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Specs

**Documents for the Construction of the  
SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S2**

**VOLUME 1 OF 2  
SPECIFICATIONS  
APRIL 4, 2011**

**OWNER'S REPRESENTATIVE**

**DARLENE GARCIA, P.E.  
COLORADO SPRINGS UTILITIES  
121 S. TEJON, 3<sup>RD</sup> FLOOR  
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PHONE: (719) 668-4097  
FAX: (719) 668-8734  
E-MAIL: [dagarcia@csu.org](mailto:dagarcia@csu.org)**



**CH2MHILL**

**ENGINEER'S REPRESENTATIVE**

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**Colorado Springs Utilities**  
*it's how we're all connected*



**Dust**

**Final Report for Noise and  
Dust Monitoring  
Colorado Springs Utilities  
Southern Delivery System  
Water Pipeline Work Package S1  
Pueblo County, Colorado**

Walsh Project No. WA-001170-0004-10TTO  
July 27, 2012

Specs

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FAX: (719) 668-8734  
E-MAIL: dgarcia@csu.org**



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**Colorado Springs Utilities**  
*It's how we're all connected*



## Trenchless



## TECHNICAL MEMORANDUM S4AE-8.1.2

## Southern Delivery System - Geotechnical Conditions and Recommendations for South 4A East Crossing I-25, BNSF and UPRR Tracks, Fountain Creek, and Floodplain

TO: Colorado Springs Utilities

FROM: CH2M HILL

DATE: April 13, 2012

### Executive Summary

This technical memorandum (TM) presents a summary of the subsurface conditions encountered and an evaluation of potential construction techniques for the proposed Southern Delivery System (SDS) South 4A East Raw Water Pipeline (S4AE) crossing of Interstate 25 (I-25), the Union Pacific (UPRR) and Burlington Northern (BNSF) railroad rights-of-way, the active channel of Fountain Creek, and the floodplain of Fountain Creek in unincorporated El Paso County Colorado (Figure S4AE-8.1.2-1).

On February 28, 2012 the alternatives described in this TM were presented to the SDS S4AE project team at the S4AE Trenchless Crossing Workshop. Based on the information presented and team discussions, the project team selected Alternative 1 as the preferred alternative for constructing the pipeline through the project area. Alternative 1 consists of the following elements: one tunnel approximately 400 feet long under I-25 installed through the upper clay unit using open-face tunneling methods, open cut construction in between I-25 and railroad right-of-way, a second tunnel approximately 1,390 feet long under the railroad rights-of-way and the active channel of Fountain Creek installed in the Pierre Shale bedrock using open-face tunneling methods, and then open cut construction through the Fountain Creek floodplain.

Additional discussions and modifications to the Alternative 1 estimated costs have occurred since the workshop previously mentioned regarding risk mitigation and costs. Based on these discussions and modifications, the SDS Program is developing an approach for contractors to propose on either Alternative 1 or Alternative 3 during the procurement phase of S4AE.

### 1.0 Introduction

On February 28, 2012 the information in this TM was presented to the SDS S4AE project team. Team members consisted of Colorado Springs Utilities project management and operations staff, SDS Program Management, design review and permitting staff, and CH2M HILL design staff. The purpose of the evaluation presented is to select a preferred combination of open cut and trenchless technologies to construct the approximately 5,400-foot reach of 66-inch welded steel pipe (WSP) between Midway Ranch Road (west of I-25) to a point approximately ¼-mile west of Hanover Road.



## Access

## STATE OF COLORADO

Region 2 Traffic Section  
905 Erie Ave., P.O. Box 536  
Pueblo, Colorado 81002  
(719) 546-5407 Fax (719) 582-5523



July 2, 2013

ATTN: Bill Williams  
Garney Construction  
611 North Weber, Suite 103  
Colorado Springs, CO 80903

**RE: State Highway Access Permit No. 213039, Located on Highway 25, Milepost 120.93,  
in County El Paso**

Dear Bill Williams,

Enclosed is your Notice to Proceed (NTP) for the above stated access permit. This NTP is valid only if the referenced access permit has not expired. Access permits expire one year from the date of issue if not under construction or complete. Your permit will expire on July 2, 2014. Access Permits may be extended in accordance with Section 2.3(11)(3), of the Access Code. You must obtain a new NTP following the suspension of work through the winter.

You shall notify the CDOT Inspector, Todd Ausbun, at (719) 696-1403, at least 48-hours prior to commencing construction within the State Highway right-of-way. All construction shall be completed in an expeditious and safe manner and shall be finished within 45-days from initiation. You must also contact the CDOT Inspector upon completion of access construction to request a final inspection, prior to any use, as allowed by this permit.

All materials and construction shall be completed in accordance with all applicable Department Standards and Specifications, and constructed in conformance with 2 CCR 601-1, State Highway Access Code, including any additional terms and conditions of the issued permit. A fully endorsed copy of the issued access permit and NTP shall be available for review at the construction site during construction.

If you have any questions or need more information, please contact me at the office listed above.

Respectfully,

A handwritten signature in cursive script that reads "Valerie Sword".

Valerie Sword  
Region 2 Access Manager

xc: Duane Greenwood, City of Fountain  
Karami

Access

# STATE OF COLORADO

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908 Erie Ave., P.O. Box 538  
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Karami

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Region 2 Access Manager

xc: Duane Greenwood, City of Fountain  
Karami

SWMP

## Stormwater Management Plan

### **SOUTHERN DELIVERY SYSTEM** Juniper Raw Pump Station

#### Location of Construction Site:

Approximately 1,900 feet northeast of  
Pueblo Dam Spillway  
(Parcel No. 0625000004 and 0600000058)  
**Section 36; T20S; R66W**

#### Key Contact:

Colorado Springs Utilities – Steve Duling  
Planning & Permitting Program Manager  
(719)668-8706  
Email: [sduling@csu.org](mailto:sduling@csu.org)

Written by:  
CDM Smith

January 31, 2013



Specs

**Documents for the Construction of the  
SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S2**

**VOLUME 1 OF 2  
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**OWNER'S REPRESENTATIVE**

**DARLENE GARCIA, P.E.  
COLORADO SPRINGS UTILITIES  
121 S. TEJON, 3<sup>RD</sup> FLOOR  
COLORADO SPRINGS, CO 80947  
PHONE: (719) 668-4097  
FAX: (719) 668-8734  
E-MAIL: [dgarcia@csu.org](mailto:dgarcia@csu.org)**



**CH2MHILL**

**ENGINEER'S REPRESENTATIVE**

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**Colorado Springs Utilities**  
*it's how we're all connected*



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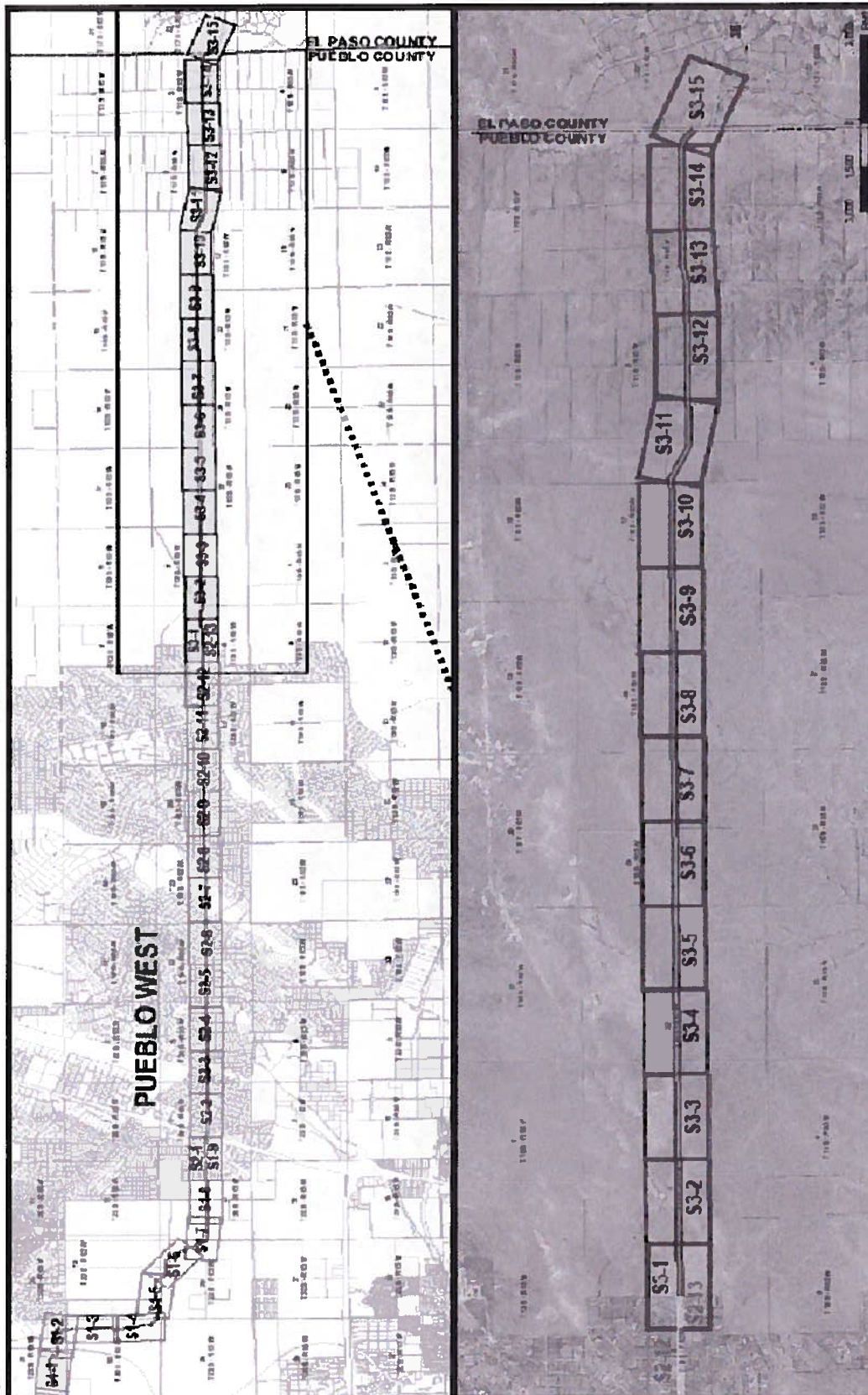
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Easement



**SOUTHERN DELIVERY SYSTEM  
PUEBLO COUNTY REVEGETATION  
S-3 MAP SERIES INDEX**

February 2012



**Dust**

**Final Report for Noise and  
Dust Monitoring  
Colorado Springs Utilities  
Southern Delivery System  
Water Pipeline Work Package S1  
Pueblo County, Colorado**

Walsh Project No. WA-001170-0004-10TTO  
July 27, 2012



CNHP Report

# Colorado Springs Utilities Southern Delivery System

*Restored Vegetation Cover Monitoring – Work Segment S3-13N*



*Prepared for:*  
**Colorado Springs Utilities**  
**Southern Delivery System**  
**Colorado Springs, CO 80947**

*Prepared by:*  
**Colorado Natural Heritage Program**  
**Colorado State University**  
**Fort Collins, CO 80523**

**September, 2014**

**Colorado**

HMP



ADVANCING WATER

**SDS S2****Hazardous Materials Management Plan**

Garney Construction will comply with all regulations relating to handling, storing, transporting and spill/ release and reporting of hazardous materials set forth by OSHA, DOT and EPA regulations.

Hazardous materials will be stored according to the product specification, codes and manufacturer's instructions.

A hazardous material inventory log will be kept with copies of MSDS on all hazardous products to be used. The MSDS book will be kept onsite in the field office.

There is no known abandoned fuel storage, refineries or landfills within the limits of our work.

Garney supervisors will monitor construction operations in order to identify any hazardous material.

For protection of employees and the general public Garney's will follow the Site Specific Safety Plan with regards to hazardous materials.

Should any spill or release of hazardous materials and / or petroleum products be identified, Garney Construction will immediately notify the Construction Manager.

If hazardous waste or petroleum contaminated soils are encountered, Garney's will cease operations and respond as outlined in the SDS "Hazardous Substance Encountered by Construction Contractor".

Garney's Safety Representative will perform routine audits to insure any hazardous materials are stored and managed properly.

Specs

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## Potential Pollution Report / Spill Contingency Plan

### Materials Handling and Spill Prevention

*The SWMP shall identify any procedures or significant materials handled at the site that could contribute pollutants to runoff. These could include: exposed storage of building materials, fertilizers or chemicals, waste piles, equipment maintenance, fueling procedures and/or other measures:*

- ♦ If done on site, vehicle fueling will be done away from the creek in an area that does not run off into the creek.
- ♦ No chemicals, oils, or fuels will be stored on site.
- ♦ Equipment maintenance will not be done on site.
- ♦ Stored soil stockpiles will be moved to an area where stormwater protection is being implemented. Silt fencing will be employed around any on-site/ out-of-the-creek stockpiles (e.g. topsoil stockpiles) that are not contoured to retain stormwater runoff.
- ♦ Runoff from any materials 'stored' in the creek will be detained behind stormwater berms (earth dikes) to allow solids sedimentation and filtration before the water enters the creek.

Concrete wash water will be discharged in a concrete washout structure 500' away from the creek and in such a manner that it does not ultimately end up in the creek area.

### Spill Control Plan

1. **POTENTIAL HAZARDS:** Fuel and oil spills from refueling area.

2. **PROCEDURES:** In the event of a spill notify the Supervisor on site who will notify the Owner/Construction Manager will determine the severity of the spill and whether or not he/she is properly equipped to deal with the situation. If the volume of substance spilled is substantial, The HCP's procedure includes building a berm around the affected area to prevent further contamination and calling the proper authorities. A list of emergency numbers is posted at the bulletin board on site.

3. **INSTRUCTIONS:** Corporate Wide Health and Safety Plan.

4. **REPORTS:** In the event of a spill the supervisor will enter the information on his/her daily reports and if applicable assume the responsibility of contacting Federal, State, or local agencies.

5. **INDIVIDUAL RESPONSIBLE FOR IMPLEMENTING CLEANUP:** Justin (Jarhead) Kurdupski will be the individual responsible for implementing the Emergency Action Plan.

6. **TRAINING REQUIREMENTS:** Weekly safety meetings are conducted and documented with each employee's signature.

7. **LIST OF CLEANUP MATERIALS:** The equipment trailer contains a fire extinguisher, dry-sweep, brooms, shovels, and a can and trash bags to dispose of contaminants in.



# RECLAMATION

*Managing Water in the West*

## Record of Decision For the Southern Delivery System Final Environmental Impact Statement

Record of Decision Reference No.: GP-2009-01

Approved: 

Date: MAR 20, 2009

Michael J. Ryan, Regional Director  
Great Plains Region  
Bureau of Reclamation



U.S. Department of the Interior  
Bureau of Reclamation  
Great Plains Region  
Billings, Montana

March 2009

SDS Project pipeline to Reclamation facilities. Pueblo West would continue to maintain its existing conveyance contract with Reclamation to use the joint use manifold from Pueblo Reservoir.

The third federal action analyzed in the FEIS is the approval of an administrative trade ("swap") of an equal amount of capacity in the Fountain Valley Authority (FVA) pipeline for capacity in the SDS Project untreated water pipeline and water treatment plant. This trade would allow Fountain to use a portion of Colorado Springs' FVA capacity in trade for Colorado Springs' use of an equal amount of Fountain's capacity in the proposed SDS Project.

In the FEIS, Reclamation identified the Participants' Proposed Action as the Agency Preferred Alternative. This Record of Decision (ROD) describes the alternative selected for implementation and the rationale for that decision. It also describes the alternatives considered in reaching the decision, and identifies those measures that will be taken to minimize environmental harm from implementation of the selected alternative in accordance with 40 CFR § 1502.2.

## The NEPA Process

The FEIS and this ROD have been prepared in accordance with the Council on Environmental Quality's (CEQ) NEPA regulations (40 CFR 1500-1508) and Department of the Interior policies. The Draft Environmental Impact Statement (DEIS) analyzing the environmental

consequences of the alternatives was released for public review on February 29, 2008. Public comments were received until June 13, 2008. Nearly 400 public comments raised a variety of topics. Comments related to water quality, dam safety, and the Western Slope, as

well as changes to the alternatives prompted Reclamation to release a Supplemental Information Report after publication of the DEIS. The Supplemental Information Report was released for public review from October 3, 2008 through November 24, 2008. A total of 40 public comments were received on the Supplemental Information Report. An

FEIS, which addressed public comment on both the DEIS and the SIR, was filed with the Environmental Protection Agency (EPA) (filing number FES 08-63) on December 12, 2008 and noticed by the EPA and Reclamation in the *Federal Register* on December 19, 2008. The decision documented in this ROD is based on the FEIS and public comment received on the FEIS.

In addition to NEPA, the Participants will need to obtain several permits or approvals from federal, state, and local agencies before implementing the SDS Project. Major permitting elements and consultation requirements for the alternatives may include but are not limited to:

- A Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers
- A Clean Water Act Section 401 certification and a Colorado Discharge permit from the Colorado Department of Public Health and Environment

**Firm yield** is the highest water demand that can be continuously fulfilled based on historical hydrologic conditions. The firm yield is the water demand fulfilled just prior to the level that produces system shortages.

**SMAPD** is the average annual increase in demand met for a project (such as SDS) at a specified annual demand level. For the purposes of this FEIS, SMAPD is always evaluated at a demand level equal to the 2046 demand from the Participants' Planning Demand Forecast.

**Table 1. Summary of Alternatives Components.**

| <b>Alternative</b>                                  |                  | <b>Regulating Storage</b> | <b>Untreated Water Intake</b>  | <b>Untreated Water Alignment</b>  | <b>Terminal Storage and Water Treatment Plant<sup>†</sup></b>                            | <b>Return Flow Storage and Conveyance</b>   |
|---|------------------|---------------------------|--|---|--|---|
| <b>Alternative 1: No Action</b>                     | Colorado Springs | None                      | Arkansas River at Lester & Attebery Ditch, FVA supply, Denver Basin Ground Water, and Ark-Otero Improvements | Ground Water Collection System<br>Colorado 115 Alignment<br>FVA Extension Pipeline    | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant                           | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |
|   | Fountain         | None                      | Fountain Creek Alluvial Well field Expansion   | Ground water Collection System Expansion  | No Storage, Expansion of Existing (planned) Water Treatment Plant                        | None  |
|   | Security         | None                      | Widefield Aquifer Wells (agricultural to municipal transfer)   | Existing  | Existing (disinfection only)   | None  |
|   | Pueblo West      | None                      | Arkansas River Downstream of Pueblo Reservoir  | Pipeline to Existing River Pump Station   | Existing   | None  |
| <b>Alternative 2: Participants' Proposed Action</b> |                  | Pueblo Reservoir          | Joint Use Manifold and/or Pueblo Dam North Outlet Works  | Western Alignment, Including Conveyance to Pueblo West                                | Upper Williams Creek Reservoir, Conventional Water Treatment Plant                       | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |
| <b>Alternative 3: Wetland Alternative</b>           |                  | Pueblo Reservoir          | Joint Use Manifold and/or Pueblo Dam North Outlet Works  | Western Alignment, Including Conveyance to Pueblo West                                | Upper Williams Creek Reservoir, Conventional Water Treatment Plant                       | No Reservoir, Return Flow Pipeline to Arkansas River Near Highway 115   |
| <b>Alternative 4: Arkansas River Alternative</b>    |                  | Pueblo Reservoir          | Arkansas River Upstream of Fountain Creek  | Eastern Alignment, excluding Conveyance to Pueblo West                                | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant                           | No Reservoir, Return Flow Pipeline to Arkansas River Near Highway 115   |
| <b>Alternative 5: Fountain Creek Alternative</b>    |                  | Pueblo Reservoir          | Joint Use Manifold and/or Pueblo Dam North Outlet Works  | Western Alignment, Including Conveyance to Pueblo West                                | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant                           | Williams Creek Reservoir, Chilcotte Ditch and Pipeline In and Return Flow Pipeline to the confluence of Fountain Creek and the Arkansas River Out |
| <b>Alternative 6: Downstream Intake Alternative</b> |                  | Pueblo Reservoir          | Arkansas River Downstream of Fountain Creek  | Eastern Alignment, Excluding Conveyance to Pueblo West                                | Jimmy Camp Creek Reservoir, Conventional and Advanced <sup>‡</sup> Water Treatment Plant | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |
| <b>Alternative 7: Highway 115 Alternative</b>       |                  | Pueblo Reservoir          | Arkansas River at Lester & Attebery Ditch, FVA Supply, and Ark-Otero Improvements                            | Colorado 115 Alignment, Excluding Conveyance to Pueblo West<br>FVA Extension Pipeline | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant                           | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |

<sup>†</sup> Treated water alignments are not included in this table and would be constructed as proposed by the Participants.  
<sup>‡</sup> Advanced treatment in this alternative includes a reverse osmosis process.

Jimmy Camp Creek Reservoir, treated, and distributed to the Participants' customers. Colorado Springs' reusable return flows would be stored in the proposed Williams Creek Reservoir. Water delivered to the Arkansas River for exchanges would be conveyed in a new pipeline to the mouth of Fountain Creek, instead of in Fountain Creek.

### **Downstream Intake Alternative (Alternative 6)**

The Downstream Intake Alternative addresses public interest in an alternative that uses an untreated water intake downstream of Fountain Creek. Untreated water would be stored in Pueblo Reservoir, released from the dam, and then diverted from the Arkansas River downstream of Fountain Creek. This water would be conveyed through a new pipeline and pump stations to the proposed Jimmy Camp Creek Reservoir, treated, and distributed to the Participants' customers. The water treatment plant would include advanced treatment and would require partial (50 percent) reverse osmosis to provide acceptable water quality to the Participants' customers. Colorado Springs' reusable return flows would be stored in the proposed Williams Creek Reservoir prior to exchange down Fountain Creek. Pueblo West would not participate in SDS Project infrastructure if this alternative were chosen.

### **Highway 115 Alternative (Alternative 7)**

The Highway 115 Alternative would address public and Participant interest in an alternative that uses the Colorado 115 corridor for water conveyance and includes an excess capacity storage contract. As with the No Action Alternative, a new untreated water intake from the Arkansas River would be constructed at the Colorado 115 crossing near Florence. Colorado Springs' reusable return flows would be stored in the proposed Williams Creek

Reservoir prior to exchange releases down Fountain Creek. Exchanges would be made from Fountain Creek and Pueblo Reservoir to the upper Arkansas River Basin, and would be primarily diverted by the Ark-Otero untreated water intake. Excess exchanges would be stored in the upper Arkansas River Basin storage facilities or in Pueblo Reservoir regulating storage. The Highway 115 untreated water intake would be supplied by releases from upper Arkansas River Basin storage. An extension pipeline would be constructed from the existing Fountain Valley Authority pipeline, and would help increase system flexibility for Colorado Springs by permitting FVA water to be delivered to Jimmy Camp Creek Reservoir through the new untreated water pipeline. Pueblo West would not participate in SDS Project infrastructure if this alternative were chosen.

## **The Decision**

Based on the analyses contained in the FEIS including the information summarized in Table 24 (Summary of direct and indirect effects) in the FEIS, public comments received on the DEIS and Supplemental Information Report, and consideration of comments received on the FEIS, the Great Plains Regional Director has decided to select the Participants' Proposed Action for implementation.

This decision allows the following Federal actions to be approved by Reclamation to implement construction and operation of the Participants' Proposed Action:

- Execution of up-to-40-year contracts between Reclamation and the Project Participants for use of the Eastern Slope System of the Fry-Ark Project in Colorado for storage, conveyance and exchange



- Question, with reasonable basis, the accuracy of the information in the document
- Question, with reasonable basis, the adequacy of the environmental analysis
- Present reasonable alternatives other than those presented in the EIS
- Cause changes or revisions in the alternatives
- Provide new or additional information relevant to the analysis

The first comment letter was from Mr. Dave Miller, President of the Natural Energy Resources Company. His comments are briefly summarized with Reclamation's responses as follows:

1. Mr. Miller was concerned that transmountain diversion alternatives that would convey water from the Gunnison River Basin and Aspinall Unit reservoirs to the Arkansas River or South Platte River basins, including the proposed Central Colorado Project, were not considered in the FEIS. He suggested two options for delivering the Gunnison River transmountain water to Colorado Springs and provided a citation to additional information on the internet. Both options included construction of an up-to-1.2 million acre-foot reservoir in the Gunnison River Basin and a 42-mile-long pipeline from the Gunnison River Basin to the South Platte River Basin. Pipelines to other river basins as well as power generation facilities were also included. The first option included construction of a new pipeline originating in the upper South Platte River Basin and traversing South Park, Colorado to Colorado Springs. The second option was construction of a new diversion upstream of Cheeseman Reservoir in the South Platte River Basin and a pipeline to the divide between the

South Platte and Arkansas River basins near Monument, Colorado. In the second option water would presumably be conveyed in the South Platte River toward Cheeseman Reservoir, diverted, and then delivered to Colorado Springs by conveying it in Monument Creek.

Reclamation did consider potential alternatives involving a transmountain diversion from the Gunnison River Basin, including the proposed Central Colorado Project, in its alternatives analysis and the FEIS (please refer to page 92 of the FEIS and comment responses 2300 and 3181 in Appendix B of the FEIS). These alternatives were dismissed from detailed evaluation due to substantial logistical, technical, or environmental deficiencies, less favorable environmental characteristics, and purpose and need criteria, with cost issues also identified (refer to page 87 of Reclamation's 2006 Alternatives Analysis for additional details).

2. Mr. Miller suggested that Reclamation did not consider and respond its prior comments, which included descriptions of benefits of the proposed Central Colorado Project.

Reclamation reviewed all comments on the DEIS and Supplemental Information Report, including those submitted by the commenter, and provided a response to each substantive comment (please refer to FEIS Appendix B and C). The commenter's previous comments contained eight substantive issues (refer to FEIS Appendix B, page B-241), all of which were addressed in the FEIS.

3. Mr. Miller requested investigations of alleged state and federal policy violations and oversights that lead to the seven

alternatives and completion of the policy investigations described above.

Reclamation considered this request and determined that the alternatives suggested by the commenter were given appropriate consideration in the FEIS and supporting documents and that the suggested investigations are not warranted. Consequently, a stay of the Record of Decision is not necessary.

The second comments letter was received from the Environmental Protection Agency (EPA)-Region 8 and is summarized as follows:

The EPA commented that in general the FEIS was largely responsive to the issues it raised in its comments on the DEIS and SIR. EPA believes SDS is more environmentally protective as a result and commends Reclamation for addressing EPA's comments and concerns. EPA commends Reclamation for conducting additional water quality analysis for the FEIS and working to resolve differences on a range of other issues. EPA is very pleased to see that the "Modified Proposed Action" is the Agency-Preferred Alternative. EPA believes the FEIS is largely responsive to the issues it raised in its comments on the DEIS and SIR.

EPA expressed two areas of continuing concern. First, it has some remaining concerns about the project's impact on water quality; however, EPA is pleased with the addition of Section 5.0 in the FEIS Environmental Commitments. EPA supports implementation of water quality monitoring when construction begins to allow three years of baseline data to be collected before SDS becomes operational. EPA believes the water quality monitoring program is appropriate and will help ensure that any potential problems that SDS causes would be addressed in an effective and timely manner.

Second, EPA remains concerned about indirect impacts from induced growth on increased flows to Fountain Creek resulting from SDS have not been sufficiently addressed in the FEIS. EPA believes there should be a commitment that stormwater Best Management Practices be implemented for future growth in Colorado Springs.

Reclamation's view is that growth is not a direct or indirect effect of the proposed SDS Project, and effects associated with growth are disclosed within the cumulative effects Section of the FEIS. As disclosed in the FEIS, there will be minor increases in peak flows and floodplains for Fountain Creek. Average simulated stream flows on Fountain Creek at Pueblo change from 249 cubic feet per second (cfs) for the No Action Alternative to 253 cfs with the Participants Proposed Action. That is an increase of 4 cfs, and represents an increase of 2%. As a result, no commitments are proposed in the ROD to mitigate the effects on peak flows or floodplains on Fountain Creek.

The City of Colorado Springs Stormwater Enterprise is described as a reasonably foreseeable action on page 125 of the DEIS. As part of their stormwater discharge permit, the City of Colorado Springs is responsible for constructing capital stormwater projects and regulating stormwater infrastructure on private property necessary for managing water quantity and quality. These activities will occur no matter what alternative is constructed for the SDS project, and are not considered as mitigation for SDS.

Public comments on the FEIS were considered but did not result in changes to the proposed action or in the selection of the Preferred Alternative.

develop a solution and remedy the violation.

- Reclamation will complete its coordination with the U.S. Fish and Wildlife Service under the Fish and Wildlife Coordination Act (FWCA) prior to implementation of the selected alternative. The U.S. Fish and Wildlife Service was a cooperating agency with Reclamation during preparation of the Final EIS and was consulted throughout the NEPA process for the SDS Project. A draft FWCA Report is on-file with Reclamation. Fish and wildlife conservation measures recommended in the final FWCA Report will be considered by Reclamation and those found to be appropriate will be implemented by Reclamation and/or the Project Sponsors through construction requirements, contract provisions, and terms and conditions of any long-term water-related contract between Reclamation and the Participants.

## **Participants' Commitments**

### ***General Commitments***

The following mitigation measures will be implemented:

- Comply with all applicable permits, regulations, and laws including but not limited to CDPHE, USCOE 404, and local land use permits obtained for the SDS project.
- Construct and operate the SDS Project in a manner that does not differ substantially from that evaluated in this FEIS, except under emergency conditions, and unless additional and appropriate environmental investigations are completed by

Reclamation and approval is then given to Participants to alter construction or operation of the SDS Project

- Develop and implement a head pressure monitoring program on the Joint Use Manifold to isolate effects attributable to the SDS Project and to mitigate those effects if they were to occur. This program will be developed over a 3-year period from the date that water is first delivered from the Joint Use Manifold for the SDS Project. Development of the monitoring program will include involvement of all other Joint Use Manifold users. This commitment will not be necessary if the intake for SDS is at the North River Outlet Works, and the Joint Use Manifold is not used for SDS.
- Develop an integrated adaptive management program for the project that will be coordinated with the Participants' existing monitoring programs and the Environmental Management System discussed in Appendix F of the FEIS. The integrated adaptive management program will be finalized prior to executing any contracts for the SDS Project.

### ***Surface Water***

The following mitigation measures will be implemented:

- Comply with the Upper Arkansas Voluntary Flow Management Program except during emergency conditions as defined in Section 2.b. of the Memorandum Of Understanding for Settlement of Case No. 04CW129, Water Division 2 (Chaffee County Recreational In-Channel Diversion)

in water quality, judging whether they are likely caused by operation of the SDS Project, and addressing actual effects in a systematic manner. Additionally, implementation of the geomorphology mitigation measures (below) will reduce suspended sediment and total recoverable iron concentrations in Fountain Creek and the lower Arkansas River.

### *Geomorphology*

The following mitigation measures will be implemented:

- Prepare a geomorphic mitigation plan and secure Reclamation approval prior to executing any contracts for the SDS Project. This plan could include, but is not limited to:
  - Evaluate and consider strategies to remove sediments that reduce the effectiveness of Corps levees located near Fountain Creek at its confluence with the Arkansas River
  - Evaluate and consider strategies to increase the sinuosity of Fountain Creek at appropriate locations in order to reduce undesirable erosion and sedimentation
  - Evaluate and consider strategies at appropriate locations along Fountain Creek to reduce undesirable erosion and sedimentation
  - Select geomorphic mitigation measures for SDS Project effects that are, to the extent practicable, consistent with priority projects identified in the Corps of Engineers' Fountain Creek Watershed Study and the Fountain Creek Corridor Master Plan. Locations where geomorphic mitigation projects
- could occur include, but are not limited to:
  - Fountain Creek at the Clear Spring Ranch site, directly upstream and downstream of the confluence of Little Fountain Creek and Fountain Creek (approximately 4 miles)
  - Fountain Creek from upstream of Fountain Boulevard to upstream of Colorado 85/87 at the Sand Creek confluence (approximately 3 miles)
- Complete pre-project geomorphic mitigation, including channel stabilization projects and non-structural options such as conservation easements, before the project is operational. Channel stabilization could include, but is not limited to, increasing stream sinuosity, flattening of steep side slopes, installation of grade control structures, and use of buried riprap, erosion blankets, and/or vegetative cover for channel stabilization in areas of high and/or erosive velocities.
- Design and construct an energy dissipation structure that will protect against erosion at the outlet of the pipeline from Williams Creek Reservoir to Fountain Creek
- Evaluate and implement appropriate future geomorphic stabilization projects, if such future projects are determined to be necessary after the project is operational.

When implemented, these recommendations will mitigate potential adverse effects on geomorphology by avoiding or minimizing effects of return flow discharges through an energy dissipation structure, compensating for anticipated effects, and responding to effects identified after project operations begin.



- Mitigate impacts to jurisdictional and non-jurisdictional wetlands in areas of temporary, short-term effects such as pipeline crossings, on-site at the place of disturbance with similar wetlands and soils to replace existing wetland functions and values
- Mitigate all unavoidable, permanent impacts to jurisdictional and non-jurisdictional wetlands with compensatory wetlands that replace existing wetland functions and values. Compensatory wetland mitigation will likely occur at the Clear Spring Ranch site on Fountain Creek downstream of the city of Fountain.
- Control tamarisk that may establish around newly constructed reservoirs
- Evaluate and consider a strategy to increase the sinuosity of Fountain Creek at appropriate locations in order to create wetlands areas
- Evaluate and consider the construction and maintenance of new areas of wetlands along Fountain Creek in order to participate in wetlands banking programs. Evaluate and consider cooperation with Colorado agencies to expand such a wetlands creation process

Mitigation plans for jurisdictional and non-jurisdictional wetlands will be submitted for approval by the Corps of Engineers and Reclamation, respectively. All design and planning measures for wetlands, waters, and riparian vegetation will be completed before any contracts for the SDS Project.

By reviewing the location of wetlands during final design, effects on wetlands can be avoided and minimized. Specifically, the pipeline construction corridors through wetlands will be reduced to the minimum

width practicable. Similarly, construction methods that do not involve trenching through a wetland will avoid impacts. Wetlands mitigated in place and off-site will replace affected wetlands on a 1:1 ratio and will provide similar functions and values. The 404 permitting process is ongoing and the final off-site mitigation ration for jurisdictional wetlands for the 404 permit has not yet been determined.

### *Vegetation*

The following mitigation measures will be implemented:

- Prior to final design, review locations of Needle and Threadgrass – Blue Grama Grasslands, high quality shrublands and woodlands, and other areas with desirable vegetation to determine design changes within the current study area that will avoid and minimize impacts
- Replace mature trees (diameter at breast height of 12 inches or greater) within construction areas at a 1:1 ratio with the same or similar native species with available nursery container stock or pole plantings as soon as practicable after construction activities have ended
- For 1 year after construction, monitor the construction areas to determine if appropriate native vegetation is establishing. If native vegetation is not establishing, the site will be reseeded with appropriate species
- In the appropriate season prior to construction, survey potential construction areas with known populations of dwarf milkweed and other plant species of concern, to locate areas where impacts can be avoided and minimized to the extent practicable

buffer zone between the nest and the limit of construction will be flagged and avoided during the nesting season, or construction will be scheduled outside of the nesting season.

- Conduct pre-construction surveys for swift fox den sites within appropriate habitat along the pipeline corridor and proposed reservoir sites. Avoid surface disturbance within ¼ mile of active den sites while young are den-dependent (March 15 - June 15)
- Restrict pesticides for rodent control within swift fox overall range
- Mitigate impacts to state-listed amphibian species by avoiding, minimizing, and mitigating wetland effects as described above
- Impose seasonal restrictions on construction to avoid sensitive large game winter habitat (from first large snowfall to summer green-up)
- Install wildlife crossovers (trench plugs) during pipeline construction with ramps on each side at a maximum of ¼ mile intervals and at well-defined game trails
- Create additional nesting habitat or nest boxes in nearby trees for the Lewis' woodpecker when nest trees are destroyed.

By replacing vegetation including structural diversity, the long-term effects on wildlife will be reduced by allowing wildlife to return to disturbed areas. Pre-construction surveys will identify wildlife use at the time of construction and allow for planning for avoidance and minimization. Imposing seasonal and/or daily restrictions on construction will enable wildlife to use important habitat, especially during breeding and other critical periods. Wildlife crossovers installed within the pipeline trench

will facilitate wildlife passage and provide escape routes for wildlife trapped within the trench, thereby reducing mortality.

### *Recreation*

The following mitigation measures will be implemented:

- During short-term construction activities that require trail closures of developed recreational trails, designate a safe and reasonable detour around the project site. Post signs directing trail users.
- Work with the local municipality to establish alternate trails with consistent width, surfacing, and signage
- Within developed parks with temporary effects, commit to full reclamation of the impact area by replacing turf, irrigation systems, and other facilities that could be affected. Provide follow-up monitoring and maintenance for 1 year to ensure that reclamation efforts are successful.
- In developed park areas with permanent, above ground SDS Project facilities, reconfigure park facilities that will be directly affected and visually screen SDS Project facilities from other park uses with vegetation, berming, or attractive fencing
- Seek opportunities to enhance angling, boating, or other recreation opportunities at Lake Henry, Lake Meredith, and Holbrook Reservoir so that they are less vulnerable to water level fluctuations. Work with the CDOW to identify priority projects and include them in a proposed wildlife mitigation plan to the Colorado Wildlife Commission pursuant to C.R.S. § 37-60-122.2 as above.

500 feet of residences, hospitals, schools, churches, and libraries. Work hours may need to be extended from time to time in order to expeditiously restore traffic flow or public access.

- Restrict access to construction areas so that the public could not be in close proximity to loud equipment or blasting
- House project operating equipment (e.g., pump stations) in structures designed to minimize radiated noise outside the structure, and will meet local noise ordinance requirements.

By following existing standards, restricting work hours and access to construction areas, and insulating new noise within structures, noise effects will be minimized by maintaining acceptable noise levels and limiting the number of people exposed to increased noise levels.

### *Visual Resources*

The following mitigation measures will be implemented:

- Vegetate earthen dam faces with native herbaceous plants to match the adjacent undisturbed prairie plant communities
- Revegetate and/or landscape with plants, all disturbances associated with the construction of all facilities
- Restore as many existing grades as practicable following pipeline excavations
- Enclose pump stations and well equipment in structures matching the architectural characteristics of the surrounding structures
- Construct powerlines with non-specular (not shiny) wire, non-reflective and opaque insulators, and light-colored, non-reflective finished poles

- Reclaim construction access roads and staging areas by restoring existing grade and revegetating the area of disturbance
- Apply water with standard construction practices to control airborne fugitive dust within construction areas
- Install baffles on construction lighting fixtures to direct light onto the construction activity only in locations where safety is a concern, scenic quality will be affected, or near occupied homes and businesses.

Restoring existing grades, revegetating disturbed areas, using architectural styles consistent with the area, and designing powerlines to have low visibility will minimize the visual contrast between the surrounding areas and will reduce the visibility of disturbance or new structures from observation points. Reducing airborne fugitive dust and construction lighting will reduce the area affected during construction.

### *Traffic*

The following mitigation measures will be implemented:

- Use trenchless construction to the extent practicable when construction features cross railroad lines, state highways, county roadways in densely populated areas, and major city roadways in densely populated areas.
- Prepare traffic control plans for approval by state and local traffic authorities and followed by contractors during construction
- Construct traffic signage, signals, acceleration, and deceleration lanes as directed by state and local traffic authorities for access to reservoir sites, treatment plants, and pump stations

### ***Hazardous Materials***

The following mitigation measures will be implemented:

- Remove solid waste and properly dispose of at a permitted solid waste disposal facility prior to construction of project facilities at the site
- Inspect the ground surface beneath the solid waste for evidence of hazardous material or petroleum product spills such as soil staining and unusual odors or colors
- If evidence of a spill or spills is noted, delineate the extent of the spill by laboratory analysis and excavate any contaminated soils and properly dispose of at a permitted waste disposal facility
- If soil and/or ground water contamination is encountered during construction of project facilities, implement mitigation procedures to minimize the risk to construction workers and to the future operation of the project.

The proposed mitigation measures will identify areas of potential contamination from hazardous materials and will remediate the soil and ground water if any contamination was identified.

### **Implementation**

The decision to implement the Federal actions needed by Reclamation for the selected alternative will be effective immediately upon approval of this Record of Decision. Reclamation staff will proceed with all activities needed to commence negotiations with the Project Participants to: (1) enter into excess capacity contracts for use of Fry-Ark facilities: (2) issue a special use permit to

connect to Fry-Ark facilities, and; (3) approve an “administrative swap” of FVA water associated with SDS Project deliveries.



# **Southern Delivery System Fish and Wildlife Mitigation Plan**

Prepared for:

**The Colorado Wildlife Commission  
in accordance with C.R.S. 37-60-122.2**

In Partnership:

**Colorado Springs Utilities  
City of Fountain  
Security Water District  
Pueblo West Metropolitan District  
Colorado Division of Wildlife**

March 11, 2010

## SCMP

# Southern Delivery System Socioeconomic Construction Management Plan

PREPARED FOR: U.S. Bureau of Reclamation  
 PREPARED BY: Colorado Springs Utilities  
 DATE: March 15, 2011

## Introduction

This Socioeconomic Construction Management Plan (SCMP) summarizes the approach by the Southern Delivery System Project (SDS Project) to minimize SDS Project construction impacts to local residents and the economies of El Paso and Pueblo Counties. This SCMP has been prepared by Colorado Springs Utilities, the SDS Project Manager, on behalf of the SDS Participants (City of Colorado Springs, the City of Fountain, Security Water District and Pueblo West Metropolitan District) and is consistent with the requirements of the U.S. Bureau of Reclamation's (Reclamation) Record of Decision (ROD) for the SDS Project (Reclamation 2009).

## Regulatory Requirement

The Socioeconomics and Land Use section of the SDS Project ROD states the following:

"The following mitigation measures will be implemented:

- Acquire properties and easements through voluntary, willing participant agreements to the maximum extent practicable
- Develop a construction management plan to outline best management practices to minimize impacts to surrounding properties and submit plan to Reclamation for approval prior to construction.

Adverse short-term effects on landowners with parcels that will contain SDS features will be offset through mutually agreed upon compensation. The land use mitigation measures will minimize disturbances to properties near the project during construction or minimize land use changes and conflicts." (Reclamation 2009)

## Construction Management Plan

### Property and Easement Acquisition

Colorado Springs Utilities will work cooperatively with property owners to obtain the easements and land required for the SDS Project. Colorado Springs Utilities, the SDS Participant responsible for purchasing easements and land on behalf of the SDS Project, will strictly adhere to the established guidelines detailed in the City of Colorado Springs' Procedure Manual for the Acquisition and Disposition of Real Property Interests (City of Colorado Springs 2007). This Procedure Manual is derived from the Federal Uniform



# United States Department of the Interior

BUREAU OF RECLAMATION  
Great Plains Region  
Eastern Colorado Area Office  
11056 West County Road 18E  
Loveland, Colorado 80537-9711

IN REPLY, REFER TO

EC-1004  
ENV-9.00

APR 26 2011

Keith Riley  
Planning and Permitting Program Manager  
Colorado Springs Utilities  
PO Box 1103, Mail Code #930  
Colorado Springs, CO 80947-9030

Subject: Approval of Environmental Mitigation and Management Plans for Southern Delivery System – Fryingpan-Arkansas Project, Colorado

Dear Mr. Riley:

In March 2011, Reclamation received the following Southern Delivery System (SDS) project documents from Colorado Springs Utilities (CSU). These documents address environmental commitments identified in the Record of Decision (GP-2009-01) for the SDS project.

Reclamation approves the following documents:

- Construction Management Plan (CMP) for Socioeconomics and Land Use, also referred to as Socioeconomic CMP submitted on March 15, 2011.
- Geomorphic Mitigation Plan submitted on March 15, 2011.
- Clear Spring Ranch Non Jurisdictional Wetlands Mitigation Plan submitted on March 30, 2011.

In addition, Reclamation concurs with the enclosed U.S. Army Corps of Engineers' (COE) approval from March 17, 2011, of the Jurisdictional Wetlands Mitigation Plan (Action No. SPA-1995-00131-SCo).

Reclamation subject matter experts within the Great Plains Region and the Technical Services Center reviewed the documents, provided review comments, or requested clarification from CSU. Enclosed Reclamation review comments and CSU clarifications should be appended to each final document.

PA



March 27, 2012

Ms. Belinda C. Mollard  
 Archaeologist  
 Eastern Colorado Area Office  
 Bureau of Reclamation  
 11056 West County Road 18E  
 Loveland, CO 80537-9711

Dear Belinda:

Enclosed please find a copy of the Programmatic Agreement (PA), Amendment 2 and the accompanying Area of Potential Effect (APE) map and Individual Area Maps USGS, 1:24,000 scale, to include new areas for addition to the Southern Delivery System (SDS) project. We have supplied 16 copies for distribution to the Colorado Historic Preservation Office (one copy), 14 interested Tribes (14 copies), and the Bureau of Reclamation (one copy):

- *SDS Programmatic Agreement, Amendment 2;*
- *Updated Area of Potential Effects Map; and*
- *Individual Area Maps, USGS 1:24,000.*

New additions to the APE include activities associated with the following:

- Juniper Pump Station Power Supply
- Williams Creek Pump Station Power Supply
- Bradley Pump Station Relocation and Power Supply
- Bradley Road Realignment
- Water Treatment Plant Sanitary Sewer Line Tie-in and Relocation of the Portions of the Raw Water Pipeline in the Northern Alignment from the north end of Work Package N2A to the Water Treatment Plant
- Finished Water 3.

These versions have been placed on the SDS SharePoint site.



**Southern Delivery System Project  
Cultural Resource Programmatic Agreement  
Annual Meeting Agenda  
Leon Young Service Center  
1521 Hancock Expressway, Colorado Springs, CO  
Pikes Peak Room  
April 3, 2015**

- I) Welcome** **1:00 – 1:15 p.m.**  
*Brian Joseph – Archaeologist, Bureau of Reclamation*  
*Allison Mosser – SDS Permitting and Compliance Sr. Project Manager, Colorado Springs*  
*Utilities*
- A) Sign-in  
 B) Introductions and Site Logistics  
 C) Objectives  
 D) Welcome  
 E) Entities/Agencies Involved
- II) Project Overview** **1:15 – 1:40 p.m.**  
*Allison Mosser – SDS Permitting and Compliance Sr. Project Manager, Colorado Springs*  
*Utilities*
- A) SDS Project History  
 B) EIS and PA  
 C) SDS Overview and Update
- III) 2014 Cultural Resource Activities** **1:40 – 2:00 p.m.**  
*Allison Mosser – SDS Permitting and Compliance Sr. Project Manager, Colorado Springs*  
*Utilities*  
*Collette Chambellan – Archeologist, Western Cultural Resource Management*  
 Cultural Resource Activities
- IV) 2015 Upcoming Construction Activities** **2:00 – 2:15 p.m.**  
*Allison Mosser – SDS Permitting and Compliance Sr. Project Manager, Colorado Springs*  
*Utilities*
- V) Questions and closeout** **2:15 – 2:30 p.m.**

**Logistics**

- Light snacks and beverages will be provided.
- Parking is available at the facility.

**PROGRAMMATIC AGREEMENT  
AMONG  
THE BUREAU OF RECLAMATION, EASTERN COLORADO AREA OFFICE,  
COLORADO SPRINGS UTILITIES, AND  
THE COLORADO STATE HISTORIC PRESERVATION OFFICER  
REGARDING  
THE SOUTHERN DELIVERY SYSTEM PROJECT**

WHEREAS, Colorado Springs Utilities, the City of Fountain, Security Water District, and Pueblo West Metropolitan District (Project Participants) intend to develop and construct a water delivery system from Pueblo, Colorado or Fremont County to Colorado Springs, Colorado, for the purpose of providing water to the Project Participants' service areas, called the Southern Delivery System (Project); and

WHEREAS, the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) which owns and operates the Fryingpan-Arkansas Project, proposes to issue long term storage, conveyance, and exchange contracts with the Project Participants to use Fryingpan-Arkansas Project facilities, and is acting as lead Federal Agency for purposes of complying with Section 106 of the National Historic Preservation Act (NEPA); and

WHEREAS, the project represents a series of undertakings with similar, repetitive effects to historic properties, the effects usually can not be determined before final siting, and the Advisory Council on Historic Preservation (ACHP) was invited but declined to participate in the consultation leading to this agreement, and Reclamation has consulted with the Colorado State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 14; and

WHEREAS, Reclamation has identified and notified the Apache Tribe of Oklahoma, the Cheyenne and Arapaho Tribes of Oklahoma, the Comanche Nation of Oklahoma, the Fort Sill Apache Tribe, the Jicarilla Apache Nation, the Kiowa Tribe of Oklahoma, the Mescalero Apache Tribe, the Northern Arapaho Tribe, the Northern Cheyenne Tribe, the Northern Ute Tribe, the Pawnee Nation of Oklahoma, the Shoshone Tribe (Eastern Band), the Shoshone-Bannock Tribe, the Southern Ute Indian Tribe, the Ute Indian Tribe, and the Ute Mountain Ute Tribe as Native American Tribes that may attach religious and cultural significance to historic properties in the Area of Potential Effect (APE); and

WHEREAS, The Cheyenne and Arapaho Tribes of Oklahoma, the Comanche Nation, the Jicarilla Apache Nation, the Kiowa Tribe of Oklahoma, the Northern Cheyenne Tribe, Northern Arapaho Tribe, the Northern Ute Tribe, the Pawnee Nation of Oklahoma, the Southern Ute Indian Tribe, and the Ute Mountain Ute Tribe have requested to be Consulting Parties for this undertaking, according to 36 CFR 800.2(c)(2) and 800.3(f)(2); and these Tribes have indicated their interest in this PA and have been invited to sign as Concurring Parties, pursuant to 36CFR 800.6(c)(3), and

WHEREAS, Colorado Springs Utilities will be responsible for constructing the Project, will



# United States Department of the Interior



## BUREAU OF RECLAMATION

Eastern Colorado Area Office  
11056 West County RD 18E  
Loveland, Colorado 80537-9711

IN REPLY  
REFER TO:

EC-1300  
ENV-3.00

- 6 2007

Ms. Georgianna Contiguglia  
State Historic Preservation Officer  
Office of Archaeology and Historic Preservation  
1300 Broadway  
Denver, Colorado 80203

Subject: Southern Delivery System Programmatic Agreement

Dear Ms. Contiguglia:

Enclosed is a draft version of the proposed Programmatic Agreement (PA) for your review and consideration. The Bureau of Reclamation, Eastern Colorado Area Office, is preparing an Environmental Impact Statement (EIS) on the proposed project, and the PA will serve to provide a framework for insuring that historic properties are properly treated. This Agreement is also being submitted to the Advisory Council on Historic Preservation (ACHP) for their consideration.

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As proposed, SDS would include construction and operation of the following components:

- Use of 42,000 acre-feet (ac-ft) of existing storage capacity in Pueblo Reservoir on an as-available basis
- Use of a Reclamation pipeline and outlet structure below Pueblo Dam to connect to an untreated ("raw") water pipeline
- 2,200 feet of 78-inch pipeline capable of conveying 96 million gallons per day (mgd) and 1,100 feet of 72-inch pipeline capable of conveying 78 mgd of raw water
- A 160-foot long, 36-inch diameter pipeline capable of conveying 18 mgd of raw water to

PA



March 27, 2012

Ms. Belinda C. Mollard  
Archaeologist  
Eastern Colorado Area Office  
Bureau of Reclamation  
11056 West County Road 18E  
Loveland, CO 80537-9711

Dear Belinda:

Enclosed please find a copy of the Programmatic Agreement (PA), Amendment 2 and the accompanying Area of Potential Effect (APE) map and Individual Area Maps USGS, 1:24,000 scale, to include new areas for addition to the Southern Delivery System (SDS) project. We have supplied 16 copies for distribution to the Colorado Historic Preservation Office (one copy), 14 interested Tribes (14 copies), and the Bureau of Reclamation (one copy):

- *SDS Programmatic Agreement, Amendment 2;*
- *Updated Area of Potential Effects Map; and*
- *Individual Area Maps, USGS 1:24,000.*

New additions to the APE include activities associated with the following:

- Juniper Pump Station Power Supply
- Williams Creek Pump Station Power Supply
- Bradley Pump Station Relocation and Power Supply
- Bradley Road Realignment
- Water Treatment Plant Sanitary Sewer Line Tie-in and Relocation of the Portions of the Raw Water Pipeline in the Northern Alignment from the north end of Work Package N2A to the Water Treatment Plant
- Finished Water 3.

These versions have been placed on the SDS SharePoint site.



