

MEMORANDUM

TO: Pueblo Board of County Commissioners

FROM: Paul Banks, Banks and Gesso, LLC

THROUGH: Kim Headley, Pueblo Co. Planning and Development Director

DATE: December 3, 2008

SUBJECT: 1041 Permit Application No. 2008-002, Southern Delivery System
Colorado Springs Utilities
City of Fountain
Security Water District
Pueblo West Metropolitan District

PURPOSE

This report is prepared for the review of the Southern Delivery System (“SDS”), a major raw water pipeline and related activities, subject to Pueblo County approval, approval with conditions, or denial under the authority of Colorado House Bill 74-1041 as an Activity of State Interest. Banks and Gesso, LLC, was retained by Pueblo County to prepare this technical review as a consultant to Pueblo County’s Planning and Development Department.

On behalf of the four participants listed above, Colorado Springs Utilities is the named “applicant” representing the other interests in this application.

The applicant requests approval of a permit pursuant to the following Chapters of the Pueblo County Code (Areas and Activities of State and Local Interest):

- 17.148 Administrative Regulations
- 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
- 17.172 Regulations of Efficient Utilization of Municipal and Industrial Water Projects

The 1041 permit is requested for the SDS Project as a whole. The project is described in detail below. In general, the SDS project is water storage and delivery system that will convey raw water from Pueblo Reservoir by pipeline to Colorado Springs, Pueblo West, Fountain and Security, using only the

participants' existing water right. The project includes the use of approximately 340 acres of land in Pueblo County (permanent and temporary easements or acquisition), some private, some public land. It requires new, long-term storage and contract exchanges in Pueblo Reservoir and also includes construction of a large pump station adjacent to the Pueblo Reservoir. In addition, the project would entail about 20 miles of 66-inch diameter pipeline in the County, with various appurtenances.

The Applicant's stated purpose for the project is threefold:

1. Meet the projected water demands of the participants through 2046.
2. Provide redundancy for additional water storage, delivery and treatment capacity.
3. To perfect and deliver the applicant's existing Arkansas River Basin water rights.

For the information of the Board of County Commissioners, two informational sheets produced by the applicant regarding benefits and effects to the Pueblo West area are attached to this document on the next pages. The Pueblo West Metropolitan District has been represented at various meetings during this review, in addition to participating as a co-applicant.

The Southern Delivery System will be a major conduit for raw water to enter Colorado Springs, with direct impacts to Pueblo County for pipeline construction and operations and with associated impacts to the Fountain Creek and Arkansas watersheds for many years. As enumerated in Pueblo County Code, under its 1041 regulations, there exists a broad range of potential effects of the Southern Delivery System of concern to Pueblo County.

PROOF OF PUBLIC NOTICE

Attachment A contains a copy of the public notice of the hearing date, the mailing list it was sent to and the affidavit for newspaper publication.

The mailing list includes landowners on and within 500 feet of land affected by the project.

STAFF RECOMMENDATIONS

Staff cannot recommend approval at this time due to the lack of concrete, enforceable mitigation proposals by the Applicant in several key areas of concern. Such mitigation is required to satisfy the approval criteria within applicable Pueblo County regulations. The Applicant has offered some mitigation in the 1041 application and has provided the County with a list of possible mitigations suggested by the Bureau of Reclamation. However, the impacts addressed by these mitigations do not cover all impacts, and the

language used in the mitigations is vague and unenforceable. The Applicant has stated in meetings with Staff and at public open houses that they are willing to offer reasonable mitigation for impacts to Pueblo County, but they would like the County to identify these impacts and state what mitigation is recommended.

Staff relied on a very large volume of documents and information in preparing the comments and recommendations. Much of the information was submitted by the applicant and some of it was not. Documents reviewed by Staff, but not submitted by the Applicant, are publically available reports and websites mostly pertaining to Fountain Creek. Attachment H contains a bibliography of reports and information used to produce the staff comments.¹ It is recommended that the Board of County Commissioners incorporate by reference, into the record, this information.

It should be pointed out that the Applicants, particularly the City of Colorado Springs and Colorado Springs Utilities have expended a large effort and a large amount of money to upgrade their sewage treatment systems, storm water runoff programs and flood control projects. They have also supported and funded several groups studying and making recommendations for the improvement of Fountain Creek. The Applicants have been responsive to Staff with most requests we have made of them and they are commended for this.

The following categories of impacts to Pueblo County require mitigation in Staff's opinion:

- Water level fluctuations and drawdowns in Lake Pueblo and the resulting impact to recreation.
- Impact on the structural integrity of Lake Pueblo Dam as a result of new storage and new construction.
- If the SDS pipeline is not connected to the proposed North River Outlet Works, decreased capacity of the Joint Use Manifold outlet at Pueblo Reservoir for existing users (e.g., Pueblo Water Board, Pueblo West) and potential increased delivery costs to these users.
- Reduced flows in the Arkansas River below the dam and the resulting impacts on the fishery, riparian environments, the Legacy Project, the kayak course and downstream agriculture.
- Impacts to Fountain Creek resulting from increased flows that result from SDS return flows, imported return flows from other sources to be exchanged

¹ A complete copy of all the documents listed in the Bibliography has been assembled in electronic form and put on disk, which is submitted with Attachment H.



