MITIGATION APPENDIX

Resolution No. P&D 09-____

A Resolution Approving Pueblo County 1041 Permit No. 2008-002 Southern Delivery System

TABLE OF CONTENTS

	nmental Conditions / Mitigation	
E-1	Water Quality and Sediment Monitoring Program	
E-2	Drainage Regulations	6
Consti	ruction Conditions / Mitigation	
C-1	Protection of Open Excavations and Trenches	6
C-2	Lighting	
C-3	Construction Site Maintenance and Security	
C-4	Control of Access to Properties	
C-5	Pre-existing Condition Assessment.	
C-5 C-6	Work Hours	
C-7	Permitting	
C-8	Dewatering	
C-9	Site Restoration	
C-10	Public Communications	
C-11	Dust and Other Air Emissions (Dust Control)	
C-12	Drainage and Erosion Control (Sediment Control)	15
C-13	Pre-Mobilization Readiness Review	
C-14	Traffic Control	
C-15	Protection of Plants and Wildlife	
C-16	Noxious Weed Control	
C-17	Hazardous Waste Management	
C-18	Sustainable Design	
C-19	Sustainable Construction Practices	
C-20	Surface and Groundwater Flows	
C-21	Protection of Livestock	
C-22	Noise Control	20
	Economic Conditions / Mitigation	
SE-1	Securing Land through Easements, Fee Purchase, or Condemnation	
SE-2	Payment in Lieu of Property Taxes	21
•	tional Conditions / Mitigation	
0-1	Release Rate Limit	
0-2	Pipeline Drainage	
O-3	Pipeline Capacity	21
	4. D	
	ement Practices	00
ENF-1	Compliance Monitoring and Reporting	22
Count	y Roads – Conditions / Mitigation	
CR-1	Evacuation Permit	24
CR-1	Access Permit	
_		
CR-3	Traffic Control Plan	
CR-4	Plan – Route/Easement Construction Staging Area	
CR-5	Haul Route Plan	
CR-6	Haul Route to Staging Area	
CR-7	Cash Payment / Escrow / Other Financial Instrument	
CR-8	Drainage Calculations / Blow-off Valves	
CR-9	Stormwater Management Plan	
CR-10	Future Roadways / Utilities	27
CR-11	Final Plans / Specifications	

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.

PROJECT DETAIL

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.

Water Quality Monitoring

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.

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.

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.

03/10/2009 Page 2 of 28

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:

- USGS Gage 07103700 Fountain Creek near Colorado Springs, CO SP #1 and a baseline upstream of Colorado Springs
- USGS Gage 07104905 on Monument Creek at Bijou St. at SP #2 -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
- USGS Gage 07106000 Fountain Creek near Fountain, CO and SP #7 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

SP #1 USGS 07103700 Fountain Creek near Colorado Springs, CO

Figure 1 - General Locations of SDS Water Quality Monitoring (North)



03/10/2009 Page 3 of 28

Figure 2 - General Locations of SDS Water Quality Monitoring (Central)

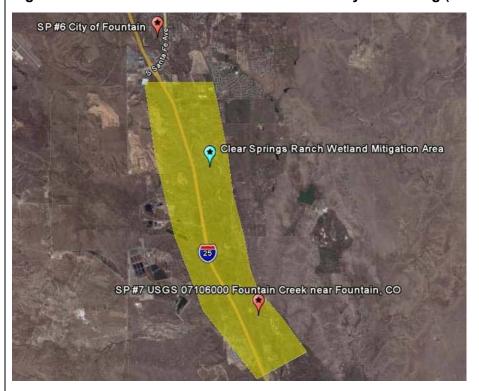


Figure 3 - General Locations of SDS Water Quality Monitoring (South)



03/10/2009 Page 4 of 28

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.

03/10/2009 Page 5 of 28

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.

PROJECT DETAIL

- 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.
- 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.
- 3. Inspect open excavations and trenches for compliance with safety plans and document in daily inspection reports.
- 4. Limit the maximum length of open trench to 400 linear feet.

03/10/2009 Page 6 of 28

- 5. Shore or bench excavations as required by OSHA regulations.
- 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.

C-2	Lighting
	Applicant shall minimize adverse light impacts to Pueblo County residents during night time hours.

- 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.

03/10/2009 Page 7 of 28

C-3	Construction Site Maintenance
	Applicant shall maintain construction sites and equipment in a safe and secure manner for the protection of the public.

- 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.
- 2. Protect open trenches as described in Construction Condition C-1.
- 3. Close open ends of installed pipeline during non-working periods.
- 4. Close access manholes during non-working hours.
- 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.
- 6. Lock or otherwise disable construction equipment during non-working hours.
- 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.
- 8. Lock controlled access points (private property gates) providing entry to construction sites and maintain a secure key control to prevent unauthorized access.
- 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.
- 10. Sweep roadways, streets, and walkways affected by the work and adjacent to the work when necessary.
- 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.

03/10/2009 Page 8 of 28

- 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.

C-4	Control of Access to Properties
	Applicant shall prevent unauthorized access to properties.