**Southern Delivery System Project  
Cultural Resource Programmatic Agreement  
Annual Meeting Agenda  
Leon Young Service Center  
1521 Hancock Expressway, Colorado Springs, CO  
Pikes Peak Room  
April 3, 2015**

- D) Welcome** **1:00 – 1:15 p.m.**  
*Brian Joseph – Archaeologist, Bureau of Reclamation*  
*Allison Mosser – SDS Permitting and Compliance Sr. Project Manager, Colorado Springs Utilities*
- A) Sign-in  
 B) Introductions and Site Logistics  
 C) Objectives  
 D) Welcome  
 E) Entities/Agencies Involved
- II) Project Overview** **1:15 – 1:40 p.m.**  
*Allison Mosser – SDS Permitting and Compliance Sr. Project Manager, Colorado Springs Utilities*  
 A) SDS Project History  
 B) EIS and PA  
 C) SDS Overview and Update
- III) 2014 Cultural Resource Activities** **1:40 – 2:00 p.m.**  
*Allison Mosser – SDS Permitting and Compliance Sr. Project Manager, Colorado Springs Utilities*  
*Collette Chambellan – Archeologist, Western Cultural Resource Management*  
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- A 160-foot long 36-inch diameter pipeline capable of conveying 18 mgd of raw water to

Noise



May 10, 2011  
Kleinfelder Job No.: 117689-1

Mr. Steve Duling  
Southern Delivery System Program  
121 South Tejon Street, Plaza of the Rockies, 3<sup>rd</sup> Floor  
Colorado Springs, Colorado 80903

**Subject: Baseline Noise Monitoring Results**  
**Southern Delivery System, Pueblo Dam Connection 1A**  
**Pueblo Reservoir**  
**Pueblo, Colorado**

Dear Mr. Minnick:

On May 3<sup>rd</sup>-6<sup>th</sup>, 2011, Kleinfelder performed noise monitoring services for the SDS Pueblo Dam Connection 1A under Colorado Springs Utilities Task Order #201106569. The Dam Connection 1A location (the Site) is located on the west side of the dam structure in Pueblo, Colorado. The purpose of the noise monitoring services was to measure baseline noise conditions prior to the commencement of construction activities at the Site.

Kleinfelder installed a Metrosonics db-3080 Noise Monitor along the Bureau of Land Management fence-line and conducted three (3) twenty-four (24) hour monitoring periods in which noise levels were logged each minute. The monitoring was conducted from May 3<sup>rd</sup> through May 6<sup>th</sup> using a db-3080 Noise Monitor.

The results of the 24-hour averages are summarized in Table 1 below. Detailed data is included on the attached graphs.

**Table 1 – Baseline Noise Monitoring Results Summary**

|  |       |                                  |       |
|--|-------|----------------------------------|-------|
| Monitoring Start Date: May 3, 2011           |       | Monitoring End Date: May 6, 2011 |       |
| Equipment: Metrosonics db-3080 Noise Monitor |       |                                  |       |
|  | Day 1 | Day 2                            | Day 3 |
| 24-hour Average Noise Level (dB)             | 67.7  | 69.2                             | 69.3  |





Environmental Scientists and Engineers, LLC

August 19, 2013

Mr. Kevin Shrewsbury  
MWH/Colorado Springs Utilities  
121 S. Tejon Street  
Plaza of the Rockies, 3<sup>rd</sup> Floor  
Colorado Springs, CO. 80903

Subject: Background Noise Monitoring  
Southern Delivery System Finished Water Pipeline Work Package  
Pueblo Dam Connection 1B (PDC1B)  
WALSH Project No. WA-001170-0012-10TTO

Dear Mr. Shrewsbury,

Walsh Environmental Scientists and Engineers, LLC. (WALSH) was contracted by Colorado Springs Utilities (CSU) to perform background noise monitoring prior to the planned construction of the Pueblo Dam Connection 1B (PDC1B) of the Southern Delivery System (SDS) in Pueblo County, Colorado. This letter summarizes the tasks performed by WALSH and the results of those tasks. Information presented is based on observations and measurements obtained during this investigation.

#### *Background and Scope of Work*

At your request WALSH conducted a background noise assessment at the above referenced Site. The investigation was requested so a baseline of noise could be established prior to commencement of construction work beginning on the Pueblo Dam Connection 1B (PDC1B) of the SDS water pipeline in Pueblo County. WALSH's scope of work included observing, monitoring, and testing background noise levels at specific locations designated by you. A field drawing illustrating the locations of testing is included as an attachment to this report.

#### *Methods*

WALSH collected noise measurements between July 17, 2013 and July 19, 2013 to establish a baseline of noise at three (3) specified locations identified by you. Samples were collected using a Casella CEL-246 Sound Level Meter that was calibrated with a CEL-110/2 Acoustic Calibrator each day before use and placed at each location for a total of seventy-two (72) hours. The Meter was set to a measurement range of 30-100 decibels (dB) with a slow response time, "A" frequency weighting and set to record an average noise measurement every ten (10) seconds. Measurements collected are summarized in the following tables and attached graphs.

PCAR

# **Southern Delivery System Permit Compliance Annual Report Calendar Year 2014**

Prepared for:

**Bureau of Reclamation**

**Colorado Department of Public Health and  
Environment**

**Colorado Division of Parks and Wildlife**

**El Paso County**

**Pueblo County**

**Fountain Creek Watershed Flood Control and  
Greenway District**

Submitted by:

**Colorado Springs Utilities, SDS Project Manager  
on behalf of the SDS Participants**

January 2015

**Site Access**

Southern Delivery System Contractor Minimum Safety Requirements



**Colorado Springs Utilities**  
It's how we're all connected

# ***Minimum Standard for Contractor Site Safety Plan (MSSSP)***

Prepared for: **SDS**  
**Content Requirements**  
**For Contractor MSSSP**  
**Version 2.0**  
**April 1, 2011**

## THE FUTURE OF CONSTRUCTION SOFTWARE

For the purpose of this study, the following definition of a "small business" was used: "A small business is a business that is independently owned and operated, is not a subsidiary of a larger company, and has fewer than 100 employees." (Bureau of Economic Analysis, 2002)

| DATE | Printed Full Name     | COMPANY | PM ESCORTS PRINTED FULL NAME                                    | TIME IN  | TIME OUT | TIME IN | TIME OUT | TIME IN | TIME OUT | TIME IN | TIME OUT |
|------|-----------------------|---------|---|----------|----------|---------|----------|---------|----------|---------|----------|
| 8/3  | Billy Martineau       | ASFI    | Greg Swindle / <sup>mtw</sup> / <sup>mtw</sup> / <sup>mtw</sup> | 7:00     | 1530     |         |          |         |          |         |          |
| 8/3  | Mike Hill             | AST     | Mike Hill / <sup>mtw</sup> / <sup>mtw</sup> / <sup>mtw</sup>    | 7:10     | 1530     |         |          |         |          |         |          |
| 8/3  | Dan S. Sorensen       | ASFI    | Greg Swindle / <sup>mtw</sup> / <sup>mtw</sup> / <sup>mtw</sup> | 7:10     | 1530     |         |          |         |          |         |          |
| 8/3  | Greg Swindle          | ASFI    | Self  | 7:10     | 1639     |         |          |         |          |         |          |
| 8/3  | Carlos Martinez       | AST     | Greg Swindle / <sup>mtw</sup> / <sup>mtw</sup> / <sup>mtw</sup> | 7:10     | 1530     |         |          |         |          |         |          |
| 8/3  | Michael Goodman       | ASFI    | Greg Swindle / <sup>mtw</sup> / <sup>mtw</sup> / <sup>mtw</sup> | 7:11     | 1530     |         |          |         |          |         |          |
| 8/3  | Mike Lamb             | ASFI    | Self  | 7:11     | 1530     |         |          |         |          |         |          |
| 8/3  | Todd Little           | HEL     | Greg Swindle / <sup>mtw</sup> / <sup>mtw</sup> / <sup>mtw</sup> | 7:11     | 1443     |         |          |         |          |         |          |
| 8/3  | Daniel Shaker         | HEL     | Greg Swindle / <sup>mtw</sup> / <sup>mtw</sup> / <sup>mtw</sup> | 7:11     | 1430     | 11:00   | 1430     |         |          |         |          |
| 8/3  | Jacqueline Hunsbarger | ERS     | Greg Swindle / <sup>mtw</sup> / <sup>mtw</sup> / <sup>mtw</sup> | 7:20     | 1430     | 11:55   | 1435     |         |          |         |          |
| 8/3  | Michael P. Swarth     | ERS     | Greg Swindle / <sup>mtw</sup> / <sup>mtw</sup> / <sup>mtw</sup> | 7:22     | 1430     | 12:05   | 1430     |         |          |         |          |
| 8/3  | Stanley Conc          | BOR     | Self  | 7:41     | 1400     |         |          |         |          |         |          |
| 8/3  | Rick Gillespie        | BOR     | Self  | 08/17/08 | 0700     | 0755    | 0836     | 1243    | 1400     | 1530    | 1625     |
| 8/3  | Greg Mink             | MMWC    | Self  | 0833     | 0854     | 1854    | 1115     | 1316    | 1413     |         |          |
| 8/3  | Steve Clatter         | MMWC    | Greg Swindle / <sup>mtw</sup> / <sup>mtw</sup> / <sup>mtw</sup> | 8:1      | 1024     | 2:02    | 3:13     | 3:30    |          |         |          |

**Accounting Manager** / **Controller**

St. C. Davis Group Performance Vector Logo  
St. C. Davis Group



PS



**MEETING SUMMARY**

# **Southern Delivery System Juniper Pump Station Architectural Definition Workshop**

**ATTENDEES:** Beth Boaz/Reclamation/Loveland  
Tom Musgrove/Reclamation/Pueblo  
Larry Bean/Reclamation/Billings  
Mike French/State Parks  
Mike Dowd/State Parks  
Bob Robler/Colorado Springs Utilities  
Russ Nicklin/Colorado Springs Utilities  
Bruce Lintjer/Lintjer + Haywood Architects  
Kevin Heffernan/CH2M HILL

**COPIES:** Bruce Spiller/CH2M HILL  
Juniper Pump Station Design Team

**NOTES TAKEN BY:** Bruce Lintjer/ Lintjer + Haywood Architects

**MEETING DATE:** January 27, 2005

**LOCATION:** State Parks Visitor Center, Lake Pueblo State Park

The meeting was started with a brief introduction by each attendee. Kevin Heffernan explained the primary purpose of the meeting was to convene together Reclamation and State Parks, with Colorado Springs Utilities and the design team, to establish the architectural design schemes and approaches mutually acceptable for Juniper Pump Station. A copy of the meeting agenda and sign-in sheet is attached following the meeting summary.

Beth Boaz qualified the meeting today was independent of the current NEPA study. The final recommendation for Southern Deliver System (SDS) project components will be made in the Record of Decision (ROD). Bob Robler indicated the current design work taking place was at-risk for Colorado Springs Utilities.

Bob Robler questioned what agency had the authority to approve architectural approaches for Juniper Pump Station. Beth Boaz and Larry Bean indicated the agency is Reclamation.

## **Southern Delivery System Overview:**

- A brief description of SDS was provided, with particular emphasis on the proposed source water location, pump station, and pipelines. All of which are on Reclamation's property at Lake Pueblo State Park.
- The current SDS project schedule was discussed. The ROD is expected in early 2007. Construction will start shortly thereafter. The SDS project is planned to be operational in early 2010.

# Colorado Springs Utilities Southern Delivery System

*Restored Vegetation Cover Monitoring – Work Segment S3-13N*



*Prepared for:*  
**Colorado Springs Utilities**  
**Southern Delivery System**  
**Colorado Springs, CO 80947**

*Prepared by:*  
**Colorado Natural Heritage Program**  
**Colorado State University**  
**Fort Collins, CO 80523**

**September, 2014**

**Colorado**

## Executive Summary

The Colorado Natural Heritage Program, in cooperation with ESCO Associates, completed post-construction monitoring of restored vegetation along the Colorado Springs Utilities' Southern Delivery System (SDS) pipeline. Construction on segment S3-13N of the pipeline route was completed during 2012 and early 2013. Areas of the S3 work segment were disturbed by flood waters and were re-graded to pre-construction contours and replanted by January 29, 2014. Work Segment S3-13N was administratively separated from the remainder of the S3-13 segment but retains the two-year bond schedule for the S3-13 Segment.

Assessment of Vegetative Cover and the Presence of Acceptable Species in revegetated and irrigated areas along the SDS Pipeline in Pueblo County was completed in late August and early September 2014 as per the Protocol developed for the project. Prior to this assessment, the density of seedlings (July 2013) and revegetation cover (late September 2013) were assessed along these same reaches of revegetated right-of-way.

Beginning with the pre-construction vegetation surveys, results of sampling in this work package have been grouped by broad soil types. The average revegetated cover of acceptable species was calculated for each soil group and compared to the 90% standard. The area weighted average of the revegetated cover values from the different soil groups within a work segment was also calculated to determine if the performance standards for the work segment as a whole were met. The area weighted average was calculated using the proportion of distance each soil group occupied within the work segment.

Vegetation cover in Segment S3-13N was 7.7 percentage points below the 90% standard. Soil group C represents 2.4% of the larger S3-13 work segment from which it was administratively separated.

Table 1. Revegetation Cover by Soil Group for Work Segment S3-13N

| Map Code | Soil Group                               | % of Work Unit | % Base Veg. Cover | 90% Perf. Std. (0.9 x Base) | % Cover by Acc. Spp. |
|----------|--|----------------|-------------------|-----------------------------|----------------------|
| C        | Soils deep on early Pleistocene alluvium | 100            | 35.0              | 31.5                        | 23.8                 |

In conformance with the provisions of the Protocol, the goal of the frequency assessment was to determine the average presence of at least two acceptable species per square meter (i.e. an average frequency of acceptable species of at least 200%). Results in the table below show that for all soil groups in the work package, the average presence of acceptable species exceeded two per square meter.

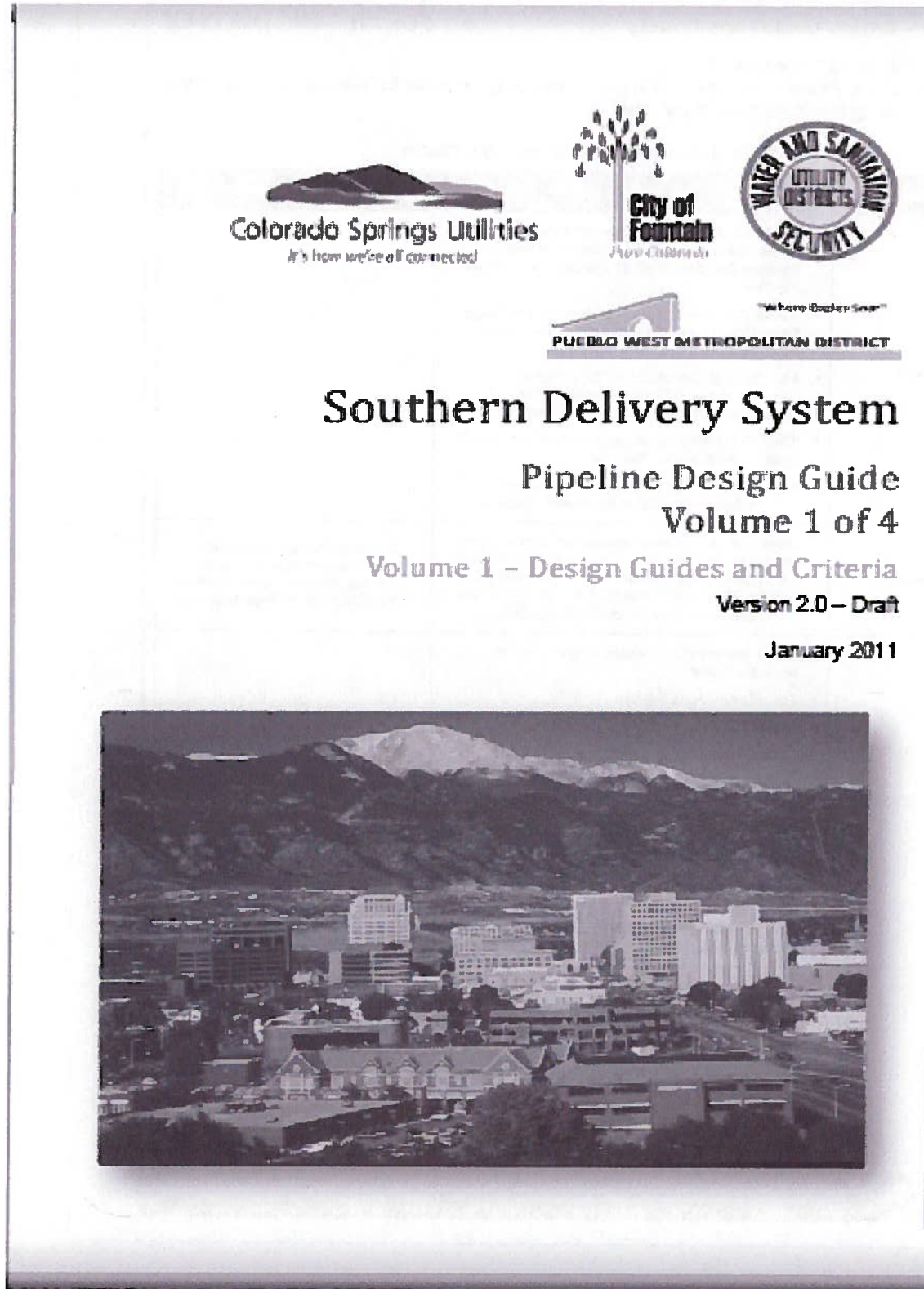
Table 2. Average Frequency of Acceptable Species, Soil Group C, S3-13N

| Work Package                  | Soil Group | Cumulative Frequency Percentage | Avg. No. of Acceptable Species per Square Meter |
|-------------------------------|------------|---------------------------------|---|
| S3-13N                        | C          | 310                             | 3.1   |
| Work Package Weighted Average |            | 310                             | 3.1   |

When viewed in isolation, revegetation cover on Segment S3-13N did not meet the 90%



Design Guide



# Volume 1 – Design Guides and Criteria

FOR INTERNAL USE ONLY

## 3.8 Drainage Crossing Guide

This section of the Pipeline Design Guide presents design criteria for natural and manmade drainages crossing the transmission pipelines.

Table 3-8 – Drainage Crossing Criteria

| Subject            | Crossing Type   | Comments/Reason   |
|--------------------|---|---|
| References         | <ul style="list-style-type: none"> <li>TM 7-G.6.2 Summary of Hydrology and Total Scour Calculations and Recommended Pipeline Depths for South Section Raw Water Pipeline.</li> <li>TM 12.C.6A Hydrologic Analysis of Drainage Crossings for the North Section Raw Water Pipeline.</li> <li>TM 12.C.6B Summary of Total Scour Calculations and Recommended Pipeline Depths for North Section Raw Water Pipeline.</li> <li>TM 7-D.1.1 Proposed Easement Widths-North Section Raw Water Pipeline.</li> <li>TM 7-D.1.18 Rev 1 Proposed Easement Widths-South Section Raw Water Pipeline.</li> </ul> |   |
| General            | Open-cut creek crossings will be constructed during dry season and when runoff is unlikely or infrequent. Appropriate best management practices (BMPs) are required and shown on plan details of specific creek crossings.  | Trenchless pipe installation methods are required when crossing Fountain Creek. (See Trenchless Crossings section). |
| Open Cut Crossings | <ul style="list-style-type: none"> <li>Scour potential comprises three types of additive scour:</li> <li>Long-term degradation</li> <li>General scour</li> <li>Local scour</li> <li>In addition to the type of scour, potential planform changes of the channel are analyzed.</li> </ul> <p>The depth of cover is determined as the greater of:</p> <ul style="list-style-type: none"> <li>a. Long term degradation + 5 ft</li> <li>or</li> <li>b. Long-term degradation + Local scour + General scour + 1 ft</li> </ul>  | Consider grade control structures to limit scour.   |



PS



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Specs

**Documents for the Construction of the  
SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S2**

**VOLUME 1 OF 2  
SPECIFICATIONS  
APRIL 4, 2011**

**OWNER'S REPRESENTATIVE**

**DARLENE GARCIA, P.E.  
COLORADO SPRINGS UTILITIES  
121 S. TEJON, 3<sup>RD</sup> FLOOR  
COLORADO SPRINGS, CO 80947  
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**Dust**

**Final Report for Noise and  
Dust Monitoring  
Colorado Springs Utilities  
Southern Delivery System  
Water Pipeline Work Package S1  
Pueblo County, Colorado**

Walsh Project No. WA-001170-0004-10TTO  
July 27, 2012

# **Final Report for Noise and Dust Monitoring Colorado Springs Utilities Southern Delivery System Water Pipeline Work Package S1 Pueblo County, Colorado**

## **1 INTRODUCTION**

Walsh Environmental Scientists and Engineers, LLC. (WALSH) was contracted by Colorado Springs Utilities (CSU) to perform background dust and noise monitoring prior to the planned construction of section S1 of the Southern Delivery System (SDS) in Pueblo County, Colorado. This report summarizes the tasks performed by WALSH and the results of those tasks. Information presented is based on observations and measurements obtained during these investigations.

## **2 FIELD ACTIVITIES**

WALSH conducted a series of background dust and noise assessments at five (5) locations designated by CSU. The investigation was requested so a baseline of particulate matter less than ten (10) microns (PM10) and noise decibels could be established prior to construction work beginning on section S1 of the SDS water pipeline in Pueblo County, Colorado. WALSH's scope of work included observing, monitoring, and measuring background dust and noise levels at specified sites, requested by CSU, along the S1 section of pipeline.

### **2.1 Background Dust Monitoring Methods**

WALSH measured particulate matter ten (10) microns (PM10) and less over an eight (8) hour period at five (5) locations designated by CSU, to establish a baseline of dust and particulate matter prior to commencement of construction beginning on the SDS S1 section of pipeline. Measurements were taken using a HAZ-DUST Real-Time Particulate Air Monitor Model EPAM-5000. The monitor was calibrated by the manufacturer with a precision of  $\pm .003 \text{ mg/m}^3$  ( $3 \text{ } \mu\text{g/m}^3$ ). The flow rate was set at 4.0 liters/minute and adjusted to detect particles less than ten (10) microns (PM10). A summary of measurements collected are included in the following tables.



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**Documents for the Construction of the  
SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S2**

**VOLUME 1 OF 2  
SPECIFICATIONS  
APRIL 4, 2011**

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## Trenchless



### TECHNICAL MEMORANDUM S4AE-8.1.2

## Southern Delivery System - Geotechnical Conditions and Recommendations for South 4A East Crossing I-25, BNSF and UPRR Tracks, Fountain Creek, and Floodplain

TO: Colorado Springs Utilities

FROM: CH2M HILL

DATE: April 13, 2012

### Executive Summary

This technical memorandum (TM) presents a summary of the subsurface conditions encountered and an evaluation of potential construction techniques for the proposed Southern Delivery System (SDS) South 4A East Raw Water Pipeline (S4AE) crossing of Interstate 25 (I-25), the Union Pacific (UPRR) and Burlington Northern (BNSF) railroad rights-of-way, the active channel of Fountain Creek, and the floodplain of Fountain Creek in unincorporated El Paso County Colorado (Figure S4AE-8.1.2-1).

On February 28, 2012 the alternatives described in this TM were presented to the SDS S4AE project team at the S4AE Trenchless Crossing Workshop. Based on the information presented and team discussions, the project team selected Alternative 1 as the preferred alternative for constructing the pipeline through the project area. Alternative 1 consists of the following elements: one tunnel approximately 400 feet long under I-25 installed through the upper clay unit using open-face tunneling methods, open cut construction in between I-25 and railroad right-of-way, a second tunnel approximately 1,390 feet long under the railroad rights-of-way and the active channel of Fountain Creek installed in the Pierre Shale bedrock using open-face tunneling methods, and then open cut construction through the Fountain Creek floodplain.

Additional discussions and modifications to the Alternative 1 estimated costs have occurred since the workshop previously mentioned regarding risk mitigation and costs. Based on these discussions and modifications, the SDS Program is developing an approach for contractors to propose on either Alternative 1 or Alternative 3 during the procurement phase of S4AE.

### 1.0 Introduction

On February 28, 2012 the information in this TM was presented to the SDS S4AE project team. Team members consisted of Colorado Springs Utilities project management and operations staff, SDS Program Management, design review and permitting staff, and CH2M HILL design staff. The purpose of the evaluation presented is to select a preferred combination of open cut and trenchless technologies to construct the approximately 5,400-foot reach of 66-inch welded steel pipe (WSP) between Midway Ranch Road (west of I-25) to a point approximately ¼-mile west of Hanover Road.



Colorado Springs Utilities

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**DESIGN/BUILD AGREEMENT**

**SOUTHERN DELIVERY SYSTEM (SDS)  
RAW WATER PIPELINE DESIGN  
AND CONSTRUCTION SERVICES FOR  
SEGMENT S4A CENTRAL**

**AGREEMENT NUMBER: 201303997**

**Between  
Colorado Springs Utilities  
and  
Garney Companies, Inc.**

**Effective Date: March 12, 2013**

Access

## STATE OF COLORADO

Region 2 Traffic Section  
905 Erie Ave., P.O. Box 538  
Pueblo, Colorado 81002  
(719) 546-5407 Fax (719) 582-5523



July 2, 2013

ATTN: Bill Williams  
Garney Construction  
611 North Weber, Suite 103  
Colorado Springs, CO 80903

**RE: State Highway Access Permit No. 213039, Located on Highway 25, Milepost 120.93,  
in County El Paso**

Dear Bill Williams,

Enclosed is your Notice to Proceed (NTP) for the above stated access permit. This NTP is valid only if the referenced access permit has not expired. Access permits expire one year from the date of issue if not under construction or complete. Your permit will expire on July 2, 2014. Access Permits may be extended in accordance with Section 2.3(11)(3), of the Access Code. You must obtain a new NTP following the suspension of work through the winter.

You shall notify the CDOT Inspector, Todd Ausbun, at (719) 696-1403, at least 48-hours prior to commencing construction within the State Highway right-of-way. All construction shall be completed in an expeditious and safe manner and shall be finished within 45-days from initiation. You must also contact the CDOT Inspector upon completion of access construction to request a final inspection, prior to any use, as allowed by this permit.

All materials and construction shall be completed in accordance with all applicable Department Standards and Specifications, and constructed in conformance with 2 CCR 601-1, State Highway Access Code, including any additional terms and conditions of the issued permit. A fully endorsed copy of the issued access permit and NTP shall be available for review at the construction site during construction.

If you have any questions or need more information, please contact me at the office listed above.

Respectfully,

Valerie Sword  
Region 2 Access Manager

xc: Duane Greenwood, City of Fountain  
Karami



Access

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Valerie Sword  
Region 2 Access Manager

xc: Duane Greenwood, City of Fountain  
Karami

SWMP

## Stormwater Management Plan

### **SOUTHERN DELIVERY SYSTEM** Juniper Raw Pump Station

#### Location of Construction Site:

Approximately 1,900 feet northeast of  
Pueblo Dam Spillway  
(Parcel No. 0625000004 and 0600000058)  
**Section 36; T20S; R66W**

#### Key Contact:

Colorado Springs Utilities – Steve Duling  
Planning & Permitting Program Manager  
(719)668-8706  
Email: [sduling@csu.org](mailto:sduling@csu.org)

Written by:  
CDM Smith

January 31, 2013

# Stormwater Management Plan – Juniper Pump Station

January 31<sup>st</sup>, 2013

Page 1

## 1 Foreword

This Stormwater Management Plan (SWMP) identifies potential sources of pollution (including sediment) which may reasonably be expected to affect the quality of stormwater discharges associated with the construction of the Juniper Raw Water Pump Station (JPS) portion of the Southern Delivery System (SDS). In addition, the plan describes the implementation of Best Management Practices (BMPs) which will be used to reduce the pollutants in stormwater discharges associated with construction activity. The BMPs will be implemented before construction and grading begins.

Colorado Springs Utilities and Contractor personnel will be familiar with this plan and its contents prior to initiating construction on the project. A copy of this document will be kept on site at all times. Contractor personnel will be responsible for updating and revising the document as required.

## 2 Project Description

### 2.1 Site Description

The JPS project area is located on Pueblo County Parcel #625000004 and #600000058, approximately 1,900 feet northeast of the Pueblo's Dam spillway, generally west of Pueblo, CO (see Location Map in Attachment 1). The construction area is located within federally owned property. The site is located on a hill that projects approximately 30 feet above the surrounding areas and slopes steeply in all directions. The overall elevation change across the site is approximately 17 feet, ranging from El. 4807 to 4790. Vegetation at the site consists of native grasses and cactus. Land use at the site is currently undeveloped. The depth to bedrock is relatively shallow on the site and outcrop of the Graneros Shale was observed in a nearby road-cut for Juniper Road. The receiving water is the Arkansas River.

### 2.2 Description of Construction Activity

Colorado Springs Utilities has received approval to construct the SDS Project from various regulatory agencies. The SDS Project will provide future water needs through 2046 to the City of Colorado Springs, City of Fountain, Security Water District, and the Pueblo West Metropolitan District (the SDS Participants). The project consists of a water conveyance system which will run from the Pueblo Reservoir Dam to the City of Colorado Springs.

The JPS portion of the project consists of the installation of a 50 million gallon per day (MGD) pump station that is expandable to 78 MGD. Proposed construction components include a pump building, flow meter vault, discharge valve vault, surge protection systems, sediment blow-off appurtenances and other ancillary facilities (see Site Map in Attachment 1). Construction of JPS is scheduled to commence in June 2013 with substantial completion in November 2015.

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**OWNER'S REPRESENTATIVE**

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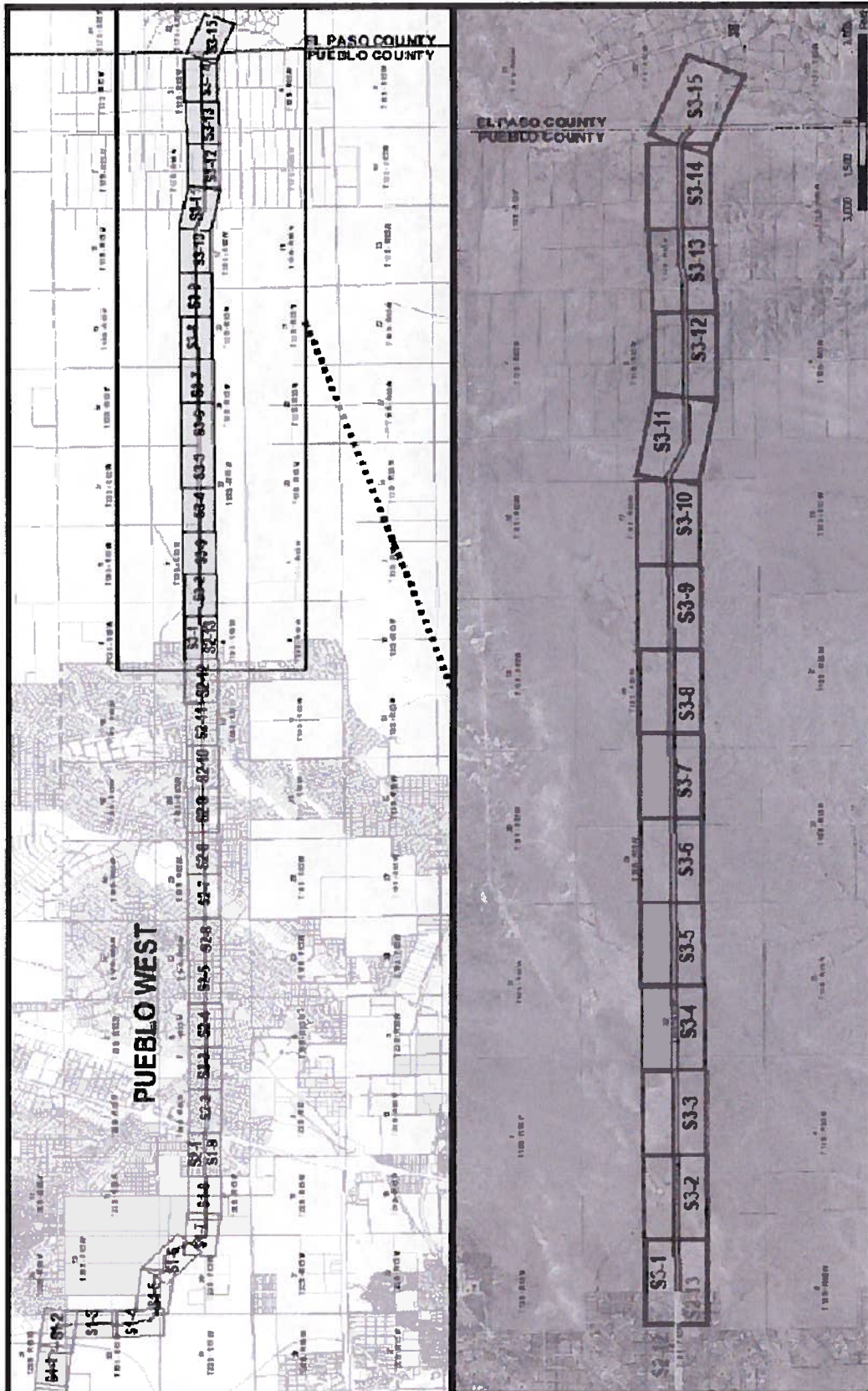
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Easement

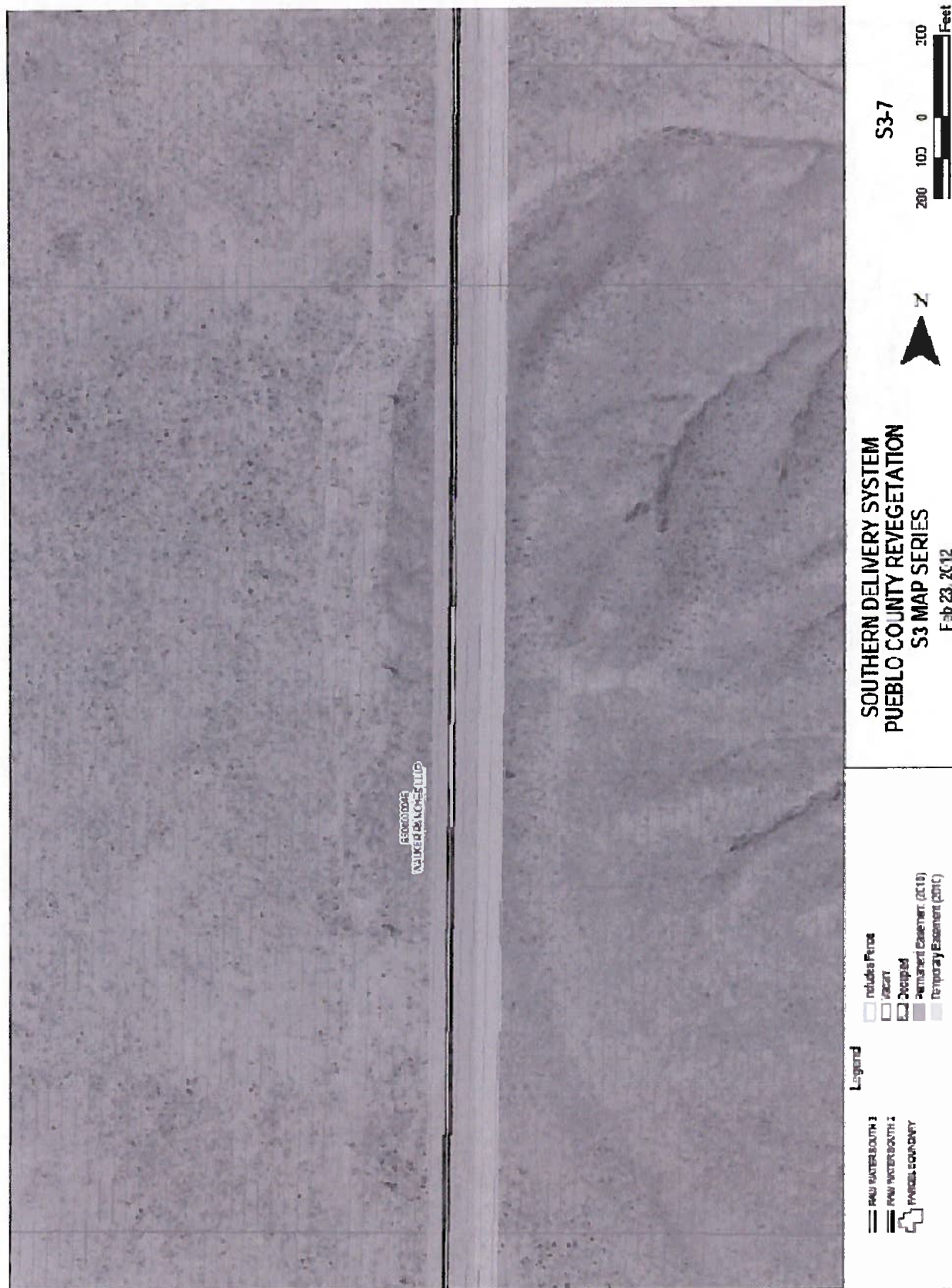


**SOUTHERN DELIVERY SYSTEM  
PUEBLO COUNTY REVEGETATION  
S-3 MAP SERIES INDEX**

February 2012









**Dust**

**Final Report for Noise and  
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Colorado Springs Utilities  
Southern Delivery System  
Water Pipeline Work Package S1  
Pueblo County, Colorado**

**Walsh Project No. WA-001170-0004-10TTO  
July 27, 2012**

# **Final Report for Noise and Dust Monitoring Colorado Springs Utilities Southern Delivery System Water Pipeline Work Package S1 Pueblo County, Colorado**

## **1 INTRODUCTION**

Walsh Environmental Scientists and Engineers, LLC. (WALSH) was contracted by Colorado Springs Utilities (CSU) to perform background dust and noise monitoring prior to the planned construction of section S1 of the Southern Delivery System (SDS) in Pueblo County, Colorado. This report summarizes the tasks performed by WALSH and the results of those tasks. Information presented is based on observations and measurements obtained during these investigations.

## **2 FIELD ACTIVITIES**

WALSH conducted a series of background dust and noise assessments at five (5) locations designated by CSU. The investigation was requested so a baseline of particulate matter less than ten (10) microns (PM10) and noise decibels could be established prior to construction work beginning on section S1 of the SDS water pipeline in Pueblo County, Colorado. WALSH's scope of work included observing, monitoring, and measuring background dust and noise levels at specified sites, requested by CSU, along the S1 section of pipeline.

### **2.1 Background Dust Monitoring Methods**

WALSH measured particulate matter ten (10) microns (PM10) and less over an eight (8) hour period at five (5) locations designated by CSU, to establish a baseline of dust and particulate matter prior to commencement of construction beginning on the SDS S1 section of pipeline. Measurements were taken using a HAZ-DUST Real-Time Particulate Air Monitor Model EPAM-5000. The monitor was calibrated by the manufacturer with a precision of  $\pm .003 \text{ mg/m}^3$  ( $3 \text{ } \mu\text{g/m}^3$ ). The flow rate was set at 4.0 liters/minute and adjusted to detect particles less than ten (10) microns (PM10). A summary of measurements collected are included in the following tables.

# Colorado Springs Utilities Southern Delivery System

*Restored Vegetation Cover Monitoring – Work Segment S3-13N*



*Prepared for:*  
**Colorado Springs Utilities**  
**Southern Delivery System**  
**Colorado Springs, CO 80947**

*Prepared by:*  
**Colorado Natural Heritage Program**  
**Colorado State University**  
**Fort Collins, CO 80523**

**September, 2014**

**Colorado**



## Executive Summary

The Colorado Natural Heritage Program, in cooperation with ESCO Associates, completed post-construction monitoring of restored vegetation along the Colorado Springs Utilities' Southern Delivery System (SDS) pipeline. Construction on segment S3-13N of the pipeline route was completed during 2012 and early 2013. Areas of the S3 work segment were disturbed by flood waters and were re-graded to pre-construction contours and replanted by January 29, 2014. Work Segment S3-13N was administratively separated from the remainder of the S3-13 segment but retains the two-year bond schedule for the S3-13 Segment.

Assessment of Vegetative Cover and the Presence of Acceptable Species in revegetated and irrigated areas along the SDS Pipeline in Pueblo County was completed in late August and early September 2014 as per the Protocol developed for the project. Prior to this assessment, the density of seedlings (July 2013) and revegetation cover (late September 2013) were assessed along these same reaches of revegetated right-of-way.

Beginning with the pre-construction vegetation surveys, results of sampling in this work package have been grouped by broad soil types. The average revegetated cover of acceptable species was calculated for each soil group and compared to the 90% standard. The area weighted average of the revegetated cover values from the different soil groups within a work segment was also calculated to determine if the performance standards for the work segment as a whole were met. The area weighted average was calculated using the proportion of distance each soil group occupied within the work segment.

Vegetation cover in Segment S3-13N was 7.7 percentage points below the 90% standard. Soil group C represents 2.4% of the larger S3-13 work segment from which it was administratively separated.

Table 1. Revegetation Cover by Soil Group for Work Segment S3-13N

| Map Code | Soil Group                               | % of Work Unit | % Base Veg. Cover | 90% Perf. Std. (0.9 x Base) | % Cover by Acc. Spp. |
|----------|--|----------------|-------------------|-----------------------------|----------------------|
| C        | Soils deep on early Pleistocene alluvium | 100            | 35.0              | 31.5                        | 23.8                 |

In conformance with the provisions of the Protocol, the goal of the frequency assessment was to determine the average presence of at least two acceptable species per square meter (i.e. an average frequency of acceptable species of at least 200%). Results in the table below show that for all soil groups in the work package, the average presence of acceptable species exceeded two per square meter.

Table 2. Average Frequency of Acceptable Species, Soil Group C, S3-13N

| Work Package                  | Soil Group | Cumulative Frequency Percentage | Avg. No. of Acceptable Species per Square Meter |
|-------------------------------|------------|---------------------------------|---|
| S3-13N                        | C          | 310                             | 3.1   |
| Work Package Weighted Average |            | 310                             | 3.1   |

When viewed in isolation, revegetation cover on Segment S3-13N did not meet the 90%

HMP



ADVANCING WATER

## **SDS S2**

### **Hazardous Materials Management Plan**

Garney Construction will comply with all regulations relating to handling, storing, transporting and spill/ release and reporting of hazardous materials set forth by OSHA, DOT and EPA regulations.

Hazardous materials will be stored according to the product specification, codes and manufacturer's instructions.

A hazardous material inventory log will be kept with copies of MSDS on all hazardous products to be used. The MSDS book will be kept onsite in the field office.

There is no known abandoned fuel storage, refineries or landfills within the limits of our work.

Garney supervisors will monitor construction operations in order to identify any hazardous material.

For protection of employees and the general public Garney's will follow the Site Specific Safety Plan with regards to hazardous materials.

Should any spill or release of hazardous materials and / or petroleum products be identified, Garney Construction will immediately notify the Construction Manager.

If hazardous waste or petroleum contaminated soils are encountered, Garney's will cease operations and respond as outlined in the SDS "Hazardous Substance Encountered by Construction Contractor".

Garney's Safety Representative will perform routine audits to insure any hazardous materials are stored and managed properly.



Specs

**Documents for the Construction of the  
SOUTHERN DELIVERY SYSTEM  
RAW WATER PIPELINE S2**

**VOLUME 1 OF 2  
SPECIFICATIONS  
APRIL 4, 2011**

**OWNER'S REPRESENTATIVE**

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**Colorado Springs Utilities**  
*It's how we're all connected*



**SPECIFICATIONS (VOLUME 1 OF 2)**

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## Potential Pollution Report / Spill Contingency Plan

### Materials Handling and Spill Prevention

*The SWMP shall identify any procedures or significant materials handled at the site that could contribute pollutants to runoff. These could include: exposed storage of building materials, fertilizers or chemicals, waste piles, equipment maintenance, fueling procedures and/or other measures:*

- ♦ If done on site, vehicle fueling will be done away from the creek in an area that does not run off into the creek.
- ♦ No chemicals, oils, or fuels will be stored on site.
- ♦ Equipment maintenance will not be done on site.
- ♦ Stored soil stockpiles will be moved to an area where stormwater protection is being implemented. Silt fencing will be employed around any on-site/ out-of-the-creek stockpiles (e.g. topsoil stockpiles) that are not contoured to retain stormwater runoff.
- ♦ Runoff from any materials 'stored' in the creek will be detained behind stormwater berms (earth dikes) to allow solids sedimentation and filtration before the water enters the creek.

Concrete wash water will be discharged in a concrete washout structure 500' away from the creek and in such a manner that it does not ultimately end up in the creek area.

### Spill Control Plan

1. **POTENTIAL HAZARDS:** Fuel and oil spills from refueling area.

2. **PROCEDURES:** In the event of a spill notify the Supervisor on site who will notify the Owner/Construction Manager will determine the severity of the spill and whether or not he/she is properly equipped to deal with the situation. If the volume of substance spilled is substantial, The HCP's procedure includes building a berm around the affected area to prevent further contamination and calling the proper authorities. A list of emergency numbers is posted at the bulletin board on site.

3. **INSTRUCTIONS:** Corporate Wide Health and Safety Plan.

4. **REPORTS:** In the event of a spill the supervisor will enter the information on his/her daily reports and if applicable assume the responsibility of contacting Federal, State, or local agencies.

5. **INDIVIDUAL RESPONSIBLE FOR IMPLEMENTING CLEANUP:** Justin (Jarhead) Kurdupski will be the individual responsible for implementing the Emergency Action Plan.

6. **TRAINING REQUIREMENTS:** Weekly safety meetings are conducted and documented with each employee's signature.


7. **LIST OF CLEANUP MATERIALS:** The equipment trailer contains a fire extinguisher, dry-sweep, brooms, shovels, and a can and trash bags to dispose of contaminants in.

# RECLAMATION

*Managing Water in the West*

## Record of Decision For the Southern Delivery System Final Environmental Impact Statement

Record of Decision Reference No.: GP-2009-01

Approved: 

Date: MAR 20, 2009

Michael J. Ryan, Regional Director  
Great Plains Region  
Bureau of Reclamation



U.S. Department of the Interior  
Bureau of Reclamation  
Great Plains Region  
Billings, Montana

March 2009

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## Introduction

The U.S. Department of the Interior, Bureau of Reclamation, (Reclamation), has published a Final Environmental Impact Statement (FEIS) for the Southern Delivery System. The Southern Delivery System (SDS) Project is a proposed regional water delivery project designed to serve most or all future water needs through 2046 of the City of Colorado Springs, City of Fountain, Security Water District, and Pueblo West Metropolitan District (the "Participants"). As proposed, the SDS Project would deliver Fryingpan-Arkansas (Fry-Ark) Project water and non-Fry-Ark Project water from Pueblo Reservoir to the Participants for storage, treatment, and distribution to customers.

Three major federal actions by Reclamation were analyzed in the FEIS: (1) entering into excess capacity contracts with the Participants for use of Fry-Ark facilities, (2) issuance of a special use permit to connect to Fry-Ark facilities, (3) and an "administrative swap" of Fountain Valley Authority (FVA) water associated with SDS Project deliveries. Reclamation is responsible for managing Fry-Ark facilities, and is the lead agency for the purposes of compliance with the National Environmental Policy Act of 1969 (NEPA). The U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, U.S. Bureau of Land Management, and the U.S. Fish and Wildlife Service are cooperating agencies.

The Fry-Ark Project is an existing water supply project in Colorado, owned by the United States, operated by Reclamation, and authorized in 1962 to serve both agricultural and municipal entities. The Fry-Ark Project

transfers, stores, and delivers water from both the Western and Eastern Slopes of the Rocky Mountains to water users in the Arkansas River Basin.

The primary federal action analyzed in the FEIS involves Reclamation entering into up-to-40-year contracts with the Project Participants for use of the Eastern Slope System of the Fry-Ark Project in Colorado. The contracts would be for use of existing storage capacity in Pueblo Reservoir when this space is not filled with Fry-Ark Project water or water stored under the Winter Water Storage

### Major Federal Actions Approved in this ROD

1. Excess Capacity Contracts for Water Storage, Conveyance, and Exchange
2. Special Use Permit
3. Fountain Valley Authority Administrative "Swap"

Program, conveyance of water through facilities associated with Pueblo Reservoir, and for exchange of water between Pueblo Reservoir and Reclamation reservoirs in the upper Arkansas River Basin including Twin Lakes and Turquoise Lake. The use of

Fry-Ark facilities by entities other than Reclamation for water storage or conveyance requires a contract with Reclamation.

Pueblo West would participate in the proposed SDS Project infrastructure only if Reclamation selects an alternative that includes diverting water from facilities associated with Pueblo Reservoir. Pueblo West would construct its new water intake and pump station at its approved location on the Arkansas River downstream of Pueblo Dam if Reclamation selects an alternative that does not divert water from facilities associated with Pueblo Reservoir. Pueblo West has also requested excess capacity storage in Pueblo Reservoir in all Action Alternatives (SDS Project alternatives that require one or more of the major federal actions analyzed in the FEIS).

The second federal action analyzed in the FEIS is issuance of a special use permit or other agreement from Reclamation to connect the

SDS Project pipeline to Reclamation facilities. Pueblo West would continue to maintain its existing conveyance contract with Reclamation to use the joint use manifold from Pueblo Reservoir.

The third federal action analyzed in the FEIS is the approval of an administrative trade ("swap") of an equal amount of capacity in the Fountain Valley Authority (FVA) pipeline for capacity in the SDS Project untreated water pipeline and water treatment plant. This trade would allow Fountain to use a portion of Colorado Springs' FVA capacity in trade for Colorado Springs' use of an equal amount of Fountain's capacity in the proposed SDS Project.

In the FEIS, Reclamation identified the Participants' Proposed Action as the Agency Preferred Alternative. This Record of Decision (ROD) describes the alternative selected for implementation and the rationale for that decision. It also describes the alternatives considered in reaching the decision, and identifies those measures that will be taken to minimize environmental harm from implementation of the selected alternative in accordance with 40 CFR § 1502.2.

## The NEPA Process

The FEIS and this ROD have been prepared in accordance with the Council on Environmental Quality's (CEQ) NEPA regulations (40 CFR 1500-1508) and Department of the Interior policies. The Draft Environmental Impact Statement (DEIS) analyzing the environmental

consequences of the alternatives was released for public review on February 29, 2008. Public comments were received until June 13, 2008. Nearly 400 public comments raised a variety of topics. Comments related to water quality, dam safety, and the Western Slope, as

well as changes to the alternatives prompted Reclamation to release a Supplemental Information Report after publication of the DEIS. The Supplemental Information Report was released for public review from October 3, 2008 through November 24, 2008. A total of 40 public comments were received on the Supplemental Information Report. An

FEIS, which addressed public comment on both the DEIS and the SIR, was filed with the Environmental Protection Agency (EPA) (filing number FES 08-63) on December 12, 2008 and noticed by the EPA and Reclamation in the *Federal Register* on December 19, 2008. The decision documented in this ROD is based on the FEIS and public comment received on the FEIS.

In addition to NEPA, the Participants will need to obtain several permits or approvals from federal, state, and local agencies before implementing the SDS Project. Major permitting elements and consultation requirements for the alternatives may include but are not limited to:

- A Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers
- A Clean Water Act Section 401 certification and a Colorado Discharge permit from the Colorado Department of Public Health and Environment

**Firm yield** is the highest water demand that can be continuously fulfilled based on historical hydrologic conditions. The firm yield is the water demand fulfilled just prior to the level that produces system shortages.

**SMAPD** is the average annual increase in demand met for a project (such as SDS) at a specified annual demand level. For the purposes of this FEIS, SMAPD is always evaluated at a demand level equal to the 2046 demand from the Participants' Planning Demand Forecast.

- A National Historic Preservation Act Section 106 review from the Advisory Council on Historic Preservation
- A Section 7 consultation by the Fish and Wildlife Service
- A 1041 land use change permit from Pueblo or Chaffee county
- Land use approval from El Paso and/or Fremont county
- Special use permit or similar authorization from Fort Carson and/or Bureau of Land Management
- A Coordination Act Report pursuant to the Fish and Wildlife Coordination Act of 1958

## Alternatives Considered in Detail

The alternatives considered in detail are briefly summarized as follows (see Table 1).

### No Action Alternative (Alternative 1)

NEPA requires No Action to be considered in an EIS and represents the most likely future in the absence of a major federal action by Reclamation. It serves as a benchmark against which effects of the other alternatives are compared.