Southern Delivery System

**Cost Effective. Dependable.
Environmentally Responsible.**

Southern Delivery System

P.O. Box 1103, MC 940
Colorado Springs, CO 80947

Phone: 719-668-7582
Toll Free: 866-719-4737

E-Mail:
sdsinfo@csu.org

Web site:
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**Property Owner
Information:**
Cheryl Everitt
Wilson & Company
719-302-6783
cheryl.everitt@wilsonco.com

Bureau of Reclamation
www.sdseis.com

**SDS Components
(Proposed Action):**

- 53-mile buried pipeline
- 1 water treatment plant
- 3 water pump stations
- 2 reservoirs

**Communities Served
(Proposed Action):**

- Colorado Springs
- Pueblo West
- Fountain
- Security

**Construction Cost
(Proposed Action):**

- \$1.1 billion

Current Timeline:

- Final EIS – 2009
- EIS Approval – 2009
- Construction – 2009-2012

Southern Delivery System and Pueblo West

The Southern Delivery System (SDS) is a regional water system that will provide a cost-effective, environmentally responsible and dependable way to deliver water to Colorado Springs, Pueblo West, Fountain and Security.

Our Proposed Action, a pipeline from Pueblo Dam, would include about 7 miles of water pipeline buried beneath a portion of Pueblo West. The primary activity occurring in Pueblo West will be the installation of pipe and drains, vents and access points to the pipeline. The work will occur on land owned by the Pueblo West Metro District, on private properties, other easements, and public right-of-ways. Land disturbed by construction will be restored to preconstruction conditions.

The pipeline will cross approximately 20 roads in Pueblo West. Construction work will cause minor disruption to the flow of traffic within construction areas. Traffic on major arterials such as Highway 50 and Purcell Blvd. will not be affected. Detours will be provided for construction involving residential streets to ensure ongoing traffic flow and access to neighborhoods. Residents may see tractor trailers, dump trucks and pipe trucks in construction areas. Truck traffic will be primarily restricted to construction hours, which generally will be from 7 a.m. to 6 p.m. Monday through Saturday.

Measures will be taken to ensure public safety around construction areas, including temporary fencing. Noise will be consistent with any construction project of this size. The most noticeable noise will be the beeping sound made by heavy equipment backing up.

Property Owner Information

Along the pipeline route, easements and a small number of properties will be acquired. We understand your property is of considerable importance to you. We are committed to being a good neighbor and have an established process to ensure your interests are protected.

We are meeting and communicating with affected property owners. Affected property owners with questions regarding the land-acquisition process, information about easements and other property-related questions can contact our land experts at the number that appears on the left side of this page.

We will not acquire any easements or property until we have a final decision on which of two pipeline routes will be used – our Proposed Action through Pueblo County (including Pueblo West), or an alternative that involves building the pipeline through Fremont County. Pueblo West would not be affected by construction nor would it receive water from SDS if the project ends up being routed through Fremont County.

The decision regarding the final SDS alternative will be determined after the Bureau of Reclamation issues its approval (Record of Decision) anticipated early next year and a decision is reached on the approval of our 1041 permit in Pueblo County. Construction activity in Pueblo West is expected to last about a year. With these approvals, construction of the project is anticipated to begin in 2009 and be completed by 2012.



Ten Reasons Why SDS is Important to Pueblo and Pueblo West

1. Pueblo and Pueblo West are tied to the regional economy of Colorado Springs, Fountain and Security. Each community's individual strength has collective benefits for the region.
2. Pueblo West can only participate in SDS if the water pipeline originates from Pueblo Dam. This will give Pueblo West a low cost water delivery option for their community.
3. The construction budget for SDS is \$600 million. About \$170 million will be for construction of the pipeline and facilities in Pueblo County. Pueblo contractors will be able to compete for this work in Pueblo and El Paso Counties.
4. About 130 construction jobs will be filled for the work planned for Pueblo County.
5. Local goods and services will be purchased in Pueblo for SDS – ranging from supplies and products to build the project to gas, food and lodging for workers.
6. SDS will be required to mitigate its impacts and make improvements to Fountain Creek, leveraging the many efforts already underway to transform the creek into an economic and cultural amenity for local communities.
7. The continuation of the Flow Management Program that protects the Arkansas River and supports stream flows for recreation, the environment and the kayak course in Pueblo is contingent on SDS originating from Pueblo Dam.
8. SDS prevents signers to the Intergovernmental Agreement – including Aurora – from transporting more water out of the Arkansas River basin.
9. SDS does not dry up agricultural lands and provides farmers and ranchers the opportunity to lease their water when they don't need it.
10. SDS will supply water for the growth of our regional military installations, including Fort Carson.



For more information, please visit www.sdswater.org

to the SDS pipeline, and storm water discharges from the new development made possible by SDS.