- 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.
- 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.

	Applicant shall determine the condition of Pueblo County residents' existing property so that it can be restored to preconstruction condition or better.
C-5	Pre-existing Condition Assessment

PROJECT DETAIL

- 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.

03/10/2009 Page 9 of 28

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.

C-6	Work Hours
	Applicant shall limit work hours to minimize disturbance to Pueblo County residents.

PROJECT DETAIL

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.

C-7	Permitting
	Applicant shall obtain all applicable permits.
	Library and a series of selection and the series has a series of the ser

PROJECT DETAIL

- 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.
 - Bureau of Reclamation
 - Execution of Contracts (Reclamation Project Act 43 CFR 427)
 - Record of Decision (ROD)
 - U.S. Fish and Wildlife Service
 - Depredation Permit
 - Section 7 Consultation (Endangered Species Act 50 CFR 402)
 - U.S. Army Corps of Engineers
 - o 404 Permit (Clean Water Act 33 CFR 320)
 - Colorado Department of Transportation (CDOT)

03/10/2009 Page 10 of 28

- Utility/Special Use Permit
- State Highway Access Permit
- Colorado Department of Public Health and Environment (CDPHE)
 - o 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
 - o 401 Certification (Clean Water Act 40 CFR 121)
 - o Reservoir Plan and Dam Safety Emergency Preparedness Plan Approval
 - o 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
 - o 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
 - o 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.

C-8	Dewatering
	Applicant shall minimize dewatering impacts on Pueblo County properties and watercourses.

PROJECT DETAIL

- 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

03/10/2009 Page 11 of 28

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.
- 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.

C-9	Site Restoration
	Applicant shall provide Pueblo County residents with replacement vegetation and property to match pre-construction conditions or better.

PROJECT DETAIL

- 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.
 - 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.
 - 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.
 - c. Seeding and planting of disturbed areas will be conducted during the first normal

03/10/2009 Page 12 of 28

- 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.

C-10	Public Communications
	Applicant shall keep Pueblo County residents informed of the SDS project and upcoming construction activities.

03/10/2009 Page 13 of 28

- 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.

C-11	Dust and Other Air Emission Controls (Dust Control)
	Applicant shall minimize fugitive dust impacts to County residents.

PROJECT DETAIL

- 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:
 - a. Watering unpaved roads on site.
 - b. Limiting vehicle speeds to 30 mph on site.
 - c. Covering excavated material with synthetic or natural cover or preventing sediment movement from the pile using silt fence.
 - d. Installing vehicle tracking control at access points to the site.
 - e. Re-vegetating disturbed areas as described in Construction Condition C-9 as soon as appropriate to reduce dust sources.
 - f. Sweeping paved streets as necessary to remove construction dust.
- 3. Perform particulate monitoring using real-time particulate monitors that are capable of

03/10/2009 Page 14 of 28

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 μ g/m3 over the integrated period not to exceed 15 minutes. If particulate levels are detected in excess of 150 μ g/m3, the upwind background level must be measured immediately using the same portable monitor. If the working site particulate measurement is greater than 100 μ g/m3 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.

C-12	Drainage and Erosion Control (Sediment Control)
	Applicant shall maintain soil within construction zone.

PROJECT DETAIL

- Obtain a permit for Drainage and Erosion Control within a construction site: General Permit - Stormwater Discharges Associated with Construction Activity (Permit No: COR-030000).
- 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.

03/10/2009 Page 15 of 28

C-13	Pre-Mobilization Readiness Review
	Applicant shall perform pre-mobilization readiness reviews prior to
	Applicant's contractor's beginning on-site construction activities.
	DDO JEOT DETAIL

- 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.
- 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:
 - a. Safety management and Emergency Preparedness policies and procedures.
 - b. Quality Assurance/Quality Control programs and procedures.
 - 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.
 - d. Site and security controls are in place.
 - e. Communications systems are in place and operational.
 - f. Temporary facilities are in place where required.
 - g. Safety plan and safety representative.
 - h. Utility Locations have been verified.
 - i. Agency Approvals (incl. Pueblo County).
 - j. Applicant shall verify that land, easement, and right-of-way acquisitions are complete and what limitations are related to Project access.

C-14	Traffic Control
	Applicant shall provide for safe vehicular and pedestrian traffic.

PROJECT DETAIL

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.

03/10/2009 Page 16 of 28

2. Comply with the Haul Route Plan accepted by Pueblo County.

C-15	Protection of Plants and Wildlife
	Applicant shall control impacts to native endangered and threatened flora and fauna.

PROJECT DETAIL

- 1. Protect native endangered and threatened flora and fauna in accordance with the Final Environmental Impact Statement.
- 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.
- 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.

C-16	Noxious Weed Control
	Applicant shall control spread of noxious weeds resulting from project construction.