This alternative would not incorporate regional sharing of facilities. Each Project Participant would meet projected demands by independently developing other water supplies that would not require long-term contracts with Reclamation. Colorado Springs, Fountain, and

Security would expand ground water use. Colorado Springs would use Denver Basin ground water, Fountain would expand its Fountain Creek alluvial well field, and Security would acquire additional water rights in the Widefield Aquifer. No Action would not require a major federal action by Reclamation; therefore, the Participants would not use excess capacity storage contracts. Colorado Springs would construct a new untreated water intake from the Arkansas River at the Colorado 115 crossing near Florence. Due to requirements in existing water rights decrees, exchanges would be made from Fountain Creek to the upper Arkansas River Basin. Exchanges would be primarily diverted by the existing Ark-Otero untreated water intake near Buena Vista, which would be upgraded as part of the alternative. The Highway 115 untreated water intake would be supplied through releases from upper Arkansas River Basin storage reservoirs. An extension pipeline would be constructed from the existing FVA pipeline permitting both the SDS Project and

FVA water to be delivered to the proposed Jimmy Camp Creek Reservoir through the new untreated water pipeline. From the reservoir, water would be treated and distributed to customers. A portion of Colorado Springs' reusable return flows would be stored in the proposed Williams Creek Reservoir prior to

exchange down Fountain Creek. Pueblo West would meet projected future water demand by implementing the 18-mgd (million gallons per day) intake on the Arkansas River near Pueblo Reservoir, which was previously approved by Reclamation in 2003.

The seven alternatives are:

- No Action Alternative (Alternative 1)
- Participants' Proposed Action (Alternative 2)
- Wetland Alternative (Alternative 3)
- Arkansas River Alternative (Alternative 4)
- Fountain Creek Alternative (Alternative 5)
- Downstream Intake Alternative (Alternative 6)
- Highway 115 Alternative (Alternative 7)

Alternatives 2 through 7 are referred to as the "Action Alternatives"

**Table 1. Summary of Alternatives Components.**

| <b>Alternative</b>                           |                  | <b>Regulating Storage</b> | <b>Untreated Water Intake</b>  | <b>Untreated Water Alignment</b>  | <b>Terminal Storage and Water Treatment Plant<sup>†</sup></b>                            | <b>Return Flow Storage and Conveyance</b>   |
|--|------------------|---------------------------|--|---|--|---|
| Alternative 1: No Action                     | Colorado Springs | None                      | Arkansas River at Lester & Attebery Ditch, FVA supply, Denver Basin Ground Water, and Ark-Otero Improvements | Ground Water Collection System<br>Colorado 115 Alignment<br>FVA Extension Pipeline    | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant                           | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |
|  | Fountain         | None                      | Fountain Creek Alluvial Well field Expansion   | Ground water Collection System Expansion  | No Storage, Expansion of Existing (planned) Water Treatment Plant                        | None  |
|  | Security         | None                      | Widfield Aquifer Wells (agricultural to municipal transfer)  | Existing  | Existing (disinfection only)   | None  |
|  | Pueblo West      | None                      | Arkansas River Downstream of Pueblo Reservoir  | Pipeline to Existing River Pump Station   | Existing   | None  |
| Alternative 2: Participants' Proposed Action |                  | Pueblo Reservoir          | Joint Use Manifold and/or Pueblo Dam North Outlet Works  | Western Alignment, Including Conveyance to Pueblo West                                | Upper Williams Creek Reservoir, Conventional Water Treatment Plant                       | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |
| Alternative 3: Wetland Alternative           |                  | Pueblo Reservoir          | Joint Use Manifold and/or Pueblo Dam North Outlet Works  | Western Alignment, Including Conveyance to Pueblo West                                | Upper Williams Creek Reservoir, Conventional Water Treatment Plant                       | No Reservoir, Return Flow Pipeline to Arkansas River Near Highway 115   |
| Alternative 4: Arkansas River Alternative    |                  | Pueblo Reservoir          | Arkansas River Upstream of Fountain Creek  | Eastern Alignment, excluding Conveyance to Pueblo West                                | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant                           | No Reservoir, Return Flow Pipeline to Arkansas River Near Highway 115   |
| Alternative 5: Fountain Creek Alternative    |                  | Pueblo Reservoir          | Joint Use Manifold and/or Pueblo Dam North Outlet Works  | Western Alignment, Including Conveyance to Pueblo West                                | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant                           | Williams Creek Reservoir, Chilcotte Ditch and Pipeline In and Return Flow Pipeline to the confluence of Fountain Creek and the Arkansas River Out |
| Alternative 6: Downstream Intake Alternative |                  | Pueblo Reservoir          | Arkansas River Downstream of Fountain Creek  | Eastern Alignment, Excluding Conveyance to Pueblo West                                | Jimmy Camp Creek Reservoir, Conventional and Advanced <sup>‡</sup> Water Treatment Plant | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |
| Alternative 7: Highway 115 Alternative       |                  | Pueblo Reservoir          | Arkansas River at Lester & Attebery Ditch, FVA Supply, and Ark-Otero Improvements                            | Colorado 115 Alignment, Excluding Conveyance to Pueblo West<br>FVA Extension Pipeline | Jimmy Camp Creek Reservoir, Conventional Water Treatment Plant                           | Williams Creek Reservoir, Chilcotte Ditch In and Williams Creek Return Flow Conveyance Pipeline Out   |

<sup>†</sup> Treated water alignments are not included in this table and would be constructed as proposed by the Participants.

<sup>‡</sup> Advanced treatment in this alternative includes a reverse osmosis process.

### **Participants' Proposed Action (Alternative 2)**

The Participants' Proposed Action is the Participants' proposal to construct and operate the SDS Project. Untreated water would be stored in Pueblo Reservoir and diverted from Pueblo Dam. This water would be conveyed through a new pipeline and pump stations to the proposed Upper Williams Creek Reservoir, treated, and distributed to the Participants' customers. A portion of Colorado Springs' reusable return flows would be stored in the proposed Williams Creek Reservoir prior to exchange down Fountain Creek. Regulating storage in Pueblo Reservoir would be through one or more long-term excess capacity storage contracts with Reclamation. These contracts would allow the Participants to store non Fry-Ark Project water in existing Fry-Ark storage space when excess space is available. Water stored in this excess space would be subject to spill from the reservoir according to existing spill priorities. All Action Alternatives include one or more long-term excess capacity contracts.

### **Wetland Alternative (Alternative 3)**

The Wetland Alternative would address scoping issues about minimizing wetland impacts. The Wetland Alternative would disturb the least amount of wetlands by using the terminal storage reservoir site with the fewest wetlands and eliminating the need for the return flow reservoir by using a return flow pipeline. Untreated water would be stored in Pueblo Reservoir and diverted from Pueblo Dam. This water would be conveyed through a new pipeline and pump stations to the proposed Upper Williams Creek Reservoir, treated, and distributed to the Participants' customers. Colorado Springs' reusable return flows would be piped from its existing wastewater treatment plants to the Arkansas

River near Colorado 115. By conveying Colorado Springs' reusable return flows to a location upstream of Pueblo Reservoir, this alternative avoids the need for a new return flow reservoir such as the proposed Williams Creek Reservoir.

### **Arkansas River Alternative (Alternative 4)**

The Arkansas River Alternative would address scoping issues about maximizing low flows in the Arkansas River through the City of Pueblo, minimizing water quality effects on the lower Arkansas River, and minimizing the total surface acres disturbed. Stream flow in the Arkansas River through Pueblo would be maximized by diverting water from the Arkansas River downstream of Pueblo, and returning treated return flows to the Arkansas River upstream of Pueblo. Untreated water would be stored in Pueblo Reservoir, released to the Arkansas River from the dam, and diverted from the Arkansas River upstream of Fountain Creek. This water would be conveyed through a new pipeline and pump stations to the proposed Jimmy Camp Creek Reservoir, treated, and distributed to the Participants' customers. Colorado Springs' reusable return flows would be piped from its existing wastewater treatment plants to the Arkansas River near Colorado 115. Pueblo West would not participate in SDS Project infrastructure if this alternative were chosen.

### **Fountain Creek Alternative (Alternative 5)**

The Fountain Creek Alternative is designed to address significant issues concerning potential effects of return flows on Fountain Creek erosion, sedimentation, and water quality. Untreated water would be stored in Pueblo Reservoir and diverted from Pueblo Dam. This water would be conveyed to the proposed



Jimmy Camp Creek Reservoir, treated, and distributed to the Participants' customers. Colorado Springs' reusable return flows would be stored in the proposed Williams Creek Reservoir. Water delivered to the Arkansas River for exchanges would be conveyed in a new pipeline to the mouth of Fountain Creek, instead of in Fountain Creek.

### **Downstream Intake Alternative (Alternative 6)**

The Downstream Intake Alternative addresses public interest in an alternative that uses an untreated water intake downstream of Fountain Creek. Untreated water would be stored in Pueblo Reservoir, released from the dam, and then diverted from the Arkansas River downstream of Fountain Creek. This water would be conveyed through a new pipeline and pump stations to the proposed Jimmy Camp Creek Reservoir, treated, and distributed to the Participants' customers. The water treatment plant would include advanced treatment and would require partial (50 percent) reverse osmosis to provide acceptable water quality to the Participants' customers. Colorado Springs' reusable return flows would be stored in the proposed Williams Creek Reservoir prior to exchange down Fountain Creek. Pueblo West would not participate in SDS Project infrastructure if this alternative were chosen.

### **Highway 115 Alternative (Alternative 7)**

The Highway 115 Alternative would address public and Participant interest in an alternative that uses the Colorado 115 corridor for water conveyance and includes an excess capacity storage contract. As with the No Action Alternative, a new untreated water intake from the Arkansas River would be constructed at the Colorado 115 crossing near Florence. Colorado Springs' reusable return flows would be stored in the proposed Williams Creek

Reservoir prior to exchange releases down Fountain Creek. Exchanges would be made from Fountain Creek and Pueblo Reservoir to the upper Arkansas River Basin, and would be primarily diverted by the Ark-Otero untreated water intake. Excess exchanges would be stored in the upper Arkansas River Basin storage facilities or in Pueblo Reservoir regulating storage. The Highway 115 untreated water intake would be supplied by releases from upper Arkansas River Basin storage. An extension pipeline would be constructed from the existing Fountain Valley Authority pipeline, and would help increase system flexibility for Colorado Springs by permitting FVA water to be delivered to Jimmy Camp Creek Reservoir through the new untreated water pipeline. Pueblo West would not participate in SDS Project infrastructure if this alternative were chosen.

## **The Decision**

Based on the analyses contained in the FEIS including the information summarized in Table 24 (Summary of direct and indirect effects) in the FEIS, public comments received on the DEIS and Supplemental Information Report, and consideration of comments received on the FEIS, the Great Plains Regional Director has decided to select the Participants' Proposed Action for implementation.

This decision allows the following Federal actions to be approved by Reclamation to implement construction and operation of the Participants' Proposed Action:

- Execution of up-to-40-year contracts between Reclamation and the Project Participants for use of the Eastern Slope System of the Fry-Ark Project in Colorado for storage, conveyance and exchange

- Issuance of a special use permit or other agreement from Reclamation to the Participants allowing connection of the SDS Project pipeline to Reclamation facilities
- Approval of an administrative trade ("swap") between Colorado Springs and Fountain of an equal amount of capacity in the FVA pipeline for capacity in the SDS Project untreated water pipeline and water treatment plant

Approval of these Federal actions by Reclamation will allow the Project Participants to proceed with construction and operation of the selected alternative in a manner that is consistent with those actions as described and evaluated in the FEIS.

### **Basis for Selection of the Agency Preferred Alternative for Implementation**

The FEIS describes the environmental effects of the alternatives analyzed in detail. This ROD selects the Agency Preferred Alternative for implementation. That decision is based on how well the alternatives addressed the significant issues identified during scoping, the environmental effects of the alternatives, and other technical factors, including economic and engineering considerations.

The environmental and technical evaluations performed as part of the FEIS indicate that all six of the Action Alternatives considered in detail are reasonable. Reclamation compared all of the alternatives in terms of how well they addressed the ten public scoping issues and other relevant environmental and non-environmental issues identified by Reclamation during the FEIS process, including energy use and estimated costs. Based upon these considerations, Reclamation

identified the Participants' Proposed Action as the Agency Preferred Alternative in the FEIS.

All alternatives would have adverse environmental effects. The Participants' Proposed Action would result in similar or fewer environmental effects when compared to the other alternatives. Additionally, this alternative would have the lowest total project cost and lowest energy use requirements, resulting in the lowest greenhouse gas emissions, of any Action Alternative. All of the Action Alternatives were developed to address specific environmental issues or meet public interest objectives. However, the other alternatives would have adverse environmental effects on other resources, would have a higher total cost, and would require at least as much or substantially more energy than the Participants' Proposed Action. There would be no impacts to Indian trust assets (ITA) and no unresolved ITA issues.

### **Environmentally Preferred Alternative**

The CEQ regulations require the ROD to identify one or more environmentally preferred alternative. The environmentally preferred alternative is the alternative(s) that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historic, cultural, and natural resources. Because it will cause the least damage to the biological and physical environment, Reclamation has determined that the Participants' Proposed Action is the environmentally preferred alternative.

### **Summary of Comments on the FEIS**

Two letters containing comments on the FEIS were received during the 30-day waiting period. Comments were considered substantive if they:

- Question, with reasonable basis, the accuracy of the information in the document
- Question, with reasonable basis, the adequacy of the environmental analysis
- Present reasonable alternatives other than those presented in the EIS
- Cause changes or revisions in the alternatives
- Provide new or additional information relevant to the analysis

The first comment letter was from Mr. Dave Miller, President of the Natural Energy Resources Company. His comments are briefly summarized with Reclamation's responses as follows:

1. Mr. Miller was concerned that transmountain diversion alternatives that would convey water from the Gunnison River Basin and Aspinall Unit reservoirs to the Arkansas River or South Platte River basins, including the proposed Central Colorado Project, were not considered in the FEIS. He suggested two options for delivering the Gunnison River transmountain water to Colorado Springs and provided a citation to additional information on the internet. Both options included construction of an up-to-1.2 million acre-foot reservoir in the Gunnison River Basin and a 42-mile-long pipeline from the Gunnison River Basin to the South Platte River Basin. Pipelines to other river basins as well as power generation facilities were also included. The first option included construction of a new pipeline originating in the upper South Platte River Basin and traversing South Park, Colorado to Colorado Springs. The second option was construction of a new diversion upstream of Cheeseman Reservoir in the South Platte River Basin and a pipeline to the divide between the

South Platte and Arkansas River basins near Monument, Colorado. In the second option water would presumably be conveyed in the South Platte River toward Cheeseman Reservoir, diverted, and then delivered to Colorado Springs by conveying it in Monument Creek.

Reclamation did consider potential alternatives involving a transmountain diversion from the Gunnison River Basin, including the proposed Central Colorado Project, in its alternatives analysis and the FEIS (please refer to page 92 of the FEIS and comment responses 2300 and 3181 in Appendix B of the FEIS). These alternatives were dismissed from detailed evaluation due to substantial logistical, technical, or environmental deficiencies, less favorable environmental characteristics, and purpose and need criteria, with cost issues also identified (refer to page 87 of Reclamation's 2006 Alternatives Analysis for additional details).

2. Mr. Miller suggested that Reclamation did not consider and respond its prior comments, which included descriptions of benefits of the proposed Central Colorado Project.

Reclamation reviewed all comments on the DEIS and Supplemental Information Report, including those submitted by the commenter, and provided a response to each substantive comment (please refer to FEIS Appendix B and C). The commenter's previous comments contained eight substantive issues (refer to FEIS Appendix B, page B-241), all of which were addressed in the FEIS.

3. Mr. Miller requested investigations of alleged state and federal policy violations and oversights that lead to the seven

alternatives that were retained for detailed evaluation in the EIS.

Reclamation prepared the EIS and supporting documents in compliance with applicable laws, regulations, and policies (refer to comment responses 3020, 5000, and 5200 in FEIS Appendix B and 5000 in FEIS Appendix C).

4. Mr. Miller suggested that the process for determining the scope of the SDS Project (presumably meaning the range of alternatives) used by Colorado Springs prior to and during preparation of the EIS was fatally flawed and should have been challenged by Reclamation.

Reclamation was not directly involved in alternatives evaluations that Colorado Springs performed prior to Reclamation's preparation of the EIS. During preparation of the EIS, Reclamation used the purpose and need for the proposed SDS Project and an array of logistical, technical, and environmental screening criteria to define a full range of reasonable alternatives for detailed evaluation in the EIS (refer to Reclamation's 2006 Alternatives Analysis report, Section 2.3 of the FEIS, and responses to comments 31-1, 1002, 1010, 1011, 1012, 2001, and 2003 in FEIS Appendix B).

5. Mr. Miller suggested that the FEIS did not include a long-term analysis of carbon footprint and pumping costs for the life of the project.

Estimated carbon emissions at 2046 water demand (highest emission scenario) were provided in Section 3.24.5 of the FEIS. Operational costs associated with pumping requirements of each alternative were considered in Reclamation's alternatives screening process (refer to Chapter 2 of the FEIS and comment response 2001 in FEIS

Appendix B) and in the alternatives effects analyses (refer to Sections 3.15 and 3.16 of the FEIS and comment response 2011 in FEIS Appendix B). Operational costs, including pumping, for all seven alternatives were evaluated for the 40-year life of the contracts requested by the Project Participants.

6. Mr. Miller suggested that stabilization of Pueblo Dam and enlargement of Pueblo Reservoir should be included in the cost of the SDS Project alternatives.

Pueblo Dam (or Pueblo Reservoir) is identified as an existing facility in the FEIS and Action Alternatives for the SDS Project would use only existing storage space in the existing conservation pool of this facility. Moreover, Reclamation's facilities must be operated and maintained safely, in order to protect our nation's security, economy, and environment. Reclamation ensures safety through inspections for safety deficiencies, analyses that use current technologies and designs, and corrective actions if needed based on current engineering practices. Costs to fund Reclamation's Dam Safety Program are provided by appropriations from Congress, and are not directly passed onto Project Participants (refer to comment responses 2011 and 3326 in FEIS Appendix B).

None of the SDS Project alternatives include enlargement of Pueblo Reservoir as a project component. Enlargement of Pueblo Reservoir is not needed to fulfill the project's purpose or needs (refer to comment response 2004 in FEIS Appendix B).

7. Mr. Miller requested a stay of the SDS Record of Decision pending analysis of the

alternatives and completion of the policy investigations described above.

Reclamation considered this request and determined that the alternatives suggested by the commenter were given appropriate consideration in the FEIS and supporting documents and that the suggested investigations are not warranted. Consequently, a stay of the Record of Decision is not necessary.

The second comments letter was received from the Environmental Protection Agency (EPA)-Region 8 and is summarized as follows:

The EPA commented that in general the FEIS was largely responsive to the issues it raised in its comments on the DEIS and SIR. EPA believes SDS is more environmentally protective as a result and commends Reclamation for addressing EPA's comments and concerns. EPA commends Reclamation for conducting additional water quality analysis for the FEIS and working to resolve differences on a range of other issues. EPA is very pleased to see that the "Modified Proposed Action" is the Agency-Preferred Alternative. EPA believes the FEIS is largely responsive to the issues it raised in its comments on the DEIS and SIR.

EPA expressed two areas of continuing concern. First, it has some remaining concerns about the project's impact on water quality; however, EPA is pleased with the addition of Section 5.0 in the FEIS Environmental Commitments. EPA supports implementation of water quality monitoring when construction begins to allow three years of baseline data to be collected before SDS becomes operational. EPA believes the water quality monitoring program is appropriate and will help ensure that any potential problems that SDS causes would be addressed in an effective and timely manner.

Second, EPA remains concerned about indirect impacts from induced growth on increased flows to Fountain Creek resulting from SDS have not been sufficiently addressed in the FEIS. EPA believes there should be a commitment that stormwater Best Management Practices be implemented for future growth in Colorado Springs.

Reclamation's view is that growth is not a direct or indirect effect of the proposed SDS Project, and effects associated with growth are disclosed within the cumulative effects Section of the FEIS. As disclosed in the FEIS, there will be minor increases in peak flows and floodplains for Fountain Creek. Average simulated stream flows on Fountain Creek at Pueblo change from 249 cubic feet per second (cfs) for the No Action Alternative to 253 cfs with the Participants Proposed Action. That is an increase of 4 cfs, and represents an increase of 2%. As a result, no commitments are proposed in the ROD to mitigate the effects on peak flows or floodplains on Fountain Creek.

The City of Colorado Springs Stormwater Enterprise is described as a reasonably foreseeable action on page 125 of the DEIS. As part of their stormwater discharge permit, the City of Colorado Springs is responsible for constructing capital stormwater projects and regulating stormwater infrastructure on private property necessary for managing water quantity and quality. These activities will occur no matter what alternative is constructed for the SDS project, and are not considered as mitigation for SDS.

Public comments on the FEIS were considered but did not result in changes to the proposed action or in the selection of the Preferred Alternative.



## **Environmental Commitments**

This section summarizes the environmental commitments that will be incorporated into the selected alternative. These commitments will be fully incorporated into all final design and project implementation activities. Reclamation will ensure that these measures are implemented through terms and conditions of any long-term contract between Reclamation and the Participants. Such contracts will, at a minimum, include a requirement for the Project Participants to submit to Reclamation an annual compliance report that certifies progress in successfully implementing these commitments in a timely manner as prescribed in this ROD and any contracts. All practicable means to avoid or minimize environmental harm from the selected alternative have been considered and adopted. The environmental commitments and mitigation measures in this section of the ROD are intended to avoid and/or minimize any environmental harm.

The Participants must obtain other significant Federal, State and local permits, approvals, and agreements for the SDS Project. These permits, approvals, and agreements may include, as examples, a Section 404 permit under the Clean Water Act, a 1041 permit from Pueblo County, and consultation with the Colorado Division of Wildlife (CDOW) and the Colorado Water Conservation Board. These permits, approvals, and agreements may trigger other environmental compliance requirements by Federal agencies which would also include significant environmental commitments (mitigation) to be undertaken by Participants as part of the SDS Project.

Comprehensive monitoring of the implementation of Participants' environmental commitments for the SDS Project will be coordinated between Reclamation, the Project Participants, and the authorities responsible for

these additional, separate permits, approvals, and agreements. This monitoring and coordination is intended to avoid redundant, inconsistent, or ineffective environmental commitments for the SDS Project. Reclamation will participate fully in this process of coordinating environmental commitments. A detailed and specific list of environmental commitments and plan for their implementation will emerge from this coordination process.

The timing of this process is important. Coordination of implementation of the environmental commitment plan will occur prior to executing any contracts for the SDS Project. Any long-term contract between Reclamation and the Participants will contain all specific environmental commitments and obligations by Participants that are determined by Reclamation to be required for the SDS Project. In the discussion below, significant environmental commitments by Participants and Reclamation are described in two forms. First, there are environmental commitments that Reclamation is responsible for implementing. Second, there are environmental commitments that will be required by Reclamation that the project Participants are responsible for implementing and that will be conducted during the broader coordination process with other permitting and approving authorities.

### **Reclamation's Commitments**

The following mitigation measures will be implemented:

- If Reclamation receives credible information that operations under the contract are causing a violation of the Arkansas River Compact, Reclamation will immediately initiate discussions among the parties, including the party alleging the Compact violation, to

develop a solution and remedy the violation.

- Reclamation will complete its coordination with the U.S. Fish and Wildlife Service under the Fish and Wildlife Coordination Act (FWCA) prior to implementation of the selected alternative. The U.S. Fish and Wildlife Service was a cooperating agency with Reclamation during preparation of the Final EIS and was consulted throughout the NEPA process for the SDS Project. A draft FWCA Report is on-file with Reclamation. Fish and wildlife conservation measures recommended in the final FWCA Report will be considered by Reclamation and those found to be appropriate will be implemented by Reclamation and/or the Project Sponsors through construction requirements, contract provisions, and terms and conditions of any long-term water-related contract between Reclamation and the Participants.

## **Participants' Commitments**

### ***General Commitments***

The following mitigation measures will be implemented:

- Comply with all applicable permits, regulations, and laws including but not limited to CDPHE, USCOE 404, and local land use permits obtained for the SDS project.
- Construct and operate the SDS Project in a manner that does not differ substantially from that evaluated in this FEIS, except under emergency conditions, and unless additional and appropriate environmental investigations are completed by

Reclamation and approval is then given to Participants to alter construction or operation of the SDS Project

- Develop and implement a head pressure monitoring program on the Joint Use Manifold to isolate effects attributable to the SDS Project and to mitigate those effects if they were to occur. This program will be developed over a 3-year period from the date that water is first delivered from the Joint Use Manifold for the SDS Project. Development of the monitoring program will include involvement of all other Joint Use Manifold users. This commitment will not be necessary if the intake for SDS is at the North River Outlet Works, and the Joint Use Manifold is not used for SDS.
- Develop an integrated adaptive management program for the project that will be coordinated with the Participants' existing monitoring programs and the Environmental Management System discussed in Appendix F of the FEIS. The integrated adaptive management program will be finalized prior to executing any contracts for the SDS Project.

### ***Surface Water***

The following mitigation measures will be implemented:

- Comply with the Upper Arkansas Voluntary Flow Management Program except during emergency conditions as defined in Section 2.b. of the Memorandum Of Understanding for Settlement of Case No. 04CW129, Water Division 2 (Chaffee County Recreational In-Channel Diversion)

- Comply with the Pueblo Flow Management Program pursuant to existing intergovernmental agreements. If Reclamation and the Participants receive credible information that project operations are impairing physical diversion of a senior water right, contrary to Colorado water law, the Participants will immediately initiate discussions among the parties, including the party alleging the impairment and Reclamation, to develop a solution and remedy the impairment in compliance with Colorado water law.
- Participants will consult with Reclamation each year on the average annual flow in Fountain Creek. If the average annual stream flow of Fountain Creek as measured at Pueblo (USGS gauge station number 071056500) exceeds the scope and range of the flow estimated and analyzed in the Final Environmental Impact Statement (see Table 33 of the FEIS), then Participants will coordinate with Reclamation, within their adaptive management plan, to evaluate the cause(s) for the change in flows and determine whether appropriate response actions, such as monitoring and/or mitigation measures, are warranted. Each year, Participants will report to Reclamation the average annual flow in Fountain Creek at Pueblo together with other relevant data.

Surface water mitigation measures will resolve adverse effects to physical diversions of senior water rights.

### *Water Quality*

The following mitigation measures will be implemented:

- Include water quality monitoring and adaptive management within the integrated adaptive management program (see Participants' General Commitments)
- Begin implementing water quality monitoring when construction of the project begins. This will allow about three years of baseline data to be collected before project operations begin.
- Submit water quality monitoring data, including trend analyses, for the preceding calendar year to Reclamation by January 31<sup>st</sup> of the subsequent year
- If the Colorado Department of Public Health and Environment (CDPHE) determines that operation of the SDS Project is causing significant adverse water quality effects, the Participants will coordinate with Reclamation, CDPHE, and other interested parties to evaluate and select measures to mitigate adverse effects
- In the event that operation of the SDS Project causes, or threatens to cause, stream flows in the Arkansas River or other waterways to diminish to low levels that will contribute significantly to elevated concentrations/densities of dissolved selenium, *E. coli*, or sulfate, the Participants will coordinate with Reclamation, CDPHE, CDOW, and other interested parties to evaluate and select measures to mitigate adverse effects.

Development and implementation of a water quality monitoring and adaptive management plan will provide a means of detecting changes

in water quality, judging whether they are likely caused by operation of the SDS Project, and addressing actual effects in a systematic manner. Additionally, implementation of the geomorphology mitigation measures (below) will reduce suspended sediment and total recoverable iron concentrations in Fountain Creek and the lower Arkansas River.

### *Geomorphology*

The following mitigation measures will be implemented:

- Prepare a geomorphic mitigation plan and secure Reclamation approval prior to executing any contracts for the SDS Project. This plan could include, but is not limited to:
  - Evaluate and consider strategies to remove sediments that reduce the effectiveness of Corps levees located near Fountain Creek at its confluence with the Arkansas River
  - Evaluate and consider strategies to increase the sinuosity of Fountain Creek at appropriate locations in order to reduce undesirable erosion and sedimentation
  - Evaluate and consider strategies at appropriate locations along Fountain Creek to reduce undesirable erosion and sedimentation
  - Select geomorphic mitigation measures for SDS Project effects that are, to the extent practicable, consistent with priority projects identified in the Corps of Engineers' Fountain Creek Watershed Study and the Fountain Creek Corridor Master Plan. Locations where geomorphic mitigation projects
- could occur include, but are not limited to:
  - Fountain Creek at the Clear Spring Ranch site, directly upstream and downstream of the confluence of Little Fountain Creek and Fountain Creek (approximately 4 miles)
  - Fountain Creek from upstream of Fountain Boulevard to upstream of Colorado 85/87 at the Sand Creek confluence (approximately 3 miles)
- Complete pre-project geomorphic mitigation, including channel stabilization projects and non-structural options such as conservation easements, before the project is operational. Channel stabilization could include, but is not limited to, increasing stream sinuosity, flattening of steep side slopes, installation of grade control structures, and use of buried riprap, erosion blankets, and/or vegetative cover for channel stabilization in areas of high and/or erosive velocities.
- Design and construct an energy dissipation structure that will protect against erosion at the outlet of the pipeline from Williams Creek Reservoir to Fountain Creek
- Evaluate and implement appropriate future geomorphic stabilization projects, if such future projects are determined to be necessary after the project is operational.

When implemented, these recommendations will mitigate potential adverse effects on geomorphology by avoiding or minimizing effects of return flow discharges through an energy dissipation structure, compensating for anticipated effects, and responding to effects identified after project operations begin.

### *Aquatic Life*

The following mitigation measures will be implemented:

- Submit a proposed wildlife mitigation plan to the Colorado Wildlife Commission (Wildlife Commission) pursuant to C.R.S. § 37-60-122.2. This proposal will include actions the Participants propose to mitigate impacts that the SDS Project may have on fish and wildlife. As required by that statute, the Wildlife Commission will evaluate the probable impact of the project on fish and wildlife and, if the Participants and Wildlife Commission cannot agree upon reasonable mitigation, the Wildlife Commission will make recommendations to the Colorado Water Conservation Board (CWCBC) regarding what it believes to be reasonable mitigation actions. If the Participants and the Wildlife Commission agree on a mitigation plan, the Wildlife Commission will submit that agreement to the CWCBC, which must adopt the agreement as the state's official position. If the Participants and the Wildlife Commission do not reach agreement on a mitigation plan, the CWCBC will consider the plan submitted by the Participants and the recommendations of the Wildlife Commission and either affirm the recommendations of the Wildlife Commission, which then becomes the State's official position, or submit its own recommendations to the Governor, who will ultimately determine the state's official position on the proposed wildlife mitigation plan.
- In the event that operation of the SDS Project causes, or threatens to cause, stream flows in Fountain Creek or the

Arkansas River to diminish to low levels that could contribute significantly to impairment of aquatic life, coordinate with Reclamation, CDPHE, CDOW and other interested parties to evaluate and select measures to mitigate adverse effects

- Evaluate and consider participation in CDOW fish hatchery programs
- Monitor the effects of the operation of the SDS Project upon aquatic life in Fountain Creek and the Arkansas River between Pueblo Dam and the Las Animas Gage. Aquatic sampling will be conducted once per year at up to 10 locations. Monitoring methods and locations will be identified in the proposed wildlife mitigation plan that will be submitted to the Colorado Wildlife Commission pursuant to C.R.S. § 37-60-122.2. Use the information from this monitoring in the adaptive management program for the SDS Project.

When implemented, these recommendations will mitigate potential adverse effects on aquatic life by avoiding or minimizing effects, compensating for anticipated effects, and detecting and responding to effects identified after project operations begin.

### *Wetlands, Waters, and Riparian Vegetation*

The following mitigation measures will be implemented:

- Design final alignments and facilities to avoid and minimize wetland impacts
- Assess alternative construction methods for pipeline crossings (i.e., directional drilling v. open cut) to minimize wetland and stream impacts



- Mitigate impacts to jurisdictional and non-jurisdictional wetlands in areas of temporary, short-term effects such as pipeline crossings, on-site at the place of disturbance with similar wetlands and soils to replace existing wetland functions and values
- Mitigate all unavoidable, permanent impacts to jurisdictional and non-jurisdictional wetlands with compensatory wetlands that replace existing wetland functions and values. Compensatory wetland mitigation will likely occur at the Clear Spring Ranch site on Fountain Creek downstream of the city of Fountain.
- Control tamarisk that may establish around newly constructed reservoirs
- Evaluate and consider a strategy to increase the sinuosity of Fountain Creek at appropriate locations in order to create wetlands areas
- Evaluate and consider the construction and maintenance of new areas of wetlands along Fountain Creek in order to participate in wetlands banking programs. Evaluate and consider cooperation with Colorado agencies to expand such a wetlands creation process

Mitigation plans for jurisdictional and non-jurisdictional wetlands will be submitted for approval by the Corps of Engineers and Reclamation, respectively. All design and planning measures for wetlands, waters, and riparian vegetation will be completed before any contracts for the SDS Project.

By reviewing the location of wetlands during final design, effects on wetlands can be avoided and minimized. Specifically, the pipeline construction corridors through wetlands will be reduced to the minimum

width practicable. Similarly, construction methods that do not involve trenching through a wetland will avoid impacts. Wetlands mitigated in place and off-site will replace affected wetlands on a 1:1 ratio and will provide similar functions and values. The 404 permitting process is ongoing and the final off-site mitigation ration for jurisdictional wetlands for the 404 permit has not yet been determined.

### *Vegetation*

The following mitigation measures will be implemented:

- Prior to final design, review locations of Needle and Threadgrass – Blue Grama Grasslands, high quality shrublands and woodlands, and other areas with desirable vegetation to determine design changes within the current study area that will avoid and minimize impacts
- Replace mature trees (diameter at breast height of 12 inches or greater) within construction areas at a 1:1 ratio with the same or similar native species with available nursery container stock or pole plantings as soon as practicable after construction activities have ended
- For 1 year after construction, monitor the construction areas to determine if appropriate native vegetation is establishing. If native vegetation is not establishing, the site will be reseeded with appropriate species
- In the appropriate season prior to construction, survey potential construction areas with known populations of dwarf milkweed and other plant species of concern, to locate areas where impacts can be avoided and minimized to the extent practicable

with design changes within the current study area. After identifying populations to avoid, mark populations within or nearby the construction easement as environmentally sensitive so that workers avoid inadvertent impacts.

- During construction, wash major construction equipment before it enters the site so that noxious weeds are not spread from other construction sites
- Use certified weed-free mulch after seeding construction areas
- Reseed construction areas with comparable native vegetation as soon as practicable after disturbance, using seed that does not contain any noxious weed seed
- Monitor construction areas for 3 years after construction to assess if noxious weeds have invaded the site. If noxious weeds are present, weed control plans will be formulated and completed.
- Because the project may indirectly increase the spread of tamarisk, the Participants will work with the Colorado Department of Agriculture's Colorado Noxious Weed Management Team on tamarisk issues in the Arkansas Valley including submitting a request for partnership evaluation.

Impacts to plant species and communities of concern and other sensitive vegetation areas can be avoided and minimized during final design and implementation. Because mitigation measures such as transplanting of individuals are often unsuccessful, avoidance and minimization will ensure survival, especially of plant species of concern. Seeding disturbed areas, replacing mature trees, and controlling noxious weeds will replace existing

vegetation types and structural diversity and will ensure that high quality habitat remained.

### *Wildlife*

The following mitigation measures will be implemented:

- Submit a proposed wildlife mitigation plan to the Colorado Wildlife Commission pursuant to C.R.S. § 37-60-122.2 as described above.
- Promptly revegetate all disturbed areas with native species that provide species diversity and food and cover for large game and wildlife habitat
- Conduct clearance surveys in suitable habitat for state-listed species following standard protocols, as available, prior to construction (e.g., CDOW undated)
- Conduct raptor nest surveys prior to construction and impose seasonal restrictions to surface activity within recommended buffers (generally ¼ to ½ mile) around active raptor nest sites and heron rookeries during construction
- Consult with CDOW and U.S. Fish and Wildlife Services' Migratory Permit Bird Office to develop mitigation for unavoidable loss of raptor nests. Options may include constructing artificial nests in suitable habitat or enhancing prey habitat
- Develop construction schedules to avoid impacts to nesting migratory birds. If construction is scheduled to occur during the nesting season (April 1 through August 31) in areas where migratory birds may nest, a qualified biologist will conduct a nesting bird survey prior to the commencement of construction activities to determine the presence of migratory birds and their nests. If an active nest is detected, a

buffer zone between the nest and the limit of construction will be flagged and avoided during the nesting season, or construction will be scheduled outside of the nesting season.

- Conduct pre-construction surveys for swift fox den sites within appropriate habitat along the pipeline corridor and proposed reservoir sites. Avoid surface disturbance within ¼ mile of active den sites while young are den-dependent (March 15 - June 15)
- Restrict pesticides for rodent control within swift fox overall range
- Mitigate impacts to state-listed amphibian species by avoiding, minimizing, and mitigating wetland effects as described above
- Impose seasonal restrictions on construction to avoid sensitive large game winter habitat (from first large snowfall to summer green-up)
- Install wildlife crossovers (trench plugs) during pipeline construction with ramps on each side at a maximum of ¼ mile intervals and at well-defined game trails
- Create additional nesting habitat or nest boxes in nearby trees for the Lewis' woodpecker when nest trees are destroyed.

By replacing vegetation including structural diversity, the long-term effects on wildlife will be reduced by allowing wildlife to return to disturbed areas. Pre-construction surveys will identify wildlife use at the time of construction and allow for planning for avoidance and minimization. Imposing seasonal and/or daily restrictions on construction will enable wildlife to use important habitat, especially during breeding and other critical periods. Wildlife crossovers installed within the pipeline trench

will facilitate wildlife passage and provide escape routes for wildlife trapped within the trench, thereby reducing mortality.

### *Recreation*

The following mitigation measures will be implemented:

- During short-term construction activities that require trail closures of developed recreational trails, designate a safe and reasonable detour around the project site. Post signs directing trail users.
- Work with the local municipality to establish alternate trails with consistent width, surfacing, and signage
- Within developed parks with temporary effects, commit to full reclamation of the impact area by replacing turf, irrigation systems, and other facilities that could be affected. Provide follow-up monitoring and maintenance for 1 year to ensure that reclamation efforts are successful.
- In developed park areas with permanent, above ground SDS Project facilities, reconfigure park facilities that will be directly affected and visually screen SDS Project facilities from other park uses with vegetation, berming, or attractive fencing
- Seek opportunities to enhance angling, boating, or other recreation opportunities at Lake Henry, Lake Meredith, and Holbrook Reservoir so that they are less vulnerable to water level fluctuations. Work with the CDOW to identify priority projects and include them in a proposed wildlife mitigation plan to the Colorado Wildlife Commission pursuant to C.R.S. § 37-60-122.2 as above.

The proposed mitigation measures will reduce the impact of project facility construction on trail users. They will also reduce the short- and long-term impacts of project facilities on park infrastructure, vegetation, aesthetics, and recreation experiences. Collaboration with the CDOW to enhance fishing and boating opportunities may result in such improvements to recreation at Lake Henry, Lake Meredith, and Holbrook Reservoir.

#### *Socioeconomics and Land Use*

The following mitigation measures will be implemented:

- Acquire properties and easements through voluntary, willing participant agreements to the maximum extent practicable
- Develop a construction management plan to outline best management practices to minimize impacts to surrounding properties and submit plan to Reclamation for approval prior to construction.

Adverse short-term effects on landowners with parcels that will contain SDS features will be offset through mutually agreed upon compensation. The land use mitigation measures will minimize disturbances to properties near the project during construction or minimize land use changes and conflicts.

#### *Cultural Resources*

The following mitigation measures will be implemented:

- Comply with the requirements of the Programmatic Agreement between Reclamation, the ACHP, Colorado Springs, and the Colorado SHPO (Appendix I of the FEIS)

Development of the project alternatives will result in impacts to non-renewable historic properties. As a result, it will be necessary to implement a mitigation plan in an effort to resolve any adverse effects. Mitigation may be accomplished through avoidance, implementation of protective measures, or data recovery. If avoidance and preservation are not possible, a data recovery plan may be used to collect and analyze significant information, thus preserving that information. Data collection as a mitigation measure should only be implemented when other means to protect or preserve historic properties have been exhausted or are not feasible. Within the data recovery plan, specific research problems concerning scientific, humanistic, and cultural concerns will be developed. Research also will focus on problems in prehistoric and historic archaeological methods and theory. Ultimately, the data collected likely will provide information regarding the cultures that have occupied the area in the past.

#### *Indian Trust Assets*

Continue consultation with Native American Tribes in accordance with the Programmatic Agreement. Under the Agreement, Reclamation and the Project Participants will coordinate with the tribes to identify and mitigate impacts to any traditional cultural properties or resources.

#### *Noise and Vibration*

The following mitigation measures will be implemented:

- Construction equipment used by contractors shall function as designed and shall conform to applicable noise emission standards
- Generally adhere to project work hour restrictions (7 a.m. to 7 p.m.) within

500 feet of residences, hospitals, schools, churches, and libraries. Work hours may need to be extended from time to time in order to expeditiously restore traffic flow or public access.

- Restrict access to construction areas so that the public could not be in close proximity to loud equipment or blasting
- House project operating equipment (e.g., pump stations) in structures designed to minimize radiated noise outside the structure, and will meet local noise ordinance requirements.

By following existing standards, restricting work hours and access to construction areas, and insulating new noise within structures, noise effects will be minimized by maintaining acceptable noise levels and limiting the number of people exposed to increased noise levels.

### *Visual Resources*

The following mitigation measures will be implemented:

- Vegetate earthen dam faces with native herbaceous plants to match the adjacent undisturbed prairie plant communities
- Revegetate and/or landscape with plants, all disturbances associated with the construction of all facilities
- Restore as many existing grades as practicable following pipeline excavations
- Enclose pump stations and well equipment in structures matching the architectural characteristics of the surrounding structures
- Construct powerlines with non-specular (not shiny) wire, non-reflective and opaque insulators, and light-colored, non-reflective finished poles

- Reclaim construction access roads and staging areas by restoring existing grade and revegetating the area of disturbance
- Apply water with standard construction practices to control airborne fugitive dust within construction areas
- Install baffles on construction lighting fixtures to direct light onto the construction activity only in locations where safety is a concern, scenic quality will be affected, or near occupied homes and businesses.

Restoring existing grades, revegetating disturbed areas, using architectural styles consistent with the area, and designing powerlines to have low visibility will minimize the visual contrast between the surrounding areas and will reduce the visibility of disturbance or new structures from observation points. Reducing airborne fugitive dust and construction lighting will reduce the area affected during construction.

### *Traffic*

The following mitigation measures will be implemented:

- Use trenchless construction to the extent practicable when construction features cross railroad lines, state highways, county roadways in densely populated areas, and major city roadways in densely populated areas.
- Prepare traffic control plans for approval by state and local traffic authorities and followed by contractors during construction
- Construct traffic signage, signals, acceleration, and deceleration lanes as directed by state and local traffic authorities for access to reservoir sites, treatment plants, and pump stations



- Construct improvements to existing access roads or construction of temporary alternate access roads to reservoir sites, treatment plants, and pump stations as directed by state and local traffic officials
- Modify or reconstruct bridges when the load limits are not adequate for construction of the SDS Project and other access routes are not reasonable.

When implemented, these recommendations will mitigate potential adverse effects on traffic by minimizing delays and promoting traffic safety.

### *Soils*

The following mitigation measures will be implemented:

- Minimize the area of disturbance to defined construction limits and limit the time bare soil is exposed
- Contain soils within the construction area through temporary sediment control measures such as silt fences, sediment logs, trenches, and sediment traps
- Remove woody vegetation prior to topsoil salvage and, to the extent possible, salvage topsoil within tree stump roots
- Use topsoil salvage methods including windrowing topsoil at the limits of construction and pulling the soil back on slopes during reclamation
- Apply topsoil, soil amendments, fertilizers, and mulches as appropriate, and seed selectively during favorable plant establishment climate conditions to match site conditions and revegetation goals

- To the extent practicable, avoid irrigated lands during final design
- To the extent practicable, allow continued use of lands crossed by project facilities after construction
- Where the proposed pipeline crosses prime farmland soils, develop a soils handling plan that separates the top 6 inches and the soils between 6 and 36 inches for subsequent reclamation

Proposed mitigation measures will reduce short-term and long-term losses of soil and soil productivity. Redistribution of topsoil to soil-deficient areas will increase soil productivity in those areas. Topsoil, soil amendments, fertilizers, and mulches will increase productivity and help establish cultivated vegetation and crops. A soils handling plan for prime farmland soils will ensure high quality topsoil is preserved and distributed properly.

### *Air Quality*

The following mitigation measures will be implemented:

- Develop and implement standard control practices, such as watering, to minimize particulate and dust emissions from construction work sites as specified in the fugitive dust control plan
- Ensure construction equipment (especially diesel equipment) meets opacity standards for operating emissions
- Promptly revegetate disturbed areas

The proposed mitigation measures will reduce both short-term and long-term effects on air quality by following standards on construction equipment and minimizing fugitive dust.

### ***Hazardous Materials***

The following mitigation measures will be implemented:

- Remove solid waste and properly dispose of at a permitted solid waste disposal facility prior to construction of project facilities at the site
- Inspect the ground surface beneath the solid waste for evidence of hazardous material or petroleum product spills such as soil staining and unusual odors or colors
- If evidence of a spill or spills is noted, delineate the extent of the spill by laboratory analysis and excavate any contaminated soils and properly dispose of at a permitted waste disposal facility
- If soil and/or ground water contamination is encountered during construction of project facilities, implement mitigation procedures to minimize the risk to construction workers and to the future operation of the project.

The proposed mitigation measures will identify areas of potential contamination from hazardous materials and will remediate the soil and ground water if any contamination was identified.

connect to Fry-Ark facilities, and; (3) approve an "administrative swap" of FVA water associated with SDS Project deliveries.

### **Implementation**

The decision to implement the Federal actions needed by Reclamation for the selected alternative will be effective immediately upon approval of this Record of Decision. Reclamation staff will proceed with all activities needed to commence negotiations with the Project Participants to: (1) enter into excess capacity contracts for use of Fry-Ark facilities: (2) issue a special use permit to

## **Pueblo County 1041 Permit**

**1. Section 4.2: Need to obtain flood hazard area development permits.**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Permit Example

**2. Section 4.3: JPS requires separate 1041 approval if > 115kv.**

In Progress:   X   Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): BHE FONSI

**3. Section 5.2: Any further third party beneficiaries of the project (within El Paso and Teller Counties and in the basin) must meet identified conditions.**

In Progress:   X   Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

Next Step: Denala Request in progress – Joan's letter to Denala

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Donala Letter

**4. Section 6: \$50M to FCWFCD over period of five years with \$300,000 advance for flood and sediment control study.**

In Progress:   X   Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: First payment

Due Date(s): 2016

Closure Documentation (if any): Check copy and letter from Pueblo County (Pending)

**a. Terms of "indexed" payments subject to subsequent agreement.**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Letter and resolution

**b. FCWFCD sponsored projects must meet identified criteria.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

Next Step: Document of use of final payments

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Committee future minutes and resolution (Pending)

5. **Section 7: \$75M for wastewater system improvements between 2009 and Dec. 31, 2024 (annual expenditure report to County).**

In Progress:   X   Complete:            Ongoing:   X   Post-Phase I:           

**Next Step: Continued capital expenditure planning**

Due Date(s): 2024

Closure Documentation (if any): PCAR

## 6. Section 8: Sediment Control/Dredging and Clear Springs Ranch

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

**Next Step: Determine remaining fund expenditures per ROD criteria**

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Pueblo County Committee letter

**a. Sediment removal project; if sediment removal not practicable, \$ could go to restoring and monitoring flood control protection (payment made to County).**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

**Next Step:** \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Pueblo County Committee letter

**b. Construct new wetlands and redirect portion of Fountain creek channel to reduce slope and improve channel stability (Reclamation must approve project design and completion).**

In Progress:   X   Complete:            Ongoing:            Post-Phase I:           

**Next Step: Review by Corps, Accept by BOR**

**Due Date(s):** \_\_\_\_\_

Closure Documentation (if any): Closure of NWP 27 (Pending)

**7. Section 9: Continued Compliance with Pueblo Flow Management Program.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

**Next Step:** \_\_\_\_\_

Due Date(s): 40 Years

Closure Documentation (if any): CSU Water Resources actively participating

## 8. Section 10: Implementation of Arkansas River Low Flow Program.

a. **MOU between CSU and PBWW for water contribution toward maintenance of storage pool in Pueblo Reservoir for downstream releases.**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

**Next Step:** \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): MOU

9. **Section 11: Construction of NOW.**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): MOU No 10AG6C0066; Report to Pueblo County

- a. **MOU between CSU and PBWW describing how will use SOW and new NOW; "if approved by the Bureau of Reclamation, the NOW shall be constructed and used as primary outlet works for SDS.**

In Progress:   NA   Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): April 17, 2009

Closure Documentation (if any): MOU

10. **Section 12: Review of Design and Construction of Structures at Pueblo Dam.**

- a. **Reclamation must perform dam safety review and accept plans before any construction (written proof).**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Letter from BoR 1A and 1B

11. **Section 13: County Road Improvements and Restoration.**

- a. **Submission of Haul Route Plan.**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Haul Route Plan

- b. **Need to rehabilitate roads to County standards (cost est. of \$6.1M—actual payment \$15M).**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): 2 letters releasing bond

12. **Section 14: Cultural and Archeological Resource Protections.**

- a. **SDS to execute Programmatic Agreement and comply therewith.**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Amendments, Letters, Reports



**13. Section 15: Acquisition of Property Interests.**

**a. Do not create undue financial burden on County residents.**

In Progress:   X   Complete:        Ongoing:        Post-Phase I:       

Next Step: Walker

**Due Date(s):** \_\_\_\_\_

**Closure Documentation (if any):** No claim other than Walker pending

**b. Use eminent domain only as last resort.**

In Progress:   X   Complete:            Ongoing:            Post-Phase I:           

**Next Step:** \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): \_\_\_\_\_

**c. Cover landowner out-of-pocket expenses.**

In Progress:   X   Complete:            Ongoing:            Post-Phase I:           

**Next Step: Hearing, Pending Walker litigation**

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): \_\_\_\_\_

**14. Section 16: Lake Level at Pueblo Reservoir.**

**a. CSU commits to voluntary participation in reservoir management plan**

**“when and if Southeastern Colorado Water Conservancy District, the Bureau of reclamation, and any other affected party agree to participate...**

In Progress: NA Complete:            Ongoing:            Post-Phase I:           

**Next Step:** \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): \_\_\_\_\_

**15. Section 17: Minimize the number of private properties acquired.**

**a. Make annual payment in lieu of taxes for properties acquired.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

**Next Step:** \_\_\_\_\_

**Due Date(s):** \_\_\_\_\_

Closure Documentation (if any): PILT payments

## 16. Section 18: Monitoring and Adaptive Management on Fountain Creek.

**a. Perform water quality and geomorphology monitoring.**

In Progress:   X   Complete:            Ongoing:            Post-Phase I:           

**Next Step:** \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Geomorphic and WQ Data

**b. Conduct adaptive management per EIS process.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_  
Next Step: Deliver water to CSU customers  
Due Date(s): 5/2016  
Closure Documentation (if any): IAMP

**c. Any mitigation greater than required by Reclamation to be performed by FCWFCD.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_  
Next Step: \_\_\_\_\_  
Due Date(s): \_\_\_\_\_  
Closure Documentation (if any): \_\_\_\_\_

**17. Section 19: Wastewater Collection System Management Practices.**

**a. Commit to ongoing collection system improvements.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_  
Next Step: \_\_\_\_\_  
Due Date(s): \_\_\_\_\_  
Closure Documentation (if any): PCAR

**18. Section 20: Construction Impact Mitigation.**

**a. Appendix C-1 thru C-22 (see quarterly reports)**

In Progress:   X   Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_  
Next Step: \_\_\_\_\_  
Due Date(s): Fall 2015  
Closure Documentation (if any): Quarterly reports

**19. Section 22: Reclamation of Disturbed Lands.**

**a. Restore to 90% of pre-construction cover.**

In Progress:   X   Complete: \_\_\_\_\_ Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_  
Next Step: Pueblo County approval: S1 and S2 pending  
Due Date(s): \_\_\_\_\_  
Closure Documentation (if any): Release protocol approved; release (Pending)

**b. Posting of bond.**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_  
Next Step: \_\_\_\_\_  
Due Date(s): \_\_\_\_\_  
Closure Documentation (if any): Bond, letter

**20. Section 23: Stormwater Management**

- a. **Duty to maintain stormwater controls and other regulations to ensure Fountain Creek peak flows resulting from new development served by SDS are no greater than existing conditions.**

In Progress: \_\_\_\_\_ Complete:   X   Ongoing: \_\_\_\_\_ Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): 5/2014

Closure Documentation (if any): DCM

**21. Section 24: Continued Commitment to Conservation and Reuse.**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): 2015

Closure Documentation (if any): IWRP

**22. Section 25: Perform Quarterly Compliance Monitoring (annual once complete).**

In Progress: \_\_\_\_\_ Complete: \_\_\_\_\_ Ongoing:   X   Post-Phase I: \_\_\_\_\_

Next Step: \_\_\_\_\_

Due Date(s): \_\_\_\_\_

Closure Documentation (if any): Quarterly reports

## Floodplain Permit

FP 2011-003

Flood Hazard Area Development Permit  
Application Information and Proposal Review Checklist

- ☒ Site Development plans are complete and depict flood hazard data.
- ☐ Engineering data is provided for proposed map and floodway revisions.
- ☐ Floodway Certificate and data does document no increase in flood heights.
- ☐ Subdivision proposal minimizes flood damage and protects utilities.
- ☐ Lowest Floor Elevations are above the base (100-year) flood level.
- ☐ Manufactured Home addresses elevation and anchoring requirements.
- ☐ A Floodproofing Certificate certifies Floodproofing designs.
- ☒ Other information/documentation as needed: CERTIFICATION BY CHEN HILL

## PERMIT ACTION

- ☒ **Permit Approved:** The information submitted for the proposed project was reviewed and is in compliance with approved flood plain management standards (site development plans were submitted and are on file).
- ☐ **Permit Denied:** The proposed project does not meet approved flood plain management standards (explanation is on file)
- ☐ **Variance Granted:** A variance was granted from the base (100-year) flood elevations established by FEMA consistent with variance requirements of NFIP Regulations Part 60.6 (variance action documentation is on file).