- Impacts of pipeline construction, particularly in populated areas such as Pueblo West, and on the Walker Ranch.
- Impacts on County roads as a result of construction, particularly in Pueblo West, and possible increased costs of future road crossings.
- Environmental and cultural resource impacts, and potential nuisances, resulting from pipeline construction and drainage.
- Property tax consequences to the County, landowners and Pueblo West Metropolitan District.
- Impacts associated with securing easements, fee ownership and condemnation.
- Preclusion of parallel future utility infrastructure within the SDS corridor.

RELATIONSHIP TO BUREAU OF RECLAMATION STUDY (N.E.P.A. REVIEW AND E.I.S. RECOMMENDATIONS)

The applicant relies heavily on analysis and conclusions produced for the Environmental Impact Statement ("EIS") required by the federal Bureau of Reclamation ("Reclamation") under the National Environmental Policy Act ("NEPA") with respect to the possible approval of SDS connections to Pueblo Reservoir outlets, associated rights-of-way, and long-term storage and exchange controls. This process was begun in 2003. A draft EIS ("DEIS") was released in February 2008, a Supplemental Information Report ("SIR") was released in October 2008 as a result of "substantial changes" to the proposed SDS action by the participants and in response to public comments. The public comment period was extended through November 24, 2008. A final EIS ("FEIS") has not yet been released, which would identify Reclamation's preferred alternative for implementation in a Record of Decision ("ROD"). The ROD and the ensuing negotiation of proposed contracts concerning Reclamation facilities and/or water rights are not expected until sometime in early 2009.

Staff would like to point out that Pueblo County's 1041 regulations and the NEPA regulations that the Bureau of Reclamation must comply with are two completely different regulatory requirements which are not linked. The approval criteria, scope and area of interest of the 1041 regulations can be broader than the Federal requirements. Because of this, the same data and evidence can result in a different judgment. The County's judgment of impacts and mitigation of those impacts can differ from the Bureau's without implying that the Bureau's judgment

is incorrect. The County Commissioners are not bound by the Bureau's decisions.

The DEIS itself acknowledges different regulatory requirements and perspectives between federal and local review. As stated in the DEIS, "Although the DEIS was coordinated with several agencies and addresses all requirements of NEPA, it may not directly address all requirements of the Pueblo County 1041 regulations."²

RECOMMENDED CONDITIONS OF 1041 APPROVAL

As an alternative to denial of the 1041 permit at this time, and if the Board of County Commissioners is inclined to consider approval of this 1041 application, it is recommended that the Commissioners direct Staff to work with the Applicant to create specific, concrete, enforceable language for conditions of approval using the following general conditions as the framework. If acceptable to the Board this language can be used in a resolution of approval or perhaps in an intergovernmental agreement between the County and the Applicant.

Water Level Fluctuations in Lake Pueblo

Withdrawal of water from the Lake by the SDS Project might lower the water level such that the swim beach or the boat ramps are rendered unusable. The terminal storage reservoir (now Upper Williams Creek Reservoir) should be constructed quickly so that pumping from the Lake can be timed and controlled to minimize these potential impacts.

Structural Integrity of Lake Pueblo Dam

The County should get assurances from the Colorado State Engineer and the Bureau of Reclamation that additional storage and/or new construction at and below the dam will not affect the structural integrity of the dam.

Early Construction of North River Outlet Works

The applicant has informed County staff that it now intends to construct the North River Outlet Works at the start of the project rather than several years later. This commitment would avoid possible capacity reductions and costs to existing users, as well as offering beneficial redundancy in water deliveries.

Reduced Flows in the Arkansas River Below the Dam

A Draft Memorandum of Understanding is being discussed between the Board of Water Works of Pueblo and Colorado Springs Utilities, which would release stored water to sustain critical low flows below the Dam. This Arkansas River Low Flow Program does not appear to yet be part of SDS mitigation for the impacts of reduced flows. Furthermore, it is not clear at what times and in what quantities would water releases benefit the river. The Applicant should explain

² DEIS, p. 93.

the benefits to the river in wet, dry and average year conditions. The County should be in a position to enforce the low flow agreement(s) (as may be amended and executed by the parties) as a condition of approval of the SDS 1041 Permit.

Fountain Creek Impacts

Staff believes that the SDS Project will have significant impacts on Fountain Creek. These impacts include erosion and sedimentation, water quality degradation, ecological deterioration and increased flood risk. Hydrologic models are not infallible. Storm water runoff from new development made possible by SDS was not modeled because the assumption was made that new regulations would be in place and that runoff controls and detention would be implemented and would be successful. These assumptions can not be relied on to mitigate impacts to Fountain Creek. The applicant's stated average increase in baseflow of 70 cfs³ could be as much as 400 cfs at any given time due to releases from Williams Creek Reservoir (with a maximum discharge rate of 300 cfs) and other discharges. Landowners along the Fountain and other commenting parties have stated that any increase in flows will create negative impacts.

The Applicant states that in the design year (2046) the median annual base flow will increase to approximately 220 cfs from 150 cfs now, a 47 percent increase in base flow. The proposed maximum flow increase of about 400 cfs represent an increase in baseflows of approximately 267 percent. This does not include all related flows, including possible increased runoff from new development or upset conditions (spills, pipe damage, etc.).