PROJECT DETAIL

- Provide a person experienced in field identification of noxious weeds to locate existing noxious weeds that will be disturbed during construction in advance of grounddisturbing construction activities.
- 2. If List A species are found, provide to the State Weed Coordinator mapping data pertinent to each population including:
 - a. Species name
 - b. Population location(s) including distribution and abundance
 - c. Estimated infested acreage
- Implement an eradication program within the project limits. Eradicate existing Class A and B noxious weed populations.
- 4. Adopt the following methods to prevent the spread of noxious weeds during

03/10/2009 Page 17 of 28

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.

C-17	Hazardous Waste Management
	Applicant shall ensure that hazardous wastes are appropriately managed.

PROJECT DETAIL

- 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.

C-18	Sustainable Design
	Applicant shall, where practical, design SDS facilities to be sustainable or "green".

PROJECT DETAIL

- 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.

C-19	Sustainable Construction Practices
	Applicant shall, where practicable, use sustainable construction practices.
	PROJECT DETAIL

03/10/2009 Page 18 of 28

- 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.

- 1. Restore disturbed surfaces to pre-construction contours, as defined by the aerial survey and mapping.
- 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.
 - a. Use "flowable fill" for bedding and pipe zone material.
 - b. Use native material that was removed from the trench in the trench zone above the pipe.
 - c. Use trench plugs in areas where groundwater is encountered to prevent flow along the trenchline.

DRO JECT DETAIL	
	Applicant shall protect livestock on lands crossed by the project during construction.
C-21	Protection of Livestock

PROJECT DETAIL

1. Work jointly with landowners and livestock owners to determine grazing areas, watering points and livestock pathways to food and water.

03/10/2009 Page 19 of 28

- 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.
- 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.

- 1. Comply with applicable OSHA, State of Colorado, and local noise control standards, requirements, and regulations.
- 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

ļ		
		Applicant shall secure land necessary for construction of the project in a fair and equitable manner.
ŀ		
	SE-1	Securing Land Through Easements, Fee Purchase, or Condemnation

PROJECT DETAIL

- 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

03/10/2009 Page 20 of 28

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.

PROJECT DETAIL

- 1. Preferentially acquire easements and minimize to extent practicable, the number of private properties acquired in fee to support construction and operation of SDS.
- 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.
- 3. Payment shall be made to Pueblo County Treasury on or before April 30 of each calendar year.
- 4. Upon successful closing of private property purchase.
- 5. This mitigation is ongoing until private properties purchased are sold or conveyed to another private owner.

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.

03/10/2009 Page 21 of 28

ENFORCEMENT PRACTICES

ENF-1	Compliance Monitoring and Reporting
	Applicant shall monitor and report on compliance with the conditions of the 1041 permit.

PROJECT DETAIL

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.

Contents of the report will include (as applicable):

- Safety incident log.
- b. Citizen call log.
- c. Description of mitigation and restoration activities (i.e., quantity and location of repaired road surface, reseeding, etc.).
- d. List of non-compliance issues by contractors (silt releases, work hour infractions, fines and penalties).
- e. Sustainable construction practices employed.
- f. Schedule and key milestones met and forecast.
- g. Location and extent of excavations.
- h. Instances of work outside normal work hours, except maintenance activies.
- i. Status of site maintenance, security and access control to properties.
- j. Location and extent of dewatering activities.
- k. Status of other required permits, including compliance with the programmatic agreement to protect cultural resources.
- I. Dust monitoring summary.
- m. Status of drainage and erosion control measures.
- n. Status of plant and wildlife protection requirements.
- o. Status of measures to protect surface and groundwater flows.
- p. Status of livestock protection measures.
- g. Status of Clear Spring Ranch project.
- r. Status of pump station architectural review.
- s. Status of land acquisition.
- t. Status of compliance with requirements concerning Pueblo County Roads.

03/10/2009 Page 22 of 28

- 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 NEPArequired 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).
- 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,

03/10/2009 Page 23 of 28

- and reception documentation).
- k. Status of lake level management cooperative efforts with other entities at Pueblo Reservoir.
- I. 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.

PPO JECT DETAIL	
	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.
CR-3	Traffic Control Plan

PROJECT DETAIL

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.
PROJECT DETAIL	

03/10/2009 Page 24 of 28

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.

PROJECT DETAIL

- 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.
- All road rehabilitation and maintenance work on the Haul Route Plan roads shall 4. 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.
PROJECT DETAIL	

Said plan shall be incorporated within construction plan and specification

03/10/2009 Page 25 of 28 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.

·		
Applicant shall establish a sach property as any small and a single	CR-7	Cash Payment / Escrow / Other Financial Instrument
instrument such as a performance bond, acceptable to the Departme and the Pueblo County Attorney, to Pueblo County, in an amount estimated by the Department to cover the total costs for rehabilitation the roads identified in the approved Haul Route Plan, to Pueblo Cour Roadway Design and Construction Standards (Standards) as noted i "Exhibit 4" within thirty days of the applicant issuing a notice to proceed		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

PROJECT DETAIL

- 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.
- 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.
- 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.
- 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.
- 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

03/10/2009 Page 26 of 28

- 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.

	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".
PROJECT DETAIL		PROJECT DETAIL
	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.

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.

03/10/2009 Page 27 of 28

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

03/10/2009 Page 28 of 28