KRU  
Flood Plain Administrator's Signature

5/5/11  
Date

Comments: \_\_\_\_\_

## COMPLIANCE DOCUMENTATION

**MAP REVISION DATA.** Certified documentation by a registered professional engineer of the as-built conditions for flood plain alterations were received and submitted to FEMA for a flood insurance map revision.

**FILL CERTIFICATE.** A community official certified the elevation, compaction, slope and slope protection for all fill placed in the flood plain consistent with NFIP Regulations Part 65.5 for Map Revisions.

**ELEVATION AND FLOODPROOFING CERTIFICATES.** The as-built elevation of the building's lowest floor was certified as \_\_\_\_\_ NGVD; or the building's floodproofing level was certified as \_\_\_\_\_ NGVD by a registered professional engineer or licensed surveyor and is on file.

**CERTIFICATE OF OCCUPANCY OR COMPLIANCE ISSUED ON:** \_\_\_\_\_  
DATE

BHE FONSI

# RECLAMATION

*Managing Water in the West*

FONSI NO. EC-2014-001

## Finding of No Significant Impact

Black Hills Corporation Pueblo Reservoir  
Substation, Pueblo, Colorado

Approved: \_\_\_\_\_



Jacklyn L. Gould P.E.  
Area Manager

March 19, 2014

Date



U.S. Department of the Interior  
Bureau of Reclamation  
Great Plains Region  
Eastern Area Office

March 2014



## Donala Letter

**TERRY A. HART**  
CHAIRMAN  
DISTRICT 1

**LIANE 'BUFFIE'  
MCFADYEN**  
CHAIR PRO TEN  
DISTRICT 2



**SAL PACE**  
COMMISSIONER  
DISTRICT 3

**JOAN ARMSTRONG**  
DIRECTOR  
planning@pc.pueblo.co.us

**PUEBLO COUNTY  
DEPARTMENT OF PLANNING AND DEVELOPMENT**

January 8, 2015

Mr. Kip Petersen  
General Manager, Donala Water and Sanitation District  
15850 Holbein Dr.  
Colorado Springs, CO 80921

**RE: Donala's Request for Exemption or Finding of No Significant Impact (FONSI) for Its Water Project Pursuant to Pueblo County's Regulations.**

Dear Mr. Petersen,

Pueblo County Staff has reviewed your letter and related submittals dated October 21, 2014, relating to Donala's proposed Water Project in Pueblo County. The Water Project is described in your letter as the delivery via Pueblo Reservoir and the Southern Delivery System ("SDS") of an annual average of 436 acre feet of water, with storage up to 499 acre feet in Pueblo Reservoir under a pending long-term excess storage contract. The Water Project is intended to reduce the Donala's reliance on current nonrenewable groundwater supplies of about 1,250 acre feet per year. Donala's customer basis is reported as primarily residential, with approximately 2,600 taps, and with a population served of about 8,200 in unincorporated El Paso County just north of the City of Colorado Springs.

We understand that Donala is requesting, first, that Pueblo County make a finding that the Water Project is not an activity requiring a 1041 permit under Pueblo County's regulations governing Site Selection and Construction of Major New Domestic Water and Sewage Treatment Systems and Major Extensions of Existing Water and Sewage Treatment Systems. Donala also requests that the Water Project be determined to be exempt under Pueblo County's regulations for Efficient Utilization of Municipal and Industrial Water Projects. Alternatively, Donala has requested a Finding of No Significant Impact ("FONSI") to avoid having to submit a permit application.

We appreciate the diligence and professionalism that you and your consultants have demonstrated so far in this process. However, after reviewing your letter, its attached submittals, and information gleaned from our preliminary meetings on this subject, Pueblo County Staff is in need of further information prior to making any of the requested determinations. Please submit supplemental information on the following topics:

**1. Planned Phases of the Water Project.**

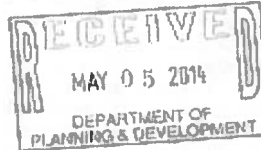
Pueblo County Staff has a concern that this Water Project may be the first phase or part of a much larger or continually expanding project. Pueblo County's 1041 Regulations [Ch

## Indexed Payments



May 1, 2014

Ms. Joan Armstrong  
Director of Planning and Development  
Pueblo County  
229 W. 12th Street  
Pueblo, CO 81003



**Subject: Condition 6 – Monetary Mitigation for Fountain Creek Impacts, Southern Delivery System (SDS), 1041 Permit No. 2008-002**

Dear Ms. Armstrong,

This letter is in response to both your January 14, 2013 letter requesting written acknowledgement that the annual indexing pursuant to Condition 6 of the 1041 permit began on October 21, 2012, and our subsequent conversations since that time on choosing an appropriate indexing calculation methodology that is consistent with the permit language.

The last paragraph of Condition 6 states as follows:

"In the event completion of the SDS Project is delayed beyond 42 months after the effective date of the permit because of an affirmative decision made by Applicant, then the payments to be made by the Applicant pursuant to this paragraph shall begin to be made on such date, without regard to project construction status, or such payments shall be subject to annual indexing commencing 42 months after the effective date of the permit, to increase the amount of such payments as required to preserve their present values, using the Colorado Front Range Producer Price Index, but not to exceed a maximum annual increase of 3.5%"

Colorado Springs Utilities ("CSU") acknowledges that annual indexing of the \$49,400,000 remaining balance of the monetary mitigation pursuant to Condition 6 began on October 21, 2012.

That said, however, CSU and its consultants, as well as Pueblo County staff, have been unable to locate an index by the name listed in the permit ("Colorado Front Range Producer Price Index"). Hence, as recently indicated to you, we propose that the parties agree upon the use of the U.S. Department of Labor, Bureau of Labor Statistics "Producer Price Index for Finished Goods", as can be found at <http://www.bls.gov/ppi/data.htm> (select "Top Picks" under "Commodity Data including stage-of-processing indexes (Producer Price Index - PPI)" and then select "Finished goods - WPUSOP3000"). This national PPI represents the entire marketed output of finished goods from U.S. producers and would fulfill the stated intent of Condition 6, i.e., to preserve the present value of the monetary mitigation amount established in the 1041 permit.

171 South Tejon Street, Third Floor  
P.O. Box 1103, Mesa Code 930  
Colorado Springs, CO 80947-0830

Phone 719.668.4800  
Fax 719.668.8734  
<http://www.csu.org>

**RESOLUTION NO. P&D 14-15****THE BOARD OF COUNTY COMMISSIONERS  
OF PUEBLO COUNTY, COLORADO****A RESOLUTION CONFIRMING THE COMMENCEMENT DATE FOR THE ANNUAL  
INDEXING AND APPROVING THE ANNUAL INDEXING METHODOLOGY FOR  
PURPOSES OF CALCULATING MONETARY MITIGATION REQUIRED UNDER  
SDS 1041 PERMIT NO. 2008-002, CONDITION NO. 6**

**WHEREAS**, on April 21, 2009, the Board of County Commissioners of Pueblo County, Colorado enacted Resolution No. P&D 09-22 approving "1041 Permit No. 2008-002 with Terms and Conditions for Construction and Use of a Municipal Water Project Known as the Southern Delivery System within Pueblo County, Colorado" ("SDS 1041 Permit"). Colorado Springs Utilities ("Utilities") filed the SDS 1041 Permit Application on behalf of itself and its named project partners ("collectively, the Permit Applicant"). Condition No. 6 of the SDS 1041 Permit, entitled "Monetary Mitigation for Fountain Creek Impacts," requires the Permit Applicant to pay the sum of fifty million dollars (\$50,000,000.00) in accordance with a specified schedule to mitigate the impacts of SDS to Fountain Creek in Pueblo County. All such payments are to be made to the Fountain Creek Watershed, Flood Control and Greenway District ("District"); and

**WHEREAS**, in compliance with paragraph 2 of Condition No. 6, three hundred thousand dollars (\$300,000.00) of the required Monetary Mitigation--payable in equal annual installments of one hundred thousand dollars (\$100,000.00) that commenced on July 1, 2009--has been made by the Permit Applicant to the District in accordance with the schedule specified in Condition No. 6; and

**WHEREAS**, by Resolution No. 09-259 passed and adopted by the Pueblo Board of County Commissioners on September 29, 2009, the Board approved Utilities' payment of another three hundred thousand dollars (\$300,000.00) to the District as a payment toward the Monetary Mitigation for Fountain Creek impacts under Condition No. 6 of the SDS 1041 Permit, thereby reducing the Monetary Mitigation required to be paid by Applicant to the remaining sum of forty-nine million four hundred thousand dollars (\$49,400,000.00); and

**WHEREAS**, the principal remaining amount of forty-nine million four hundred thousand dollars (\$49,400,000.00) for Monetary Mitigation is to be paid on January 15 of the year following completion and commencement of water deliveries through the SDS Pipeline from Pueblo Reservoir to Colorado Springs, in five equal annual payments, with nine million four hundred thousand dollars (\$9,400,000.00) to be paid in the first annual installment, and with ten million dollars (\$10,000,000.00) to be paid in each of the four succeeding years; and

**WHEREAS**, the last paragraph of Condition No. 6 provides that:

*"In the event completion of the SDS Project is delayed beyond 42 months after the effective date of the permit because of an affirmative decision made by Applicant, then the payments to be made by the Applicant pursuant to this paragraph shall begin to be made on such date, without regard to project construction status, or such payments shall be subject to annual indexing commencing 42 months after the effective date of the permit, to increase the amount of such payments as required to preserve their present*

PCAR

# **Southern Delivery System Permit Compliance Annual Report Calendar Year 2014**

Prepared for:

**Bureau of Reclamation**

**Colorado Department of Public Health and  
Environment**

**Colorado Division of Parks and Wildlife**

**El Paso County**

**Pueblo County**

**Fountain Creek Watershed Flood Control and  
Greenway District**

Submitted by:

**Colorado Springs Utilities, SDS Project Manager  
on behalf of the SDS Participants**

January 2015



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**Pueblo County 1041 Permit**

**Expenditures for Wastewater System**

**Improvements**

**Annual Progress Report**

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January 26, 2015

Reporting for the period between January 1, 2014 and December 31, 2014



## Fredell Letter

J.E. CHOŠTNER  
CHAIRMAN  
DISTRICT 3

JOHN B. CORDOVA, SR.  
DISTRICT 2



ANTHONY NUÑEZ  
DISTRICT 1

KIM B. HEADLEY  
DIRECTOR  
planning@pc.pueblo.co.us

August 30, 2010  
DEPARTMENT OF PLANNING AND DEVELOPMENT

John A. Fredell  
Southern Delivery System Program Director  
Colorado Springs Utilities  
P. O. Box 1103, Mail Code 930  
Colorado Springs, CO 80947-0930

**RE: SOUTHERN DELIVERY SYSTEM, PUEBLO COUNTY 1041 PERMIT  
NO. 2008-002; CONDITION 8: SEDIMENT CONTROL/DREDGING**


Dear Mr. Fredell:

I have reviewed your letter of August 19, 2010, concerning the above-referenced matter and have shared the same with the Board of County Commissioners. The purpose of my letter is to respond to your request for direction from Pueblo County on how it intends for Colorado Springs Utilities to proceed on the subject of compliance with Condition No. 8 of the SDS Permit.

The Board of County Commissioners has requested that I confirm its determination that a payment in lieu of dredging and installation of sediment collection devices is an acceptable approach to satisfying the requirement of Condition No. 8. It is the Board's determination that this approach, i.e. the acceptance of a payment in lieu of actual construction, is not a material change that would require a permit amendment pursuant to Condition No. 5 of the SDS Permit. Given the determination of the Board on each of these issues, it is our understanding that Colorado Springs Utilities will present funds in the amount of \$2,202,000.00 payable to Pueblo County within a reasonable period of time not to exceed thirty (30) days from the date of this letter.

Our interpretation of Condition No. 8 is that the funds so received will be used for another project designed to assist the City of Pueblo in restoring and maintaining sufficient flood protection to allow its existing levy systems to withstand a 100-year flood and, further, that any such project will be subject to the approval of the Bureau of Reclamation. As to whether or not that project meets the conditions of Section 5.2.4 of the FEIS will be a matter left to the Bureau of Reclamation and to Colorado Springs Utilities. While the Board of County Commissioners will fully commit to expending funds on a project, subject to BOR approval, which meets the language of Condition No. 8, the Board is not, through the acceptance of these funds, making any representation that

229 WEST 12<sup>TH</sup> STREET • PUEBLO, COLORADO 81003-2810 • (719) 583-6100 • FAX (719) 583-6378

  
**Colorado Springs Utilities**  
*it's how we do it*

September 28, 2010

Board of County Commissioners of Pueblo County  
 215 West 10<sup>th</sup> Street  
 Pueblo, CO 81003

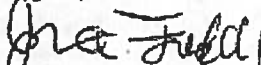
**Re: Pueblo County 1041 Permit for SDS**

Dear Commissioners:

On Monday, September 27, 2010, I hand-delivered a check to Pueblo County in the amount of \$2,202,000.00. The payment represented by this check is in fulfillment of the SDS participants' obligations to comply with Condition No. 8 of 1041 Permit No. 2008-002 for the Southern Delivery System. The payment has been made in accordance with our mutual understandings and agreements set forth in letters from Colorado Springs dated August 19, 2010 and from Pueblo County dated August 30, 2010. In accordance with the terms of these letters we understand that the SDS participants have now completely fulfilled their obligations to comply with Condition No. 8.

Thank you for your cooperation in arriving at this resolution.

Regards,



John A. Fredell  
 Southern Delivery System Program Director

- c. Kim Headley, Director, Pueblo County Department of Planning and Development  
 Jerry Forte, Chief Executive Officer, Colorado Springs Utilities  
 Bruce McCormick, Chief Water Services Officer, Colorado Springs Utilities  
 Keith Riley, SDS Planning and Permitting Program Manager, Colorado Springs Utilities

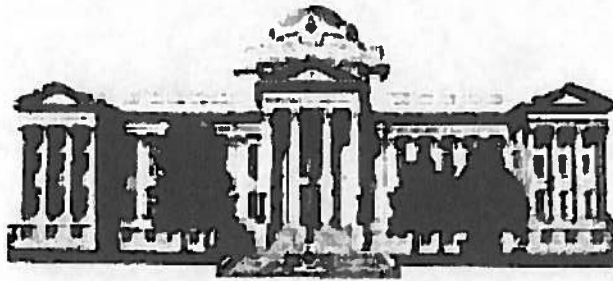
121 South Tejon Street, Third Floor  
 P.O. Box 1103, Mail Code 930  
 Colorado Springs, CO 80947-0930

Phone 719/669-4600  
 Fax 719/669-8734  
<http://www.csu.org>

## Fredell Letter

J.E. CHOSTNER  
CHAIRMAN  
DISTRICT 3

JOHN B. CORDOVA, SR.  
DISTRICT 2



ANTHONY NUÑEZ  
DISTRICT 1

KIM B. HEADLEY  
DIRECTOR  
planning@co.pueblo.co.us

August 30, 2010

**DEPARTMENT OF PLANNING AND DEVELOPMENT**

John A. Fredell  
Southern Delivery System Program Director  
Colorado Springs Utilities  
P. O. Box 1103, Mail Code 930  
Colorado Springs, CO 80947-0930

**RE: SOUTHERN DELIVERY SYSTEM, PUEBLO COUNTY 1041 PERMIT  
NO. 2009-002; CONDITION 8: SEDIMENT CONTROL/DREDGING**

Dear Mr. Fredell:

I have reviewed your letter of August 19, 2010, concerning the above-referenced matter and have shared the same with the Board of County Commissioners. The purpose of my letter is to respond to your request for direction from Pueblo County on how it intends for Colorado Springs Utilities to proceed on the subject of compliance with Condition No. 8 of the SDS Permit.

The Board of County Commissioners has requested that I confirm its determination that a payment in lieu of dredging and installation of sediment collection devices is an acceptable approach to satisfying the requirement of Condition No. 8. It is the Board's determination that this approach, i.e. the acceptance of a payment in lieu of actual construction, is not a material change that would require a permit amendment pursuant to Condition No. 5 of the SDS Permit. Given the determination of the Board on each of these issues, it is our understanding that Colorado Springs Utilities will present funds in the amount of \$2,202,000.00 payable to Pueblo County within a reasonable period of time not to exceed thirty (30) days from the date of this letter.

Our interpretation of Condition No. 8 is that the funds so received will be used for another project designed to assist the City of Pueblo in restoring and maintaining sufficient flood protection to allow its existing levy systems to withstand a 100-year flood and, further, that any such project will be subject to the approval of the Bureau of Reclamation. As to whether or not that project meets the conditions of Section 5.2.4 of the FEIS will be a matter left to the Bureau of Reclamation and to Colorado Springs Utilities. While the Board of County Commissioners will fully commit to expending funds on a project, subject to BOR approval, which meets the language of Condition No. 8, the Board is not, through the acceptance of these funds, making any representation that

229 WEST 12<sup>TH</sup> STREET • PUEBLO, COLORADO 81003-2810 • (719) 563-6100 • FAX (719) 563-6376

## Ark River Low Flow

### ARKANSAS RIVER LOW FLOW PROGRAM

This memorandum of understanding is agreed to by and between the Board of Water Works of Pueblo ("Board") and Colorado Springs Utilities ("Utilities"), an enterprise owned and operated by the City of Colorado Springs, a Colorado home-rule city and municipal corporation, to guide certain aspects of their water resource management activities occurring in the normal course of their respective business operations.

#### RECITALS

- I. On March 1, 2004, the City of Colorado Springs, on behalf of its Utility Enterprise known as Colorado Springs Utilities, the City of Pueblo, and the Board of Water Works of Pueblo entered into an Intergovernmental Agreement ("IGA") to effectuate the "Arkansas River Flow Management Program," among other topics.
- II. The purpose of the Arkansas River Flow Management Program is to provide a reasonable level of protection for streamflows through the City of Pueblo's Arkansas River Corridor Legacy Project.
- III. In the IGA, Colorado Springs and the Board agreed to forego the exercise of certain exchanges of water rights and changes of water rights, collectively called the "Subject Exchanges," in order to assist in providing both a year-round flow and recreational flows between the "Above Pueblo Location" and the "Combined Flow Location" as defined in the IGA.
- IV. The City of Pueblo, the Board and the City of Colorado Springs subsequently participated in developing and executed a second IGA that includes the City of Aurora, the

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- IV. The City of Pueblo, the Board and the City of Colorado Springs subsequently participated in developing and executed a second IGA that includes the City of Aurora, the



**DELIVERY OF MUNICIPAL WATER SUPPLIES  
FROM PUEBLO RESERVOIR**

This Memorandum of Understanding is agreed to by and between the Board of Water Works of Pueblo, Colorado ("Board") and Colorado Springs Utilities ("Utilities"), an enterprise owned and operated by the City of Colorado Springs, a Colorado home-rule city and municipal corporation, to provide the manner in which the Board and Utilities will cooperate in the use of Municipal Water Supply delivery facilities at Pueblo Reservoir in the normal course of their respective business operations.

**RECITALS**

A. Both the Board and Utilities (collectively "Parties") are participants in and beneficiaries of the Fryingpan-Arkansas Project constructed by the United States Bureau of Reclamation ("Bureau") pursuant to Congressional authorization (Public Law 87-490).

B. On July 11, 2000, the Board entered into Contract No. 009D6C0048 with the Bureau of Reclamation for delivery of municipal and industrial water through, and repayment for, the South Outlet Works of Pueblo Dam, a feature of the Fryingpan-Arkansas Project. The Board entered into a separate license with the Bureau to install a pipeline across Bureau lands, which the Board has now installed and uses to deliver raw water to its municipal water treatment plant(s).

C. Pursuant to an Intergovernmental Agreement signed on August 15, 2000, between the Board and Utilities (the "2000 IGA"), Utilities paid approximately \$3 million toward the

## MOU

**U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
GREAT PLAINS REGION  
EASTERN COLORADO AREA OFFICE**

**MEMORANDUM OF UNDERSTANDING  
MOU No. 10AG6C0066  
FOR**

**MODIFICATION OF THE PUEBLO DAM RIVER OUTLET FACILITIES AND  
CONSTRUCTION OF CONNECTION FACILITIES TO SUPPLY WATER TO THE  
SOUTHERN DELIVERY SYSTEM**

This Memorandum of Understanding (MOU) between the United States, acting through the Department of the Interior, Bureau of Reclamation (Reclamation), and Colorado Springs Utilities (Utilities) identifies the funding roles, responsibilities, and steps necessary to modify existing Reclamation facilities at Pueblo Dam and to construct additional facilities in the vicinity of Pueblo Dam needed for the Southern Delivery System (SDS) Project. The parties agree to the terms and conditions expressed and referenced herein.

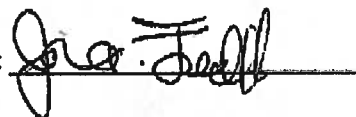
Bureau of ReclamationColorado Springs Utilities

Signed: \_\_\_\_\_



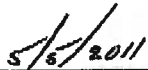
Name: Michael P. Collins  
Title: Area Manager  
Eastern Colorado Area Office

Signed: \_\_\_\_\_

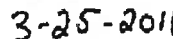


Name: John A. Fredell  
Title: Project Director  
Southern Delivery System

Date: \_\_\_\_\_



Date: \_\_\_\_\_



APPROVED AS TO FORM:  
  
BY ATTORNEYS OFFICE  
UTILITIES DIVISION

Pueblo County 1041 Permit No. 2016-002 Compliance Document for MEIS

Note: All sub-headers and conditions listed in columns 1 and 2 of the table below are taken verbatim from the 1041 Permit document.

| 1041 CONDITION   |                | PROGRAMMATIC  | WORK PLAN   |
|--|----------------|---|---|
| 1041 Permit Section  | 1041 Condition | Documentation of Compliance   | Documentation   |
| 10. Implementation of Colorado Springs Utilities and property subject to a signed Memorandum of Understanding between the Pueblo Board of Water Works and Colorado Springs Utilities which shall provide for the release of water into the Arkansas River and assist in the maintenance of a storage pond in Pueblo Reservoir designed to permit the release of water into the Arkansas River during times when the flow in the River could fall dangerously low, to levels at or below 50 cfs. SCS participants shall not exchange against reservoir releases made by the Board of Water Works of Pueblo or Colorado Springs Utilities for the Arkansas River Low Flow Program. |                | A Memorandum of Understanding (MOU) was executed between the Pueblo Board of Water Works and Colorado Springs Utilities on April 17, 2008 which provides the terms and conditions under which each of the entities will contribute to the maintenance of a storage pond in Pueblo Reservoir designed to permit the release of water into the Arkansas River during times when the flow in the River could fall dangerously low, to levels at or below 50 cfs. SCS participants shall not exchange against reservoir releases made by the Board of Water Works of Pueblo or Colorado Springs Utilities for the Arkansas River Low Flow Program. Please see Attachment E for a copy of the MOU. | Programmatic Documentation  |
| 11. Construction and Use of North River Culvert Works, p. 14   |                | In a Memorandum of Understanding (MOU) was executed between the Pueblo Board of Water Works and Colorado Springs Utilities on August 15, 2020 which describes the manner in which the two entities will use the South Culvert Works & North River Ventilation and the North Culvert Works of Pueblo Dam. Please see Attachment C for a copy of this MOU.  | Programmatic Documentation  |
| 12. Safety Review of Design and Construction of Structures at Pueblo Dam, p. 14  |                | The commitment will be addressed in the submittal of the Work Package 1A, Pueblo Dam Construction, PE-3.  | The Bureau of Reclamation shall address specifications addressing their |
| 13. County Road Improvements and Restoration, p. 14  |                | See the Mitigation Appendices C1-1 through C1-4 responses provided below.   | See the Mitigation Appendices below.                                    |

MOU

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
GREAT PLAINS REGION  
EASTERN COLORADO AREA OFFICE

MEMORANDUM OF UNDERSTANDING  
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FOR

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Bureau of Reclamation

Signed: 

Name: Michael P. Collins  
Title: Area Manager  
Eastern Colorado Area Office

Date: 5/5/2011

Colorado Springs Utilities

Signed: 

Name: John A. Fredell  
Title: Project Director  
Southern Delivery System

Date: 3-25-2011

APPROVED AS TO FORM:  
  
ATTORNEY GENERAL  
UTILITIES DIVISION

Letter



IN REPLY REFER TO:

EC-1001  
ADM-13.00

## United States Department of the Interior

BUREAU OF RECLAMATION  
Great Plains Region  
Eastern Colorado Area Office  
11056 West County Road 18E  
Loveland, Colorado 80537-9711

OCT 31 2011

Mr. Steve Duling  
SDS Project Manager  
Colorado Springs Utilities  
P.O. Box 1103, Mail Code 930  
Colorado Springs, Colorado 80947-0930

Subject: Progress Report for Contributed Funds Act Agreement (CFAA) No. R10CF60066 and Memorandum of Understanding (MOU) No. 10AG6C0066, Southern Delivery System Project, Fryngpan-Arkansas Project, Colorado

Dear Mr. Duling:

This letter reports Reclamation expenditures as of September 30, 2011 for CFAA No. R10CF60066. Colorado Springs Utilities has advanced funding in the amount of \$701,012. As of September 30, 2011, Reclamation has expended \$303,315 and committed an additional \$321,022 to Service Agreements with the Technical Services Center (TSC) and Construction Services. In the last Fiscal Year quarter of 2011, Reclamation has supported:

- a) Work Package (WP)1A: Ongoing Reclamation full time inspection, safety and security reviews; construction oversight activities and meetings, TSC construction support including submittal reviews and TSC field inspections, Pueblo staff inclinometer well monitoring and equipment clearances, TSC rock monitoring activities and reviews, and TSC inspector contract administration.
- b) WP1B: TSC and ECAO 30 and 60 percent design review activities as well as Hydraulics and Surge Analysis reviews.
- c) South Pipeline (SP)1: TSC 100 percent design review activities.
- d) Permitting activities: Additional environmental analysis, Master Crossing Consent, general coordination, budget reporting, and the SP1 Special Use Permit.

The CFAA account balance less Reclamation commitments is currently \$76,675. Reclamation anticipates expending \$47,000 in salaries through December 31, 2011. Pursuant to MOU No. 10AG6C0066 a net balance of \$50,000 needs to be maintained. Based on current forecasts,



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# **The Southern Delivery System Project**

## **Construction Management Plan Pueblo Dam Connections Work Package 1A**

FINAL REVISION 0: October 22, 2010

## Haul Route Plan



## Letters



## Colorado Springs Utilities

*It's how we're all connected*

September 28, 2011

Joan Armstrong, Interim Director  
Pueblo County Planning & Development  
229 W. 12<sup>th</sup> Street  
Pueblo, CO 81003-2810

Subject: Southern Delivery System - Pueblo County Road Rehabilitation Bond

Dear Ms. Armstrong:

In accordance with Pueblo County 1041 Permit No. 2008-002 for the Southern Delivery System water project (1041 Permit), condition 13 of the Terms and Conditions, and CR-7 of the Mitigation Appendix, Colorado Springs Utilities transmitted to Pueblo County, yesterday, a Pueblo County Road Rehabilitation Bond in the amount of \$7,231,113.00. This amount is based upon the road rehabilitation estimate prepared by the Pueblo County Public Works Department included in Exhibit 4 of the Mitigation Appendix of the 1041 Permit, plus estimated increases in costs over time as represented by the Construction Cost Index through 2013.

We were notified that Pueblo County's current estimate is now \$15,815,356.88. We are disappointed that the new amount is more than double the amount provided by the 1041 Permit. We disagree that this estimate establishes the financial assurance requirement, however, in order to avoid delays in the project we are submitting the attached additional surety bond in the maximum penal sum of \$9,502,006.00 while reserving our rights under the 1041 Permit.

The amount of this additional surety bond, when added to the bond submitted yesterday, provides a combined surety amount equal to Pueblo County's current estimate of \$15,815,356.88 plus escalation in accordance with the 1041 Permit.

Please let me know immediately if you have concerns or questions regarding our surety bond submittals.

Sincerely,

John A. Fredell  
Southern Delivery System Program Director  
719-668-8037

enc: Pueblo County Road Rehabilitation Bond  
cc: Gary Raso

TERRY A. HART  
CHAIRMAN  
DISTRICT 1

LIANE "BUFFIE"  
MCFADYEN  
CHAIR PRO TEM  
DISTRICT 2



SAL PACE  
COMMISSIONER  
DISTRICT 3

JOAN ARMSTRONG  
DIRECTOR  
planning@co.pueblo.co.us

**PUEBLO COUNTY  
DEPARTMENT OF PLANNING AND DEVELOPMENT**

December 8, 2014

Colorado Springs Utilities  
Mr. John Fredell, SDS Program Director  
121 South Tejon Street, Third Floor  
P.O. Box 1103, Mail Code 930  
Colorado Springs, CO 80947-0930

Re: 1041 Permit No. 2008-002  
Condition No. 13 County Road Improvements and Restoration  
Mitigation Appendix CR-7 Cash Payment/Escrow/Other Financial Instrument

Dear Mr. Fredell:

In October 2011, Travelers Casualty and Surety Company of America submitted to Pueblo County a Road Rehabilitation Bond, Bond Number 105598247 in the amount of \$16,733,119.00. The Bond is the financial instrument to cover the total costs for rehabilitation of the roads identified in the approved Haul Route Plan.

In your May 29, 2012 letter titled Southern Delivery System, Pueblo County 1041 Permit No. 2008-002/Road Rehabilitation Payments, item 1 gives the payment installment schedule of the \$15 million to Pueblo County: 1<sup>st</sup> installment of \$5 million on or before June 1, 2012; 2<sup>nd</sup> installment of \$5 million on or before January 2, 2013; 3<sup>rd</sup> installment of \$5 million on or before January 2, 2014. "Upon completion of these three payments, Colorado Springs Utilities will be released from any and all obligations related to the cost of rehabilitation of any Pueblo County roads as referenced in Condition 13 of the 1041 Permit and Colorado Springs Utilities' currently posted bond will be unconditionally released."

Pueblo County Department of Planning and Development has received the three payment installations of \$5 million each. Therefore, Pueblo County is satisfied that Colorado Springs Utilities has complied with Condition No. 13 and thereby is releasing Pueblo County Road Rehabilitation Bond, Bond Number 105598247.

Sincerely,

Joan Armstrong, Director

c: Board of County Commissioners  
Greg Styduhar, County Attorney  
Marcy Day, Assistant County Attorney  
Gary Raso, Special Assistant County Attorney

## Cultural Resources



March 27, 2012

Ms. Belinda C. Mollard  
Archaeologist  
Eastern Colorado Area Office  
Bureau of Reclamation  
11056 West County Road 18E  
Loveland, CO 80537-9711

Dear Belinda:

Enclosed please find a copy of the Programmatic Agreement (PA), Amendment 2 and the accompanying Area of Potential Effect (APE) map and Individual Area Maps USGS, 1:24,000 scale, to include new areas for addition to the Southern Delivery System (SDS) project. We have supplied 16 copies for distribution to the Colorado Historic Preservation Office (one copy), 14 interested Tribes (14 copies), and the Bureau of Reclamation (one copy):

- *SDS Programmatic Agreement, Amendment 2;*
- *Updated Area of Potential Effects Map; and*
- *Individual Area Maps, USGS 1:24,000.*

New additions to the APE include activities associated with the following:

- Juniper Pump Station Power Supply
- Williams Creek Pump Station Power Supply
- Bradley Pump Station Relocation and Power Supply
- Bradley Road Realignment
- Water Treatment Plant Sanitary Sewer Line Tie-in and Relocation of the Portions of the Raw Water Pipeline in the Northern Alignment from the north end of Work Package N2A to the Water Treatment Plant
- Finished Water 3.

These versions have been placed on the SDS SharePoint site.



**Southern Delivery System Project**  
**Cultural Resource Programmatic Agreement**  
**Annual Meeting Agenda**  
**Leon Young Service Center**  
**1521 Hancock Expressway, Colorado Springs, CO**  
**Pikes Peak Room**  
**April 3, 2015**

- D) **Welcome** 1:00 – 1:15 p.m.  
*Brian Joseph – Archaeologist, Bureau of Reclamation*  
*Allison Mosser – SDS Permitting and Compliance Sr. Project Manager, Colorado Springs*  
*Utilities*
- A) Sign-in  
 B) Introductions and Site Logistics  
 C) Objectives  
 D) Welcome  
 E) Entities/Agencies Involved
- II) **Project Overview** 1:15 – 1:40 p.m.  
*Allison Mosser – SDS Permitting and Compliance Sr. Project Manager, Colorado Springs*  
*Utilities*
- A) SDS Project History  
 B) EIS and PA  
 C) SDS Overview and Update
- III) **2014 Cultural Resource Activities** 1:40 – 2:00 p.m.  
*Allison Mosser – SDS Permitting and Compliance Sr. Project Manager, Colorado Springs*  
*Utilities*  
*Collette Chambellan – Archeologist, Western Cultural Resource Management*  
 Cultural Resource Activities
- IV) **2015 Upcoming Construction Activities** 2:00 – 2:15 p.m.  
*Allison Mosser – SDS Permitting and Compliance Sr. Project Manager, Colorado Springs*  
*Utilities*
- V) **Questions and closeout** 2:15 – 2:30 p.m.

**Logistics**

- Light snacks and beverages will be provided.
- Parking is available at the facility.

**PROGRAMMATIC AGREEMENT  
AMONG  
THE BUREAU OF RECLAMATION, EASTERN COLORADO AREA OFFICE,  
COLORADO SPRINGS UTILITIES, AND  
THE COLORADO STATE HISTORIC PRESERVATION OFFICER  
REGARDING  
THE SOUTHERN DELIVERY SYSTEM PROJECT**

WHEREAS, Colorado Springs Utilities, the City of Fountain, Security Water District, and Pueblo West Metropolitan District (Project Participants) intend to develop and construct a water delivery system from Pueblo, Colorado or Fremont County to Colorado Springs, Colorado, for the purpose of providing water to the Project Participants' service areas, called the Southern Delivery System (Project); and

WHEREAS, the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) which owns and operates the Fryingpan-Arkansas Project, proposes to issue long term storage, conveyance, and exchange contracts with the Project Participants to use Fryingpan-Arkansas Project facilities, and is acting as lead Federal Agency for purposes of complying with Section 106 of the National Historic Preservation Act (NHPA); and

WHEREAS, the project represents a series of undertakings with similar, repetitive effects to historic properties, the effects usually can not be determined before final siting, and the Advisory Council on Historic Preservation (ACHP) was invited but declined to participate in the consultation leading to this agreement, and Reclamation has consulted with the Colorado State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 14; and

WHEREAS, Reclamation has identified and notified the Apache Tribe of Oklahoma, the Cheyenne and Arapaho Tribes of Oklahoma, the Comanche Nation of Oklahoma, the Fort Sill Apache Tribe, the Jicarilla Apache Nation, the Kiowa Tribe of Oklahoma, the Mescalero Apache Tribe, the Northern Arapaho Tribe, the Northern Cheyenne Tribe, the Northern Ute Tribe, the Pawnee Nation of Oklahoma, the Shoshone Tribe (Eastern Band), the Shoshone-Bannock Tribe, the Southern Ute Indian Tribe, the Ute Indian Tribe, and the Ute Mountain Ute Tribe as Native American Tribes that may attach religious and cultural significance to historic properties in the Area of Potential Effect (APE); and

WHEREAS, The Cheyenne and Arapaho Tribes of Oklahoma, the Comanche Nation, the Jicarilla Apache Nation, the Kiowa Tribe of Oklahoma, the Northern Cheyenne Tribe, Northern Arapaho Tribe, the Northern Ute Tribe, the Pawnee Nation of Oklahoma, the Southern Ute Indian Tribe, and the Ute Mountain Ute Tribe have requested to be Consulting Parties for this undertaking, according to 36 CFR 800.2(c)(2) and 800.3(f)(2); and these Tribes have indicated their interest in this PA and have been invited to sign as Concurring Parties, pursuant to 36CFR 800.6(c)(3); and

WHEREAS, Colorado Springs Utilities will be responsible for constructing the Project, will



# United States Department of the Interior

## BUREAU OF RECLAMATION

Eastern Colorado Area Office  
11056 West County RD 18E  
Lowland, Colorado 80537-9711



IN REPLY  
REFER TO:

EC-1300  
ENV-3.00

6 2007

Ms. Georgianna Contiguglin  
State Historic Preservation Officer  
Office of Archaeology and Historic Preservation  
1300 Broadway  
Denver, Colorado 80203

Subject: Southern Delivery System Programmatic Agreement

Dear Ms. Contiguglin:

Enclosed is a draft version of the proposed Programmatic Agreement (PA) for your review and consideration. The Bureau of Reclamation, Eastern Colorado Area Office, is preparing an Environmental Impact Statement (EIS) on the proposed project, and the PA will serve to provide a framework for insuring that historic properties are properly treated. This Agreement is also being submitted to the Advisory Council on Historic Preservation (ACHP) for their consideration.

The Southern Delivery System (SDS) Project is a proposed regional water delivery project designed to serve most or all of the Participants' (City of Colorado Springs, City of Fountain, Security Water District and Pueblo West Metropolitan District) future water needs through 2046. As proposed, SDS would deliver Frying Pan-Arkansas (Fry-Ark) Project water and non-Fry-Ark Project water from the Arkansas River near the City of Pueblo to the Participants' service areas. The proposed SDS Project area would extend northward from the Arkansas River from a pipeline at Pueblo Reservoir to the City of Colorado Springs.

As proposed, SDS would include construction and operation of the following components:


- Use of 42,000 acre-feet (ac-ft) of existing storage capacity in Pueblo Reservoir on an as-available basis
- Use of a Reclamation pipeline and outlet structure below Pueblo Dam to connect to an untreated ("raw") water pipeline
- 2,200 feet of 78-inch pipeline capable of conveying 96 million gallons per day (mgd) and 1,100 feet of 72-inch pipeline capable of conveying 78 mgd of raw water
- A 160-foot long 36-inch diameter pipeline capable of conveying 18 mgd of raw water to

PILT

**DIRECT PAY REQUEST**

See QBD Document 10874 or call Accounts Payable 888-8550

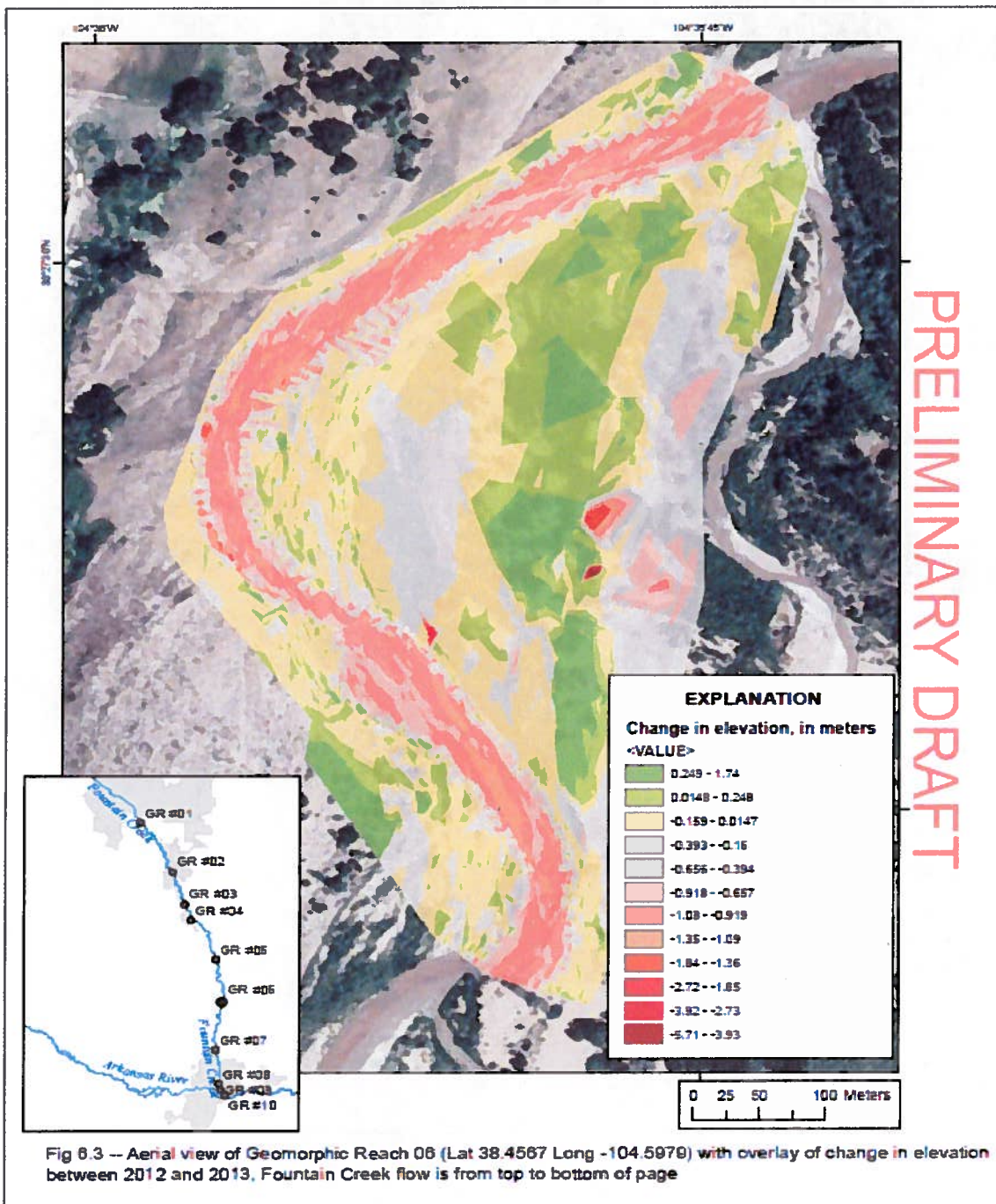
Payment will not be processed without a receipt or supporting documentation attached to this form. Please send originals by Interoffice Mail to Accounts Payable - Mail Code 929

|  |   |
|--|---|
| <b>Date payment is needed:</b><br><small>(a minimum of 3 days is needed to process payment)</small>  | 04/01/2014  |
| <b>Make payment to:</b>  | Pueblo County Treasurer   |
| <b>Indicate Remit vendor number or Employee's ID number for employee reimbursements if known:</b>  | 999004078   |
| <b>Vendor's remit address:</b><br><small>You must provide the full mailing address with the city, state and zip code</small>   | 215 W 10 <sup>th</sup> Street<br>Pueblo, CO 81003   |
| <b>Amount of payment:</b>  | \$2346.01   |
| <b>Reason for payment:</b><br><small>(This information will print on the check)<br/>Payment will not be processed without receipt or supporting documentation attached to this form. (supporting documentation is a registration form, membership application, or an itemized receipt)</small> | Southern Delivery System 2013 PILT Payment per 1041 Regulations<br><br>PLEASE DO NOT MAIL CHECK. CALL CLARA LUCERO @ 88685 FOR CHECK PICK UP.   |
| <b>Please email copy of check to:</b>  | Email Address to send check copy to:  |
| <b>Real Estate Transaction?</b>  | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/><br>Real Estate contact:<br>Phone Number:  |
| <b>Do you have an attachment you want sent with the check?</b> <small>(Include attachment with this form)</small>  | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |
| <b>Requested by:</b><br><b>Phone number:</b>   | Liz Baston<br>Ext. 88539  |
| <b>Approval Signature:</b><br><b>AND Name Printed:</b><br><small>Your supervisor or manager's name and their signature<br/>Approver must be set up for signature authority in RMS.<br/>Manager needs to call URS x 84357 to set up authorization.</small>                                      | <br>Approval Signature<br>Keith Riley<br>Print Name  |
| <b>Date Approved:</b>  | 3/27/14   |
| <b>Debit *G/L Account Number:</b><br><small>A minimum 19-digit number or a 30-digit number<br/>If Account number 107000 is used</small>  | 0100-305180-603000-0080<br><small>Example: 000-000000-000000-0000 (last question mark is allowed)<br/>* Also include the Activity and Account Category number when Account number 107000 is used.<br/>Example: 000-000000-107880-0000 000000-000000</small> |
| <b>Work Order Number:</b><br><small>* This is optional. Please provide only if expense must be recorded on an open work order in RMS</small>   |   |

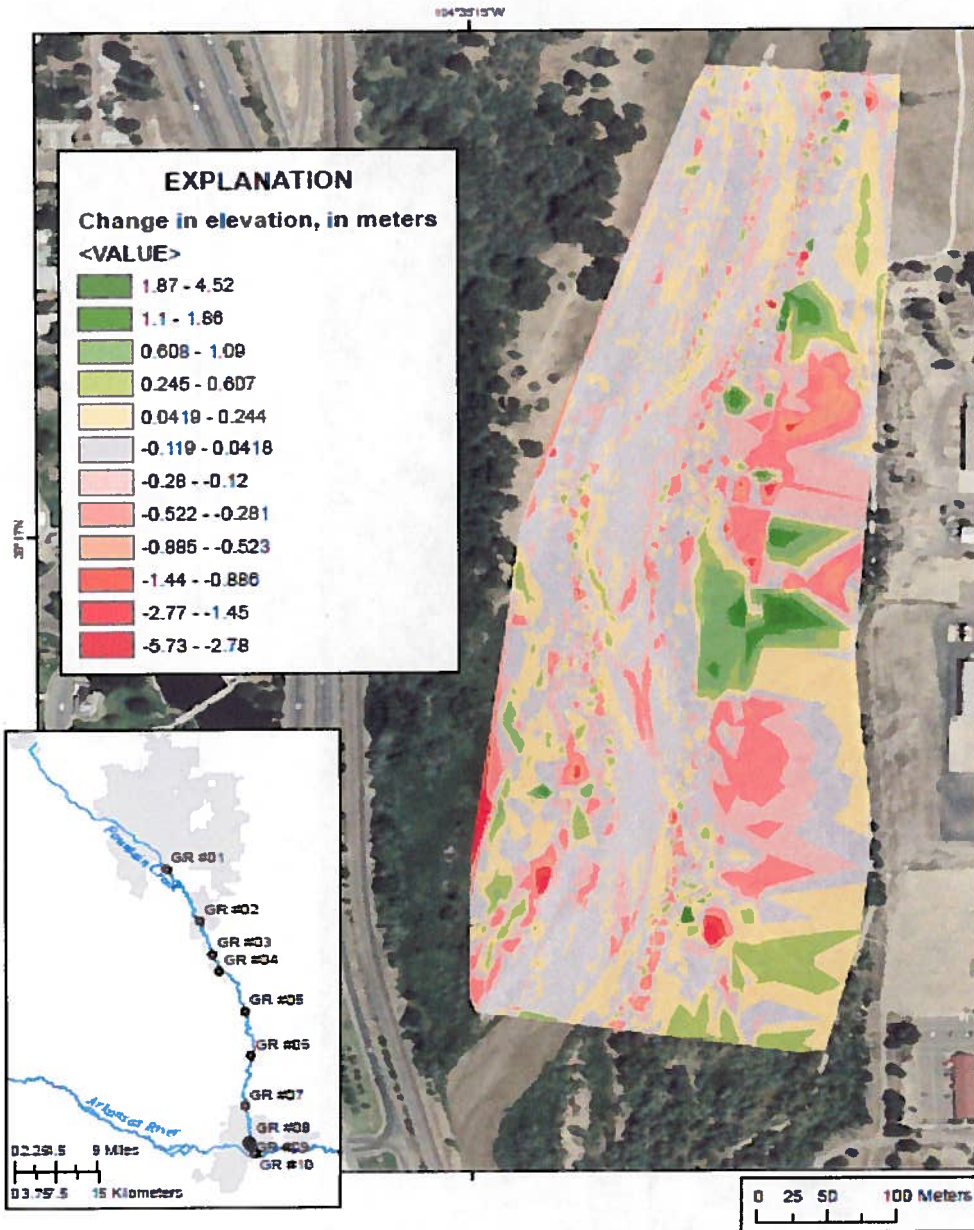
\* G/L = General Ledger  
F01-10874 (12/2010)