Base flows can and do cause erosion and sedimentation. Erosion of soils, bedrock and farmland can result in increased salinity and selenium (a natural constituent of many marine shales). The Applicant has stated that erosion and sedimentation caused by SDS will be minimal and that since salinity and selenium levels increase in Fountain Creek as it approaches the confluence with the Arkansas River the source must be something other than contributions from Colorado Springs. Staff believes that minimum 47 percent increase in base flows will have a significant impact on erosion, sedimentation and water quality.

The Applicant has stated that flood risk will not be significantly increased by the SDS Project. Floods are natural events that have been occurring on Fountain Creek historically. However, Staff believes the Applicant has discounted runoff from new impervious surfaces made possible by SDS (such as development of Banning Lewis Ranch) and has discounted increased flood risk at the Pueblo levees caused by sediment build up in the creek bed.

³ There is some uncertainty about the quantity of baseflows used in the applicant and DEIS modeling of Fountain Creek effects. See discussion under analysis of Approval Criteria 20 (Pueblo County Code 17.172.130 (20)) and 26 (Pueblo County Code 17.172.130 (26)) below.

Staff recommends that the form of mitigation for impacts to Fountain Creek be monetary. The U.S. Army Corps of Engineers, Fountain Creek Vision Task Force, Fountain Creek Corridor Master Plan and others have hundreds of millions of dollars in unfunded projects for the improvement of Fountain Creek.

The amount of monetary mitigation - when it is paid, how it is funded, to whom it is paid and on what projects it should be spent should be negotiated with the Applicant and should be a condition of approval of the SDS 1041 Permit.

Staff fully recognizes that problems in Fountain creek have been developing for decades and that the SDS Project should not and can not be expected to correct everything that has happened in the past. However, over the next 35-40 years, the design time that SDS is planned for, exacerbation of already serious problems must be mitigated.

It is difficult to quantify what would be an appropriate amount of monetary mitigation to build projects that would offset SDS impacts to Fountain Creek. Staff strongly recommends that the vast majority of these monies be used for construction projects as opposed to studies. An example of this would be dredging the creek bed at the Pueblo levees, for which the U.S. Army Corps of Engineers has estimated an annual cost of approximately \$300,000.

The November 2008 Draft Report (Watershed Management Plan), by the USACOE, lists 46 unfunded projects to improve Fountain Creek. If you included the flood control dam (which is not considered to be cost beneficial by the Corps) the total estimated cost of these projects exceeds \$300 million.

The Fountain Creek Corridor Master Plan also contains numerous recommended, but unfunded projects, notably the desire to build 530 acres of new wetlands and 440 acres of mini-dams (side detention off the main channel to detain flood waters). The cost of implementing these projects is not known but will be at least tens of millions of dollars.

Colorado Springs is reported to have a \$300 million backlog of drainage projects. Fortunately, the Colorado Springs Stormwater Enterprise remains in place, however Pueblo County can not assume that it always will be, nor can the County enforce the implementation of new drainage regulations such as low impact development standards (low impact with respect to storm water runoff).

The SDS Project will have impacts to Fountain Creek over its planned lifetime. Even if SDS added a very small percent to the total dollar cost of necessary projects on Fountain Creek, their monetary mitigation would be significant.

Staff recommends that a condition of approval should be discharge from Williams Creek reservoir should be restricted to a maximum of 300 CFS. The rationale for

this is that the impacts on Fountain Creek were modeled and predicted based on this limitation.

Base load sedimentation is not currently regulated by CDPHE in any quantifiable manner. Pueblo County, through its 1041 regulations, can therefore play a necessary role to identify and require mitigation of the impacts of sedimentation in Fountain Creek associated with SDS.

Pipeline Construction

The Applicant should develop a list of construction impact mitigations to insure the protection of people, property and livestock. Such mitigations may include but are not limited to the following:

- Fencing of open trenches
- Night lighting mitigation
- Capping the ends of pipe to prevent entry
- Limitations on days and hours of operation
- Control of dewatering discharges
- Security for staging and equipment parking areas
- Restoration of lawns, pasture land, fences, outbuildings, driveways, etc. to pre-existing conditions or better
- Public communications program concerning the schedule of construction
- Appointment of an ombudsman who can be called for complaints, comments, reporting of incidents, etc.
- Noise standards and mitigation
- Dust control plans
- Financial warranty to insure proper restoration
- Drainage and erosion control measures

These items should become conditions of approval. The applicant has discussed with Staff the option of constructing the SDS pipeline through Pueblo West at the beginning of the construction process, so as to avoid prolonged impacts to urban and suburban properties.

Impacts to County Roads

Attachment B to these Staff comments contains road impact mitigation recommended by the Pueblo County Department of Public Works.

Environmental and Cultural Resource Impacts

Attachment C to these Staff comments contains a copy of Section H of the SDS 1041 Application (Monitoring and Mitigation Plan) and a copy of a document given to us by CSU summarizing the primary mitigation measures being considered by the Bureau of Reclamation. All the mitigation measures listed in both documents should be enforceable conditions of approval of the 1041 Permit. It is recommended that the Staff work with the Applicant to ensure that the

language used is concrete and enforceable (e.g. replace “may” with “shall” in many instances).