Revised 12/2010

\$25K Receipt

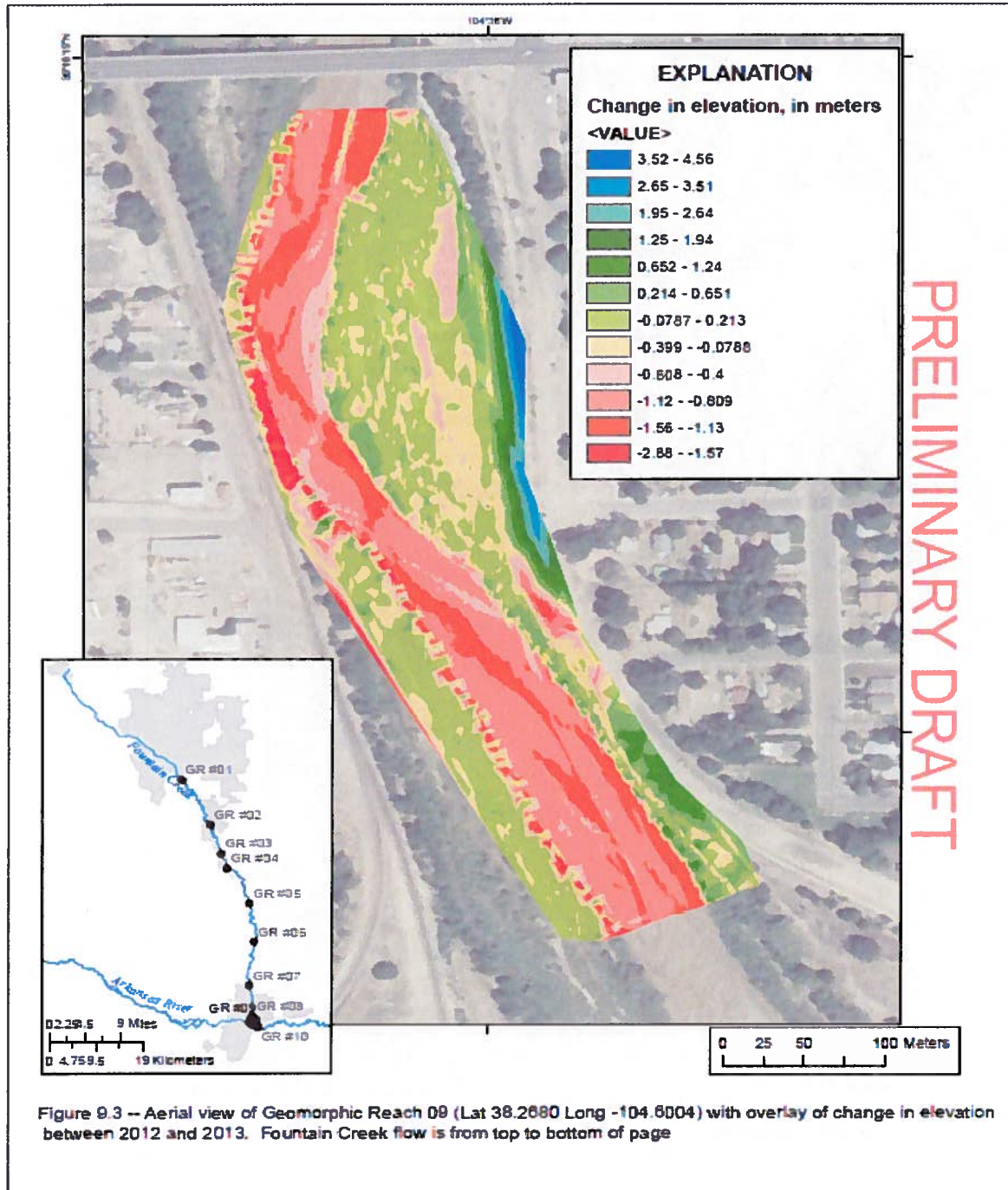




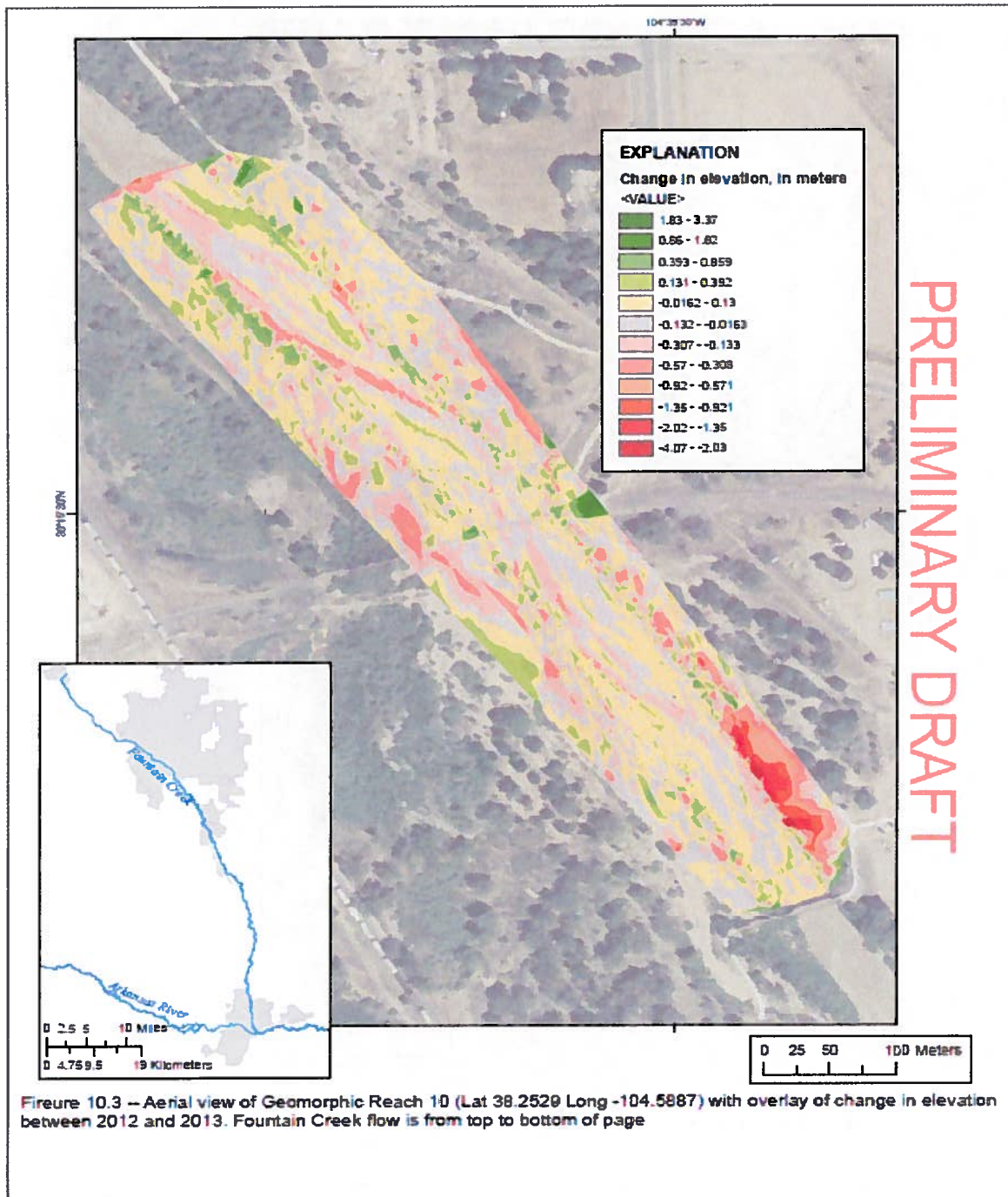


PRELIMINARY DRAFT

Fig 8.3 -- Aerial view of Geomorphic Reach 08 (Lat 38.2828 Long -104.6032) with overlay of change in elevation between 2012 and 2013, Fountain Creek flow is from top to bottom of page







| Location  | Date     | Flow | Water pressure | Dissolved oxygen | pH  | Specific conductance | Temperature | Turbidity | E. coli | Total coliform | Not | Ammonia | Not  | Selenium | Not |
|---|----------|------|----------------|------------------|-----|----------------------|-------------|-----------|---------|----------------|-----|---------|------|----------|-----|
| Standard (if applicable)                        |          |      |                |                  |     |                      |             |           | 126     | See Note       |     |         |      | 17.4     |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20131023 | 141  | 641            | 9.4              | 8.4 | 542                  | 11.8        | 14        | 24      | 1790           |     | 0.02    |      | 1.8      |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20131118 | 313  | 641            | 13.6             | 8.4 | 481                  | 9.1         | 4.7       | 18      | 630            |     | 0.02    |      | 1.3      |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20131204 | 55   | 639            | 11.9             | 8.2 | 639                  | 4.7         | 0.7       | 6       | 190            |     | 0.02    |      | 11.8     |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20140113 | 58   | 645            | 11.5             | 8.8 | 639                  | 8.3         | 2.1       | 3       | 130            |     | 0.002   |      | 23.3     |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20140309 | 67   | 638            | 11.1             | 8.8 | 671                  | 8           | 4.1       | 4       | 41             |     | 0.002   |      | 11.7     |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20140303 | 70   | 644            | 11.1             | 8.2 | 604                  | 2.9         | 7.5       | 3       | 110            |     | 0.03    |      | 11.7     |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20140403 | 129  | 638            | 11.8             | 8.1 | 546                  | 8.3         | 3.3       | 2       | 100            |     | 0.001   |      | 11.9     |     |
| Selenium Standard Change *Updated test 20140430 |          |      |                |                  |     |                      |             |           |         |                |     |         |      |          |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20140312 | 144  | 649            | 11.1             | 8.5 | 472                  | 9.4         | 0.7       | 18      | 2480           |     | 0.001   |      | 5.5      |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20140803 | 4860 | 642            | 8.3              | 8.3 | 427                  | 11.4        | 11        | 13      | 1400           |     | 0.009   | *1.2 | 5        |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20140702 | 1360 | 631            | 8.7              | 8.4 | 271                  | 11.5        | 11        | 14      | 1400           |     | 0.001   |      | 1.6      |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20140812 | 867  | 649            | 8.3              | 8.2 | 322                  | 11.6        | 14        | 25      | 2400           |     | 0.02    |      | 4.5      |     |
| ARKANSAS RIVER AT HOFFPAT STREET AT PUEBLO, CO  | 20140902 | 343  | 641            | 8.6              | 8.4 | 389                  | 21.7        | 5.1       | 14      | 2400           |     | 0.05    | *1.1 | 4.7      |     |
| Standard (if applicable)                        |          |      |                |                  |     |                      |             |           |         |                |     |         |      |          |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20131002 | 21.0 | 614            | 13.9             | 8.1 | 208                  | 6.2         | 41        | 18      | 510            |     | 0.002   |      | 0.2      |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20131112 | 21.0 | 612            | 13.5             | 8.1 | 339                  | 4.7         | 61        | 14      | 1680           |     | 0.02    |      | 0.2      |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20141203 | 15   | 599            | 13.4             | 8.1 | 311                  | 4.2         | 0.4       | 16      | 170            |     | 0.001   |      | 0.17     |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20140109 | 11   | 604            | 13.9             | 8.2 | 300                  | 2.2         | 0.7       | 18      | 890            |     | 0.002   |      | 0.2      |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20140211 | 5.9  | 609            | 13.7             | 8.2 | 417                  | 2.1         | 0.5       | 14      | 170            |     | 0.001   |      | 0.24     | *30 |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20140304 | 8.1  | 605            | 13.6             | 8.4 | 417                  | 4.5         | 7.3       | 18      | 900            |     | 0.001   |      | 0.2      |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20140403 | 6.9  | 602            | 13.1             | 8.1 | 445                  | 5.6         | 2.1       | 18      | 140            |     | 0.001   |      | 0.2      |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20140508 | 30   | 605            | 9.1              | 8.3 | 283                  | 9.4         | 51        | 71      | 2400           |     | 0.002   |      | 0.2      |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20140605 | 9.9  | 611            | 8.1              | 8.2 | 229                  | 14.9        | 69        | 27      | 10000          |     | 0.002   |      | 0.16     |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20140703 | 8.5  | 611            | 7.7              | 8.3 | 400                  | 26          | 21        | 1300    | 1790           |     | 0.002   |      | 0.16     |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20140811 | 20   | 611            | 8.5              | 8.2 | 288                  | 11.1        | 180       | 100     | 2400           |     | 0.07    |      | 0.16     |     |
| FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO        | 20140903 | 9.9  | 608            | 7.5              | 8.1 | 441                  | 11.3        | 11        | 92      | 2400           |     | 0.001   | *7   | 0.17     |     |

**SDS IAMP**

# **Southern Delivery System**

## **Integrated Adaptive Management Plan**

Prepared for:

**Bureau of Reclamation**

Submitted by:

**Colorado Springs Utilities, SDS Project Manager  
on behalf of the SDS Participants**

**CH2MHILL**

March 18, 2011



PCAR

# **Southern Delivery System Permit Compliance Annual Report Calendar Year 2014**

Prepared for:

**Bureau of Reclamation**

**Colorado Department of Public Health and  
Environment**

**Colorado Division of Parks and Wildlife**

**El Paso County**

**Pueblo County**

**Fountain Creek Watershed Flood Control and  
Greenway District**

Submitted by:

**Colorado Springs Utilities, SDS Project Manager  
on behalf of the SDS Participants**

January 2015

**Quarterly Reports**

April 29, 2015

Joan Armstrong, Director  
Pueblo County Planning & Development  
229 W. 12th Street  
Pueblo, CO 81003-2810

Subject: Southern Delivery System Pueblo County 1041 Permit Quarterly Construction  
Report, 1<sup>st</sup> Quarter Calendar Year 2015

Ms. Armstrong:

Colorado Springs Utilities, the Southern Delivery System (SDS) Project Manager, is submitting the attached Pueblo County (County) Quarterly Construction Report for the first quarter of calendar year 2015 in fulfillment of Pueblo County 1041 Permit No. 2008-002, Condition ENF-1, No. 1 – Quarterly Report, with a summary of project construction in Pueblo County. Attachments to this report include the Project Execution Plan Update for SDS Programmatic, Pueblo Dam Connection Work Packages 1A and 1B, Raw Water Pipeline Work Packages S1, S2, and S3, and the Juniper Pump Station.

Please contact me at 719-668-8037, or Mark Pifher at 719-668-8693, with any questions regarding the attached report.

Sincerely,

A handwritten signature in dark ink, appearing to read 'John A. Fredell', is written over a horizontal line.

John A. Fredell  
Southern Delivery System Program Director

Enclosure

cc: Mike Ryan, Bureau of Reclamation – Great Plains Regional Director

**Southern Delivery System  
Pueblo County 1041 Permit  
Quarterly Construction Report  
1<sup>st</sup> Quarter, Calendar Year 2015**

Prepared for:  
**Pueblo County**

Submitted by:  
**Colorado Springs Utilities, SDS Project Manager  
on behalf of SDS Participants**

April 2015

**Category : Reports - Quarterly (16)**


2014 Q1 Quarterly Construction Report FINAL with attachments and cover letter

Q1 2014 - FINAL Quarterly Report w Cover including PEP - COMPLETE



2014 Q2 Quarterly Construction Report FINAL with cover letter and attachments

Q2 2014 - FINAL Quarterly Report w Cover including PEP - COMPLETE



2014 Q3 Quarterly Construction Report FINAL with attachments and cover letter

Q3 2014 - FINAL Quarterly Report w Cover including PEP - COMPLETE



FINAL Q1 2012 Quarterly Report w Signed Cover Letter and PEP

Q1 2012 - FINAL Quarterly Report w Cover including PEP - COMPLETE



FINAL Q3 2011 Quarterly Report w Signed Cover Letter and PEP

Q3 2011 - FINAL Quarterly Report w Cover including PEP - COMPLETE



FINAL Q4 2011 Quarterly Construction Report with Attachments with cover letter

Q4 2011 - FINAL Quarterly Report w Cover including PEP - COMPLETE



FINAL SDS Quarterly Report Q1 2011 with Cover inc PEP

Q1 2011 - FINAL Quarterly Report w Cover including PEP - COMPLETE



FINAL SDS Quarterly Report Q4 2010 with Cover inc PEP

Q4 2010 - FINAL Quarterly Report w Cover including PEP - COMPLETE



Q1 2013 Quarterly Construction Report FINAL with Attachments

Q1 2013 - FINAL Quarterly Report w Cover including PEP - COMPLETE



Q2 2011 Combined Quarterly Report - Final

Q2 2011 - FINAL Quarterly Report w Cover including PEP - COMPLETE



Q2 2012 Quarterly Report with cover letter

Q2 2012 - FINAL Quarterly Report w Cover including PEP - COMPLETE



Q2 2013 Quarterly Construction Report with Attachments and cover letter FINAL

Q2 2013 - FINAL Quarterly Report w Cover including PEP - COMPLETE



Q3 2012 Quarterly Construction Report with cover letter and Attachments

Q3 2012 - FINAL Quarterly Report w Cover including PEP - COMPLETE



Q3 2013 Quarterly Construction Report with Attachments and cover letter FINAL

Q3 2013 - FINAL Quarterly Report w Cover including PEP - COMPLETE



Q4 2012 Quarterly Construction Report FINAL with attachments

Q4 2012 - FINAL Quarterly Report w Cover including PEP - COMPLETE

## Letters



## Colorado Springs Utilities

*It's how we're all connected*

November 14, 2011

Pueblo County  
Department of Planning and Development  
229 West 12<sup>th</sup> Street  
Pueblo, Colorado 81003  
Attention: Ms. Julie Ann Woods, Director

**Subject: Pueblo County Revegetation Bond No. 105692956 for South Pipeline 2 (S2),  
Southern Delivery System**

Dear Ms. Woods:

On November 8, 2011, Colorado Springs Utilities delivered the subject bond (copy attached) to Pueblo County. This security bond is a guarantee for revegetation of lands impacted by construction of the Work Package referred to as Southern Delivery System South Pipeline 2 (S2). The revegetation standard, the associated security bond requirement, and pertinent terms and conditions set out in Condition 22 of Pueblo County 1041 Permit No. 2008-002 are identified in the bond.

Work Package S2 is a 6.4-mile raw water pipeline extending northerly from Spaulding Avenue within Pueblo West to the north boundary of Pueblo West within Pueblo County, Colorado. The maximum penal sum of the revegetation bond is \$157,000.00. This amount is based on the total Work Package S2 area covered by temporary easements or permanent easements (78.49 acres) multiplied by \$2,000.00 per acre, as required in Condition 22. The calculated amount of \$156,980.00 was then rounded up to \$157,000.00 for bonding.

Please contact me at 719-668-8037 with any questions regarding this information.

Sincerely,

John Fredell  
Program Director  
Southern Delivery System

enclosures: Pueblo County Revegetation Bond, Bond No. 105692956

121 South Tejon Street, Third Floor



## Pueblo County Revegetation Bond

Bond Number: 105692962

KNOW ALL BY THESE PRESENTS that **Colorado Springs Utilities**, as Principal, and **Travelers Casualty and Surety Company of America**, a corporation organized and existing under the laws of the State of Connecticut and duly authorized to transact a corporate surety business in the State of Colorado, as Surety, are hereby held and firmly bound unto **Pueblo County, Colorado**, as Obligor, in the maximum penal sum of **Two Hundred and Five Thousand Dollars (\$205,000.00)** for the payment whereof Principal and Surety hereby bind themselves, jointly and severally, as provided herein.

Whereas, the Principal has agreed to certain terms and conditions (the "Terms and Conditions") contained in a 1041 land-use permit and its mitigation appendix, Pueblo County 1041 Permit No. 2008-002 issued by Obligor ("1041 Permit") as part of the Principal's construction of the Southern Delivery System in and around Pueblo County, Colorado; and

Whereas, pursuant to Section 22 of the Terms and Conditions of the 1041 Permit, Principal is required to re-vegetate lands in permanent or temporary construction easements pertaining to South Pipeline 1 (S1) – A 4.3-mile raw water pipeline extending from the Juniper Pump Station site adjacent to Pueblo Dam north and northeast to Spaulding Avenue within Pueblo West; and

Whereas, pursuant to Section 22 of the Terms and Conditions of the 1041 Permit, Principal is also required to establish a security bond acceptable to the Obligor guaranteeing the re-vegetation of Impacted Lands to no less than 90% of the value of the preconstruction vegetation cover with similar species diversity ("Minimum Standard"), as further outlined in the Mitigation Appendix C-9, part 2.

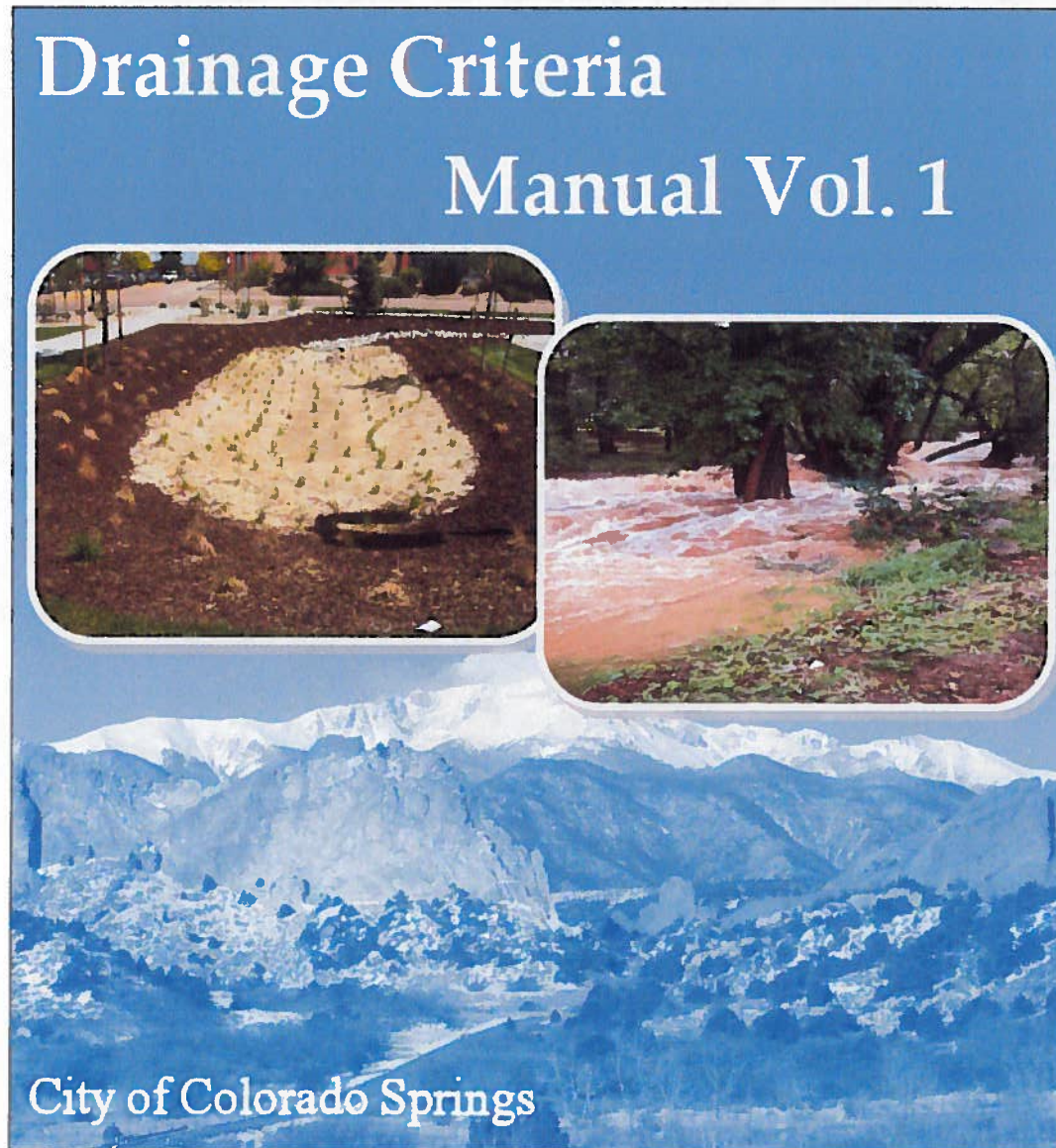
Now, therefore, the condition of this obligation is such, that if the Principal shall re-vegetate Impacted Lands to the Minimum Standard, and obtain a release by the Obligor, then this obligation shall be void; otherwise to remain in full force and effect.

Obligor shall be entitled to receive payment from the Surety if, after completion of the non-binding mediation process described in Condition 29 of the 1041 Permit, the Principal has neither revegetated Impacted Lands to Minimum Standard nor paid to Obligor either 1) the amount demanded by the Obligor to re-vegetate Impacted Lands to the Minimum Standard, or 2) such lesser amount as may be agreed to by Obligor as part of the non-binding mediation process ("Re-vegetation Costs").

Payment of the Re-vegetation Costs shall be made by the Surety within thirty (30) days after receiving the tender by the Obligor of the invoice together with a written Claim for payment signed by the Obligor substantially in the form attached hereto. The Claim by Obligor to Surety shall be sent registered or certified mail to Travelers Casualty and Surety Company of America, Attn: Vice President, Commercial Surety Claim, One Tower Square, Hartford, CT 06183. Payment to Obligor by Surety shall be made by check or other method acceptable to Obligor, payable to Board of County Commissioners of Pueblo County, and delivered to the Pueblo County Attorney, 215 W. 10<sup>th</sup> Street, Room 312, Pueblo, Colorado, 81003.

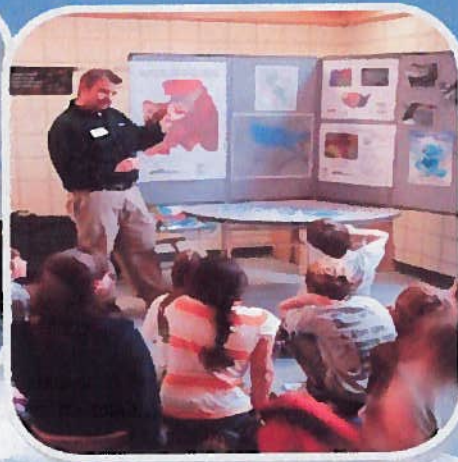
Any claim under this Bond shall be made no later than December 31, 2015.

DCM



# Drainage Criteria

## Manual Vol. 2




**Stormwater Quality Policies, Procedures  
and Best Management Practices (BMPs)**

**City of Colorado Springs  
Engineering Division**



## IWRP



[Residential](#)
[Business](#)
[Work With Us](#)

[CUSTOMER SERVICE](#)
[WAYS TO SAVE](#)
[ENVIRONMENT](#)
[SAFETY](#)
[COM](#)

## Integrated Water Resource Plan

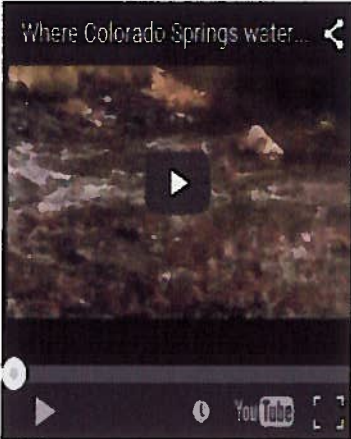
Maintaining a dependable water supply for Colorado Springs residents and businesses is one of our community's greatest challenges. Continuous, long-term water planning is the reason Colorado Springs has an excellent and reliable water system today that supports our economy and quality of life.

An Integrated Water Resource Plan (IWRP) is being developed to serve as our community's roadmap for ensuring a reliable, cost-effective water supply for the next 50 years and beyond.

Colorado Springs' last water resource plan was done almost 20 years ago and we have already implemented or are continuing to implement all four major components recommended in that plan, including conservation efforts, nonpotable water development, existing infrastructure improvements and the Southern Delivery System, a new major water delivery system. Adding new supplies or infrastructure can take several decades, so the time to plan is now. Recent drought, wildfires and flooding exemplify the need for continued water resources planning.

**Goal of the new plan**  
The goals of the IWRP are to sustainably address water supply and demand issues, while reflecting our community values, and to be adaptable to changing conditions. Through the IWRP process, we can prepare for changing conditions and uncertainties related to climate variability, hydrology, water rights, aging infrastructure, environmental/recreational water demands, political positions, social values, and environmental regulations. The plan will be developed in three phases:

### The source of our water



### Related links

- [Project fact sheet](#)
- [Contact us](#)
- [Public outreach/comments](#)
- [Customer survey results](#)
- [Water system map](#)
- [Water Planning Advisory Group](#)
- [Ensuring the Resiliency of Our Future Water and Energy Systems \(Energy.gov\)](#)
- [Video: The Water Cycle \(NBC Learn\)](#)
- [Climate change in Colorado \(Colorado Water Conservation Board\)](#)

## Integrated Water Resource Plan Fact Sheet

Maintaining a dependable water supply for Colorado Springs is one of our community's greatest challenges, and one of our great success stories. Because we are the largest city in Colorado not located on a major water source, we rely upon a complex system to transport water to nearly 450,000 people. Continuous, long-term water planning is the reason Colorado Springs enjoys an excellent and reliable water system today; a system necessary for a healthy economy and quality of life.

A new Integrated Water Resource Plan (IWRP) will be developed to serve as our community's roadmap for ensuring a reliable, cost-effective water supply for the next 50-plus years.

Colorado Springs' last water resource plan was completed nearly 20 years ago and we have already implemented or continue to implement all four major initiatives recommended in that plan:

**Conservation:** Colorado Springs is a leader in water conservation and has achieved some of the lowest per capita residential water use in the state for similar communities.

**Nonpotable Water Development:** Utilities pioneered the use of treated wastewater for irrigation and has one of the largest nonpotable water systems in Colorado.

**Existing System Improvements:** Investments in local system improvements have increased the system's effectiveness and enhanced the water system's firm yield. Utilities invested in water rights and infrastructure to recapture much of its reusable wastewater and outdoor irrigation return flows through exchanges on the Arkansas River.

**New Major Delivery System:** Colorado Springs is one of the few cities in the west successfully constructing a new major water project to assist in meeting current and future water needs. Phase 1 of the Southern Delivery System (SDS) project will be completed in 2016. When Phase 1 is finished, SDS will provide a more reliable means to deliver our water. The construction of the future SDS



Colorado Springs Utilities

*It's how we're all connected*





**Quarterly Reports**

April 29, 2015

Joan Armstrong, Director  
Pueblo County Planning & Development  
229 W. 12th Street  
Pueblo, CO 81003-2810

Subject: Southern Delivery System Pueblo County 1041 Permit Quarterly Construction  
Report, 1<sup>st</sup> Quarter Calendar Year 2015

Ms. Armstrong:

Colorado Springs Utilities, the Southern Delivery System (SDS) Project Manager, is submitting the attached Pueblo County (County) Quarterly Construction Report for the first quarter of calendar year 2015 in fulfillment of Pueblo County 1041 Permit No. 2008-002, Condition ENF-1, No. 1 – Quarterly Report, with a summary of project construction in Pueblo County. Attachments to this report include the Project Execution Plan Update for SDS Programmatic, Pueblo Dam Connection Work Packages 1A and 1B, Raw Water Pipeline Work Packages S1, S2, and S3, and the Juniper Pump Station.

Please contact me at 719-668-8037, or Mark Pifner at 719-668-8693, with any questions regarding the attached report.

Sincerely,

John A. Fredell  
Southern Delivery System Program Director

Enclosure
















cc: Mike Ryan, Bureau of Reclamation – Great Plains Regional Director

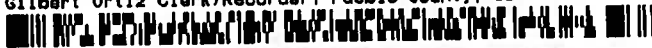
**Southern Delivery System  
Pueblo County 1041 Permit  
Quarterly Construction Report  
1<sup>st</sup> Quarter, Calendar Year 2015**

Prepared for:  
**Pueblo County**

Submitted by:  
**Colorado Springs Utilities, SDS Project Manager  
on behalf of SDS Participants**

April 2015

| Category : Reports - Quarterly (16)   |   |
|---|---|
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|  2014 Q2 Quarterly Construction Report FINAL with cover letter and attachments   | Q2 2014 - FINAL Quarterly Report w Cover including PEP - COMPLETE |
|  2014 Q3 Quarterly Construction Report FINAL with attachments and cover letter   | Q3 2014 - FINAL Quarterly Report w Cover including PEP - COMPLETE |
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|  Q4 2012 Quarterly Construction Report FINAL with attachments                  | Q4 2012 - FINAL Quarterly Report w Cover including PEP - COMPLETE |



49

RESOLUTION NO. P&D 09- 22THE BOARD OF COUNTY COMMISSIONERS  
OF PUEBLO COUNTY COLORADOA RESOLUTION APPROVING 1041 PERMIT NO. 2008-002  
WITH TERMS AND CONDITIONS FOR CONSTRUCTION AND USE OF A  
MUNICIPAL WATER PROJECT KNOWN AS THE SOUTHERN DELIVERY SYSTEM WITHIN  
PUEBLO COUNTY, COLORADO

WHEREAS, the Board of County Commissioners has held public hearings on the Permit referenced above and having considered the testimony and the documentary evidence submitted does hereby find and conclude as is hereinafter set forth:

1. The Pueblo County Board of County Commissioners has adopted regulations for areas and activities of State and local interest pursuant to §§ 24-65.1-101, et seq., C.R.S. (2008) ("HB 1041"), §§ 29-20-101, et seq., C.R.S. (2008) ("HB 1034"), and other applicable land use and regulatory powers of Pueblo County. These regulations, titled "Pueblo County Regulations for Area and Activities of State and Local Interest," are set forth in Title 17, Land Use, Division II of the Pueblo County Code ("Areas and Activities Regulations"). Chapter 17.148 contains the general administrative provisions applicable to all designated areas and activities regulated in the County, and subsequent chapters address each specific area or activity which has been designated by the County for regulation.

2. An Application has been submitted to Pueblo County for approval of a permit to conduct certain activities under Chapters 17.164 and 17.172, Pueblo County Code, for the Southern Delivery System project within Pueblo County (the "SDS Project"). The SDS Project, as proposed and as is more particularly set forth in the Application for this Permit, is a regional water delivery project. As proposed, the SDS Project would use Pueblo Reservoir, a feature of the Fryngpan-Arkansas Project, located in Pueblo County to regulate storage and would deliver untreated water through a proposed 53-mile pipeline to treatment and distribution facilities.

3. Chapter 17.164, "Local Regulations of Site Selection and Construction of Major New Domestic Water and Sewage Treatment Systems and Major Extensions of Existing Domestic Water and Sewage Treatment Systems," contains procedures and criteria for permitting major new water and sewer systems or major extensions of existing systems.

4. Chapter 17.172, "Regulations for Efficient Utilization of Municipal and Industrial Water Projects," contains procedures and criteria for development of municipal and industrial water projects.

5. Section 17.140.010(F) of the Pueblo County Code provides that any proposed activity or use, which requires a permit pursuant to the Areas and Activities Regulations, shall not require application for and issuance of a Special Use Permit otherwise required by Pueblo County zoning regulations.

1802587 RES 04/21/2009 10:50:30 AM  
Page: 2 of 49 R 0.00 D 0.00 T 0.00  
Gilbert Ortiz Clerk/Recorder, Pueblo County, Co

**RESOLUTION NO. P&D 09-22 (CONT.)**

6. Colorado Springs Utilities, on behalf of itself and its project partners, filed the Application. Colorado Springs Utilities is an enterprise owned and operated by the City of Colorado Springs. Colorado Springs Utilities is the project manager charged with the responsibility to oversee the permitting, construction, and operation of the SDS Project pursuant to agreement with the other project partners, the City of Fountain ("Fountain"), the Security Water District ("Security"), and the Pueblo West Metropolitan District ("Pueblo West District") (these four partners are collectively the "Applicant" or the "Participants").

7. The proposed SDS Project includes the following features:

**(a) In Pueblo County:**

**(i) Long-Term Storage in Pueblo Reservoir.**

The Participants would use up to 42,000 acre feet (AF) of existing excess ("if and when") storage space in Pueblo Reservoir under proposed renewable contracts (with individual terms of up to 40 years) with the United States Bureau of Reclamation ("Reclamation"), the owner of Pueblo Reservoir, as follows: Colorado Springs Utilities--28,000 AF; Fountain--2,500 AF; Security--1,500 AF; and Pueblo West District--10,000 AF. This water would be delivered to the Participants through the reservoir outlet works.

**(ii) Modification of the Pueblo Reservoir Outlet Works for Pipeline Intakes.**

By proposed renewable contracts with Reclamation (with individual terms of up to 40 years), the North River Outlet Works, located on the north side of the Arkansas River at the Pueblo Reservoir dam, would be modified to allow a connection to be constructed to an untreated water pipeline of the Participants. This north intake connection would serve as the preferred SDS intake. Additionally, a new tie-in to the existing Joint Use Manifold, which serves as a connection to other municipal users on the south side of the River at the dam, might be constructed as an alternate SDS intake. This south intake would involve constructing a buried pipeline under the River to join the north intake pipeline. The Joint Use Manifold is currently used for deliveries to pipelines for the Pueblo Water Board, the Fountain Valley Authority ("FVA"), Pueblo West District, and possibly to the planned Arkansas Valley Conduit to eastern Colorado communities; if an SDS connection to this Manifold were constructed, it would be operated pursuant to a future agreement among Applicant, the Bureau of Reclamation, the Pueblo Board of Water Works, and other entities.

**(iii) Pueblo West Turnout.**

On the north side of the Arkansas River, a turnout from the pipeline from the outlet(s) would be constructed for water delivery to the existing Pueblo West Pump Station and then through an existing pipeline for treatment by Participant Pueblo West Metropolitan District. A pipeline would be constructed from the turnout about 140 feet to the Pueblo West Pump Station. This turnout would be in addition to the proposed river intake pump station of Pueblo West District, which was previously authorized by Reclamation and by a Pueblo County Areas



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and Activities Permit 2003-003 near the same location. Construction of the Pueblo West river intake pump station is necessary to provide system redundancy. Pueblo West District is pursuing construction of the river intake pump station independent of SDS.

**(iv) Juniper Pump Station.**

Beyond the Pueblo West Turnout, a pipeline would be constructed approximately 1,500 feet to the Juniper Pump Station to be built east of the base of the Pueblo Dam and to the north of the Arkansas River. The building would be approximately 14,000 square-feet and 42 feet high, and it would include an office, parking lot, and auxiliary power facilities, in addition to pumping facilities. The pump station would be operated by Participants on land leased from Reclamation.

**(v) SDS Pipeline.**

From the Juniper Pump Station, a 66-inch diameter raw water pipeline (with a maximum capacity of 78 million gallons per day ("mgd") from the Juniper Pump Station) would extend approximately 20 miles to the El Paso County line. Along the pipeline, the Applicant would construct various buried appurtenances and structures, including access manways, vaults, valves, air vents, and drainage structures. The pipeline in Pueblo County would be crossing under Hwy. 50 and under about 130 separate parcels, 24 County roads, and 50 drainages within Pueblo County; the pipeline would require about 238 acres of permanent easements and another 92 acres of temporary easements for construction within Pueblo County. The SDS Pipeline would extend northward out of Lake Pueblo State Park into Pueblo West, cross U.S. Highway 50 West approximately 3,600 feet east of Purcell Boulevard, and continue northward through the central portion of Pueblo West north of U.S. Highway 50. The pipeline generally would parallel the existing FVA pipeline right-of-way through most of Pueblo West, thereafter diverge from the FVA pipeline location in portions of northern Pueblo County, and exit Pueblo County approximately 3½ miles west of Interstate 25.

**(b) In El Paso County (outside the terms of this permit):**

**(i) SDS Pipeline:** Approximately 33 miles of raw water pipeline extending from the El Paso County line to the terminal storage reservoir and water treatment plant.

**(ii) Terminal Reservoir and WTP.**

An approximately 30,500 AF terminal storage reservoir would be constructed on upper Williams Creek, tributary to Fountain Creek, in El Paso County. Flows from the SDS pipeline would be stored there and/or delivered to a new water treatment plant (WTP) to be constructed by Colorado Springs Utilities. Phase 1 of the new WTP would deliver 50 mgd of treated water to meet the maximum day demand. Security would receive treated water by connection to Colorado Springs' distribution system. Fountain would receive its share of water through the FVA pipeline by an administrative trade with Colorado Springs of an equivalent amount of water and treatment capacity in that system.

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(iii) **Return Flow Reservoir.**

Colorado Springs Utilities would construct a 28,500 acre-foot exchange reservoir on the lower Williams Creek, a tributary to Fountain Creek. The purpose of the reservoir would be to store return flows for later release to Fountain Creek and for exchange upstream on the Arkansas River when higher river conditions allow such exchanges. Releases to Fountain Creek would be by a pipeline at a maximum release rate of 300 cubic feet per second ("cfs").

(c) **Other SDS Project Activities:**

(i) **Conveyance of Fountain Creek Return Flows.**

Municipal return flows (sewered and non-sewered) and other reusable water is and will be discharged into Fountain Creek after use by the Participants (except for Pueblo West District). This water flows down Fountain Creek to its confluence with the Arkansas River and is exchanged pursuant to existing water rights decrees to Pueblo Reservoir or other decreed points of diversion and/or storage. This river exchange will decrease flows in the Arkansas River below the Reservoir through Pueblo County and the City of Pueblo to the Fountain Creek confluence.

(ii) **SDS Project Operations.**

The assumed operations for purposes of the environmental impact studies by Reclamation are set forth in detail in Appendix D, Operations, Southern Delivery System Final Environmental Impact Statement (December 2008) (the "FEIS").

(iii) **Schedule and Cost.**

The current proposed schedule is to commence construction beginning in 2009, with completion in late 2012, for the Pueblo Reservoir outlet modifications, Juniper Pump Station, SDS pipeline, and WTP (to 50 mgd). Engineering and construction of the terminal storage reservoir (Upper Williams Creek) would occur between 2015 and 2017. Engineering and construction of the exchange reservoir (Williams Creek) and conveyance facilities and the WTP expansion would commence in 2021 and be completed in 2024. The estimated capital cost of the SDS Project is about \$1.1 billion (2007 dollars).

(iv) **Not Related to Pueblo Reservoir Enlargement.**

Enlargement of Pueblo Reservoir by raising the dam is not a component of the SDS Project for purposes of this Application or Permit, nor is reoperation of space in Pueblo Reservoir. According to the FEIS, enlargement is not needed to fulfill the project's purpose or Participants' needs, and the periodic unavailability of storage space under "if and when" storage contracts was considered in evaluating the project yield to the Participants.

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8. On March 26, 2008, the Applicant requested a Finding of No Significant Impact (FONSI) for the SDS Project under the provisions of the Areas and Activities Regulations. On August 28, 2008, the Pueblo County Planning and Development Director determined that the SDS project did not qualify for a FONSI and that the Applicant had to proceed with its application to the County for a permit to conduct the proposed activity. Notice of this determination was given to Applicant and published on August 30, 2008 in accordance with the Areas and Activities Regulations. This FONSI denial was not appealed to the Board of County Commissioners and the time for such an appeal has expired.

9. On August 20, 2008, the Applicant submitted an application for a permit for the Southern Delivery System Project under Sections 17.164 and 17.172 of the Pueblo County Code.

10. On October 24, 2008, the Pueblo County Planning and Development Director determined that the Application was complete.

11. At the request of the Pueblo County Planning and Development Director and upon published notice, the Applicant hosted four public meetings to explain the SDS Project and answer questions. A meeting was held on October 16, 2008 at the Visitor's Center at Lake Pueblo State Park, Colorado, on the topic of impacts to Lake Pueblo State Park. Meetings were held on October 23 and 27, 2008, at the VFW Post in Pueblo West, Colorado, on the topic of pipeline routing and construction. A meeting was held on October 30, 2008 at the Old Pueblo Museum in Pueblo, Colorado, on the topic of impacts to Fountain Creek.

12. On October 15, 2008, the Pueblo County Planning and Development Director mailed a letter to various public agencies and other interested entities requesting comments on the Application.

13. On November 1, 2008, the Pueblo Board of County Commissioners published notice under §17.148.260, Pueblo County Code, that it would hold a public hearing beginning on December 9, 2008, at 6:00 p.m., in the Jackson Conference Room of the Sangre de Cristo Arts and Conference Center, 210 North Santa Fe Avenue, Pueblo, Colorado, to review and consider action regarding the Application.

14. Under direction of Pueblo County planning staff, the Applicant mailed notice of the public hearing to owners of property located within 500 feet of the SDS Project.

15. A hearing was held on December 9, 2008, at which time Applicant and County staff made their presentations. The hearing was continued to December 11, 2008, December 29, 2008, January 21, 2009, February 25, 2009, and March 18, 2009 pursuant to Section 17.148.260, Pueblo County Code.

16. On December 3, 2008, the Pueblo County staff issued its written comments on the Application, and on December 8, 2008, issued an addendum to those comments. At the hearings on January 21, 2009 and February 25, 2009, the Pueblo County staff, consultants, and attorneys presented additional written comments, updates on federal agencies' reviews of the SDS Project, and recommended terms and conditions if a permit were to be approved by the Board.

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17. On December 23, 2008, the Applicant submitted Rebuttal Submissions to the Pueblo Board of County Commissioners in response to the written comments of the Pueblo County staff and written and public comments received at the December 11, 2008 hearing. The Applicant also responded to questions by the County Commissioners and County staff, consultants, and attorneys. The Applicant also submitted another written Rebuttal Submission on January 21 in response to testimony and additional written comments.

Public comment on the proposed Permit was received by the Board of County Commissioners on December 11, 2008, with further written comment accepted for the record until closure of the public comment portion of the hearing on December 29, 2008. Additional public comment regarding mitigation and proposed conditions was allowed by the Board of County Commissioners, up to the closure of this additional comment period on March 18, 2009.

The matter was tabled to April 2, 2009 to allow for further consideration of the proposed terms and conditions by the City of Colorado Springs City Council. To further accommodate this review the matter was again tabled by the Board of County Commissioners to April 21, 2009 for final deliberation and final action on the Permit request.

18. In support of the Application, the Applicant incorporated and relied upon analyses produced for the Environmental Impact Statement required by the Bureau of Reclamation under the National Environmental Policy Act ("NEPA"). A draft Environmental Impact Statement (DEIS) was released in February 2008. A Supplemental Information Report (SIR) was released in October 2008, as a result of Applicant's changes to the proposed SDS Project and in response to public comments on the project. A final Environmental Impact Statement (FEIS) was released on December 12, 2008, which contains recommended mitigation measures for a Reclamation action. Applicant has agreed to perform significant additional mitigation activities under this permit for the 78 mgd SDS Project. Reclamation executed its Record of Decision ("ROD") on March 20, 2009, selecting the SDS Project as outlined in this Application as the preferred alternative for implementation. As of the date hereof, Reclamation has not entered into contracts with the Participants.

19. The Applicant has demonstrated a need for the SDS Project to provide water for the projected demand of the Participants' communities for the reasonably foreseeable future, to provide water delivery system redundancy, and to increase drought protection.

20. The SDS Project would benefit citizens in Pueblo West by, amongst other matters, providing a water delivery capacity for its projected build-out. Pueblo West's use of the pipeline from the North Outlet Works would provide valuable redundancy to its pipeline from the Joint Use Manifold.

21 According to the FEIS, there are several other reasonable alternatives to the SDS Project pipeline from Pueblo Reservoir, but these alternatives are substantially more expensive and not as operationally efficient. The FEIS estimates that the pipeline from Pueblo Reservoir would save the Applicant over \$215 million in capital costs and \$50 million in operating costs when compared to the next likely alternative. Upon the issuance of a satisfactory permit by Pueblo County for the SDS Project, the Applicant has agreed that a portion of such savings would be used for mitigation of impacts and improvements on Fountain Creek specified as commitments in the permit.

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22. The SDS Project will decrease flows in the Arkansas River between Pueblo Reservoir and the Fountain Creek confluence under some hydrologic conditions. Without mitigation, such reduced flows could further impair water quality, endanger aquatic life and the riparian environment, and adversely impact recreation, boating, and angling.

23. In anticipation of permitting for the SDS Project and to mitigate its effects, the City of Colorado Springs, Fountain, and other water supply entities entered into agreements to manage flows between Pueblo reservoir and the Fountain Creek confluence ("Pueblo Flow Management Program" or "PFMP"). Its purpose is to provide a reasonable level of protection for streamflows to protect the Arkansas River Corridor Legacy Project (riparian and channel restoration, preservation of aquatic life, and boat chutes, constructed and financed by the City of Pueblo and the U.S. Army Corps of Engineers). The parties agreed to forego certain exchanges of water and changes of water rights to assist in providing both year-round flow and recreational flows at specified target flow levels. The PFMP agreements provide that Colorado Springs can terminate its participation if Colorado Springs is unable to reasonably construct the SDS Project from Pueblo Reservoir due to terms, conditions or requirements contained in any federal, State, or local permit, permission or license including Reclamation's Record of Decision or this Permit. The continuation of the PMFP and the achievement of its purposes are necessary to address the decreased flows referenced in these findings. Accordingly, it will be necessary for all Project Participants to continue to abide by its terms.

24. At some times and under certain hydrologic conditions, the SDS Project will decrease lake levels and surface acreage in Pueblo Reservoir with potential adverse effects on recreation, boating, and angling.

25. The SDS Project will increase flows in Fountain Creek in Pueblo County. New development and growth serviced by the SDS Project, without proper management, could increase flows and volumes and pollutant loads in Fountain Creek. Without mitigation, such increased flows would aggravate problems of erosion, sedimentation, flooding, and water quality degradation.

26. The SDS Project, even with mitigation, will have unavoidable construction impacts on Pueblo West and other Pueblo County residents due to truck hauls, increased traffic, noise, disruption of roads, excavation, and easement acquisition. Offsetting such impacts, Applicant estimates the capital construction costs of facilities in Pueblo County would be approximately \$193 million through 2012 which Applicant represents would benefit the local economy in Pueblo County through opportunities for employment and purchases of goods and services in Pueblo County.

27. In its testimony and written submittals, the Applicant made the following commitments to Pueblo County:

"We will:

- Build SDS in environmentally responsible manner
- Mitigate SDS impacts
- Use water rights we own
- Ensure that Pueblo County won't pay for SDS
- Continue doing our part to improve Fountain Creek"



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28. With mitigation pursuant to the terms and conditions of this Permit, the Board finds that the benefits of the SDS Project outweigh the losses of resources and environmental and socioeconomic impacts to the County and its residents.

29. Subject to Applicant's compliance with the terms and conditions of the Permit and its satisfaction of its commitments herein described, the SDS Project complies with the criteria set forth in Sections 17.164.030 (A) through (O), and 17.172.130 (B)(1) through (29).

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Pueblo County Commissioners does hereby approve a permit for construction, operation and use of the SDS Project within Pueblo County, Colorado, on the basis and terms of the findings set forth above in this Resolution, and further based upon the Record made in this matter including specifically, but not limited to, the documentary and other evidence submitted by Pueblo County staff and consultants, and subject to the following general terms, conditions and commitments, together with the detailed descriptions of those terms, conditions and commitments contained in the Mitigation Appendix referenced herein and incorporated herein:

1. **Commitments of Applicant.**

The following terms and conditions contain the specific commitments of the Applicant and shall be met as herein described.

2. **Term of Permit.**

This Permit is valid indefinitely for the life of the SDS Project, provided Applicant is in compliance with this Permit. If the Applicant fails to take substantial steps to construct the permitted development within thirty-six (36) months from the date of the Permit, then the Permit may be revoked or suspended by the County in accordance with its Areas and Activities Regulations. The Applicant may submit a written request to Pueblo County for an extension of the time period to begin construction under the Permit for good cause.

3. **Transfer of Permit.**

This Permit may be transferred in whole or part to another party only with the written consent of the Board of Pueblo County Commissioners. A proposed transferee shall demonstrate that it can and will comply with all the requirements, terms, and condition contained in the Permit.

4. **Compliance with other Regulatory Requirements.**

Applicant shall comply with applicable local, State, and federal regulatory requirements and permits. See *Mitigation Appendix C-7*. Prior to commencement of construction of any phase or work package of the SDS Project in Pueblo County, and within 60 days of said permit approvals, Applicant shall provide copies to Pueblo County of permits applicable to that work package of construction. If any such permits or approvals result in a material change in the SDS Project or are inconsistent with the terms and conditions of this Permit, Applicant shall notify Pueblo County, and Pueblo County shall determine whether a Permit amendment or suspension is required.

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**4.1. Other Pueblo County Regulations.**

This permit shall not constitute an exemption from Pueblo County zoning, building, health, or other applicable regulations and codes (except as provided in Section 17.140.010(F) of the Pueblo County Code regarding special use permits).

**4.2. Flood Hazard Area Development Permits.**

The Applicant shall obtain a Flood Hazard Area Development permit(s) for construction proposed within any designated 100-year floodplain in Pueblo County (as identified by the most current FEMA Flood Insurance Rate Maps for Pueblo County). These permits require review and approval by the Pueblo County Department of Planning and Development prior to any construction within a floodplain.

**4.3. Permit for New Electrical Substation and Transmission Lines.**

Construction of a new substation and transmission lines for the Juniper Pump Station shall require approval by Pueblo County of a Use-by-Review as specified in the Public Use District (S-1) zoning regulations if less than 115 Kv. If 115 Kv or greater, a separate permit application shall be submitted under the applicable Areas and Activities Regulations.

**5. Permit Amendment.**

Any material change in either the construction, use, or operation (exceeding 78 mgd pumping by the Juniper Pump Station) of the SDS Project from that approved herein, or with the Applicant's performance of the terms and conditions approved herein, shall require a permit amendment. For these purposes, a material change shall be any change in the Project which significantly changes the nature of impacts addressed by the Permit. The Applicant shall notify Pueblo County of any material change in the SDS Project (not including routine maintenance, repair, or operation of an existing facility) and the County will determine whether an amendment or new permit is required. Any disagreement about the materiality of a change shall be subject to the Dispute Resolution Process outlined herein.

**5.1. Use of New Water Supplies Delivered Through SDS Project.**

Although Applicant currently has no firm plans to acquire by purchase or lease additional water rights in the Arkansas Basin either downstream or upstream of Pueblo Reservoir, the possibility exists that additional water supplies will be required in the future. In addition, if third-party contracts or agreements are executed meeting the other terms and conditions of this permit, those entities might well seek to acquire new or additional water rights for transportation of water through the SDS Project. Pueblo County asserts that it possesses the legal authority to regulate and control such additional water and water rights transportation through the SDS project. Nothing in the terms and conditions of this 1041 Permit is intended to prevent Pueblo County from asserting that jurisdiction and regulatory authority, subject to the right of any such third-party and/or Applicant to assert any defenses to the exercise of the County's authority that may then exist.

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5.2. Carriage Of Water To Entities That Are Not SDS Project Participants.

Although Applicant has no existing permits or agreements with third-parties not listed as Applicants on 1041 Permit Application No. 2008-002, except all existing service agreements already disclosed to Pueblo County, it does not intend to foreclose the potential of making additional agreements for the long-term delivery of water to third parties via the SDS Project. In the event any such third-party contracts are entered into under which Applicant would deliver water to such a third-party in El Paso County, Applicant shall require that the following conditions be included in any contract, permit, or agreement with such third-party:

- A. A clear acknowledgment of support for the Fountain Creek Watershed Flood Control and Greenway District, together with a commitment to participate in the financing of said district;
- B. A clear and irrevocable commitment not to serve property located outside of the natural drainage of the Arkansas River or to market, transfer, wheel, or otherwise provide water to properties or entities located outside the natural drainage of the Arkansas River;
- C. The adoption and maintenance of a financing mechanism similar to the Colorado Springs Stormwater Enterprise capable of financing, constructing, and maintaining storm water detention and retention facilities intended to insure that the storm flows of the Fountain Creek Basin do not increase above existing conditions, along with the adoption and maintenance of regulations and ordinances requiring stormwater detention, retention, and management no less strict than those in place in the City of Colorado Springs. This condition can only apply to such third-parties who have the legal authority to regulate in this manner;
- D. An agreement to accept and comply with the City of Pueblo Flow Management Program and the Pueblo Recreational In-channel Diversion Decree both impacting the Arkansas River between Pueblo Dam and its confluence with Fountain Creek, in any application for a change of water rights or exchange implicating that reach of the river;<sup>1</sup>
- E. Pro rata participation in any water quality monitoring or studies to the same degree and extent as undertaken by the Applicant under this permit; and
- F. Support of any studies of a flood control dam or dams on Fountain Creek.

Upon the submission of contracts or agreements to Pueblo County evidencing the acceptance of the foregoing terms and conditions, Applicant shall be entitled to enter into third-party contracts for the delivery of water from Pueblo Reservoir to entities located in El Paso County or Teller County within the Arkansas River Basin. Nothing herein shall provide a right in the Applicant or any other entities to operate the SDS Project at a rate of flow in excess of 78

<sup>1</sup> The term "Pueblo RICD" refers to Case No. 01CW160, District Court, Water Division 2, Colorado.

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mgd without applying for and receiving an amended 1041 Permit satisfying any additional terms and conditions which might then be imposed.

**5.3. Reservation of Permit Authority.**

Colorado Springs currently does not have the authority to enlarge the storage capacity of Pueblo Reservoir. Should the enlargement of Pueblo Reservoir occur in the future, and should Colorado Springs become a participant in that enlargement, Pueblo County reserves the right to assert, at that time, that those actions constitute a permissible activity under its 1041 regulations, subject to the right of Colorado Springs to assert any defenses to the exercise of the County's authority that may then exist.

**6. Monetary Mitigation for Fountain Creek Impacts.**

In order to mitigate the impacts of SDS to Fountain Creek in Pueblo County, Applicant will pay fifty million dollars (\$50,000,000) to the Fountain Creek Watershed, Flood Control and Greenway District ("District") described in the Intergovernmental Agreement for the Management and Conservation of Fountain Creek executed by El Paso County on December 15, 2008 and Pueblo County on December 16, 2008.

Three hundred thousand dollars (\$300,000) of that amount shall be paid in equal annual installments of one hundred thousand dollars (\$100,000), commencing July 1, 2009. These payments shall be used to assist in the identification and prioritization of projects, and to fund a study or studies of opportunities for constructing flood control and sediment control facilities which may include the feasibility of a dam or dams on Fountain Creek or its tributaries in order to improve the flood protection for the City of Pueblo and the Fountain Creek Basin.

Payment shall be made as to the remaining forty-nine million seven hundred thousand dollars (\$49,700,000) as follows: nine million seven hundred thousand (\$9,700,000) on January 15, of the year following completion and commencement of water deliveries through the SDS Pipeline from Pueblo Reservoir to Colorado Springs; and in equal annual installments of ten million dollars (\$10,000,000) on January 15 of each of the four years thereafter.

Payments shall be made to the District, provided: it is created by legislation supported by Pueblo County and El Paso County for the management and conservation of Fountain Creek; it provides for participation by Pueblo County and the City of Colorado Springs as voting members of the board of directors; it has equal representation of entities from Pueblo County and El Paso County as voting members of the board of directors; and it has power to levy taxes and impose fees. If the District is not so created, then Pueblo County and Colorado Springs will establish a not for profit corporation pursuant to the Colorado Revised Nonprofit Corporation Act, C.R.S. § 7-121-101, et seq, governed by a board of directors having an equal number of directors from Pueblo County and from Colorado Springs, for the purposes specified herein. The Foundation, if established, will be referred to as the Fountain Creek Restoration Foundation. ("FCRF").

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The District (or if not created, the FCRF) may use funds provided by the Applicant under this permit condition only for one or more new projects in the Fountain Creek watershed between Colorado Springs and the Arkansas River confluence in Pueblo that create a significant and not merely incidental benefit to Fountain Creek within Pueblo County for improvement of water quality, for flood control, or for prevention of erosion and sedimentation. Subject to these criteria, acceptable projects may include:

- A. those projects that have been identified by the United States Army Corps of Engineers ("Corps") as high priority erosion, sedimentation, or flood control projects in a formal Corps' recommendation for Fountain Creek;
- B. erosion, sedimentation, flood control or water quality improvement projects identified as part of the Fountain Creek Corridor Master Plan adopted by Colorado Springs Utilities and the Lower Arkansas Valley Water Conservancy District;
- C. any other sedimentation and erosion control, flood control, including a dam or dams, or stream improvement project that is found to be acceptable by the District or, if not created, the FCRF.

In the event completion of the SDS Project is delayed beyond 42 months after the effective date of the permit because of an affirmative decision made by Applicant, then the payments to be made by the Applicant pursuant to this paragraph shall begin to be made on such date, without regard to project construction status, or such payments shall be subject to annual indexing commencing 42 months after the effective date of the permit, to increase the amount of such payments as required to preserve their present values, using the Colorado Front Range Producer Price Index, but not to exceed a maximum annual increase of 3.5%.

**7. Expenditures for Wastewater System Improvements.**

In order to continue its efforts to protect against future spills to Fountain Creek, to increase its opportunities for reuse, and to mitigate possible water quality impacts by the SDS Project to Fountain Creek, Colorado Springs Utilities shall commit to invest an additional seventy-five million dollars (\$75,000,000) in its wastewater system. Expenditures will be made as part of the wastewater collection system rehabilitation programs or wastewater reuse systems between January 1, 2009 and December 31, 2024 as required. These expenditures shall be for projects not currently required by other regulatory permits, agency enforcement or court orders, consent agreements, or governmental regulations existing as of January 30, 2009. These expenditures will include the Local Collector Evaluation and Rehabilitation Program (LCERP) for the improvement and fortification of wastewater lines which could adversely affect Fountain Creek or its tributaries. These expenditures are subject to annual appropriation by the Colorado Springs City Council. Beginning in 2010, by January 31 of each year, Colorado Springs Utilities shall provide an annual report to Pueblo County describing such expenditures for the prior year.



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8. **Sediment Control/Dredging and Clear Springs Ranch.**

It is acknowledged by Pueblo County and Applicant that one mitigation commitment will be a project to reduce the sediment load in lower Fountain Creek through dredging and the construction of sediment collection devices. These efforts will occur prior to the construction of the SDS Project. These sediment removal activities are of vital importance to Pueblo County because they will assist the City of Pueblo in preserving the flood protection of the Fountain Creek levees at or above the 100-year flood level. This mitigation commitment may be conducted in cooperation with a project or projects of the U.S. Army Corps of Engineers. It is acknowledged that there will have to be sampling done on the bed sediments in Fountain Creek to insure that no hazardous materials exist that would make a dredging and sediment removal project technically or financially impracticable. Applicant, as a condition of this permit, will pursue vigorously its efforts to complete this sediment removal project at the levels committed to in the final Environmental Impact Statement process. In the event that sediment removal is not practicable because of the quality of the bed sediments, Applicant will commit an equal amount of money that would have been expended on this sediment removal project at the level required by the FEIS for another project designed to assist the City of Pueblo in restoring and maintaining sufficient flood protection to allow the existing levee systems to withstand a 100-year flood, subject to approval of the Bureau of Reclamation.

In addition, Applicant has committed, as part of the EIS process, to construct new wetlands and redirect a portion of the channel of Fountain Creek adjacent to the wetlands area at the Clear Springs Ranch to reduce the slope and improve channel stability through this area subject to the approval of Reclamation. The redirected channel is proposed to have an increased length and sinuosity to stabilize the channel. The purpose of this mitigation activity is to reduce sediment transport down Fountain Creek into Pueblo County, improve water quality and reduce flood threat downstream. This project will be completed to the levels required by Reclamation.

Applicant has submitted a letter to Reclamation, dated April 20, 2009, stating its intention and desire to achieve its obligations set forth in the Final Environmental Impact Statement, Sections 5.2.4 and 5.2.6, in the manner described in this paragraph 8. A copy of the letter has been made a part of the record.

9. **Continuation of Pueblo Flow Management Program.**

All SDS Participants shall cooperate in and comply with the PFMP (including Pueblo West and Security who are not signatories to the PFMP agreements at this time) and its requirements for maintaining target flows through Pueblo below Pueblo Reservoir by cessation of exchanges.

10. **Implementation of Arkansas River Low Flow Program.**

Colorado Springs Utilities shall promptly submit a signed Memorandum of Understanding between the Pueblo Board of Water Works and Colorado Springs Utilities which shall provide the terms and conditions under which each of the entities will contribute to and assist in the maintenance of a storage pool in Pueblo Reservoir designed to permit the release of water into the Arkansas River during times when the flow in the River could fall dangerously low, to levels at or below 50 cubic feet per second (cfs). SDS participants shall not exchange against reservoir releases made by the Board of Water Works of Pueblo or Colorado Springs Utilities for the Arkansas River Low Flow Program.

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RESOLUTION NO. P&D 09-22 (CONT.)

11. **Construction and Use of North River Outlet Works.**

Colorado Springs Utilities shall promptly submit to Pueblo County an executed Memorandum of Understanding with the Pueblo Board of Water Works designed to describe the manner in which the two entities will use the South Outlet Works & Joint Use Manifold and the North Outlet Works of Pueblo Dam for the provision of municipal water supplies. If approved by the Bureau of Reclamation, the North Outlet Works shall be constructed and used as the primary outlet works for SDS.

12. **Safety Review of Design and Construction of Structures at Pueblo Dam.**

No construction shall occur at or near Pueblo Reservoir Dam (outlet modifications and pipelines west of the Pueblo West turnout) until the Bureau of Reclamation has performed its dam safety review and has accepted the design construction plans. Prior to commencement of construction, Applicant shall provide Pueblo County with written proof of such acceptance by the Bureau of Reclamation and any other required regulatory agency.

13. **County Road Improvements and Restoration.**

The Applicant shall obtain and comply with Excavation Permits from the Pueblo County Public Works Department ("Department") for each road crossing within the County, and Access Permits from the Department for each access point onto a County road. The Applicant shall submit a Traffic Control Plan to the Department for review and approval. The Applicant shall submit a Staging Area Plan to the Department for review and approval to define construction work times, material delivery hours, noise suppression, dust abatement, construction methods, and other mitigation of construction nuisances. The Applicant shall provide a Haul Route Plan to the Department for review and approval; the Haul Route Plan shall identify the roads utilized for construction vehicle traffic, maintenance of those roads at Applicant's expense during the project, and rehabilitation of those roads to current Pueblo County Roadway Design and Construction Standards at Applicant's expense. Within thirty (30) days of the Applicant issuing a notice to proceed to its contractors to perform pipeline installation activities that require use of roads in the Haul Route Plan, the Applicant shall establish a cash payment, escrow, or other financial instrument such as a performance bond, acceptable to the County, in an amount estimated by the Department to cover the total costs for rehabilitation of the roads to County Standards (currently estimated at approximately \$6.1 million), plus estimated increases in costs over time as represented by the Construction Cost Index. The Applicant shall coordinate, design, and construct the SDS pipeline facilities so as to anticipate and accommodate future roadways and utilities across the SDS easement so as not to unreasonably preclude them or increase their costs. See *Mitigation Appendix, CR-1 through CR-11 with Exhibits 1-5.*

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14. **Cultural and Archaeological Resource Protections.**

Applicant shall execute the Programmatic Agreement in a form substantially similar to that set forth in the FEIS with the applicable federal and State agencies and Native American Tribes. Applicant shall comply with the standards and procedures of the Programmatic Agreement to ensure the identification, avoidance, protection and disposition of cultural and archaeological resources which may be encountered during construction in Pueblo County, as required by federal and State laws and in accordance with landowner agreements. Proof of execution of the Programmatic Agreement shall be provided to Pueblo County prior to land disturbance.

15. **Acquisition of Property Interests.**

Applicant shall acquire necessary property interests required for each individual work package or phase of the SDS Project in Pueblo County prior to the initiation of construction of that work package. Private property owners shall be treated fairly by the Applicant and the SDS Project shall not create undue financial burdens on existing or future residents of Pueblo County. The Applicant shall commit to using the power of eminent domain only as a last resort. The Applicant shall offer to compensate landowners to have their own appraisal done if they disagree with the Applicant's appraisal. Applicant shall reimburse landowners for relocation costs, title work, and closing costs in accordance with the City of Colorado Springs Procedure Manual for the Acquisition and Disposition of Real Property Interests. No landowner should have out-of-pocket expenses from the Project. Applicant shall provide proof to the County that it has secured the necessary interests in property required to construct the Project prior to starting construction at any given location. See *Mitigation Appendix SE-1*.

16. **Lake Level Management at Pueblo Reservoir.**

Colorado Springs Utilities commits to Pueblo County as a part of the 1041 process that it will voluntarily participate, when and if the Southeastern Colorado Water Conservancy District, the Bureau of Reclamation, and any other affected party agree to participate, in developing a reservoir management plan for Pueblo Reservoir designed to protect reservoir levels and recreational opportunities on Pueblo Reservoir to the extent feasible given the potential for future changes in hydrology and water demands by project beneficiaries.

17. **Payments In-Lieu Of Property Tax.**

Applicant shall minimize to the extent practicable the number of private properties acquired in fee to support construction and operation of SDS facilities. For those private properties purchased and owned in fee, Applicant shall make an annual payment in lieu of taxes equal to the value of the taxes assessed by the Pueblo County Assessor. Payment shall be made to the Pueblo County Treasury on or before April 30 of each calendar year. See *Mitigation Appendix SE-2*.

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18. **Monitoring Program and Adaptive Management for Fountain Creek and the Arkansas River.**

Applicant shall implement a monitoring program to provide information on the current water quality and geomorphology (including erosion, sediment loading, and channel stability conditions) in Fountain Creek and the Arkansas River, and to track changes over time. The monitoring will assist in the selection of mitigation measures and in the assessment of the effectiveness of SDS mitigation measures on Fountain Creek and the Arkansas River. To collect data that supports the evaluations related to impacts on water quality and geomorphology, Applicant shall implement monitoring activities at defined monitoring locations in the Fountain Creek Basin and the Arkansas River. See *Mitigation Appendix E-1*.

Pursuant to the Environmental Impact Statement process, Applicant has committed to engage in adaptive management, which contemplates that Applicant will undertake modified or different mitigation activities for impacts that have been identified in the EIS. If additional mitigation activities are required in order for Applicant to comply with the requirements of the ROD, any costs associated with that additional mitigation activity shall be the sole responsibility of Applicant.

To the extent that the monitoring and the adaptive management program causes Pueblo County to request or require that additional mitigation activities occur over and above those required by the Bureau of Reclamation, Applicant's obligation to conduct those mitigation activities shall be the responsibility of the Fountain Creek District (or FCRF, if the District is not formed) and not directly the responsibility of Applicant. Pueblo County shall be a stakeholder in the Adaptive Management Program, for purposes of this paragraph.

19. **Colorado Springs Utilities - Wastewater Collection System Management Practices to Protect Water Quality.**

Colorado Springs Utilities has committed as a condition of this Permit to continue to implement and maintain wastewater collection system improvements within the Fountain Creek drainage to prevent and minimize the impact of its wastewater system overflows or spills through prevention programs and response activities. Since 2000, it has spent \$114 million for these programs. In addition, Colorado Springs has established a Stormwater Enterprise Fund to finance the capital costs of needed stormwater control infrastructure. See *Mitigation Appendix E-2*.

20. **Construction Impact Mitigation.**

Applicant shall mitigate the impacts of project construction, as set forth in the Mitigation Appendix C-1 through C-22, to include the following:

- Proof of required permits and compliance
- Pre-existing condition assessment of affected properties
- Public information measures and responses to public complaints
- Pre-mobilization readiness
- Sustainable design and construction
- Protection of open excavations and trenches
- Construction site maintenance
- Provisions for access to properties
- Limits on work hours
- Dewatering control

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- Lighting control
- Dust control
- Noise control
- Drainage and erosion control
- Traffic control
- Weed control
- Protection of plants and wildlife/vegetation surveys
- Hazardous waste management
- Management of surface and ground water flows
- Protection of livestock
- Site restoration

Applicant shall assign a point of contact for responding to public questions, comments, and concerns during construction in Pueblo County and one-year following final construction in Pueblo County. Applicant shall also develop notices to affected residents and a website for information on construction scheduling.

**21. Juniper Pump Station Architectural Review.**

Applicant shall allow Pueblo County to appoint a representative who will participate in the final selection of the architecture and landscaping for the Juniper Pump Station, along with representatives of Colorado State Parks and the Bureau of Reclamation.

**22. Reclamation of Disturbed Lands.**

Applicant shall conduct a preconstruction evaluation of existing vegetation to be disturbed during construction of the SDS Project within Pueblo County. Upon reclamation of the site, the vegetation cover shall be of the same seasonal variety native to the area of the disturbed land, or a reasonable substitute pursuant to agreement with the landowner. The revegetated area will be considered acceptable if its cover will be not less than 90 percent of the pre-construction vegetation cover with similar species diversity. Applicant shall provide to Pueblo County a security bond equal to \$2,000/acre of land in permanent or temporary construction easement in each work package. The security bond shall be released upon establishing 90 percent of pre-construction vegetation cover on the impacted land segment. See Mitigation Appendix C-9.

**23. Stormwater Management.**

The Applicant shall maintain stormwater controls and other regulations intended to ensure that Fountain Creek peak flows resulting from new development served by the SDS project within the Fountain Creek basin are no greater than existing conditions. This requirement can only apply to Project Participants who have the legal authority to regulate in this manner. Regulations shall comprehensively address peak flow conditions, runoff volumes, and flood hazards, incorporating at a minimum all relevant components of existing regulations of Colorado Springs and the other Project Participants including: regional drainage planning for low-flow and major storm events; detention; erosion and sediment control for land disturbance, construction, and similar activities; structural measures such as channel protection and engineered outfalls; prohibition of activities that infringe on the designated floodway; water quality controls, including water quality capture volume and a determination of the need for



**RESOLUTION NO. P&D 09-22 (CONT.)**

permanent best management practices (BMPs); and adequate provision for maintenance of all drainage-related facilities so required. This condition shall not prevent Colorado Springs and other local jurisdictions subject to this condition from revising and improving stormwater regulations from time to time, to incorporate new technologies, management techniques, or otherwise modify regulations consistent with the intent of not exceeding historical peak flows. *See Mitigation Appendix E-2.*

**24. Conservation and Reuse.**

In recent years, Applicant has demonstrated a commitment to water conservation programs and local reuse. Continued commitment and local reuse will reduce the Applicant's diversions from the Arkansas River and Pueblo Reservoir and reduce flows on Fountain Creek, below what they would have been without such conservation and reuse, thereby reducing the impacts of the SDS Project in Pueblo County. Applicant has specifically committed itself to continue such conservation and reuse despite the availability of additional water from the SDS Project.

**25. Compliance Monitoring and Reporting.**

Applicant shall monitor and periodically report to Pueblo County on its compliance with this Permit. During project construction in Pueblo County, Applicant will submit a quarterly report to Pueblo County summarizing the activities during that period, forecasting activities scheduled for the upcoming period, and addressing compliance with the terms and conditions of the Permit. After commencing deliveries of water through the SDS pipeline, Applicant shall submit annual reports to Pueblo County summarizing its activities related to the SDS Project, the Permit, and addressing compliance with the terms and conditions of the Permit. Pueblo County may, at its discretion, hold public reviews of the reports and Permit compliance, including hearings in accordance with its regulations. *See Mitigation Appendix ENF-1.*

**26. Noncompliance.**

Substantial noncompliance with the terms and conditions set forth herein shall be subject to the provisions governing revocation or suspension of a permit set forth in Section 17.148.320(A) of the Pueblo County Code. The final resolution of issues related to non-compliance (except for the failure to pay the monetary mitigation payments as set forth in Paragraph 6 herein) and any further act of revocation or suspension of the Permit will be accomplished through the dispute resolution process described below.

**27. Approval by Colorado Springs.**

The Colorado Springs City Council must take formal action to recognize the commitments herein prior to Pueblo County's final issuance of a 1041 permit for SDS.

**28. Mitigation Appendix.**

The provisions of that certain Mitigation Appendix previously referenced herein and attached hereto is hereby incorporated by this reference as though fully set forth. In the event of a conflict between the provisions of the Mitigation Appendix and the terms and conditions set forth in this Resolution, then the terms and conditions set forth in this Resolution shall prevail.

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29. Dispute Resolution.

If a dispute between the Applicant and the County arises relating to any term or condition contained in this Permit (except for the failure to pay the monetary mitigation payments as set forth in Paragraph 6), the following procedure shall be followed:

- A. A joint management team, comprised of three (3) representatives of each Party shall first consider any of the circumstances and contentions related to any disputed matter. If the County Manager for Pueblo County [or another representative of the County as designated by the Board of Commissioners] (County Manager) determines that Pueblo County requires technical assistance to assess a disputed matter, Applicant will pay the costs, not to exceed a total of \$150,000 for all disputes related to the Permit, of hiring a technical consultant for that purpose.
- B. If not resolved by agreement of the members of the joint management team, the disputed matter shall be referred by either Party to the Administrative Officers of the Parties defined below. The Administrative Officers shall hold a meeting promptly, but in no event later than fifteen (15) working days from the referral of the dispute, also attended by other staff members with direct responsibility regarding the dispute, to attempt in good faith to negotiate a resolution or cure of the dispute; provided, however, that no such meeting shall be deemed to vitiate or reduce the obligations and liabilities of the Parties or be deemed a waiver by a Party hereto of any remedies to which such Party would otherwise be entitled unless otherwise agreed to by the Parties in writing. For purposes of this dispute resolution provision, "Administrative Officers" means the Chief Water Services Officer for Colorado Springs Utilities and the County Manager [or another representative of the County as designated by the Board of Commissioners].
- C. If, within fifteen (15) working days after such meeting, the Parties have not succeeded in negotiating a resolution of the dispute, they agree to submit the dispute to non-binding mediation with Applicant to bear the costs of the mediation.
- D. The Parties agree to participate in good faith in the mediation and related negotiations for a period of 30 calendar days. The substantive and procedural law of the State of Colorado shall apply to the proceedings. If the Parties are not successful in resolving the dispute through mediation, then the Parties shall be free to pursue any other legal remedy including the remedies contained in any conditions or commitments appended to or made a part of the Permit. The Parties agree to reasonably expedite any legal proceedings brought hereunder in order to obtain a prompt resolution. The venue for these legal proceedings shall be the District Court of Pueblo County.

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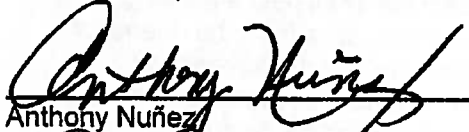
30. Integrated Terms and Conditions.

In issuing this Permit, the Board of County Commissioners has determined that the benefits accruing to the County and its citizens from the SDS Project (subject to the terms and conditions set forth herein) outweigh the unavoidable impacts and losses of resources within the County. Consequently, if any term or condition herein is deemed invalid and unenforceable, this Permit shall be rescinded or suspended unless the Board of County Commissioners, in its discretion, approves a Permit amendment.

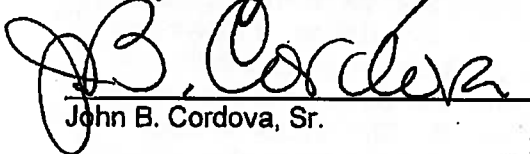
The foregoing resolution is hereby made the official act of Pueblo County by and through the action of the Board of County Commissioners on this 21<sup>st</sup> day of April, 2009. In addition to the Board's approval and adoption of this resolution, the Board further directs that this resolution is certified by the Clerk to the Board through his attestation and signature below and that it shall be delivered for recordation to the Office of the Pueblo County Clerk and Recorder.



J.E. Chostner, Chairman



Anthony Nuñez



John B. Cordova, Sr.

ATTEST:

By: 

Gilbert Ortiz, County Clerk



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**MITIGATION APPENDIX**

Resolution No. P&D 09- 22

A Resolution Approving Pueblo County  
1041 Permit No. 2008-002  
Southern Delivery System

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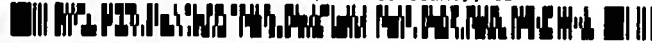
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## **ENVIRONMENTAL CONDITIONS / MITIGATIONS**

|  |   |
|--|---|
| E-1  | Water Quality and Sediment Monitoring Program   |
|  | Applicant shall implement a monitoring program to provide information on water quality and sediment conditions in Fountain Creek and Arkansas River, and track changes over time. |
| <p style="text-align: center;"><b>PROJECT DETAIL</b></p> <p>Conduct monitoring to assess the effectiveness of proposed SDS mitigation measures. Monitoring along Fountain Creek and the Arkansas River will focus on water quality and geomorphic features. To collect data that supports the evaluations related to impacts on water quality and geomorphology, Colorado Springs Utilities will implement the following monitoring activities at defined monitoring locations in the Fountain Creek Basin and the Arkansas River near the mouth of Fountain Creek.</p> <p><u>Water Quality Monitoring</u></p> <p>Colorado Springs Utilities will monitor specific water quality constituents to include dissolved selenium, E. coli, ammonia, and salinity as measured by specific conductance. To monitor water quality, samples will be taken from each of the 13 monitoring locations, shown in Figures 1 through 3 within the Fountain Creek Basin and along the Arkansas River monthly, starting at the beginning of project construction, until the SDS project begins operation and then quarterly once the project is online. Pre-operation monitoring shall consist of no less than 2 years of monthly-collected data before or during construction of the project. At least two samples will be taken at each monitoring site following standard procedure according to the National Field Manual for the Collection of Water-Quality Data (Field Manual). One sample from each monitoring location will be filtered for inorganic solid constituents in the field according to section 5.2 of the Field Manual to get an accurate reading of dissolved selenium. The other sample from each monitoring location will be analyzed for E. coli, ammonia and salinity. All samples will be managed in accordance with the Field Manual or approved EPA criteria for sample collection and management and analyzed by a State-certified laboratory capable of detecting each constituent below the Maximum Contaminant Level (MCL) or other applicable compliance criterion. Samples will be analyzed in accordance with standard ASTM or EPA-approved methods.</p> <p>In addition to the water quality constituents referenced above, Springs Utilities will monitor both the inlet and outlet to Lower Williams Creek Reservoir for methyl mercury on a quarterly basis following the start of reservoir operations for a period of one year, then annually for four years thereafter. Samples will be collected and analyzed following standard procedures according to the Field Manual and EPA Method 1630.</p> <p>Springs Utilities will use effluent monitoring data from its wastewater treatment plants to demonstrate the plants are operating in accordance with all required specifications and standards. In addition, Springs Utilities will conduct additional monitoring in accordance with monitoring requirements adopted and participated in by all other regional wastewater treatment agencies (i.e., those in the Fountain Creek basin, Pueblo and Pueblo West wastewater treatment plants) including monitoring programs associated with emerging contaminants or other contaminant analyses. CSU will take into consideration and maintain records of other reliable information presented to it by outside sources.</p> |   |

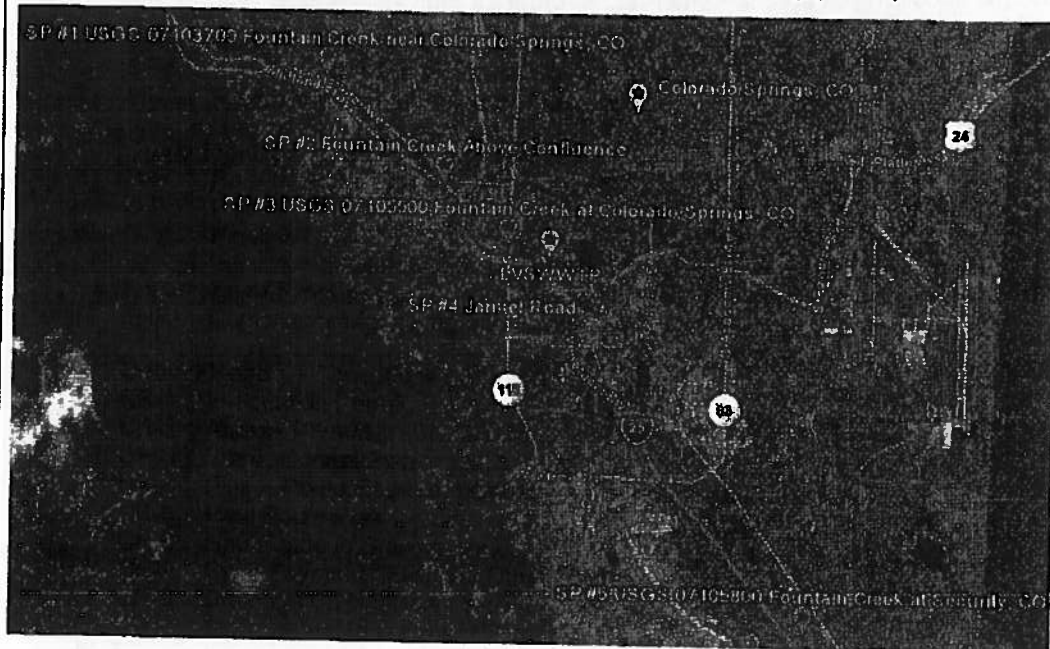
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Figures 1 through 3 present the general location of the sampling locations for water quality monitoring efforts. The rationale used to select sampling locations are as follows:

- SP #1 – USGS Gage 07103700 Fountain Creek near Colorado Springs, CO and a baseline upstream of Colorado Springs
- SP #2 – USGS Gage 07104905 on Monument Creek at Bijou St. at Colorado Springs and point below the Northern Wastewater Treatment Plant
- SP #3 – USGS Gage 07105500 Fountain Creek at Colorado Springs, CO and point above the Las Vegas Wastewater Treatment Plant
- SP #4 – Point below the Las Vegas Wastewater Treatment Plant
- SP #5 – USGS Gage 07105800 Fountain Creek at Security, CO
- SP #6 – Point above the CSR wetland mitigation
- SP #7 – USGS Gage 07106000 Fountain Creek near Fountain, CO and point below the CSR wetland mitigation
- SP #8 – USGS Gage 07106300 Fountain Creek near Pinon, CO
- SP #9 – Point above the Pueblo levee system
- SP #10 – USGS 07106500 Fountain Creek at Pueblo, CO and a point within the Pueblo levee system
- SP #11 – Point below the Pueblo levee system
- SP #12 – USGS Gage 07099970 Arkansas River at Moffat Street at Pueblo, CO and point on Arkansas River above confluence to establish baseline
- SP #13 – USGS 07109500 Arkansas River near Avondale, CO and point below confluence to determine exit conditions

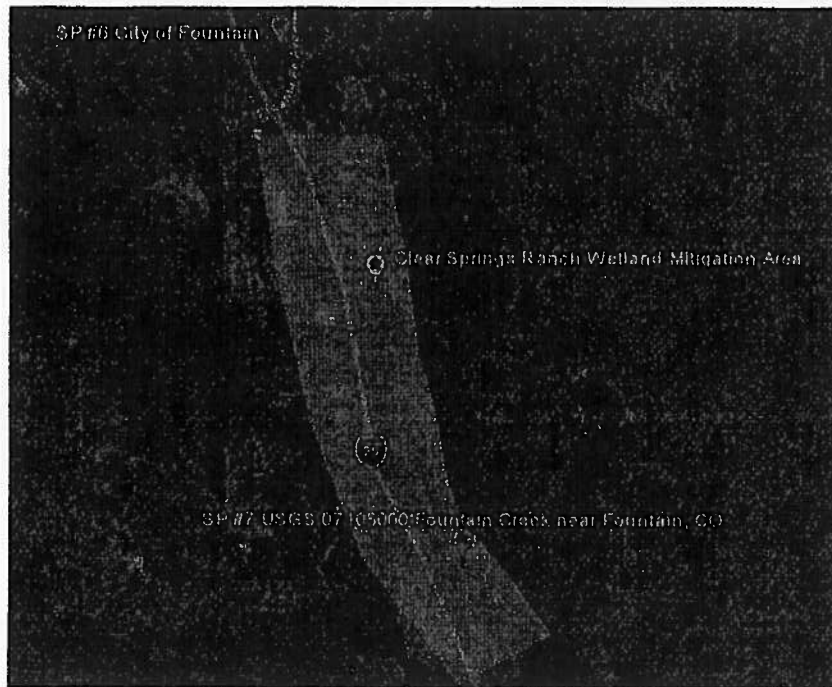
Figure 1 - General Locations of SDS Water Quality Monitoring (North)



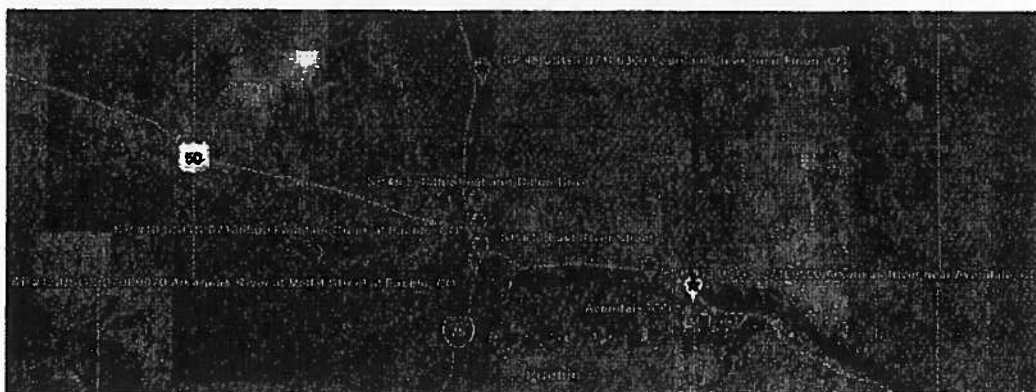
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**Figure 2 - General Locations of SDS Water Quality Monitoring (Central)**



**Figure 3 - General Locations of SDS Water Quality Monitoring (South)**



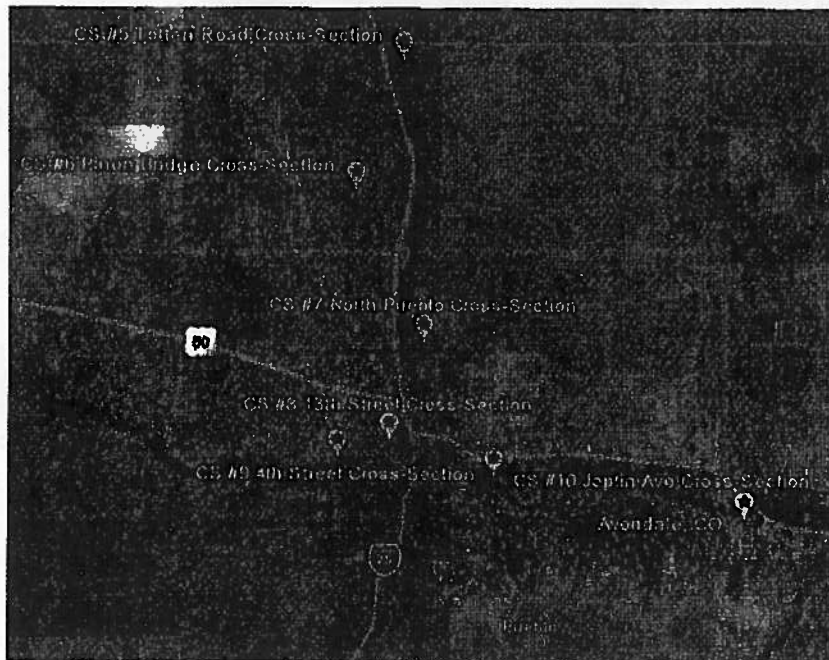
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### Geomorphic Monitoring

In addition to water quality monitoring, geomorphic monitoring is also required. Ten cross-sections will be established at designated points along Fountain Creek to monitor for degradation, aggradation, and other changes to the geomorphologic surface. Each cross-section will be surveyed once per year during low stream flow; preferably in the winter when leaves and other organic material on the ground is at a minimum. Cross-sections will be accurate to standards for normal transect surveys, with a vertical tolerance of approximately 0.01 foot in measurements of channel elevation.

**Figure 4 - General Locations of SDS Geomorphology Monitoring (South)**



Data gathered by the water quality and geomorphic monitoring programs will be assembled and entered into an electronic database accessible to Pueblo County upon request. Monthly data gathered before SDS comes online will be used as a baseline to compare against once flows from SDS start entering Fountain Creek in 2012. Data will be categorized by type, date, and location. These data, along with other data collected through independent sampling and monitoring efforts will be the basis for making decisions as part of the adaptive management strategy.

|                           |   |
|---------------------------|---|
| Estimated Start Date      | Within 60 days of approval of Pueblo 1041 permit. |
| Estimated Completion Date | December 31, 2046.                                |
| Permits                   | None.   |

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|     |   |
|-----|---|
| E-2 | Drainage Regulations  |
|     | At all times water is delivered through the Southern Delivery System, the Applicant, including all participants, shall maintain stormwater controls and other regulations intended to ensure that Fountain Creek peak flows and runoff volumes received from development served by the SDS project are no greater than existing conditions, or at levels as appropriate to prevent damage to presently existing downstream facilities. Regulations shall address peak flow and runoff volume, conditions and flood hazards, incorporating at a minimum all relevant components of existing Colorado Springs regulations, including: regional drainage planning for low-flow and major storm events; detention; erosion and sediment control for land disturbance, construction, and similar activities; structural measures such as channel protection and engineered outfalls; prohibition of activities that infringe on the designated floodway; water quality controls, including water quality capture volume and a determination of the need for permanent best management practices (BMPs); and adequate provision for maintenance of all drainage-related facilities so required. This condition shall not prevent Colorado Springs and other local jurisdictions subject to this condition from revising and improving stormwater regulations from time to time, to incorporate new technologies, management techniques, or otherwise modify regulations consistent with the intent of preventing the exceedence of historical peak flows. |

### **CONSTRUCTION CONDITIONS / MITIGATION**

|  |   |
|--|---|
| C-1  | Protection of Open Excavations and Trenches                                 |
|  | Applicant shall provide safe work sites for the residents of Pueblo County. |
| <b>PROJECT DETAIL</b> <ol style="list-style-type: none"> <li>1. Comply with applicable Codes, Standards, Laws and Regulations relating to the safety of persons or property or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain safeguards for such safety and protection.</li> <li>2. Provide and maintain temporary security fences to protect the Work Sites. Temporary security fencing is described in more detail in Construction Conditions C-3.</li> <li>3. Inspect open excavations and trenches for compliance with safety plans and document in daily inspection reports.</li> <li>4. Limit the maximum length of open trench to 400 linear feet.</li> </ol> |   |



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5. Shore or bench excavations as required by OSHA regulations.
6. Protect streets, roads, highways, and other public thoroughfares that are closed to traffic by barricades with warning signs per Manual of Uniform Traffic Control Devices (MUTCD).
7. Provide signage and lighting to alert general public of construction hazards, which could include surface irregularities, unramped walkways, grade changes, and trenches or excavations in roadways and in other public access areas.
8. Designate a qualified and experienced safety representative at the Work Site whose duties and responsibilities shall be the maintaining, supervising and enforcement of safety plans and programs.

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| C-2                   | Lighting   |
|                       | Applicant shall minimize adverse light impacts to Pueblo County residents during night time hours.   |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Comply with applicable Codes, Standards, Laws and Regulations relating to providing lighting for the safety of persons or property, or to the protection of property from damage, injury, or loss.   |
| 2.                    | Notify property owners within 500 feet of the site 48 hours prior to any night work, except in the case of emergency night work.   |
| 3.                    | Design lighting to prevent spillover, nuisance, or hazard effects of light and glare on adjacent locations and uses of land.   |
| 4.                    | Position, to the extent practical, lighting used for security around equipment storage areas away from residences and oncoming traffic. The use of cut-off type luminaires is required. Light bulbs and light sources shall be shielded so that they are not directly visible from any adjacent lot or public roadway. Spillover of lighting for adjacent properties will not exceed one-half of one (.50) footcandle measured at any point ten feet (10') beyond a property line. |
| 5.                    | Provide individual light sources not exceeding 150,000 lumens per light source (typical of a 1250W metal halide light). Light standards will not exceed 24 feet in height. Generators used to power light sources will not exceed 70 dB at 25 feet from the source.  |

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| C-3  | Construction Site Maintenance   |
|  | Applicant shall maintain construction sites and equipment in a safe and secure manner for the protection of the public. |
| <b>PROJECT DETAIL</b>  |   |
| <ol style="list-style-type: none"> <li>1. Comply with applicable Codes, Standards, Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss, and shall erect and maintain safeguards for such safety and protection.</li> <li>2. Protect open trenches as described in Construction Condition C-1.</li> <li>3. Close open ends of installed pipeline during non-working periods.</li> <li>4. Close access manholes during non-working hours.</li> <li>5. Provide barricades and light as necessary to prevent unauthorized entry to construction areas and affected roads, streets, and alleyways, inside and outside of fenced area, and as required to ensure public safety and the safety of project personnel and others who may be affected by the Work.</li> <li>6. Lock or otherwise disable construction equipment during non-working hours.</li> <li>7. Store materials and equipment in secure areas and arrange partitions to provide security of contents and ready access for inspection and inventory. Combustible materials (paints, solvents, fuels) shall be stored in a well-ventilated building meeting safety standards. Hazardous materials shall be stored according to product specification, codes, and manufacturer's instructions.</li> <li>8. Lock controlled access points (private property gates) providing entry to construction sites and maintain a secure key control to prevent unauthorized access.</li> <li>9. Perform work within right-of-way and easements in a systematic manner that minimizes inconvenience to property owners and the public and interferes as little as possible with public travel, whether vehicular or pedestrian. This will include that no residence or business will be cut off from vehicular traffic for a period exceeding 4 hours unless special arrangements have been made. Whenever it is necessary to cross, close, or obstruct roads, driveways, and walks, whether public or private, safe bridges, detours, or other temporary expedient access for accommodation of public and private travel will be provided and maintained.</li> <li>10. Sweep roadways, streets, and walkways affected by the work and adjacent to the work when necessary.</li> <li>11. Erect temporary security fencing around active construction areas. Fences around open trenches, staging areas, material storage areas and equipment storage areas may be standard plastic orange construction fence, 4 feet high, with posts at intervals no greater than 20 feet. Temporary 4-strand barbed wire fences shall be installed wherever necessary to prevent livestock from migrating out of their designated pasture. Temporary fences shall be maintained as needed during the construction period. Material selection for fencing between work area and adjacent property will be agreed upon between Applicant and the property owner.</li> </ol> |   |

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12. Inspect site safety measures each work day and periodically during non-working days.
13. Provide 24/7 security services including mobile patrols, lighting and video surveillance.

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| C-4   | Control of Access to Properties                            |
|   | Applicant shall prevent unauthorized access to properties. |
| <b>PROJECT DETAIL</b>   |  |
| <ol style="list-style-type: none"> <li>1. Work with property owners, both public and private, to understand the conditions of ingress and egress, security issues, property control and protection issues, regarding the property, prior to mobilization to a specific work area.</li> <li>2. Establish mutually agreeable conditions of access with property owner, and require all personnel accessing the site to sign a statement indicating that they understand and will abide by the conditions of access.</li> <li>3. Grant access to enter the property only to those individuals that have a legitimate SDS related need to access the property, and then shall only do so under the previously agreed access conditions.</li> <li>4. Provide signs at gates and access points notifying individuals that specific conditions of entry exist.</li> <li>5. Close and secure gates and entry points by a locking mechanism when not in use. Conditions of entry will specify approved access times and conditions on open gates.</li> <li>6. Strictly control access to keys to entry point locks. Recipients of keys will be required to sign when receiving the key, and again when returning the key. Recipients will be required to advise the Site Health &amp; Safety Officer when they have lost or misplaced a key. Keys will be required to be of a non-duplicating type. Locks and keys will be changed when a key is reported lost or misplaced.</li> <li>7. Designate the Site Health and Safety Officer to monitor the access control system.</li> </ol> |  |

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| C-5  | Pre-existing Condition Assessment  |
|  | Applicant shall determine the condition of Pueblo County residents' existing property so that it can be restored to preconstruction condition or better. |
| <b>PROJECT DETAIL</b>  |  |
| <ol style="list-style-type: none"> <li>1. Perform an examination of pre-construction existing conditions of land surface, drainage, vegetation and structures adjacent to the construction site that could be damaged or altered by construction operations. The property owner will be invited to attend.</li> <li>2. Perform periodic reexaminations, if required, to document any changes, including, but not limited to, cracks in structures, settlement, leakage, and similar conditions.</li> </ol> |  |

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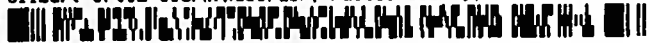
Examinations may include photography, sampling and expert assessments of existing or current conditions.

3. Document examinations in writing, and by photographs and audio-video recordings. Photography shall be by a professional commercial photographer, experienced in shooting interior/exterior construction photos, in daylight and nighttime conditions, and in good and inclement weather.
4. Provide a copy of documentation to property owner for review and acceptance. A copy of the documentation shall be provided to the County. Applicant and the County shall each maintain a copy of the documentation. Such documentation shall be used as indisputable evidence in ascertaining whether and to what extent damage occurred as a result of Applicant's operations.

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| C-6                   | Work Hours  |
|                       | Applicant shall limit work hours to minimize disturbance to Pueblo County residents.  |
| <b>PROJECT DETAIL</b> |   |
| 1.                    | Perform work within the hours of 7:00 am to 6:00 pm Monday through Friday. Work outside of these hours will be restricted to maintenance of traffic, safety, and construction controls, maintenance of construction equipment, and approved exceptions. Pueblo County and residences within 500 feet of the affected portion of the work site shall be notified 48 hours in advance of work outside of these hours, other than maintenance or emergency work. |

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| C-7                   | Permitting   |
|                       | Applicant shall obtain all applicable permits.   |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Obtain permits and comply with permit conditions and applicable regulations. Permits may include those listed below and in Section C, Table C-1 of the 1041 Application, as well as other permits that may be required under Federal, State, County, or local regulatory jurisdiction. <ul style="list-style-type: none"> <li>• Bureau of Reclamation               <ul style="list-style-type: none"> <li>○ Execution of Contracts (Reclamation Project Act 43 CFR 427)</li> <li>○ Record of Decision (ROD)</li> </ul> </li> <li>• U.S. Fish and Wildlife Service               <ul style="list-style-type: none"> <li>○ Depredation Permit</li> <li>○ Section 7 Consultation (Endangered Species Act 50 CFR 402)</li> </ul> </li> <li>• U.S. Army Corps of Engineers               <ul style="list-style-type: none"> <li>○ 404 Permit (Clean Water Act 33 CFR 320)</li> </ul> </li> <li>• Colorado Department of Transportation (CDOT)</li> </ul> |

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- Utility/Special Use Permit
- State Highway Access Permit
- Colorado Department of Public Health and Environment (CDPHE)
  - Air Pollution Emission Permit for Land Development
  - Stormwater Construction Permit
  - Construction Dewatering General Permit
  - Minimal Discharge Industrial Wastewater General Permit
  - Water Quality Control Division Plan Approval
- Other State Permits/Approvals
  - 401 Certification (Clean Water Act 40 CFR 121)
  - Reservoir Plan and Dam Safety Emergency Preparedness Plan Approval
  - Section 106 Review (National Historic Preservation Act 36 CFR 800)
- Union Pacific/Burlington Northern Santa Fe Railroad Permits
  - Utility License/Pipeline Crossing Agreements
- Potential Regional Permits\*
  - Various Building related Permits (i.e., electrical, mechanical, HVAC, structural, etc.)
  - Floodplain Permits
- Potential County Permits\*
  - Excavation/Grading Permits
  - Driveway Access Permits
  - Land Use/Zoning Permits
  - Building Permits
  - Grading and Erosion and Stormwater Quality Control Permits
  - Air Quality Construction Permits
  - Individual Sewage Disposal System Permits
  - Floodplain Permits
- Potential City Permits\*
  - Excavation/Grading Permits
  - Land Use/Zoning Permits
  - Grading and Erosion and Stormwater Quality Control Permits
  - Driveway Access Permits

\*As required by local agency with jurisdiction over the specific SDS Project work location. These may include the Pueblo Regional Building Department, Pueblo County, and Pueblo West Metropolitan District Department of Public Works.

2. Provide copies to Pueblo County within 60 days of obtaining permits.

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| C-8                   | Dewatering   |
|                       | Applicant shall minimize dewatering impacts on Pueblo County properties and watercourses.                          |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Obtain a construction dewatering permit from the Colorado Department of Public Health and the Environment (CDPHE). |
| 2.                    | Create and implement a water control plan that includes descriptions of proposed                                   |



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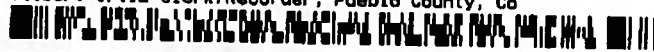


ground and surface water control facilities including, but not limited to: equipment, methods, standby equipment and power supply, pollution control facilities, discharge locations, and provisions for temporary water supply; drawings showing locations, dimensions, and relationships of elements of each system; design calculations demonstrating accuracy of proposed dewatering system and components. Copies of plan will be provided to Pueblo County within 60 days of approval by CDPHE.

3. Control water during the course of construction, including weekends and holidays and during periods of work stoppages. Adequate backup systems shall be in place to maintain control of water.
4. Remove surface water controls when they are no longer needed.
5. Furnish, operate and maintain dewatering systems of sufficient size and capacity to continuously maintain excavations free of water, regardless of source, until backfilled to final grade.
6. Design and operate dewatering systems to prevent loss of soil as water is removed, to avoid inducing settlement or damage to existing facilities, completed work, or adjacent property, and to relieve artesian pressures and resultant uplift of excavation bottom.
7. Be responsible to obtain and comply with the requirements set forth in any applicable well permits required by the State.

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| C-9                   | Site Restoration   |
|                       | Applicant shall provide Pueblo County residents with replacement vegetation and property to match pre-construction conditions or better.   |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Grade disturbed areas to preconstruction contours so preconstruction drainage paths are reestablished.   |
| 2.                    | Reclaim disturbed land, except water areas and surface areas of roads, by seeding or planting to achieve a permanent vegetation cover as specified below. <ol style="list-style-type: none"> <li>a. In accordance with Construction Condition C-5, a pre-construction evaluation of existing vegetation will be conducted to determine species diversity, woody plant density, and seasonal variety.</li> <li>b. Vegetation cover will be of the same seasonal variety native to the area of disturbed land, or species that support the post-construction land use. In those areas of disturbed vegetation where such seeds are not commercially available, seeds will be collected on-site to be used in revegetation, including, rare plants identified in the FEIS, by the Colorado Natural Heritage Program or by other qualified investigators.</li> <li>c. Seeding and planting of disturbed areas will be conducted during the first normal</li> </ol> |

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period for favorable planting conditions after final preparation for seeding or planting.

- d. Soil stabilization practices will be used on all regraded and topsoiled areas.
  - e. The revegetated area will be considered acceptable if the revegetated area cover is not less than 90 percent of the pre-construction vegetation cover with similar species diversity. The pipeline access road will not be included in the 90 percent coverage calculation.
3. Restore roads and driveways so that:
    - a. Surfaces are finished level with existing surfaces.
    - b. Sealed roadways are finished to match existing seal (asphalt, spray seal, etc).
    - c. Unsealed roadways are to be finished to match existing surface. Concrete roadways/driveways shall be reinstated in such a manner as to match existing surface. Portions of slab damaged or rendered unstable by undermining (whether inadvertently or deliberately) should be included in the portion to be restored.
  4. Restore damaged or injured property including outbuildings, to a condition similar or better to that existing before the damage or injury occurred, by repairing, rebuilding, or restoring the property.
  5. Restore or replace fences and gates that are disturbed during construction.
  6. Provide Pueblo County a security bond equal to \$2,000 per acre of land in permanent or temporary construction easement in each work package. The security bond shall be released in full to the Applicant two years following the final completion of the construction contract, upon successful revegetation, as described above. If successful revegetation is not achieved, the security bond will be forfeited in the amount of \$2,000 for each acre, or fraction of an acre, that has not been successfully revegetated.

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| C-10 | Public Communications  |
|      | Applicant shall keep Pueblo County residents informed of the SDS project and upcoming construction activities. |

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1. Assign a point of contact for responding to public questions, comments and concerns. The point of contact shall continue for one year following the final construction in Pueblo County.
2. Establish a local telephone number (a "hot-line") to allow citizens' access to the Public Communications Office and team throughout the duration of the Project. This telephone number will be included in the public information measures listed below, as well as on job site signage. The hot-line will be a combination of pre-recorded and live operator communications.
3. Develop and maintain a website that will include details of current and future project activities (i.e., schedules, type of work, phases, etc.)
4. Deliver individual resident "mailers" notifying each resident of future construction activity near their home. Residences within 500 feet of an upcoming construction zone will be informed thirty (30) days prior to construction. The mailers will include details of when construction will begin, when completion is planned, what types of activities are expected, an overview of the Project; and the hotline number.
5. Distribute individual resident "door hangers" to properties within 500 feet of the construction site. These will serve as reminders of future construction activities, and will be distributed approximately seven (7) days prior to construction.