Property Tax Consequences

The Applicant should provide the County with an estimate of lost property tax revenues to the County as a result of approximately 238 acres of land (much of it private property) being potentially taken off the tax roles as a result of permanent easements, fee purchases or condemnation by CSU.

The Applicant should also provide an estimate of lost land value and tax revenue to Pueblo West Metropolitan District.

Also, if a landowner has a 100-foot permanent easement on their property that they cannot use, they may seek a decrease in the assessed valuation of the property. This would result in additional lost revenue to the County and the District.

The Applicant has stated that the SDS Project will not cost Pueblo County anything. At this point Staff is not suggesting that any lost revenue should be subject to mitigation, however, the County Commissioners should be made aware of what these potential costs are and then decide whether they consider it significant or not.

Securing Land Through Easements, Fee Purchase or Condemnation

The County Government has no role in the Applicant’s efforts to secure private property in order to construct the project. However, Staff does recommend that the County ensure that private property owners are treated fairly and that the project does not create undue financial burdens on existing or future residents. The Applicant should commit to using the power of eminent domain only as a last resort. The Applicant should offer to compensate landowners to have their own appraisal done if they disagree with the Applicant’s appraisal. No landowner should have out-of-pocket losses from the project. Lastly, Staff recommends a condition of approval that the Applicant provide proof to the County that they have secured the necessary rights to construct the project prior to starting construction at any given location.

OTHER RECOMMENDATIONS

Staff recommends a condition of approval that requires an amendment to this 1041 Permit if any water is sold, leased or delivered to any entity other than the currently listed applicants, or if other than existing water rights are used for this project. The rationale for this is that the impacts associated with any new user or new water rights (e.g., converted agricultural water rights) have not been identified in this permit application.

Staff recommends a condition of approval that requires an amendment to this 1041 Permit if the Applicant's plan any enlargement to Lake Pueblo. The rationale for this is that the impacts associated with any such enlargement or additional water decline have not been identified in this permit application.

The permit shall not constitute an exemption from zoning, health or other applicable regulations. Issuance of this permit is subject to approvals by any regulatory agency where required by regulation or statute.

The SDS Project construction, operation and activity shall be implemented according to the plans and information in the materials submitted by the applicant for 1041 Permit No. 2008-002.

The applicant shall file an application for a Flood Hazard Area Development Permit(s) for construction proposed within a floodplain (as identified by the FEMA Flood Insurance Rate Maps for Pueblo County). The Flood Hazard Area Development Permits require review and approval by the Pueblo County Department of Planning and Development prior to any construction within a floodplain.

The applicant shall provide to the Department of Planning and Development copies of all subsequent permit approvals by other regulatory agencies within sixty (60) days of said permit approvals being received by applicant.

Construction of a new substation and transmission lines for the Juniper Pump Station will require approval by the Pueblo County Planning Commission of a Use by Review as specified in the Public Use District (S-1) zoning regulations. The power requirements for the Juniper Pump Station have evolved with the project, as the proposal originally involved service from high voltage lines that would trigger a separate 1041 permit. At this time, the applicant believes that electric service to the pump station will not involve facilities operating at 115 kV or higher, the threshold for 1041 review. Regarding the Juniper Pump Station itself, it is noted that this facility is integral to the SDS 1041 application and therefore, particularly with regard to Pueblo County Code 17.140.010 (F), does not require its own Use by Review or Special Use Permit.

The Bureau of Reclamation and the Colorado Office of Archaeology and Historic Preservation (OAHP) have concerns that the information related to the location or character of historic resources should not be released to the general public. Consistent with OAHP policy regarding the "Dissemination", maps, locations, and descriptions of historic or archaeological interest cannot be included as part of this submittal due to the sensitive nature of these areas of concerns. However, a Programmatic Agreement between the Bureau of Reclamation, the Advisory Council on Historic Preservation, the Colorado State Historic Preservation Officer, and Colorado Springs specifies the measures to be taken with regard to the identification and evaluation of historic properties, a treatment plan to resolve

adverse effects, a treatment report, modification to project design, the unanticipated discovery of historic properties, the unanticipated discovery of human remains, curation, and other terms and conditions related to the preservation of paleontological, historical, and archaeological sites. The terms and conditions of the Programmatic Agreement shall be followed for this Project. As of November 2008, this Agreement had not been executed by the parties.

The applicant places a significant amount of importance on its “Adaptive Management” scheme, but provides little elaboration on the manner in which SDS impacts would be monitored and what responses and capabilities would be implemented as Adaptive Management. More tangible detail regarding this program would be helpful.

Other issues and potential mitigation strategies may be identified in analysis below or as the result of the 1041 hearing process.

DESCRIPTION AND LOCATION

The Southern Delivery System (SDS) is a water delivery project that will bring water from Pueblo Reservoir to the communities of Colorado Springs and their project partners, Pueblo West Metropolitan District, City of Fountain, and Security Water District.