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| C-11                  | Dust and Other Air Emission Controls (Dust Control)  |
|                       | Applicant shall minimize fugitive dust impacts to County residents.  |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Prepare, submit and implement a fugitive dust control plan as required by the Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division. A copy of the plan will be submitted to Pueblo County.  |
| 2.                    | Implement standard fugitive dust control practices as specified in the fugitive dust control plan, including: <ol style="list-style-type: none"> <li>a. Watering unpaved roads on site.</li> <li>b. Limiting vehicle speeds to 30 mph on site.</li> <li>c. Covering excavated material with synthetic or natural cover or preventing sediment movement from the pile using silt fence.</li> <li>d. Installing vehicle tracking control at access points to the site.</li> <li>e. Re-vegetating disturbed areas as described in Construction Condition C-9 as soon as appropriate to reduce dust sources.</li> <li>f. Sweeping paved streets as necessary to remove construction dust.</li> </ol> |
| 3.                    | Perform particulate monitoring using real-time particulate monitors that are capable of  |

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monitoring particulate matter less than ten microns (PM10). Particulate levels will be monitored immediately downwind of the working site and integrated over a period not to exceed 15 minutes. Monitoring will be conducted a minimum of once a day, with additional testing conducted if complaints are received. Instrumentation shall require necessary averaging hardware to accomplish this task. In order to ensure the validity of the fugitive dust measurements performed, there will be appropriate Quality Assurance/Quality Control (QA/QC) that includes the following features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and record keeping.

The action level will be established at 150 µg/m<sup>3</sup> over the integrated period not to exceed 15 minutes. If particulate levels are detected in excess of 150 µg/m<sup>3</sup>, the upwind background level must be measured immediately using the same portable monitor. If the working site particulate measurement is greater than 100 µg/m<sup>3</sup> above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust.

4. Use construction equipment that meets Colorado opacity standards for operating emissions. Construction equipment will be emissions tested at an approved facility prior to use on the site. This test will be performed each year that the equipment is used on the project. The certificates of approval for each item of construction equipment will be maintained by Applicant and be available for inspection by Pueblo County if requested.
5. Do not burn waste materials, rubbish, or other debris on or adjacent to the construction site.

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| C-12                  | Drainage and Erosion Control (Sediment Control)  |
|                       | Applicant shall maintain soil within construction zone.  |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Obtain a permit for Drainage and Erosion Control within a construction site: General Permit - Stormwater Discharges Associated with Construction Activity (Permit No: COR-030000). |
| 2.                    | Implement a Stormwater Management Plan (SWMP) and Best Management Practices (BMPs) per Colorado Department of Transportation (CDOT) Erosion Control and Stormwater Quality Guide.  |
| 3.                    | Perform a pre-existing condition assessment of areas potentially subject to sedimentation from SDS construction as described in Construction Condition C-5.                        |
| 4.                    | Restore lands outside of the work area that have been impacted by sediment from SDS construction consistent with Construction Condition C-9.                                       |
| 5.                    | Shall not release sediment impacting more than 4 square feet of land outside of the work.  |

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| C-13  | Pre-Mobilization Readiness Review   |
|   | Applicant shall perform pre-mobilization readiness reviews prior to Applicant's contractor's beginning on-site construction activities. |
| <b>PROJECT DETAIL</b>   |   |
| <ol style="list-style-type: none"> <li>1. Prepare a Project Execution Plan (PEP) for each Work Package of the SDS Project (i.e., Pump Station, Pipeline Segment, Water Treatment Plant). The PEP will be structured to standardize and codify the project planning process for consistency and quality of implementation.</li> <li>2. Perform a Pre-Mobilization Readiness Review to determine the project's readiness for mobilization of field activities. Pueblo County will be invited to participate in the review. Subject mater of a Readiness Review ill, at a minimum, include:               <ol style="list-style-type: none"> <li>a. Safety management and Emergency Preparedness policies and procedures.</li> <li>b. Quality Assurance/Quality Control programs and procedures.</li> <li>c. Required local, state, and federal permits and agency approvals have been acquired, the Contractor is aware of permit requirement and limitations, and appropriate Contractor policies and procedures are in place for compliance.</li> <li>d. Site and security controls are in place.</li> <li>e. Communications systems are in place and operational.</li> <li>f. Temporary facilities are in place where required.</li> <li>g. Safety plan and safety representative.</li> <li>h. Utility Locations have been verified.</li> <li>i. Agency Approvals (incl. Pueblo County).</li> <li>j. Applicant shall verify that land, easement, and right-of-way acquisitions are complete and what limitations are related to Project access.</li> </ol> </li> </ol> |   |

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| C-14   | Traffic Control  |
|  | Applicant shall provide for safe vehicular and pedestrian traffic. |
| <b>PROJECT DETAIL</b>  |  |
| <ol style="list-style-type: none"> <li>1. Develop a traffic control plan complying with the applicable standards of the Manual on Uniform Traffic Control Devices. The Traffic Control Plan will be signed by an individual certified by the Colorado Department of Transportation (CDOT) or the American Traffic Safety Services Association (ATSSA), as a Worksite Traffic Control Supervisor, whose signature shall constitute certification that the plan meets or exceeds MUTCD standards. The plan will include drawings(s) of the project location showing phases of the project, a list of the posted speed limits throughout the project, and a drawing(s) of the traffic control measures to be employed at the project site.</li> </ol> |  |



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2. Comply with the Haul Route Plan accepted by Pueblo County.

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| C-15   | Protection of Plants and Wildlife  |
|  | Applicant shall control impacts to native endangered and threatened flora and fauna. |
| <b>PROJECT DETAIL</b>  |  |
| <ol style="list-style-type: none"> <li>1. Protect native endangered and threatened flora and fauna in accordance with the Final Environmental Impact Statement.</li> <li>2. Submit a wildlife mitigation plan to the Colorado Division of Wildlife in accordance with their regulations prior to construction. This Plan will include actions the Applicant proposes to mitigate impacts that the SDS Project may have on fish and wildlife. As required by statute, the Wildlife Commission will evaluate the probable impact of the project on fish and wildlife. The Applicant shall provide the official wildlife mitigation plan and official state position to Pueblo County Staff prior to construction.</li> <li>3. Coordinate with Bureau of Reclamation to release flows to the Arkansas River through the flood control gates when the North Outlet Works is unavailable due to construction activities.</li> </ol> |  |

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| C-16   | Noxious Weed Control   |
|  | Applicant shall control spread of noxious weeds resulting from project construction. |
| <b>PROJECT DETAIL</b>  |  |
| <ol style="list-style-type: none"> <li>1. Provide a person experienced in field identification of noxious weeds to locate existing noxious weeds that will be disturbed during construction in advance of ground-disturbing construction activities.</li> <li>2. If List A species are found, provide to the State Weed Coordinator mapping data pertinent to each population including:               <ol style="list-style-type: none"> <li>a. Species name</li> <li>b. Population location(s) including distribution and abundance</li> <li>c. Estimated infested acreage</li> </ol> </li> <li>3. Implement an eradication program within the project limits. Eradicate existing Class A and B noxious weed populations.</li> <li>4. Adopt the following methods to prevent the spread of noxious weeds during</li> </ol> |  |

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| <b>construction.</b> |  |
| a.                   | Major equipment (track equipment, rubber tire loaders, and backhoes) will be cleaned by high pressure air or water spray before being delivered to the project site. |
| b.                   | Use weed free seed, mulch, and borrow material.  |
| c.                   | Use 100-percent certified weed free seed and mulch. Locally or regionally available seed and mulch will be used when practicable.                                    |
| 5.                   | Disturbed areas will be re-seeded as soon as practicable after the disturbance ends.   |

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| C-17                  | Hazardous Waste Management   |
|                       | Applicant shall ensure that hazardous wastes are appropriately managed.  |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Follow regulations to the handling, storage, transportation, and disposal of hazardous materials as set forth in the Code of Federal Regulations (CFR) 1910.120, DOT, EPA and NRC regulations, as applicable. The type and quantity of these materials will be small quantities (paints, solvents, fuels, etc.). |
| 2.                    | Development and implement Health, Safety and Environmental plans including hazardous material management in compliance with Federal, State and Local regulations prior to mobilizing on-site for Project construction.   |

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| C-18                  | Sustainable Design  |
|                       | Applicant shall, where practical, design SDS facilities to be sustainable or "green".   |
| <b>PROJECT DETAIL</b> |   |
| 1.                    | Make an effort to balance cut and fill for site grading and backfill to reduce imported or exported material.   |
| 2.                    | Use site and building design to promote energy and resource conservation.   |
| 3.                    | Motors and electrical equipment will be high-efficiency rated. Efficiencies will be determined by testing as set forth in ANSI/IEEE 112-Standard Test Procedures for Polyphase Induction Motors and Generators, Method B or Method F. |

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| C-19                  | Sustainable Construction Practices  |
|                       | Applicant shall, where practicable, use sustainable construction practices. |
| <b>PROJECT DETAIL</b> |   |

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1. Create opportunities for sustainable construction.
2. Prepare a materials handling plan including recycling and reuse. This plan shall identify materials expected to be encountered during demolition, site clearing, field office operations, equipment maintenance, etc. In this plan, the Applicant shall define how these materials will be handled to maximize recycling and reuse opportunities and to minimize permanent disposal of such items including used motor oil, waste paper, removed asphalt, removed concrete, used tires, etc.
3. Use minimum 10-percent bio diesel in construction equipment.
4. Purchase local goods and services to the maximum extent possible consistent with sound procurement practices and local availability. Such purchases may include bulk commodities where longer shipping distances are not economical, such as fuel, lubricants, oils, sand and gravel, masonry and concrete.

|   |   |
|---|---|
| C-20  | Surface Water and Groundwater Flows   |
|   | Applicant shall restore ground and surface water supplies to pre-construction conditions. |
| <b>PROJECT DETAIL</b>   |   |
| <ol style="list-style-type: none"> <li>1. Restore disturbed surfaces to pre-construction contours, as defined by the aerial survey and mapping.</li> <li>2. Perform pre-construction hydrologic investigations on properties that have active springs along the pipeline route. Design and construct the pipeline to prevent injury to springs.               <ol style="list-style-type: none"> <li>a. Use "flowable fill" for bedding and pipe zone material.</li> <li>b. Use native material that was removed from the trench in the trench zone above the pipe.</li> <li>c. Use trench plugs in areas where groundwater is encountered to prevent flow along the trenchline.</li> </ol> </li> </ol> |   |

|  |  |
|--|--|
| C-21   | Protection of Livestock  |
|  | Applicant shall protect livestock on lands crossed by the project during construction. |
| <b>PROJECT DETAIL</b>  |  |
| <ol style="list-style-type: none"> <li>1. Work jointly with landowners and livestock owners to determine grazing areas, watering points and livestock pathways to food and water.</li> </ol> |  |

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2. Provide access for livestock through farm areas, do not cut off ready access points of farmlands in which livestock are pastured, provide alternate accessible water sources, maintain existing fences required to restrain livestock, and keep gates closed and secure.
3. Temporarily relocate livestock away from construction activities if requested by livestock owner.

|   |   |
|---|---|
| C-22  | Noise Control   |
|   | Applicant shall minimize noise impacts to adjacent property owners. |
| <b>PROJECT DETAIL</b>   |   |
| <ol style="list-style-type: none"> <li>1. Comply with applicable OSHA, State of Colorado, and local noise control standards, requirements, and regulations.</li> <li>2. Measure baseline noise conditions prior to construction work commencing. The baseline will be the average noise reading over three 24-hour periods at each receptor lot-line location or at 1-mile intervals, whichever is greater.</li> <li>3. Periodically monitor generated sound levels and record decibel levels. Should noise levels exceed appropriate standards, the operation will be ceased and noise mitigation measures will be implemented.</li> <li>4. Develop a noise control plan to mitigate construction noise and to comply with appropriate standards.</li> <li>5. Any excessively high decibel level work, such as blasting or pile driving will be performed between the limited hours of 9:00 am and 5:00 pm to minimize disruptions.</li> </ol> |   |

### **SOCIO-ECONOMIC/CONTRACTING PRACTICES**

|  |   |
|--|---|
| SE-1   | Securing Land Through Easements, Fee Purchase, or Condemnation  |
|  | Applicant shall secure land necessary for construction of the project in a fair and equitable manner. |
| <b>PROJECT DETAIL</b>  |   |
| <ol style="list-style-type: none"> <li>1. Treat private property owners fairly and commit to using the power of eminent domain only as a last resort.</li> <li>2. Offer to compensate landowners to have their own appraisal done if they disagree with the applicant's appraisal.</li> <li>3. Reimburse landowners for relocation costs, title work, and closing costs. No landowner</li> </ol> |   |

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should have out-of-pocket expenses from the project for these activities.

4. Provide proof to Pueblo County that they have secured the necessary rights to construct the project prior to starting construction at any given location.

|   |  |
|---|--|
| SE-2  | Payment in Lieu of Property Taxes  |
|   | Applicant shall reimburse Pueblo County for property taxes lost due to acquisition of land in fee. |
| <b>PROJECT DETAIL</b>   |  |
| <ol style="list-style-type: none"> <li>1. Preferentially acquire easements and minimize to extent practicable, the number of private properties acquired in fee to support construction and operation of SDS.</li> <li>2. For those private properties purchased and owned in fee, make an annual payment in lieu of taxes equal to the value of the taxes assessed by the Pueblo County Assessor.</li> <li>3. Payment shall be made to Pueblo County Treasury on or before April 30 of each calendar year.</li> <li>4. Upon successful closing of private property purchase.</li> <li>5. This mitigation is ongoing until private properties purchased are sold or conveyed to another private owner.</li> </ol> |  |

### **OPERATIONAL PRACTICES**

|     |   |
|-----|---|
| O-1 | Release Rate Limit  |
|     | Applicant shall limit the maximum release rate from the Williams Creek Reservoir to 300 cubic feet per second.  |
| O-2 | Pipeline Drainage   |
|     | Applicant shall limit the release rate of drains from the pipeline to a drainageway to the equivalent of less than a 2-year storm event in that drainageway, except in the case of emergency. |
| O-3 | Pipeline Capacity   |
|     | Applicant shall limit the rate of water pumped by the Juniper Pump Station to 78 mgd.   |

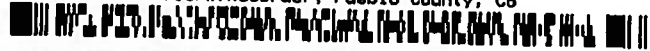


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## **ENFORCEMENT PRACTICES**

|   |  |
|---|--|
| ENF-1   | Compliance Monitoring and Reporting  |
|   | Applicant shall monitor and report on compliance with the conditions of the 1041 permit. |
| <p style="text-align: center;"><b>PROJECT DETAIL</b></p> <p>1. Submit a quarterly report during project construction in Pueblo County that will provide a summary of activities related to the Conditions of the permit. The report will summarize the activities occurring in the reporting period, and a forecast of activities planned in the upcoming period.</p> <p>Contents of the report will include (as applicable):</p> <ul style="list-style-type: none"> <li>a. Safety incident log.</li> <li>b. Citizen call log.</li> <li>c. Description of mitigation and restoration activities (i.e., quantity and location of repaired road surface, reseeding, etc.).</li> <li>d. List of non-compliance issues by contractors (silt releases, work hour infractions, fines and penalties).</li> <li>e. Sustainable construction practices employed.</li> <li>f. Schedule and key milestones met and forecast.</li> <li>g. Location and extent of excavations.</li> <li>h. Instances of work outside normal work hours, except maintenance activities.</li> <li>i. Status of site maintenance, security and access control to properties.</li> <li>j. Location and extent of dewatering activities.</li> <li>k. Status of other required permits, including compliance with the programmatic agreement to protect cultural resources.</li> <li>l. Dust monitoring summary.</li> <li>m. Status of drainage and erosion control measures.</li> <li>n. Status of plant and wildlife protection requirements.</li> <li>o. Status of measures to protect surface and groundwater flows.</li> <li>p. Status of livestock protection measures.</li> <li>q. Status of Clear Spring Ranch project.</li> <li>r. Status of pump station architectural review.</li> <li>s. Status of land acquisition.</li> <li>t. Status of compliance with requirements concerning Pueblo County Roads.</li> </ul> |  |

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- u. Status of dredging at the levees on Fountain Creek in Pueblo.
  - v. Status of reclamation and bonding for disturbed areas.
  - w. Status of the written MOU for construction and use of the North River Outlet Works.
  - x. Acceptance of the design of structures at Lake Pueblo Dam by the BOR.
  - y. Status of conservation strategies, local reuse, stormwater management, drainage regulations and enforcement.
  - z. Status of stormwater and wastewater system improvements per permit commitments.
  - aa. Status of NEPA, ROD, contract negotiations with BOR and notice of NEPA-required required mitigation and any project changes resulting from contract negotiations.
  - bb. Status of payments in lieu of property taxes.
  - cc. Copies of the annual reports on the SDS Project submitted to Reclamation.
2. Submit an annual report to Pueblo County that will provide a summary of activities related to the SDS Project and the Conditions of the Permit. These reports will be due annually on or before January 31, beginning the year following commencement of water deliveries through the SDS pipeline. The reports shall include a signed certification of compliance with the Permit.
- Contents of the report will include, but will not be necessarily limited to:
- a. Summary of storage, diversion, delivery of water in Pueblo County.
  - b. Summary of Participants' return flows to Fountain Creek including storage and releases of such return flows (maximum daily flows, average annual and monthly flows and amounts).
  - c. Summaries of exchanges by Participants between Pueblo Reservoir and the Fountain Creek confluence (monthly and annual rates of flow and quantities).
  - d. Use of any new water rights to be delivered or stored through SDS (amount, time, source).
  - e. Water quality monitoring.
  - f. Geomorphology monitoring.
  - g. Status of adaptive management plans on Fountain Creek.
  - h. Status of payments into the Fountain Creek monetary mitigation fund.
  - i. Status of expenditures for wastewater system improvements for Participants (and third party users in the Fountain Creek basin) per Permit Conditions.
  - j. Reports on the operation of the Pueblo Flow Management Program and the Low Flow Program (rates, and quantities, and times of foregone exchanges, releases,

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and reception documentation).

- k. Status of lake level management cooperative efforts with other entities at Pueblo Reservoir.
- l. Status of conservation and local reuse.
- m. Payments to Pueblo County in lieu of property taxes.
- n. Copies of the annual reports on the SDS Project submitted to Reclamation.

### **COUNTY ROADS – CONDITIONS / MITIGATION**

|      |   |
|------|---|
| CR-1 | Excavation Permit   |
|      | Applicant shall make application for an Excavation Permit with the Pueblo County Public Works Department (Department) for each road crossing and comply with all conditions of that permit. |

|      |  |
|------|--|
| CR-2 | Access Permit  |
|      | Applicant shall make application for an Access Permit with the Department for each access point onto a County roadway and comply with all conditions of that permit. |

|                       |   |
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| CR-3                  | Traffic Control Plan  |
|                       | Applicant shall submit a Traffic Control Plan to the Department for review and approval, for the project which conforms to applicable standards of the Manual on Uniform Traffic Control Devices. |
| <b>PROJECT DETAIL</b> |   |
| 1.                    | The traffic control plan shall be developed and administered by a certified Traffic Control Supervisor or their authorized personnel.   |

|                       |   |
|-----------------------|---|
| CR-4                  | Plan – Route/Easement Construction Staging Area   |
|                       | Applicant shall provide a plan to the Department defining the use of the pipeline route/easement as a construction "Staging Area" for approval. |
| <b>PROJECT DETAIL</b> |   |

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1. The Staging Area Plan shall define construction work times, material delivery hours, noise suppression, dust abatement, construction methods, and other mitigation of construction nuisances. Deviation from the plan will require approval by the Department prior to a change in use.

|                       |  |
|-----------------------|--|
| CR-5                  | Haul Route Plan  |
|                       | Applicant shall provide a Haul Route Plan, for use of the public road system to provide access to the Staging Area/pipeline easement, to the Department for review and approval.   |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | The Haul Route Plan will identify the roads utilized by the applicant for construction vehicle traffic, maintenance of those roads during the project and rehabilitation of those roads. For the purpose of this plan, "construction vehicle" shall mean those vehicles requiring operators to possess a Commercial Drivers License (CDL) and/or weighing more than 10,001 pounds. |
| 2.                    | The Haul Route Plan shall identify the final treatment for utilized roads and be developed cooperatively between Colorado Springs Utilities and the Department.  |
| 3.                    | The roads utilized in the Haul Route Plan shall be maintained by the applicant during pipeline construction periods such that they are passable by the motoring public at all times except when identified in an approved Traffic Control Plan as "Closed" or as otherwise approved by the Department.   |
| 4.                    | All road rehabilitation and maintenance work on the Haul Route Plan roads shall comply with the Pueblo County Roadway Design and Construction Standards.   |
| 5.                    | Costs for maintenance of the Haul Route Plan roads shall be borne solely by the applicant.   |
| 6.                    | The applicant shall initiate maintenance at the discretion of the Pueblo County Director of Public Works.  |

|                       |  |
|-----------------------|--|
| CR-6                  | Haul Route to Staging Area   |
|                       | Applicant shall limit the haul route from the "Staging Area" to the State Highway System to those roads identified in the above defined "Haul Route Plan Map" dated 12-31-08 ("Exhibit 1" and Haul Route Plan Road Table "Exhibit 2") or Haul Route Plan approved by the Department prior to commencement of pipeline installation activities that require use of roads identified in the Haul Route Plan. |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Said plan shall be incorporated within construction plan and specification   |

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documents. Identification by the applicant of additional roads they desire to be included in the Haul Route Plan for dedicated project use will require approval by the Department.

2. The Department may include roads in the plan if it is determined that they are being used by the applicant's representative or their contractor by above identified "construction vehicles".
3. The Department will notify the applicant, prior to inclusion in the Haul Route Plan, of the observed use of non Haul Route Plan roads. Incidental use of roads not specifically designated on the Haul Route plan is approved for the applicant, their representatives or contractor's vehicles weighing less than 10,001 pounds and/or not requiring a CDL license.

| CR-7  | Cash Payment / Escrow / Other Financial Instrument  |
|---|---|
|   | Applicant shall establish a cash payment, escrow, or other financial instrument such as a performance bond, acceptable to the Department and the Pueblo County Attorney, to Pueblo County, in an amount estimated by the Department to cover the total costs for rehabilitation of the roads identified in the approved Haul Route Plan, to Pueblo County Roadway Design and Construction Standards (Standards) as noted in "Exhibit 4" within thirty days of the applicant issuing a notice to proceed to its contractors to perform pipeline installation activities that require use of roads identified in the Haul Route Plan. |
| <p style="text-align: center;"><b>PROJECT DETAIL</b></p> <ol style="list-style-type: none"> <li>1. If a financial instrument is selected, said financial instrument shall be held by Pueblo County until such time as the rehabilitation of Haul Route Plan roads are accepted by the County.</li> <li>2. The financial instrument is to be for an amount sufficient to cover the estimated costs established in "Exhibit 4", for rehabilitation of the Haul Route Plan roads plus estimated increases in costs over time as represented by the Construction Cost Index.</li> <li>3. It will be at the discretion of the Public Works Director to determine when it is necessary to commence rehabilitation of individual roads identified in the Haul Route Plan.</li> <li>4. Upon request of the Public Works Director, the applicant will be required to submit funds to the Department necessary to perform the rehabilitation of the individual roads selected by the Director of Public Works.</li> <li>5. The applicant will have 30 days to provide the requested funds to the Department. Upon such a request and payment of the funds, the applicant will be relieved of any further rehabilitation, maintenance or warranty obligation for that road section. Upon receipt of the requested funds, the total value of the financial instrument may be</li> </ol> |   |



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reduced by a same amount, less any increased cost over estimated costs in "Exhibit 4", at the discretion of the applicant.

6. Pueblo County will commence maintenance of rehabilitated roads upon their completion and final acceptance by the County. Attached as "Exhibit 3" is the minimum defined cross-section and treatment for identified Haul Route Plan roads. The minimum pavement section may change based upon the outcome of a "Pavement Structure Design" which conforms to the Standards. In any event, all reasonable costs associated with rehabilitation of Haul Route Plan roads will be borne solely by the applicant including engineering design, construction, drainage, etc.

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|-----------------------|---|
| CR-8                  | Drainage Calculations / Blow-off Valves   |
|                       | Applicant shall provide to the Department for review and approval, drainage calculations performed by a professional engineer licensed to practice in the State of Colorado, detailed plans on the "Blow-off Valves". |
| <b>PROJECT DETAIL</b> |   |
| 1.                    | The plans shall include any necessary drainage structures and erosion control measures and be incorporated into the construction plans.   |

|      |   |
|------|---|
| CR-9 | Stormwater Management Plan  |
|      | Applicant shall submit a Stormwater Management Plan accepted by the responsible jurisdiction to the Department and incorporate that Stormwater Management Plan into the construction plans. |

|                       |  |
|-----------------------|--|
| CR-10                 | Future Roadways / Utilities  |
|                       | Applicant shall not unreasonably prohibit the installation of future roadways and utilities across the utility easement. Future roadways are expected to be surface crossings at existing grade for a typically defined roadway section in the Pueblo County Roadway Design and Construction Standards today or as modified in the future. |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Future roadways are expected to be surface crossings at existing grade for a typically defined roadway section in the Pueblo County Roadway Design and Construction Standards today or as modified in the future.  |

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| CR-11 | Final Plans / Specifications  |
|-------|---|
|       | Applicant shall submit to Pueblo County, which reserves the right to review, the final construction plans and specifications, final Haul Route Plan, final Staging Area Plan, and other supporting documents and to modify these conditions of approval based upon that review to conform to final documents. |

**Including Exhibits:**

(Previously submitted for record, not included in this appendix)

- Exhibit 1 - Haul Route Plan Map
- Exhibit 2 - Haul Route Plan Roads Table
- Exhibit 3 - Haul Route Plan Treatment
- Exhibit 4 - Haul Route Plan Cost Estimates
- Exhibit 5 - Pueblo County Roadway Design and Construction Standards

**RECOMMENDED TERMS AND CONDITIONS  
AND MITIGATION OF PROJECT IMPACTS**

Southern Delivery System  
1041 Application  
March 18, 2009

1. **Commitments of Applicant.**

The following terms and conditions contain the specific commitments of the Applicant and shall be met as herein described.

2. **Term of Permit.**

This Permit is valid indefinitely for the life of the SDS Project, provided Applicant is in compliance with this Permit. If the Applicant fails to take substantial steps to construct the permitted development within thirty-six (36) months from the date of the Permit, then the Permit may be revoked or suspended by the County in accordance with its Areas and Activities Regulations. The Applicant may submit a written request to Pueblo County for an extension of the time period to begin construction under the Permit for good cause.

3. **Transfer of Permit.**

This Permit may be transferred in whole or part to another party only with the written consent of the Board of Pueblo County Commissioners. A proposed transferee shall demonstrate that it can and will comply with all the requirements, terms and condition contained in the Permit.

4. **Compliance with other Regulatory Requirements.**

Applicant shall comply with applicable local, State and federal regulatory requirements and permits. *See Mitigation Appendix C-7.* Prior to commencement of construction of any phase or work package of the SDS Project in Pueblo County, and within 60 days of said permit approvals, Applicant shall provide copies to Pueblo County of permits applicable to that work package of construction. If any such permits or approvals result in a material change in the SDS Project or are inconsistent with the terms and conditions of this Permit, Applicant shall notify Pueblo County, and Pueblo County shall determine whether a Permit amendment or suspension is required.

4.1. **Other Pueblo County Regulations.**

This permit shall not constitute an exemption from Pueblo County zoning, building, health or other applicable regulations and codes (except as provided in Section 17.140.010(F) of the Pueblo County Code regarding special use permits).

#### **4.2. Flood Hazard Area Development Permits.**

The Applicant shall obtain a Flood Hazard Area Development permit(s) for construction proposed within any designated 100-year floodplain in Pueblo County (as identified by the most current FEMA Flood Insurance Rate Maps for Pueblo County). These permits require review and approval by the Pueblo County Department of Planning and Development prior to any construction within a floodplain.

#### **4.3. Permit for New Electrical Substation and Transmission Lines.**

Construction of a new substation and transmission lines for the Juniper Pump Station shall require approval by Pueblo County of a Use by Review as specified in the Public Use District (S-1) zoning regulations if less than 115 Kv. If 115 Kv or greater, a separate permit application shall be submitted under the applicable Areas and Activities Regulations.

#### **5. Permit Amendment.**

Any material change in either the construction, use or operation (exceeding 78 mgd pumping by the Juniper Pump Station) of the SDS Project from that approved herein, or with the Applicant's performance of the terms and conditions approved herein, shall require a permit amendment. For these purposes, a material change shall be any change in the Project which significantly changes the nature of impacts addressed by the Permit. The Applicant shall notify Pueblo County of any material change in the SDS Project (not including routine maintenance, repair or operation of an existing facility) and the County will determine whether an amendment or new permit is required. Any disagreement about the materiality of a change shall be subject to the Dispute Resolution Process outlined herein.

##### **5.1. Use Of New Water Supplies Delivered Through SDS Project.**

Although Applicant currently has no firm plans to acquire by purchase or lease additional water rights in the Arkansas Basin either downstream or upstream of Pueblo Reservoir, the possibility exists that additional water supplies will be required in the future. In addition, if third-party contracts or agreements are executed meeting the other terms and conditions of this permit, those entities might well seek to acquire new or additional water rights for transportation of water through the SDS Project. Pueblo County asserts that it possesses the legal authority to regulate and control such additional water and water rights transportation through the SDS project. Nothing in the terms and conditions of this 1041 Permit is intended to prevent Pueblo County from asserting that jurisdiction and regulatory authority, subject to the right of any such third-party



and/or Applicant to assert any defenses to the exercise of the County's authority that may then exist.

**5.2 Carriage Of Water To Entities That Are Not SDS Project Participants**

Although Applicant has no existing permits or agreements with third-parties not listed as Applicants on 1041 Permit Application Number 2008-002, except all existing service agreements already disclosed to Pueblo County, it does not intend to foreclose the potential of making additional agreements for the long term delivery of water to third parties via the SDS Project. In the event any such third-party contracts are entered into under which Applicant would deliver water to such a third-party in El Paso County, Applicant shall require that the following conditions be included in any contract, permit or agreement with such third-party:

- A. A clear acknowledgment of support for the Fountain Creek Watershed Flood Control and Greenway District, together with a commitment to participate in the financing of said district;
- B. A clear and irrevocable commitment not to serve property located outside of the natural drainage of the Arkansas River or to market, transfer, wheel, or otherwise provide water to properties or entities located outside the natural drainage of the Arkansas River;
- C. The adoption and maintenance of a financing mechanism similar to the Colorado Springs Stormwater Enterprise capable of financing, constructing and maintaining storm water detention and retention facilities intended to insure that the storm flows of the Fountain Creek Basin do not increase above existing conditions, along with the adoption and maintenance of regulations and ordinances requiring stormwater detention, retention and management no less strict than those in place in the City of Colorado Springs. This condition can only apply to such third parties who have the legal authority to regulate in this manner;
- D. An agreement to accept and comply with the City of Pueblo Flow Management Program and the Pueblo Recreational In-channel Diversion Decree both impacting the Arkansas River between Pueblo Dam and its confluence with Fountain

Creek, in any application for a change of water rights or exchange implicating that reach of the river;<sup>1</sup>

- E. Pro rata participation in any water quality monitoring or studies to the same degree and extent as undertaken by the Applicant under this permit; and
- F. Support of any studies of a flood control dam or dams on Fountain Creek.

Upon the submission of contracts or agreements to Pueblo County evidencing the acceptance of the foregoing terms and conditions, Applicant shall be entitled to enter into third-party contracts for the delivery of water from Pueblo Reservoir to entities located in El Paso County or Teller County within the Arkansas River Basin. Nothing herein shall provide a right in the Applicant or any other entities to operate the SDS Project at a rate of flow in excess of 78 mgd without applying for and receiving an amended 1041 Permit satisfying any additional terms and conditions which might then be imposed.

#### 5.3. **Reservation of Permit Authority.**

Colorado Springs currently does not have the authority to enlarge the storage capacity of Pueblo Reservoir. Should the enlargement of Pueblo Reservoir occur in the future, and should Colorado Springs become a participant in that enlargement, Pueblo County reserves the right to assert, at that time, that those actions constitute a permissible activity under its 1041 regulations, subject to the right of Colorado Springs to assert any defenses to the exercise of the County's authority that may exist.

#### 6. **Monetary Mitigation for Fountain Creek Impacts.**

In order to mitigate the impacts of SDS to Fountain Creek in Pueblo County, Applicant will pay fifty million dollars (\$50,000,000) to the Fountain Creek Watershed, Flood Control and Greenway District ("District") described in the Intergovernmental Agreement for the Management and Conservation of Fountain Creek executed by El Paso County on December 15, 2008 and Pueblo County on December 16, 2008.

Three hundred thousand dollars (\$300,000) of that amount shall be paid in equal annual installments of one hundred thousand dollars (\$100,000), commencing July 1, 2009. These payments shall be used to assist in the identification and prioritization of projects, and to fund a study or studies of opportunities for constructing flood control and sediment control facilities which may include the

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<sup>1</sup> The term "Pueblo RICD" refers to case no. 01CW160, District Court, Water Division 2, Colorado.

feasibility of a dam or dams on Fountain Creek or its tributaries in order to improve the flood protection for the City of Pueblo and the Fountain Creek Basin.

Payment shall be made as to the remaining forty-nine million seven hundred thousand (\$49,700,000) as follows: nine million seven hundred thousand (\$9,700,000) on January 15, of the year following completion and commencement of water deliveries through the SDS Pipeline from Pueblo Reservoir to Colorado Springs; and in equal annual installments of ten million dollars (\$10,000,000) on January 15 of each of the four years thereafter.

Payments shall be made to the District, provided: it is created by legislation supported by Pueblo County and El Paso County for the management and conservation of Fountain Creek; it provides for participation by Pueblo County and the City of Colorado Springs as voting members of the board of directors; it has equal representation of entities from Pueblo County and El Paso County as voting members of the board of directors; and it has power to levy taxes and impose fees. If the District is not so created, then Pueblo County and Colorado Springs will establish a not for profit corporation pursuant to the Colorado Revised Nonprofit Corporation Act, C.R.S. § 7-121-101, et seq, governed by a board of directors having an equal number of directors from Pueblo County and from Colorado Springs, for the purposes specified herein. The Foundation, if established, will be referred to as the Fountain Creek Restoration Foundation. ("FCRF").

The District (or if not created, the FCRF) may use funds provided by the Applicant under this permit condition only for one or more new projects in the Fountain Creek watershed between Colorado Springs and the Arkansas River confluence in Pueblo that create a significant and not merely incidental benefit to Fountain Creek within Pueblo County for improvement of water quality, for flood control, or for prevention of erosion and sedimentation. Subject to these criteria, acceptable projects may include:

- A. those projects that have been identified by the United States Corps of Engineers ("Corps") as high priority erosion, sedimentation or flood control projects in a formal Corps recommendation for Fountain Creek;
- B. erosion, sedimentation, flood control or water quality improvement projects identified as part of the Fountain Creek Corridor Master Plan adopted by Colorado Springs Utilities and the Lower Arkansas Valley Water Conservancy District;
- C. any other sedimentation and erosion control, flood control, including a dam or dams, or stream improvement project that is found to be acceptable by the District or, if not created, the FCRF.

In the event completion of the SDS Project is delayed beyond 42 months after the effective date of the permit because of an affirmative decision made by Applicant, then the payments to be made by the Applicant pursuant to this paragraph shall begin to be made on such date, without regard to project construction status, or such payments shall be subject to annual indexing commencing 42 months after the effective date of the permit, to increase the amount of such payments as required to preserve their present values, using the Colorado Front Range Producer Price Index, but not to exceed a maximum annual increase of 3.5%.

**7. Expenditures for Wastewater System Improvements.**

In order to continue its efforts to protect against future spills to Fountain Creek, to increase its opportunities for reuse, and to mitigate possible water quality impacts by the SDS Project to Fountain Creek, Colorado Springs Utilities shall commit to invest an additional seventy-five million dollars (\$75,000,000) in its wastewater system. Expenditures will be made as part of the wastewater collection system rehabilitation programs or wastewater reuse systems between January 1, 2009 and December 31, 2024 as required. These expenditures shall be for projects not currently required by other regulatory permits, agency enforcement or court orders, consent agreements, or governmental regulations existing as of January 30, 2009. These expenditures will include the Local Collector Evaluation and Rehabilitation Program (LCERP) for the improvement and fortification of wastewater lines which could adversely affect Fountain Creek or its tributaries. These expenditures are subject to annual appropriation by the Colorado Springs City Council. Beginning in 2010, by January 31 of each year, Colorado Springs Utilities shall provide an annual report to Pueblo County describing such expenditures for the prior year.

**8. Sediment Control/Dredging and Clear Springs Ranch.**

It is acknowledged by Pueblo County and Applicant that one mitigation commitment will be a project to reduce the sediment load in lower Fountain Creek through dredging and the construction of sediment collection devices. These efforts will occur prior to the construction of the SDS Project. These sediment removal activities are of vital importance to Pueblo County because they will assist the City of Pueblo in preserving the flood protection of the Fountain Creek levees at or above the 100 year flood level. This mitigation commitment may be conducted in cooperation with a project or projects of the U.S. Army Corps of Engineers. It is acknowledged that there will have to be sampling done on the bed sediments in Fountain Creek to insure that no hazardous materials exist that would make a dredging and sediment removal project technically or financially impracticable. Applicant, as a condition of this permit, will pursue vigorously its efforts to complete this sediment removal project at the levels committed to in the final Environmental Impact Statement process. In the event that sediment removal is not practicable because of the quality of the

bed sediments, Applicant will commit an equal amount of money that would have been expended on this sediment removal project at the level required by the FEIS for another project designed to assist the City of Pueblo in restoring and maintaining sufficient flood protection to allow the existing levee systems to withstand a 100 year flood, subject to approval of the Bureau of Reclamation.

In addition, Applicant has committed, as part of the EIS process, to construct new wetlands and redirect a portion of the channel of Fountain Creek adjacent to the wetlands area at the Clear Spring Ranch to reduce the slope and improve channel stability through this area subject to the approval of Reclamation. The redirected channel is proposed to have an increased length and sinuosity to stabilize the channel. The purpose of this mitigation activity is to reduce sediment transport down Fountain Creek into Pueblo County, improve water quality and reduce flood threat downstream. This project will be completed to the levels required by Reclamation.

Applicant has submitted a letter to Reclamation, dated \_\_\_\_\_, stating its intention and desire to achieve its obligations set forth in the Final Environmental Impact Statement, sections 5.2.4 and 5.2.6, in the manner described in this paragraph 8. A copy of the letter has been made a part of the record.

**9. Continuation of Pueblo Flow Management Program.**

All SDS Participants shall cooperate in and comply with the PFMP (including Pueblo West and Security who are not signatories to the PFMP agreements at this time) and its requirements for maintaining target flows through Pueblo below Pueblo Reservoir by cessation of exchanges.

**10. Implementation of Arkansas River Low Flow Program.**

Colorado Springs Utilities shall promptly submit a signed Memorandum of Understanding between the Pueblo Board of Water Works and Colorado Springs Utilities which shall provide the terms and conditions under which each of the entities will contribute to and assist in the maintenance of a storage pool in Pueblo Reservoir designed to permit the release of water into the Arkansas River during times when the flow in the River could fall dangerously low, to levels at or below 50 cubic feet per second (cfs). SDS participants shall not exchange against reservoir releases made by the Board of Water Works of Pueblo or Colorado Springs Utilities for the Arkansas River Low Flow Program.

**11. Construction and Use of North River Outlet Works.**

Colorado Springs Utilities shall promptly submit to Pueblo County an executed Memorandum of Understanding with the Pueblo Board of Water Works designed to describe the manner in which the two entities will use the South Outlet Works & Joint Use Manifold and the North Outlet Works of Pueblo Dam for the provision



of municipal water supplies. If approved by the Bureau of Reclamation, the North Outlet Works shall be constructed and used as the primary outlet works for SDS.

**12. Safety Review of Design and Construction of Structures at Pueblo Dam.**

No construction shall occur at or near Pueblo Reservoir Dam (outlet modifications and pipelines west of the Pueblo West turnout) until the Bureau of Reclamation has performed its dam safety review and has accepted the design construction plans. Prior to commencement of construction, Applicant shall provide Pueblo County with written proof of such acceptance by the Bureau of Reclamation and any other required regulatory agency.

**13. County Road Improvements and Restoration.**

The Applicant shall obtain and comply with Excavation Permits from the Pueblo County Public Works Department ("Department") for each road crossing within the County, and Access Permits from the Department for each access point onto a County road. The Applicant shall submit a Traffic Control Plan to the Department for review and approval. The Applicant shall submit a Staging Area Plan to the Department for review and approval to define construction work times, material delivery hours, noise suppression, dust abatement, construction methods, and other mitigation of construction nuisances. The Applicant shall provide a Haul Route Plan to the Department for review and approval; the Haul Route Plan shall identify the roads utilized for construction vehicle traffic, maintenance of those roads at Applicant's expense during the project and rehabilitation of those roads to current Pueblo County Roadway Design and Construction Standards at Applicant's expense. Within thirty (30) days of the Applicant issuing a notice to proceed to its contractors to perform pipeline installation activities that require use of roads in the Haul Route Plan, the Applicant shall establish a cash payment, escrow, or other financial instrument such as a performance bond, acceptable to the County, in an amount estimated by the Department to cover the total costs for rehabilitation of the roads to County Standards (currently estimated at approximately \$6.1 million), plus estimated increases in costs over time as represented by the Construction Cost Index. The Applicant shall coordinate, design and construct the SDS pipeline facilities so as to anticipate and accommodate future roadways and utilities across the SDS easement so as not to unreasonably preclude them or increase their costs. *See Mitigation Appendix, CR-1 through CR-11 with Exhibits 1 – 5.*

**14. Cultural and Archaeological Resource Protections.**

Applicant shall execute the Programmatic Agreement in a form substantially similar to that set forth in the FEIS with the applicable federal and state agencies and Native American Tribes. Applicant shall comply with the standards and procedures of the Programmatic Agreement to ensure the identification,

avoidance, protection and disposition of cultural and archaeological resources which may be encountered during construction in Pueblo County, as required by federal and state laws and in accordance with landowner agreements. Proof of execution of the Programmatic Agreement shall be provided to Pueblo County prior to land disturbance.

**15. Acquisition of Property Interests.**

Applicant shall acquire necessary property interests required for each individual work package or phase of the SDS Project in Pueblo County prior to the initiation of construction of that work package. Private property owners shall be treated fairly by the Applicant and the SDS Project shall not create undue financial burdens on existing or future residents of Pueblo County. The Applicant shall commit to using the power of eminent domain only as a last resort. The Applicant shall offer to compensate landowners to have their own appraisal done if they disagree with the Applicant's appraisal. Applicant shall reimburse landowners for relocation costs, title work and closing costs in accordance with the City of Colorado Springs Procedure Manual for the Acquisition and Disposition of Real Property Interests. No landowner should have out-of-pocket expenses from the Project. Applicant shall provide proof to the County that it has secured the necessary interests in property required to construct the Project prior to starting construction at any given location. *See Mitigation Appendix SE-1.*

**16. Lake Level Management at Pueblo Reservoir.**

Colorado Springs Utilities commits to Pueblo County as a part of the 1041 process that it will voluntarily participate, when and if the Southeastern Colorado Water Conservancy District, the Bureau of Reclamation, and any other affected party agree to participate, in developing a reservoir management plan for Pueblo Reservoir designed to protect reservoir levels and recreational opportunities on Pueblo Reservoir to the extent feasible given the potential for future changes in hydrology and water demands by project beneficiaries.

**17. Payments In-Lieu Of Property Tax.**

Applicant shall minimize to the extent practicable the number of private properties acquired in fee to support construction and operation of SDS facilities. For those private properties purchased and owned in fee, Applicant shall make an annual payment in lieu of taxes equal to the value of the taxes assessed by the Pueblo County Assessor. Payment shall be made to the Pueblo County Treasury on or before April 30 of each calendar year. *See Mitigation Appendix SE-2.*

**18. Monitoring Program and Adaptive Management for Fountain Creek and the Arkansas River.**

Applicant shall implement a monitoring program to provide information on the current water quality and geomorphology (including erosion, sediment loading and channel stability conditions) in Fountain Creek and the Arkansas River, and to track changes over time. The monitoring will assist in the selection of mitigation measures and in the assessment of the effectiveness of SDS mitigation measures on Fountain Creek and the Arkansas River. To collect data that supports the evaluations related to impacts on water quality and geomorphology, Applicant shall implement monitoring activities at defined monitoring locations in the Fountain Creek Basin and the Arkansas River. See *Mitigation Appendix E-1*.

Pursuant to the Environmental Impact Statement process, Applicant has committed to engage in adaptive management, which contemplates that Applicant will undertake modified or different mitigation activities for impacts that have been identified in the EIS. If additional mitigation activities are required in order for Applicant to comply with the requirements of the ROD, any costs associated with that additional mitigation activity shall be the sole responsibility of Applicant.

To the extent that the monitoring and the adaptive management program causes Pueblo County to request or require that additional mitigation activities occur over and above those required by the Bureau of Reclamation, Applicant's obligation to conduct those mitigation activities shall be the responsibility of the Fountain Creek District (or FCRF, if the District is not formed) and not directly the responsibility of Applicant. Pueblo County shall be a stakeholder in the Adaptive Management Program, for purposes of this paragraph.

**19. Colorado Springs Utilities - Wastewater Collection System Management Practices to Protect Water Quality.**

Colorado Springs Utilities has committed as a condition of this Permit to continue to implement and maintain wastewater collection system improvements within the Fountain Creek drainage to prevent and minimize the impact of its wastewater system overflows or spills through prevention programs and response activities. Since 2000, it has spent \$114 million for these programs. In addition, Colorado Springs has established a Stormwater Enterprise Fund to finance the capital costs of needed stormwater control infrastructure. See *Mitigation Appendix E-2*.

**20. Construction Impact Mitigation.**

Applicant shall mitigate the impacts of project construction, as set forth in the Mitigation Appendix C-1 through C-22, to include the following:

- Proof of required permits and compliance
- Pre-existing condition assessment of affected properties

- Public information measures and responses to public complaints
- Pre-mobilization readiness
- Sustainable design and construction
- Protection of open excavations and trenches
- Construction site maintenance
- Provisions for access to properties
- Limits on work hours
- Dewatering control
- Lighting Control
- Dust Control
- Noise control
- Drainage and erosion control
- Traffic control
- Weed control
- Protection of plants and wildlife/vegetation surveys
- Hazardous waste management
- Management of surface and ground water flows
- Protection of livestock
- Site restoration

Applicant shall assign a point of contact for responding to public questions, comments and concerns during construction in Pueblo County and one-year following final construction in Pueblo County. Applicant shall also develop notices to affected residents and a website for information on construction scheduling.

#### **21. Juniper Pump Station Architectural Review.**

Applicant shall allow Pueblo County to appoint a representative who will participate in the final selection of the architecture and landscaping for the Juniper Pump Station, along with representatives of Colorado State Parks and the Bureau of Reclamation.

#### **22. Reclamation of Disturbed Lands.**

Applicant shall conduct a preconstruction evaluation of existing vegetation to be disturbed during construction of the SDS Project within Pueblo County. Upon reclamation of the site, the vegetation cover shall be of the same seasonal variety native to the area of the disturbed land, or a reasonable substitute pursuant to agreement with the landowner. The revegetated area will be considered acceptable if its cover will be not less than 90 percent of the pre-construction vegetation cover with similar species diversity. Applicant shall provide to Pueblo County a security bond equal to \$2,000/acre of land in permanent or temporary construction easement in each work package. The

security bond shall be released upon establishing 90 percent of pre-construction vegetation cover on the impacted land segment. See Mitigation Appendix C-9.

**23. Stormwater Management.**

The Applicant shall maintain stormwater controls and other regulations intended to ensure that Fountain Creek peak flows resulting from new development served by the SDS project within the Fountain Creek basin are no greater than existing conditions. This requirement can only apply to Project Participants who have the legal authority to regulate in this manner. Regulations shall comprehensively address peak flow conditions, runoff volumes, and flood hazards, incorporating at a minimum all relevant components of existing regulations of Colorado Springs and the other Project Participants including: regional drainage planning for low-flow and major storm events; detention; erosion and sediment control for land disturbance, construction, and similar activities; structural measures such as channel protection and engineered outfalls; prohibition of activities that infringe on the designated floodway; water quality controls, including water quality capture volume and a determination of the need for permanent best management practices (BMPs); and adequate provision for maintenance of all drainage-related facilities so required. This condition shall not prevent Colorado Springs and other local jurisdictions subject to this condition from revising and improving stormwater regulations from time to time, to incorporate new technologies, management techniques, or otherwise modify regulations consistent with the intent of not exceeding historical peak flows. See Mitigation Appendix E-2.

**24. Conservation and Reuse.**

In recent years, Applicant has demonstrated a commitment to water conservation programs and local reuse. Continued commitment and local reuse will reduce the Applicant's diversions from the Arkansas River and Pueblo Reservoir and reduce flows on Fountain Creek, below what they would have been without such conservation and reuse, thereby reducing the impacts of the SDS Project in Pueblo County. Applicant has specifically committed itself to continue such conservation and reuse despite the availability of additional water from the SDS Project.

**25. Compliance Monitoring and Reporting.**

Applicant shall monitor and periodically report to Pueblo County on its compliance with this Permit. During project construction in Pueblo County, Applicant will submit a quarterly report to Pueblo County summarizing the activities during that period, forecasting activities scheduled for the upcoming period, and addressing compliance with the terms and conditions of the Permit. After commencing deliveries of water through the SDS pipeline, Applicant shall submit annual reports to Pueblo County summarizing its activities related to the



SDS Project, the Permit, and addressing compliance with the terms and conditions of the Permit. Pueblo County may, at its discretion, hold public reviews of the reports and Permit compliance, including hearings in accordance with its regulations. See Mitigation Appendix ENF-1.

**26. Noncompliance.**

Substantial noncompliance with the terms and conditions set forth herein shall be subject to the provisions governing revocation or suspension of a permit set forth in section 17.148.320(A) of the Pueblo County Code. The final resolution of issues related to non-compliance (except for the failure to pay the monetary mitigation payments as set forth in Paragraph 6 herein) and any further act of revocation or suspension of the Permit will be accomplished through the dispute resolution process described below.

**27. Approval by Colorado Springs.**

The Colorado Springs City Council must take formal action to recognize the commitments herein prior to Pueblo County's final issuance of a 1041 permit for SDS.

**28. Mitigation Appendix.**

The provisions of that certain Mitigation Appendix previously referenced herein and attached hereto is hereby incorporated by this reference as though fully set forth. In the event of a conflict between the provisions of the Mitigation Appendix and the terms and conditions set forth in this Resolution, then the terms and conditions set forth in this Resolution shall prevail.

**29. Dispute Resolution.**

If a dispute between the Applicant and the County arises relating to any term or condition contained in this Permit (except for the failure to pay the monetary mitigation payments as set forth in Paragraph 6), the following procedure shall be followed:

- A. A joint management team, comprised of three (3) representatives of each Party shall first consider any of the circumstances and contentions related to any disputed matter. If the County Manager for Pueblo County [or another representative of the County as designated by the Board of Commissioners] (County Manager) determines that Pueblo County requires technical assistance to assess a disputed matter, Applicant will pay the costs, not to exceed a total of \$150,000 for all disputes related to the Permit, of hiring a technical consultant for that purpose.

- B. If not resolved by agreement of the members of the joint management team, the disputed matter shall be referred by either Party to the Administrative Officers of the Parties defined below. The Administrative Officers shall hold a meeting promptly, but in no event later than fifteen (15) working days from the referral of the dispute, also attended by other staff members with direct responsibility regarding the dispute, to attempt in good faith to negotiate a resolution or cure of the dispute; provided, however, that no such meeting shall be deemed to vitiate or reduce the obligations and liabilities of the Parties or be deemed a waiver by a Party hereto of any remedies to which such Party would otherwise be entitled unless otherwise agreed to by the Parties in writing. For purposes of this dispute resolution provision, "Administrative Officers" means the Chief Water Services Officer for Colorado Springs Utilities and the County Manager [or another representative of the County as designated by the Board of Commissioners].
- C. If, within fifteen (15) working days after such meeting, the Parties have not succeeded in negotiating a resolution of the dispute, they agree to submit the dispute to non-binding mediation with Applicant to bear the costs of the mediation.
- D. The Parties agree to participate in good faith in the mediation and related negotiations for a period of 30 calendar days. The substantive and procedural law of the State of Colorado shall apply to the proceedings. If the Parties are not successful in resolving the dispute through mediation, then the Parties shall be free to pursue any other legal remedy including the remedies contained in any conditions or commitments appended to or made a part of the Permit. The Parties agree to reasonably expedite any legal proceedings brought hereunder in order to obtain a prompt resolution. The venue for these legal proceedings shall be the District Court of Pueblo County.

**30. Integrated Terms and Conditions.**

In issuing this Permit, the Board of County Commissioners has determined that the benefits accruing to the County and its citizens from the SDS Project (subject to the terms and conditions set forth herein) outweigh the unavoidable impacts and losses of resources within the County. Consequently, if any term or condition herein is deemed invalid and unenforceable, this Permit shall be rescinded or suspended unless the Board of County Commissioners, in its discretion, approves a Permit amendment.

**RESOLUTION NO. 94-09****A RESOLUTION RECOGNIZING THE TERMS AND CONDITIONS OF THE  
PUEBLO COUNTY 1041 PERMIT FOR THE SOUTHERN DELIVERY SYSTEM**

WHEREAS, on March 18, 2009, the Pueblo County Board of County Commissioners approved certain terms and conditions for a 1041 Permit for the Southern Delivery System, specified in "Recommended Terms and Conditions and Mitigation of Project Impacts – Southern Delivery System 1041 Application" (March 18, 2009) ("Terms and Conditions"); and

WHEREAS, Condition No. 8 of the Terms and Conditions states that the Applicant for the 1041 Permit has submitted a letter to the Bureau of Reclamation stating its intention and desire to achieve the obligations set forth in the Final Environmental Impact Statement, Sections 5.2.4 and 5.2.6; and

WHEREAS, Condition No. 10 of the Terms and Conditions states that Colorado Springs Utilities shall promptly submit a signed Memorandum of Understanding between the Pueblo Board of Water Works and Colorado Springs Utilities related to implementation of the Arkansas River Low Flow Program ("Arkansas River Low Flow Program MOU"); and

WHEREAS, Condition No. 11 states that Colorado Springs Utilities shall promptly submit to Pueblo County an executed Memorandum of Understanding with the Pueblo Board of Water Works related to the use of the South Outlet Works & Joint Use Manifold and the North Outlet Works of Pueblo Dam ("Outlet Works MOU");

WHEREAS, Condition No. 27 of the Terms and Conditions states: "The Colorado Springs City Council must take formal action to recognize the commitments herein prior to Pueblo County's final issuance of a 1041 Permit for SDS"; and

WHEREAS, Colorado Springs Utilities recommends that City Council take formal action to recognize the Terms and Conditions as approved by the Pueblo County Board of County Commissioners on March 18, 2009; and

WHEREAS, City Council conducted a public hearing on April 9, 2009 to hear comments on the Terms and Conditions; and

WHEREAS, City Council finds that it is in the best interest of the City to take formal action to recognize the Terms and Conditions and to enter into the Arkansas Low Flow Program MOU and the Outlet Works MOU; and

WHEREAS, Colorado Springs Utilities recommends that the City Council approve the Arkansas Low Flow Program MOU and the Outlet Works MOU and direct the Utilities Chief Executive Officer to execute those MOUs on behalf of the City; and

WHEREAS, by letter dated March 17, 2009, Colorado Springs Utilities has committed to a dispute resolution process with the owner of approximately seven miles of proposed right of way for

the SDS pipeline, Mr. Gary Walker, for any disputes that may arise from SDS activities on land owned by Mr. Walker located in Pueblo County, and the City Council finds that it is in the best interest of the City to continue with that agreement;

**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COLORADO SPRINGS:**

Section 1: City Council hereby recognizes the commitments in the Terms and Conditions to be included in the Pueblo County 1041 Permit for SDS, as approved by the Pueblo County Board of County Commissioners on March 18, 2009, and directs Colorado Springs Utilities to comply with such commitments if the SDS is constructed through Pueblo County.

Section 2: City Council hereby approves the Arkansas River Low Flow Program MOU and the Outlet Works MOU and directs the Chief Executive Officer for Colorado Springs Utilities to execute both MOUs on behalf of the City.

Section 3: City Council hereby ratifies the City's letter to the Bureau of Reclamation stating the City's intention and desire to achieve the obligations set forth in Sections 5.2.4 and 5.2.6 of the SDS Project Final Environmental Impact Statement.

Section 4: City Council hereby ratifies the City's March 17, 2009 letter to Mr. Gary Walker, the owner of approximately seven miles of proposed right of way for the SDS pipeline, and directs Colorado Springs Utilities to comply with the dispute resolution process outlined therein.

Dated at Colorado Springs, Colorado, this 14th day of April, 2009.

ATTEST

CITY CLERK

MAYOR

**MITIGATION APPENDIX**

Resolution No. P&D 09-\_\_\_\_\_

A Resolution Approving Pueblo County  
1041 Permit No. 2008-002  
Southern Delivery System



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## **ENVIRONMENTAL CONDITIONS / MITIGATIONS**

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| E-1  | Water Quality and Sediment Monitoring Program   |
|  | Applicant shall implement a monitoring program to provide information on water quality and sediment conditions in Fountain Creek and Arkansas River, and track changes over time. |
| <b>PROJECT DETAIL</b>  |   |
| <p>Conduct monitoring to assess the effectiveness of proposed SDS mitigation measures. Monitoring along Fountain Creek and the Arkansas River will focus on water quality and geomorphic features. To collect data that supports the evaluations related to impacts on water quality and geomorphology, Colorado Springs Utilities will implement the following monitoring activities at defined monitoring locations in the Fountain Creek Basin and the Arkansas River near the mouth of Fountain Creek.</p>   |   |
| <b><u>Water Quality Monitoring</u></b>   |   |
| <p>Colorado Springs Utilities will monitor specific water quality constituents to include dissolved selenium, E. coli, ammonia, and salinity as measured by specific conductance. To monitor water quality, samples will be taken from each of the 13 monitoring locations, shown in Figures 1 through 3 within the Fountain Creek Basin and along the Arkansas River monthly, starting at the beginning of project construction, until the SDS project begins operation and then quarterly once the project is online. Pre-operation monitoring shall consist of no less than 2 years of monthly-collected data before or during construction of the project. At least two samples will be taken at each monitoring site following standard procedure according to the National Field Manual for the Collection of Water-Quality Data (Field Manual). One sample from each monitoring location will be filtered for inorganic solid constituents in the field according to section 5.2 of the Field Manual to get an accurate reading of dissolved selenium. The other sample from each monitoring location will be analyzed for E. coli, ammonia and salinity. All samples will be managed in accordance with the Field Manual or approved EPA criteria for sample collection and management and analyzed by a State-certified laboratory capable of detecting each constituent below the Maximum Contaminant Level (MCL) or other applicable compliance criterion. Samples will be analyzed in accordance with standard ASTM or EPA-approved methods.</p> |   |
| <p>In addition to the water quality constituents referenced above, Springs Utilities will monitor both the inlet and outlet to Lower Williams Creek Reservoir for methyl mercury on a quarterly basis following the start of reservoir operations for a period of one year, then annually for four years thereafter. Samples will be collected and analyzed following standard procedures according to the Field Manual and EPA Method 1630.</p>   |   |
| <p>Springs Utilities will use effluent monitoring data from its wastewater treatment plants to demonstrate the plants are operating in accordance with all required specifications and standards. In addition, Springs Utilities will conduct additional monitoring in accordance with monitoring requirements adopted and participated in by all other regional wastewater treatment agencies (i.e., those in the Fountain Creek basin, Pueblo and Pueblo West wastewater treatment plants) including monitoring programs associated with emerging contaminants or other contaminant analyses. CSU will take into consideration and maintain records of other reliable information presented to it by outside sources.</p>  |   |

Figures 1 through 3 present the general location of the sampling locations for water quality monitoring efforts. The rationale used to select sampling locations are as follows:

- SP #1 – USGS Gage 07103700 Fountain Creek near Colorado Springs, CO and a baseline upstream of Colorado Springs**
- SP #2 – USGS Gage 07104905 on Monument Creek at Bijou St. at Colorado Springs and point below the Northern Wastewater Treatment Plant**
- SP #3 – USGS Gage 07105500 Fountain Creek at Colorado Springs, CO and point above the Las Vegas Wastewater Treatment Plant**
- SP #4 – Point below the Las Vegas Wastewater Treatment Plant**
- SP #5 – USGS Gage 07105800 Fountain Creek at Security, CO**
- SP #6 – Point above the CSR wetland mitigation**
- SP #7 – USGS Gage 07106000 Fountain Creek near Fountain, CO and point below the CSR wetland mitigation**
- SP #8 – USGS Gage 07106300 Fountain Creek near Pinon, CO**
- SP #9 – Point above the Pueblo levee system**
- SP #10- USGS 07106500 Fountain Creek at Pueblo, CO and a point within the Pueblo levee system**
- SP #11 – Point below the Pueblo levee system**
- SP #12 – USGS Gage 07099970 Arkansas River at Moffat Street at Pueblo, CO and point on Arkansas River above confluence to establish baseline**
- SP #13 – USGS 07109500 Arkansas River near Avondale, CO and point below confluence to determine exit conditions**

**Figure 1 - General Locations of SDS Water Quality Monitoring (North)**



**Figure 2 - General Locations of SDS Water Quality Monitoring (Central)**



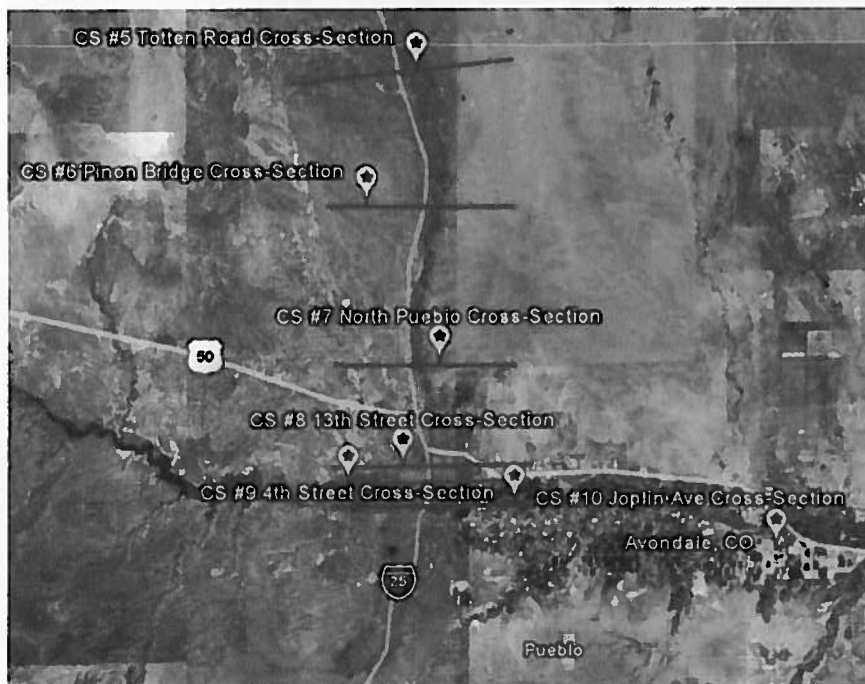
**Figure 3 - General Locations of SDS Water Quality Monitoring (South)**



### Geomorphic Monitoring

In addition to water quality monitoring, geomorphic monitoring is also required. Ten cross-sections will be established at designated points along Fountain Creek to monitor for degradation, aggradation, and other changes to the geomorphologic surface. Each cross-section will be surveyed once per year during low stream flow; preferably in the winter when leaves and other organic material on the ground is at a minimum. Cross-sections will be accurate to standards for normal transect surveys, with a vertical tolerance of approximately 0.01 foot in measurements of channel elevation.

**Figure 4 - General Locations of SDS Geomorphology Monitoring (South)**



Data gathered by the water quality and geomorphic monitoring programs will be assembled and entered into an electronic database accessible to Pueblo County upon request. Monthly data gathered before SDS comes online will be used as a baseline to compare against once flows from SDS start entering Fountain Creek in 2012. Data will be categorized by type, date, and location. These data, along with other data collected through independent sampling and monitoring efforts will be the basis for making decisions as part of the adaptive management strategy.

|                           |   |
|---------------------------|---|
| Estimated Start Date      | Within 60 days of approval of Pueblo 1041 permit. |
| Estimated Completion Date | December 31, 2046.                                |
| Permits                   | None.   |



|     |   |
|-----|---|
| E-2 | Drainage Regulations  |
|     | At all times water is delivered through the Southern Delivery System, the Applicant, including all participants, shall maintain stormwater controls and other regulations intended to ensure that Fountain Creek peak flows and runoff volumes received from development served by the SDS project are no greater than existing conditions, or at levels as appropriate to prevent damage to presently existing downstream facilities. Regulations shall address peak flow and runoff volume, conditions and flood hazards, incorporating at a minimum all relevant components of existing Colorado Springs regulations, including: regional drainage planning for low-flow and major storm events; detention; erosion and sediment control for land disturbance, construction, and similar activities; structural measures such as channel protection and engineered outfalls; prohibition of activities that infringe on the designated floodway; water quality controls, including water quality capture volume and a determination of the need for permanent best management practices (BMPs); and adequate provision for maintenance of all drainage-related facilities so required. This condition shall not prevent Colorado Springs and other local jurisdictions subject to this condition from revising and improving stormwater regulations from time to time, to incorporate new technologies, management techniques, or otherwise modify regulations consistent with the intent of preventing the exceedence of historical peak flows. |

### **CONSTRUCTION CONDITIONS / MITIGATION**

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| C-1  | Protection of Open Excavations and Trenches                                 |
|  | Applicant shall provide safe work sites for the residents of Pueblo County. |
| <p align="center"><b>PROJECT DETAIL</b></p> <ol style="list-style-type: none"> <li>1. Comply with applicable Codes, Standards, Laws and Regulations relating to the safety of persons or property or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain safeguards for such safety and protection.</li> <li>2. Provide and maintain temporary security fences to protect the Work Sites. Temporary security fencing is described in more detail in Construction Conditions C-3.</li> <li>3. Inspect open excavations and trenches for compliance with safety plans and document in daily inspection reports.</li> <li>4. Limit the maximum length of open trench to 400 linear feet.</li> </ol> |   |

5. Shore or bench excavations as required by OSHA regulations.
6. Protect streets, roads, highways, and other public thoroughfares that are closed to traffic by barricades with warning signs per Manual of Uniform Traffic Control Devices (MUTCD).
7. Provide signage and lighting to alert general public of construction hazards, which could include surface irregularities, unramped walkways, grade changes, and trenches or excavations in roadways and in other public access areas.
8. Designate a qualified and experienced safety representative at the Work Site whose duties and responsibilities shall be the maintaining, supervising and enforcement of safety plans and programs.

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| C-2                   | Lighting   |
|                       | Applicant shall minimize adverse light impacts to Pueblo County residents during night time hours.   |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Comply with applicable Codes, Standards, Laws and Regulations relating to providing lighting for the safety of persons or property, or to the protection of property from damage, injury, or loss.   |
| 2.                    | Notify property owners within 500 feet of the site 48 hours prior to any night work, except in the case of emergency night work.   |
| 3.                    | Design lighting to prevent spillover, nuisance, or hazard effects of light and glare on adjacent locations and uses of land.   |
| 4.                    | Position, to the extent practical, lighting used for security around equipment storage areas away from residences and oncoming traffic. The use of cut-off type luminaires is required. Light bulbs and light sources shall be shielded so that they are not directly visible from any adjacent lot or public roadway. Spillover of lighting for adjacent properties will not exceed one-half of one (.50) footcandle measured at any point ten feet (10') beyond a property line. |
| 5.                    | Provide individual light sources not exceeding 150,000 lumens per light source (typical of a 1250W metal halide light). Light standards will not exceed 24 feet in height. Generators used to power light sources will not exceed 70 dB at 25 feet from the source.  |

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| C-3  | Construction Site Maintenance   |
|  | Applicant shall maintain construction sites and equipment in a safe and secure manner for the protection of the public. |
| <b>PROJECT DETAIL</b>  |   |
| <ol style="list-style-type: none"> <li>1. Comply with applicable Codes, Standards, Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss, and shall erect and maintain safeguards for such safety and protection.</li> <li>2. Protect open trenches as described in Construction Condition C-1.</li> <li>3. Close open ends of installed pipeline during non-working periods.</li> <li>4. Close access manholes during non-working hours.</li> <li>5. Provide barricades and light as necessary to prevent unauthorized entry to construction areas and affected roads, streets, and alleyways, inside and outside of fenced area, and as required to ensure public safety and the safety of project personnel and others who may be affected by the Work.</li> <li>6. Lock or otherwise disable construction equipment during non-working hours.</li> <li>7. Store materials and equipment in secure areas and arrange partitions to provide security of contents and ready access for inspection and inventory. Combustible materials (paints, solvents, fuels) shall be stored in a well-ventilated building meeting safety standards. Hazardous materials shall be stored according to product specification, codes, and manufacturer's instructions.</li> <li>8. Lock controlled access points (private property gates) providing entry to construction sites and maintain a secure key control to prevent unauthorized access.</li> <li>9. Perform work within right-of-way and easements in a systematic manner that minimizes inconvenience to property owners and the public and interferes as little as possible with public travel, whether vehicular or pedestrian. This will include that no residence or business will be cut off from vehicular traffic for a period exceeding 4 hours unless special arrangements have been made. Whenever it is necessary to cross, close, or obstruct roads, driveways, and walks, whether public or private, safe bridges, detours, or other temporary expedient access for accommodation of public and private travel will be provided and maintained.</li> <li>10. Sweep roadways, streets, and walkways affected by the work and adjacent to the work when necessary.</li> <li>11. Erect temporary security fencing around active construction areas. Fences around open trenches, staging areas, material storage areas and equipment storage areas may be standard plastic orange construction fence, 4 feet high, with posts at intervals no greater than 20 feet. Temporary 4-strand barbed wire fences shall be installed wherever necessary to prevent livestock from migrating out of their designated pasture. Temporary fences shall be maintained as needed during the construction period. Material selection for fencing between work area and adjacent property will be agreed upon between Applicant and the property owner.</li> </ol> |   |

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| 12. | Inspect site safety measures each work day and periodically during non-working days.      |
| 13. | Provide 24/7 security services including mobile patrols, lighting and video surveillance. |

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| C-4                   | Control of Access to Properties  |
|                       | Applicant shall prevent unauthorized access to properties.   |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Work with property owners, both public and private, to understand the conditions of ingress and egress, security issues, property control and protection issues, regarding the property, prior to mobilization to a specific work area.  |
| 2.                    | Establish mutually agreeable conditions of access with property owner, and require all personnel accessing the site to sign a statement indicating that they understand and will abide by the conditions of access.  |
| 3.                    | Grant access to enter the property only to those individuals that have a legitimate SDS related need to access the property, and then shall only do so under the previously agreed access conditions.  |
| 4.                    | Provide signs at gates and access points notifying individuals that specific conditions of entry exist.  |
| 5.                    | Close and secure gates and entry points by a locking mechanism when not in use. Conditions of entry will specify approved access times and conditions on open gates.   |
| 6.                    | Strictly control access to keys to entry point locks. Recipients of keys will be required to sign when receiving the key, and again when returning the key. Recipients will be required to advise the Site Health & Safety Officer when they have lost or misplaced a key. Keys will be required to be of a non-duplicating type. Locks and keys will be changed when a key is reported lost or misplaced. |
| 7.                    | Designate the Site Health and Safety Officer to monitor the access control system.   |

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| C-5                   | Pre-existing Condition Assessment  |
|                       | Applicant shall determine the condition of Pueblo County residents' existing property so that it can be restored to preconstruction condition or better.   |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Perform an examination of pre-construction existing conditions of land surface, drainage, vegetation and structures adjacent to the construction site that could be damaged or altered by construction operations. The property owner will be invited to attend. |
| 2.                    | Perform periodic reexaminations, if required, to document any changes, including, but not limited to, cracks in structures, settlement, leakage, and similar conditions.   |

Examinations may include photography, sampling and expert assessments of existing or current conditions.

3. Document examinations in writing, and by photographs and audio-video recordings. Photography shall be by a professional commercial photographer, experienced in shooting interior/exterior construction photos, in daylight and nighttime conditions, and in good and inclement weather.
4. Provide a copy of documentation to property owner for review and acceptance. A copy of the documentation shall be provided to the County. Applicant and the County shall each maintain a copy of the documentation. Such documentation shall be used as indisputable evidence in ascertaining whether and to what extent damage occurred as a result of Applicant's operations.

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| C-6                   | Work Hours  |
|                       | Applicant shall limit work hours to minimize disturbance to Pueblo County residents.  |
| <b>PROJECT DETAIL</b> |   |
| 1.                    | Perform work within the hours of 7:00 am to 6:00 pm Monday through Friday. Work outside of these hours will be restricted to maintenance of traffic, safety, and construction controls, maintenance of construction equipment, and approved exceptions. Pueblo County and residences within 500 feet of the affected portion of the work site shall be notified 48 hours in advance of work outside of these hours, other than maintenance or emergency work. |

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| C-7                   | Permitting  |
|                       | Applicant shall obtain all applicable permits.  |
| <b>PROJECT DETAIL</b> |   |
| 1.                    | <p>Obtain permits and comply with permit conditions and applicable regulations. Permits may include those listed below and in Section C, Table C-1 of the 1041 Application, as well as other permits that may be required under Federal, State, County, or local regulatory jurisdiction.</p> <ul style="list-style-type: none"> <li>• Bureau of Reclamation <ul style="list-style-type: none"> <li>○ Execution of Contracts (Reclamation Project Act 43 CFR 427)</li> <li>○ Record of Decision (ROD)</li> </ul> </li> <li>• U.S. Fish and Wildlife Service <ul style="list-style-type: none"> <li>○ Depredation Permit</li> <li>○ Section 7 Consultation (Endangered Species Act 50 CFR 402)</li> </ul> </li> <li>• U.S. Army Corps of Engineers <ul style="list-style-type: none"> <li>○ 404 Permit (Clean Water Act 33 CFR 320)</li> </ul> </li> <li>• Colorado Department of Transportation (CDOT)</li> </ul> |



- Utility/Special Use Permit
- State Highway Access Permit
- Colorado Department of Public Health and Environment (CDPHE)
  - Air Pollution Emission Permit for Land Development
  - Stormwater Construction Permit
  - Construction Dewatering General Permit
  - Minimal Discharge Industrial Wastewater General Permit
  - Water Quality Control Division Plan Approval
- Other State Permits/Approvals
  - 401 Certification (Clean Water Act 40 CFR 121)
  - Reservoir Plan and Dam Safety Emergency Preparedness Plan Approval
  - Section 106 Review (National Historic Preservation Act 36 CFR 800)
- Union Pacific/Burlington Northern Santa Fe Railroad Permits
  - Utility License/Pipeline Crossing Agreements
- Potential Regional Permits\*
  - Various Building related Permits (i.e., electrical, mechanical, HVAC, structural, etc.)
  - Floodplain Permits
- Potential County Permits\*
  - Excavation/Grading Permits
  - Driveway Access Permits
  - Land Use/Zoning Permits
  - Building Permits
  - Grading and Erosion and Stormwater Quality Control Permits
  - Air Quality Construction Permits
  - Individual Sewage Disposal System Permits
  - Floodplain Permits
- Potential City Permits\*
  - Excavation/Grading Permits
  - Land Use/Zoning Permits
  - Grading and Erosion and Stormwater Quality Control Permits
  - Driveway Access Permits

\*As required by local agency with jurisdiction over the specific SDS Project work location. These may include the Pueblo Regional Building Department, Pueblo County, and Pueblo West Metropolitan District Department of Public Works.

2. Provide copies to Pueblo County within 60 days of obtaining permits.

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| C-8   | Dewatering  |
|   | Applicant shall minimize dewatering impacts on Pueblo County properties and watercourses. |
| <b>PROJECT DETAIL</b>   |   |
| 1. Obtain a construction dewatering permit from the Colorado Department of Public Health and the Environment (CDPHE). |   |
| 2. Create and implement a water control plan that includes descriptions of proposed                                   |   |

ground and surface water control facilities including, but not limited to: equipment, methods, standby equipment and power supply, pollution control facilities, discharge locations, and provisions for temporary water supply; drawings showing locations, dimensions, and relationships of elements of each system; design calculations demonstrating accuracy of proposed dewatering system and components. Copies of plan will be provided to Pueblo County within 60 days of approval by CDPHE.

3. Control water during the course of construction, including weekends and holidays and during periods of work stoppages. Adequate backup systems shall be in place to maintain control of water.
4. Remove surface water controls when they are no longer needed.
5. Furnish, operate and maintain dewatering systems of sufficient size and capacity to continuously maintain excavations free of water, regardless of source, until backfilled to final grade.
6. Design and operate dewatering systems to prevent loss of soil as water is removed, to avoid inducing settlement or damage to existing facilities, completed work, or adjacent property, and to relieve artesian pressures and resultant uplift of excavation bottom.
7. Be responsible to obtain and comply with the requirements set forth in any applicable well permits required by the State.

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| C-9                   | Site Restoration   |
|                       | Applicant shall provide Pueblo County residents with replacement vegetation and property to match pre-construction conditions or better.   |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Grade disturbed areas to preconstruction contours so preconstruction drainage paths are reestablished.   |
| 2.                    | Reclaim disturbed land, except water areas and surface areas of roads, by seeding or planting to achieve a permanent vegetation cover as specified below. <ol style="list-style-type: none"> <li>a. In accordance with Construction Condition C-5, a pre-construction evaluation of existing vegetation will be conducted to determine species diversity, woody plant density, and seasonal variety.</li> <li>b. Vegetation cover will be of the same seasonal variety native to the area of disturbed land, or species that support the post-construction land use. In those areas of disturbed vegetation where such seeds are not commercially available, seeds will be collected on-site to be used in revegetation, including, rare plants identified in the FEIS, by the Colorado Natural Heritage Program or by other qualified investigators.</li> <li>c. Seeding and planting of disturbed areas will be conducted during the first normal</li> </ol> |

period for favorable planting conditions after final preparation for seeding or planting.

- d. Soil stabilization practices will be used on all regraded and topsoiled areas.
  - e. The revegetated area will be considered acceptable if the revegetated area cover is not less than 90 percent of the pre-construction vegetation cover with similar species diversity. The pipeline access road will not be included in the 90 percent coverage calculation.
3. Restore roads and driveways so that:
- a. Surfaces are finished level with existing surfaces.
  - b. Sealed roadways are finished to match existing seal (asphalt, spray seal, etc).
  - c. Unsealed roadways are to be finished to match existing surface. Concrete roadways/driveways shall be reinstated in such a manner as to match existing surface. Portions of slab damaged or rendered unstable by undermining (whether inadvertently or deliberately) should be included in the portion to be restored.
4. Restore damaged or injured property including outbuildings, to a condition similar or better to that existing before the damage or injury occurred, by repairing, rebuilding, or restoring the property.
5. Restore or replace fences and gates that are disturbed during construction.
6. Provide Pueblo County a security bond equal to \$2,000 per acre of land in permanent or temporary construction easement in each work package. The security bond shall be released in full to the Applicant two years following the final completion of the construction contract, upon successful revegetation, as described above. If successful revegetation is not achieved, the security bond will be forfeited in the amount of \$2,000 for each acre, or fraction of an acre, that has not been successfully revegetated.

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| C-10 | Public Communications  |
|      | Applicant shall keep Pueblo County residents informed of the SDS project and upcoming construction activities. |

### PROJECT DETAIL

1. Assign a point of contact for responding to public questions, comments and concerns. The point of contact shall continue for one year following the final construction in Pueblo County.
2. Establish a local telephone number (a "hot-line") to allow citizens' access to the Public Communications Office and team throughout the duration of the Project. This telephone number will be included in the public information measures listed below, as well as on job site signage. The hot-line will be a combination of pre-recorded and live operator communications.
3. Develop and maintain a website that will include details of current and future project activities (i.e., schedules, type of work, phases, etc.)
4. Deliver individual resident "mailers" notifying each resident of future construction activity near their home. Residences within 500 feet of an upcoming construction zone will be informed thirty (30) days prior to construction. The mailers will include details of when construction will begin, when completion is planned, what types of activities are expected, an overview of the Project; and the hotline number.
5. Distribute individual resident "door hangers" to properties within 500 feet of the construction site. These will serve as reminders of future construction activities, and will be distributed approximately seven (7) days prior to construction.

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| C-11   | Dust and Other Air Emission Controls (Dust Control)                 |
|  | Applicant shall minimize fugitive dust impacts to County residents. |
| <b>PROJECT DETAIL</b>  |   |
| <ol style="list-style-type: none"> <li>1. Prepare, submit and implement a fugitive dust control plan as required by the Colorado Department of Public Health and Environment (CDPHE) Air Pollution Control Division. A copy of the plan will be submitted to Pueblo County.</li> <li>2. Implement standard fugitive dust control practices as specified in the fugitive dust control plan, including: <ol style="list-style-type: none"> <li>a. Watering unpaved roads on site.</li> <li>b. Limiting vehicle speeds to 30 mph on site.</li> <li>c. Covering excavated material with synthetic or natural cover or preventing sediment movement from the pile using silt fence.</li> <li>d. Installing vehicle tracking control at access points to the site.</li> <li>e. Re-vegetating disturbed areas as described in Construction Condition C-9 as soon as appropriate to reduce dust sources.</li> <li>f. Sweeping paved streets as necessary to remove construction dust.</li> </ol> </li> <li>3. Perform particulate monitoring using real-time particulate monitors that are capable of</li> </ol> |   |

monitoring particulate matter less than ten microns (PM10). Particulate levels will be monitored immediately downwind of the working site and integrated over a period not to exceed 15 minutes. Monitoring will be conducted a minimum of once a day, with additional testing conducted if complaints are received. Instrumentation shall require necessary averaging hardware to accomplish this task. In order to ensure the validity of the fugitive dust measurements performed, there will be appropriate Quality Assurance/Quality Control (QA/QC) that includes the following features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and record keeping.

The action level will be established at 150 µg/m<sup>3</sup> over the integrated period not to exceed 15 minutes. If particulate levels are detected in excess of 150 µg/m<sup>3</sup>, the upwind background level must be measured immediately using the same portable monitor. If the working site particulate measurement is greater than 100 µg/m<sup>3</sup> above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust.

4. Use construction equipment that meets Colorado opacity standards for operating emissions. Construction equipment will be emissions tested at an approved facility prior to use on the site. This test will be performed each year that the equipment is used on the project. The certificates of approval for each item of construction equipment will be maintained by Applicant and be available for inspection by Pueblo County if requested.
5. Do not burn waste materials, rubbish, or other debris on or adjacent to the construction site.

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| C-12                  | Drainage and Erosion Control (Sediment Control)  |
|                       | Applicant shall maintain soil within construction zone.  |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Obtain a permit for Drainage and Erosion Control within a construction site: General Permit - Stormwater Discharges Associated with Construction Activity (Permit No: COR-030000). |
| 2.                    | Implement a Stormwater Management Plan (SWMP) and Best Management Practices (BMPs) per Colorado Department of Transportation (CDOT) Erosion Control and Stormwater Quality Guide.  |
| 3.                    | Perform a pre-existing condition assessment of areas potentially subject to sedimentation from SDS construction as described in Construction Condition C-5.                        |
| 4.                    | Restore lands outside of the work area that have been impacted by sediment from SDS construction consistent with Construction Condition C-9.                                       |
| 5.                    | Shall not release sediment impacting more than 4 square feet of land outside of the work.  |



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| C-13  | Pre-Mobilization Readiness Review   |
|   | Applicant shall perform pre-mobilization readiness reviews prior to Applicant's contractor's beginning on-site construction activities. |
| <b>PROJECT DETAIL</b>   |   |
| <ol style="list-style-type: none"> <li>1. Prepare a Project Execution Plan (PEP) for each Work Package of the SDS Project (i.e., Pump Station, Pipeline Segment, Water Treatment Plant). The PEP will be structured to standardize and codify the project planning process for consistency and quality of implementation.</li> <li>2. Perform a Pre-Mobilization Readiness Review to determine the project's readiness for mobilization of field activities. Pueblo County will be invited to participate in the review. Subject matter of a Readiness Review will, at a minimum, include: <ol style="list-style-type: none"> <li>a. Safety management and Emergency Preparedness policies and procedures.</li> <li>b. Quality Assurance/Quality Control programs and procedures.</li> <li>c. Required local, state, and federal permits and agency approvals have been acquired, the Contractor is aware of permit requirement and limitations, and appropriate Contractor policies and procedures are in place for compliance.</li> <li>d. Site and security controls are in place.</li> <li>e. Communications systems are in place and operational.</li> <li>f. Temporary facilities are in place where required.</li> <li>g. Safety plan and safety representative.</li> <li>h. Utility Locations have been verified.</li> <li>i. Agency Approvals (incl. Pueblo County).</li> <li>j. Applicant shall verify that land, easement, and right-of-way acquisitions are complete and what limitations are related to Project access.</li> </ol> </li> </ol> |   |

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| C-14   | Traffic Control  |
|  | Applicant shall provide for safe vehicular and pedestrian traffic. |
| <b>PROJECT DETAIL</b>  |  |
| <ol style="list-style-type: none"> <li>1. Develop a traffic control plan complying with the applicable standards of the Manual on Uniform Traffic Control Devices. The Traffic Control Plan will be signed by an individual certified by the Colorado Department of Transportation (CDOT) or the American Traffic Safety Services Association (ATSSA), as a Worksite Traffic Control Supervisor, whose signature shall constitute certification that the plan meets or exceeds MUTCD standards. The plan will include drawings(s) of the project location showing phases of the project, a list of the posted speed limits throughout the project, and a drawing(s) of the traffic control measures to be employed at the project site.</li> </ol> |  |

2. Comply with the Haul Route Plan accepted by Pueblo County.

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| C-15   | Protection of Plants and Wildlife  |
|  | Applicant shall control impacts to native endangered and threatened flora and fauna. |
| <b>PROJECT DETAIL</b>  |  |
| <ol style="list-style-type: none"><li>1. Protect native endangered and threatened flora and fauna in accordance with the Final Environmental Impact Statement.</li><li>2. Submit a wildlife mitigation plan to the Colorado Division of Wildlife in accordance with their regulations prior to construction. This Plan will include actions the Applicant proposes to mitigate impacts that the SDS Project may have on fish and wildlife. As required by statute, the Wildlife Commission will evaluate the probable impact of the project on fish and wildlife. The Applicant shall provide the official wildlife mitigation plan and official state position to Pueblo County Staff prior to construction.</li><li>3. Coordinate with Bureau of Reclamation to release flows to the Arkansas River through the flood control gates when the North Outlet Works is unavailable due to construction activities.</li></ol> |  |

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| C-16  | Noxious Weed Control   |
|   | Applicant shall control spread of noxious weeds resulting from project construction. |
| <b>PROJECT DETAIL</b>   |  |
| <ol style="list-style-type: none"><li>1. Provide a person experienced in field identification of noxious weeds to locate existing noxious weeds that will be disturbed during construction in advance of ground-disturbing construction activities.</li><li>2. If List A species are found, provide to the State Weed Coordinator mapping data pertinent to each population including:<ol style="list-style-type: none"><li>a. Species name</li><li>b. Population location(s) including distribution and abundance</li><li>c. Estimated infested acreage</li></ol></li><li>3. Implement an eradication program within the project limits. Eradicate existing Class A and B noxious weed populations.</li><li>4. Adopt the following methods to prevent the spread of noxious weeds during</li></ol> |  |

construction.

- a. Major equipment (track equipment, rubber tire loaders, and backhoes) will be cleaned by high pressure air or water spray before being delivered to the project site.
  - b. Use weed free seed, mulch, and borrow material.
  - c. Use 100-percent certified weed free seed and mulch. Locally or regionally available seed and mulch will be used when practicable.
5. Disturbed areas will be re-seeded as soon as practicable after the disturbance ends.

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| C-17                  | Hazardous Waste Management   |
|                       | Applicant shall ensure that hazardous wastes are appropriately managed.  |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Follow regulations to the handling, storage, transportation, and disposal of hazardous materials as set forth in the Code of Federal Regulations (CFR) 1910.120, DOT, EPA and NRC regulations, as applicable. The type and quantity of these materials will be small quantities (paints, solvents, fuels, etc.). |
| 2.                    | Development and implement Health, Safety and Environmental plans including hazardous material management in compliance with Federal, State and Local regulations prior to mobilizing on-site for Project construction.   |

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| C-18                  | Sustainable Design  |
|                       | Applicant shall, where practical, design SDS facilities to be sustainable or "green".   |
| <b>PROJECT DETAIL</b> |   |
| 1.                    | Make an effort to balance cut and fill for site grading and backfill to reduce imported or exported material.   |
| 2.                    | Use site and building design to promote energy and resource conservation.   |
| 3.                    | Motors and electrical equipment will be high-efficiency rated. Efficiencies will be determined by testing as set forth in ANSI/IEEE 112-Standard Test Procedures for Polyphase Induction Motors and Generators, Method B or Method F. |

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| C-19                  | Sustainable Construction Practices  |
|                       | Applicant shall, where practicable, use sustainable construction practices. |
| <b>PROJECT DETAIL</b> |   |

1. Create opportunities for sustainable construction.
2. Prepare a materials handling plan including recycling and reuse. This plan shall identify materials expected to be encountered during demolition, site clearing, field office operations, equipment maintenance, etc. In this plan, the Applicant shall define how these materials will be handled to maximize recycling and reuse opportunities and to minimize permanent disposal of such items including used motor oil, waste paper, removed asphalt, removed concrete, used tires, etc.
3. Use minimum 10-percent bio diesel in construction equipment.
4. Purchase local goods and services to the maximum extent possible consistent with sound procurement practices and local availability. Such purchases may include bulk commodities where longer shipping distances are not economical, such as fuel, lubricants, oils, sand and gravel, masonry and concrete.

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| C-20  | Surface Water and Groundwater Flows   |
|   | Applicant shall restore ground and surface water supplies to pre-construction conditions. |
| <b>PROJECT DETAIL</b>   |   |
| <ol style="list-style-type: none"> <li>1. Restore disturbed surfaces to pre-construction contours, as defined by the aerial survey and mapping.</li> <li>2. Perform pre-construction hydrologic investigations on properties that have active springs along the pipeline route. Design and construct the pipeline to prevent injury to springs. <ol style="list-style-type: none"> <li>a. Use "flowable fill" for bedding and pipe zone material.</li> <li>b. Use native material that was removed from the trench in the trench zone above the pipe.</li> <li>c. Use trench plugs in areas where groundwater is encountered to prevent flow along the trenchline.</li> </ol> </li> </ol> |   |

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| C-21   | Protection of Livestock  |
|  | Applicant shall protect livestock on lands crossed by the project during construction. |
| <b>PROJECT DETAIL</b>  |  |
| <ol style="list-style-type: none"> <li>1. Work jointly with landowners and livestock owners to determine grazing areas, watering points and livestock pathways to food and water.</li> </ol> |  |

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| 2. | Provide access for livestock through farm areas, do not cut off ready access points of farmlands in which livestock are pastured, provide alternate accessible water sources, maintain existing fences required to restrain livestock, and keep gates closed and secure. |
| 3. | Temporarily relocate livestock away from construction activities if requested by livestock owner.  |

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| C-22                  | Noise Control   |
|                       | Applicant shall minimize noise impacts to adjacent property owners.   |
| <b>PROJECT DETAIL</b> |   |
| 1.                    | Comply with applicable OSHA, State of Colorado, and local noise control standards, requirements, and regulations.   |
| 2.                    | Measure baseline noise conditions prior to construction work commencing. The baseline will be the average noise reading over three 24-hour periods at each receptor lot-line location or at 1-mile intervals, whichever is greater. |
| 3.                    | Periodically monitor generated sound levels and record decibel levels. Should noise levels exceed appropriate standards, the operation will be ceased and noise mitigation measures will be implemented.                            |
| 4.                    | Develop a noise control plan to mitigate construction noise and to comply with appropriate standards.   |
| 5.                    | Any excessively high decibel level work, such as blasting or pile driving will be performed between the limited hours of 9:00 am and 5:00 pm to minimize disruptions.   |

### **SOCIO-ECONOMIC/CONTRACTING PRACTICES**

|                       |  |
|-----------------------|--|
| SE-1                  | Securing Land Through Easements, Fee Purchase, or Condemnation   |
|                       | Applicant shall secure land necessary for construction of the project in a fair and equitable manner.            |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Treat private property owners fairly and commit to using the power of eminent domain only as a last resort.      |
| 2.                    | Offer to compensate landowners to have their own appraisal done if they disagree with the applicant's appraisal. |
| 3.                    | Reimburse landowners for relocation costs, title work, and closing costs. No landowner                           |



should have out-of-pocket expenses from the project for these activities.

4. Provide proof to Pueblo County that they have secured the necessary rights to construct the project prior to starting construction at any given location.

|   |  |
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| SE-2  | Payment in Lieu of Property Taxes  |
|   | Applicant shall reimburse Pueblo County for property taxes lost due to acquisition of land in fee. |
| <b>PROJECT DETAIL</b>   |  |
| <ol style="list-style-type: none"><li>1. Preferentially acquire easements and minimize to extent practicable, the number of private properties acquired in fee to support construction and operation of SDS.</li><li>2. For those private properties purchased and owned in fee, make an annual payment in lieu of taxes equal to the value of the taxes assessed by the Pueblo County Assessor.</li><li>3. Payment shall be made to Pueblo County Treasury on or before April 30 of each calendar year.</li><li>4. Upon successful closing of private property purchase.</li><li>5. This mitigation is ongoing until private properties purchased are sold or conveyed to another private owner.</li></ol> |  |

### **OPERATIONAL PRACTICES**

|     |   |
|-----|---|
| O-1 | Release Rate Limit  |
|     | Applicant shall limit the maximum release rate from the Williams Creek Reservoir to 300 cubic feet per second.  |
| O-2 | Pipeline Drainage   |
|     | Applicant shall limit the release rate of drains from the pipeline to a drainageway to the equivalent of less than a 2-year storm event in that drainageway, except in the case of emergency. |
| O-3 | Pipeline Capacity   |
|     | Applicant shall limit the rate of water pumped by the Juniper Pump Station to 78 mgd.   |

## **ENFORCEMENT PRACTICES**

|   |  |
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| ENF-1   | Compliance Monitoring and Reporting  |
|   | Applicant shall monitor and report on compliance with the conditions of the 1041 permit. |
| <b>PROJECT DETAIL</b>   |  |
| <p>1. Submit a quarterly report during project construction in Pueblo County that will provide a summary of activities related to the Conditions of the permit. The report will summarize the activities occurring in the reporting period, and a forecast of activities planned in the upcoming period.</p> <p>Contents of the report will include (as applicable):</p> <ul style="list-style-type: none"><li>a. Safety incident log.</li><li>b. Citizen call log.</li><li>c. Description of mitigation and restoration activities (i.e., quantity and location of repaired road surface, reseeding, etc.).</li><li>d. List of non-compliance issues by contractors (silt releases, work hour infractions, fines and penalties).</li><li>e. Sustainable construction practices employed.</li><li>f. Schedule and key milestones met and forecast.</li><li>g. Location and extent of excavations.</li><li>h. Instances of work outside normal work hours, except maintenance activities.</li><li>i. Status of site maintenance, security and access control to properties.</li><li>j. Location and extent of dewatering activities.</li><li>k. Status of other required permits, including compliance with the programmatic agreement to protect cultural resources.</li><li>l. Dust monitoring summary.</li><li>m. Status of drainage and erosion control measures.</li><li>n. Status of plant and wildlife protection requirements.</li><li>o. Status of measures to protect surface and groundwater flows.</li><li>p. Status of livestock protection measures.</li><li>q. Status of Clear Spring Ranch project.</li><li>r. Status of pump station architectural review.</li><li>s. Status of land acquisition.</li><li>t. Status of compliance with requirements concerning Pueblo County Roads.</li></ul> |  |

- u. Status of dredging at the levees on Fountain Creek in Pueblo.
  - v. Status of reclamation and bonding for disturbed areas.
  - w. Status of the written MOU for construction and use of the North River Outlet Works.
  - x. Acceptance of the design of structures at Lake Pueblo Dam by the BOR.
  - y. Status of conservation strategies, local reuse, stormwater management, drainage regulations and enforcement.
  - z. Status of stormwater and wastewater system improvements per permit commitments.
  - aa. Status of NEPA, ROD, contract negotiations with BOR and notice of NEPA-required required mitigation and any project changes resulting from contract negotiations.
  - bb. Status of payments in lieu of property taxes.
  - cc. Copies of the annual reports on the SDS Project submitted to Reclamation.
2. Submit an annual report to Pueblo County that will provide a summary of activities related to the SDS Project and the Conditions of the Permit. These reports will be due annually on or before January 31, beginning the year following commencement of water deliveries through the SDS pipeline. The reports shall include a signed certification of compliance with the Permit.
- Contents of the report will include, but will not be necessarily limited to:
- a. Summary of storage, diversion, delivery of water in Pueblo County.
  - b. Summary of Participants' return flows to Fountain Creek including storage and releases of such return flows (maximum daily flows, average annual and monthly flows and amounts).
  - c. Summaries of exchanges by Participants between Pueblo Reservoir and the Fountain Creek confluence (monthly and annual rates of flow and quantities).
  - d. Use of any new water rights to be delivered or stored through SDS (amount, time, source).
  - e. Water quality monitoring.
  - f. Geomorphology monitoring.
  - g. Status of adaptive management plans on Fountain Creek.
  - h. Status of payments into the Fountain Creek monetary mitigation fund.
  - i. Status of expenditures for wastewater system improvements for Participants (and third party users in the Fountain Creek basin) per Permit Conditions.
  - j. Reports on the operation of the Pueblo Flow Management Program and the Low Flow Program (rates, and quantities, and times of foregone exchanges, releases,

and reception documentation).

- k. Status of lake level management cooperative efforts with other entities at Pueblo Reservoir.
- l. Status of conservation and local reuse.
- m. Payments to Pueblo County in lieu of property taxes.
- n. Copies of the annual reports on the SDS Project submitted to Reclamation.

### **COUNTY ROADS – CONDITIONS / MITIGATION**

|      |   |
|------|---|
| CR-1 | Excavation Permit   |
|      | Applicant shall make application for an Excavation Permit with the Pueblo County Public Works Department (Department) for each road crossing and comply with all conditions of that permit. |

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| CR-2 | Access Permit  |
|      | Applicant shall make application for an Access Permit with the Department for each access point onto a County roadway and comply with all conditions of that permit. |

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| CR-3 | Traffic Control Plan  |
|      | Applicant shall submit a Traffic Control Plan to the Department for review and approval, for the project which conforms to applicable standards of the Manual on Uniform Traffic Control Devices. |

#### **PROJECT DETAIL**

1. The traffic control plan shall be developed and administered by a certified Traffic Control Supervisor or their authorized personnel.

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| CR-4                  | Plan – Route/Easement Construction Staging Area   |
|                       | Applicant shall provide a plan to the Department defining the use of the pipeline route/easement as a construction "Staging Area" for approval. |
| <b>PROJECT DETAIL</b> |   |

1. The Staging Area Plan shall define construction work times, material delivery hours, noise suppression, dust abatement, construction methods, and other mitigation of construction nuisances. Deviation from the plan will require approval by the Department prior to a change in use.

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| CR-5  | Haul Route Plan  |
|   | Applicant shall provide a Haul Route Plan, for use of the public road system to provide access to the Staging Area/pipeline easement, to the Department for review and approval. |
| <b>PROJECT DETAIL</b>   |  |
| <ol style="list-style-type: none"><li>1. The Haul Route Plan will identify the roads utilized by the applicant for construction vehicle traffic, maintenance of those roads during the project and rehabilitation of those roads. For the purpose of this plan, "construction vehicle" shall mean those vehicles requiring operators to possess a Commercial Drivers License (CDL) and/or weighing more than 10,001 pounds.</li><li>2. The Haul Route Plan shall identify the final treatment for utilized roads and be developed cooperatively between Colorado Springs Utilities and the Department.</li><li>3. The roads utilized in the Haul Route Plan shall be maintained by the applicant during pipeline construction periods such that they are passable by the motoring public at all times except when identified in an approved Traffic Control Plan as "Closed" or as otherwise approved by the Department.</li><li>4. All road rehabilitation and maintenance work on the Haul Route Plan roads shall comply with the Pueblo County Roadway Design and Construction Standards.</li><li>5. Costs for maintenance of the Haul Route Plan roads shall be borne solely by the applicant.</li><li>6. The applicant shall initiate maintenance at the discretion of the Pueblo County Director of Public Works.</li></ol> |  |

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| CR-6  | Haul Route to Staging Area   |
|   | Applicant shall limit the haul route from the "Staging Area" to the State Highway System to those roads identified in the above defined "Haul Route Plan Map" dated 12-31-08 ("Exhibit 1" and Haul Route Plan Road Table "Exhibit 2") or Haul Route Plan approved by the Department prior to commencement of pipeline installation activities that require use of roads identified in the Haul Route Plan. |
| <b>PROJECT DETAIL</b>   |  |
| <ol style="list-style-type: none"><li>1. Said plan shall be incorporated within construction plan and specification</li></ol> |  |



documents. Identification by the applicant of additional roads they desire to be included in the Haul Route Plan for dedicated project use will require approval by the Department.

2. The Department may include roads in the plan if it is determined that they are being used by the applicant's representative or their contractor by above identified "construction vehicles".
3. The Department will notify the applicant, prior to inclusion in the Haul Route Plan, of the observed use of non Haul Route Plan roads. Incidental use of roads not specifically designated on the Haul Route plan is approved for the applicant, their representatives or contractor's vehicles weighing less than 10,001 pounds and/or not requiring a CDL license.

| CR-7  | Cash Payment / Escrow / Other Financial Instrument  |
|---|---|
|   | Applicant shall establish a cash payment, escrow, or other financial instrument such as a performance bond, acceptable to the Department and the Pueblo County Attorney, to Pueblo County, in an amount estimated by the Department to cover the total costs for rehabilitation of the roads identified in the approved Haul Route Plan, to Pueblo County Roadway Design and Construction Standards (Standards) as noted in "Exhibit 4" within thirty days of the applicant issuing a notice to proceed to its contractors to perform pipeline installation activities that require use of roads identified in the Haul Route Plan. |
| <p style="text-align: center;"><b>PROJECT DETAIL</b></p> <ol style="list-style-type: none"> <li>1. If a financial instrument is selected, said financial instrument shall be held by Pueblo County until such time as the rehabilitation of Haul Route Plan roads are accepted by the County.</li> <li>2. The financial instrument is to be for an amount sufficient to cover the estimated costs established in "Exhibit 4", for rehabilitation of the Haul Route Plan roads plus estimated increases in costs over time as represented by the Construction Cost Index.</li> <li>3. It will be at the discretion of the Public Works Director to determine when it is necessary to commence rehabilitation of individual roads identified in the Haul Route Plan.</li> <li>4. Upon request of the Public Works Director, the applicant will be required to submit funds to the Department necessary to perform the rehabilitation of the individual roads selected by the Director of Public Works.</li> <li>5. The applicant will have 30 days to provide the requested funds to the Department. Upon such a request and payment of the funds, the applicant will be relieved of any further rehabilitation, maintenance or warranty obligation for that road section. Upon receipt of the requested funds, the total value of the financial instrument may be</li> </ol> |   |

reduced by a same amount, less any increased cost over estimated costs in "Exhibit 4", at the discretion of the applicant.

6. Pueblo County will commence maintenance of rehabilitated roads upon their completion and final acceptance by the County. Attached as "Exhibit 3" is the minimum defined cross-section and treatment for identified Haul Route Plan roads. The minimum pavement section may change based upon the outcome of a "Pavement Structure Design" which conforms to the Standards. In any event, all reasonable costs associated with rehabilitation of Haul Route Plan roads will be borne solely by the applicant including engineering design, construction, drainage, etc.

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| CR-8                  | Drainage Calculations / Blow-off Valves   |
|                       | Applicant shall provide to the Department for review and approval, drainage calculations performed by a professional engineer licensed to practice in the State of Colorado, detailed plans on the "Blow-off Valves". |
| <b>PROJECT DETAIL</b> |   |
| 1.                    | The plans shall include any necessary drainage structures and erosion control measures and be incorporated into the construction plans.   |

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| CR-9 | Stormwater Management Plan  |
|      | Applicant shall submit a Stormwater Management Plan accepted by the responsible jurisdiction to the Department and incorporate that Stormwater Management Plan into the construction plans. |

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| CR-10                 | Future Roadways / Utilities  |
|                       | Applicant shall not unreasonably prohibit the installation of future roadways and utilities across the utility easement. Future roadways are expected to be surface crossings at existing grade for a typically defined roadway section in the Pueblo County Roadway Design and Construction Standards today or as modified in the future. |
| <b>PROJECT DETAIL</b> |  |
| 1.                    | Future roadways are expected to be surface crossings at existing grade for a typically defined roadway section in the Pueblo County Roadway Design and Construction Standards today or as modified in the future.  |

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| CR-11 | Final Plans / Specifications  |
|       | Applicant shall submit to Pueblo County, which reserves the right to review, the final construction plans and specifications, final Haul Route Plan, final Staging Area Plan, and other supporting documents and to modify these conditions of approval based upon that review to conform to final documents. |

Including Exhibits:

(Previously submitted for record, not included in this appendix)

Exhibit 1 - Haul Route Plan Map

Exhibit 2 - Haul Route Plan Roads Table

Exhibit 3 - Haul Route Plan Treatment

Exhibit 4 - Haul Route Plan Cost Estimates

Exhibit 5 - Pueblo County Roadway Design and Construction Standards