Project components consist of hooking up to the joint use manifold, constructing a new river outlet works at the downstream face of the dam, underground pipelines, a large pumping station enclosed in a building and other features as summarized below:

- 42,000 acre-feet of storage in Pueblo Reservoir, together with contract rights to trade Pueblo Reservoir water for upstream reservoir water in Fry-Ark facilities near Buena Vista.
- The Juniper Pump station, proposed to be located at the base of Pueblo Dam, would be a 14,000 – sq. ft. building, 42 feet high with associated office, parking lot, and auxiliary power facilities.
- 96 million gallon per day (Mgpd) raw water deliveries, with an 18 Mgpd turnout to Pueblo West.
- A 60-inch wide pipeline, 20 miles in length from Pueblo Reservoir would be constructed through urbanized areas of Pueblo West in unincorporated Pueblo County, including through many residential lots.
- At least 20 concrete vaults, partially buried, would be constructed in Pueblo County along the length of the pipeline, between 300 and 1,300 – sq. ft. each. These vaults would house air vents for the pipeline and

water discharge points to empty the pipeline into nearby drainages along the pipeline length.

- About 40 manholes would be constructed along the pipeline in Pueblo County.
- 24 Pueblo County roads would be crossed by the pipeline.
- The pipeline would cross an estimated 130 separate parcels in Pueblo County; the SDS participants though, have not acquired any land or easements for these facilities.
- An estimated 26 residential lots in Pueblo County with existing homes on them would be crossed by the western pipeline.
- Approximately 340-acres in Pueblo County would be required for permanent and temporary easements for the proposed action; importantly, these easements would be located outside of any existing easements or rights-of-way for the nearby Fountain Valley Authority pipeline.
- 50 separate drainage crossings would be made by the pipeline within Pueblo County.

The location of the SDS project is displayed in Attachment D. The anticipated area of permanent easement required for the SDS project is approximately 238 acres (10,400,000 ft²). An additional 92 acres (4,010,000 ft²) is estimated to be temporarily required for construction. A portion of the project is located on public lands.

ZONING AND LAND USE

Zone districts for land affected by the SDS project include: S-1 (Public Use), A-1 (Agricultural One), A-3 (Agricultural Three), and B-4 (Community Business). A map depicting the Project Alignment and Pueblo County's Current Zoning is included in Attachment E – Current Zoning and Project Alignment.

The Juniper Pump Station (JPS) and the electric substation and overhead electric transmission facilities will be located on land owned by the United States Government and administered by Reclamation. The land is zoned as Public Use District (S-1) and is leased by State Parks. The Juniper Pump Station is incorporated into the present 1041 permit application and is therefore not required to obtain any additional use approval, such as a Special Use Permit, under Pueblo County regulations.⁴

⁴ Pueblo County Code 17.140.010 (F).

Based on Pueblo's Comprehensive Plan, developed by the Pueblo Area Council of Governments, existing land use within and adjacent to the impact area associated with JPS and the substation and overhead electric transmission facilities is classified as "Permanent Open Space."

The raw water pipeline permanent easements and construction work zones will be located in unincorporated Pueblo County in a corridor beginning at Pueblo Dam and generally heading north to the Pueblo County line. According to the official website of the Pueblo County Assessor, the lands that are directly impacted by the raw water pipeline are zoned as:

- Public Use District (S-1)
- Agricultural 1 (A-1)
- Agricultural 3 (A-3)
- Community Business District (B-4)

Adjacent land uses include:

- Public Use District (S-1)
- Agricultural 1 (A-1)
- Agricultural 3 (A-3)
- Community Business District (B-4)
- Multiple Residential and Office District (R-5)
- Mixed Residential District (R-4)

The raw water pipeline permanent easements and construction work zones will be located in areas with land use classified as:

- Permanent Open Space
- Developing Metro Area
- Employment Center
- County Residential
- Rural/Ranch

Properties adjacent to the raw water pipeline impact area are also classified as:

- Permanent Open Space
- Developing Metro Area
- Employment Center
- County Residential
- Rural/Ranch

PUEBLO REGIONAL DEVELOPMENT PLAN

The SDS Project complies with and is consistent with Pueblo's Comprehensive Plan to the extent that the plan applies to the Project. The Project conforms, subject to the recommended conditions of approval, with the Regional Development Principle: "Encourage efficient and prudent extensions of infrastructure in a manner that considers impacts to both service providers and taxpayers" (p.30); and Urban Development Principle: "Provide public services and infrastructure to areas of the Region that are environmentally and economically suitable for urban growth" (p. 30).

As a participant, Pueblo West will share land, capital, and future maintenance and operating costs with the other Participants, resulting in more efficient use of land and resources, and shared cost savings to Pueblo West customers. By participating in the Project, the use of land and local resources will be minimized. The Project will meet future water needs for Pueblo West, allowing for future projected growth and providing redundancy to Pueblo West's existing water supply, and finally accommodating lands appropriate for future service and industrial growth. Pueblo West's plans for development and growth have been reviewed and approved by Pueblo County, and incorporated into Pueblo's Comprehensive Plan, and are not anticipated to contribute to urban sprawl or "leapfrog" development, or create proliferation of special districts or overlap boundaries of special districts.

FLOODPLAIN

It appears that construction of the SDS Project will be within at least three FEMA floodplains in Pueblo County. These are the Arkansas River, Wild Horse Creek and possibly Dry Creek (see Attachment F for a map showing the location of the 100 year floodplains in relation to SDS). Prior to construction in these 100 year floodplains a Flood Hazard Area Development Permit must be issued by the County.

CONSTRUCTION AND OPERATION

Construction of the project is expected to begin in 2009 and continue into 2012. Physical facilities will be operated, maintained and replaced as necessary to provide service in perpetuity.

The Applicant has provided preliminary plans and drawings for the Project to provide reviewers with sufficient detail to evaluate the Project against Pueblo County evaluation and approval criteria. In general, the SDS project is a water delivery system that will convey raw water from Pueblo Reservoir to the communities of Colorado Springs, Pueblo West, Fountain, and Security. The SDS project will provide the Participants with water from their existing water rights.

The majority (approximately 14.3 miles) of the raw water pipeline alignment will parallel existing utilities corridors. The existing utilities consist of underground water pipelines, underground gas pipelines, and overhead electric transmission lines.

The majority of the raw water pipeline will be constructed via open cut methods. Locations proposed to be constructed with trenchless methods include crossings of:

- Juniper Road
- Union Pacific Railroad
- US Highway 50
- Platteville Boulevard (at two locations)

In open cut construction, the trench is excavated, the pipe installed and welded, the pipeline backfilled, and the ground surface restored to pre-construction conditions. Whether employing open-cut or trenchless installation technologies, the installation and construction methods employed will follow standard industry practices designed to produce a safe, environmentally sound, and quality operation.

Each JPS pumping unit will be designed for a rated flow condition of 9,030 gallons per minute (gpm). This rated condition is consistent with the facility design capacity of 78 mgd with six pumps operating.

During preliminary design of JPS, the design team conducted an Architectural Definition Workshop with Springs Utilities, Reclamation, and State Parks to establish a mutually acceptable architectural design scheme and approach.

The dimensions of the JPS building are estimated to be 161 feet long by 75 feet wide. The total height of the facility is estimated to be approximately 42 feet between the lower level pumping room floor and the top of the parapet. The lower level of the pump building will be buried approximately 10 feet below grade to reduce the overall height of the structure and to allow structures to be shielded by the existing hill when viewing the site from the east. An office/control complex approximately 47 feet long by 39 feet wide will be attached to the south side of the pump building. The roof construction will be a metal deck on open web steel joists. The building construction will consist of cast-in-place concrete and concrete masonry units, designed to be both aesthetically compatible with the surrounding topography and minimize sound emissions. Access to the site will be from the intersection of Juniper Road and Spillway Road.

Detailed specifications developed and completed for final design may be subject to review by Pueblo County Regional Building officials prior to construction. The jurisdiction of building officials will depend on the location of proposed facilities (e.g., federal land) and the exact nature of the construction project.

AGENCY / REFERRAL COMMENTS

Attachment G is a distribution list requesting comments on the application. The request letter was mailed by the Pueblo County Planning and Development Director on October 15, 2008.

As of this writing, **three** referral comments have been received.

- Turkey Creek Conservation District recommends denial due to impacts to Fountain Creek. If approved Turkey Creek wants restitution for damage to private property caused by increased flows in Fountain Creek caused by SDS.
- Pueblo County Public Works Department comments lay out the terms and conditions whereby County Roads can be impacted (see Attachment B).
- El Paso County has sent comments that primarily pertain to construction impacts and activities in El Paso County. They point out that the SDS Project is subject to an Approval of Location process governed by the El Paso County Planning Commission.

At the County's request, Colorado Springs Utilities held four open houses to explain the project and answer questions. One open house was at the Visitor's Center at Lake Pueblo (impacts to Lake Pueblo State Park), two were held at the VFW Post in Pueblo West (pipeline impacts), and one was held at the Old Pueblo Museum (focusing on Fountain Creek impacts and corridor planning).

Also, CSU mailed letters or personally contacted landowners whose property would be affected by the project (easements, fee purchases, etc.).

Staff has reviewed the public comments submitted to The Bureau of Reclamation on the DEIS. Attachment H contains a website where a list of the commenters is available. Summarized below are some of the more relevant comments in support of the staff recommendations.

U.S. Army Corps of Engineers

The Corps stated there would be additional costs associated with the project that is the subject of the 1041 application. Specifically, the treatment of return flows entering Fountain Creek and costs associated with flood control and sediment reduction.

City of Colorado Springs

Colorado Springs stated that it is committed to, and heavily invested in, protecting Fountain Creek. They stated they have acted aggressively to resolve past problems with Fountain Creek. They participate in regional cooperative efforts to protect Fountain Creek, including the Fountain Creek Vision Task Force and co-funding the Fountain Creek Corridor Master Plan with the Lower

Arkansas Water Conservancy District. Colorado Springs has invested more than \$100 million for wastewater collection systems, \$40 million to upgrade the Las Vegas Wastewater Treatment Plant, \$80 million on the J.D. Phillips Plant and a \$10 million commitment for the Fountain Creek Recovery Project. By 2025, Colorado Springs will have invested \$250 million in their wastewater system over the preceding 20 years.

The Colorado Springs City Storm Water Enterprise is aimed specifically at improving the City's ability to control stormwater runoff.

Colorado Springs Utilities

CSU Stated that Colorado Springs has an annual growth rate of 1.2 percent. About half of the growth comes from the birth of the children and grandchildren of those already living in the region. The Colorado State demographer estimates that 800,000 people will reside in Colorado Springs by 2050. Springs Utilities supplies the water to Fort Carson, Peterson Air Force Base and the U.S. Air Force Academy, two of which are currently undergoing expansions.

Population forecasts estimate that El Paso County will be the most populous county in Colorado by the year 2030, with most of that growth occurring in the SDS participants' cities and towns (Colorado Springs, Fountain and Security).

Increased erosion in other regions of the study area may occur as a result of higher baseflows associated with increased wastewater return flows from Colorado Springs. Because of the anticipated difficulty of separating the direct effects of the SDS project from non-project effects, a more comprehensive, watershed approach will be taken to address these additional geomorphic issues.

Through coordination with the Fountain Creek Watershed Study and evaluation of various sites within the study area, channel stabilization work at the following locations is proposed.

- Fountain Creek from Upstream of Fountain Boulevard to Upstream of Colorado 85/87 at Sand Creek Confluence.
- Fountain Creek between CR 102 (upstream) and Young Hollow Road (downstream) at Young Hollow Confluence.
- Jimmy Camp Creek from upstream of Fontaine Boulevard to downstream of Peaceful Valley Road.

Petros and White (on behalf of the Pueblo County Attorney and planning staff)

Petros and White, as special counsel, submitted two comments letters to Reclamation on behalf of the County Attorney and planning staff. These letters, dated November 15, 2005, and June 13, 2008, as attached to this report. In the 2005 letter, Reclamation was encouraged to consider a multipurpose reservoir on Fountain Creek for storage, flood control, and recreation.

According to comments submitted on behalf of Pueblo County by Petros and White, approximately 63% of the pipeline deliveries, together with other reusable water, would be carried down Fountain Creek through Pueblo and exchanged for upstream water in Pueblo Reservoir by 2046. Colorado Springs estimates it will be delivering 74,000 acre-feet annually (102 cfs on the average) of foreign water (not native to Fountain Creek) down Fountain Creek for use in the SDS project; these flows are in addition to increased water flows originating from new impervious surfaces and development in the upper Fountain Creek basin above Pueblo County.

These comments further note that:

- The DEIS and its Appendix C acknowledge that increase return flows and releases from the Williams Creek Reservoir will cause additional erosion in the upper segments of Fountain Creek with the resulting increased sedimentation and erosion and channel instability in the lower reaches of Fountain Creek in Pueblo County.
- The DEIS and its Appendix C provide that Fountain Creek mitigation would include monitoring of problems on Fountain Creek over time by the SDS participants and an adaptive management program which would mitigate the perceived effects of SDS. However, as presently proposed, such long-term monitoring and an adaptive management program do not appear workable. The program lacks specific guidelines and benchmarks for monitoring and requirements for mitigation. It lacks an enforcement mechanism to ensure compliance by the SDS participants to any required mitigation measures. It lacks a sustainable funding mechanism (such as reclamation bonding or escrowed funds) to ensure that recommended monitoring and mitigation is funded by the SDS participants and not subject to the contingencies of annual appropriations by the public entities.
- The DEIS assumes that releases from Williams Creek Reservoir will not exceed 300 cfs to avoid downstream erosion effects on Fountain Creek. That restriction on releases should be considered an explicit term and condition.
- Participation in the Flow Management Program, to the extent its benefits, if any, are embedded in the EIS analyses, should be incorporated as a term and condition of any federal approval and binding on all SDS participants, regardless of their participation in the Flow Management Program IGAs.
- Benefits of the Pueblo Flow Management Agreement are not quantified sufficiently. Also, impacts (direct and cumulative) upon river flow at Pueblo Reservoir levels are not disclosed for dry-year or wet-year

variables. The Downstream Intake alternative is not adequately addressed for comparison purposes.

Environmental Groups

A number of non-governmental environmental advocacy organizations (NGOs) commented during the draft EIS process, including the Colorado Environmental Coalition, Western Resource Advocates, Environment Colorado, the Sierra Club, National Clean Water Action, the High Country Citizen's Alliance, and the Rocky Mountain Environment and Labor Coalition. NGO comments included the following:

- SDS impacts on water quality will be seen primarily on Fountain Creek, a stream the State of Colorado already includes on its § 303(d) list of impaired waters. These impacts would be driven by increases which will be seen in effluent returned to Fountain Creek. Additional impacts may be seen from use by Pueblo West should Reclamation select an alternative which diverts water from a facility associated with Pueblo Reservoir. Because water from SDS would be used to serve future growth, we can also assume that increased storm water runoff will be likely, as new growth will require increases in non-permeable surfaces in the region, adding an additional concern for water quality.
- The project should include implementation of the suggested projects found in The Fountain Creek Watershed Plan, developed in the Pikes Peak Area and Pueblo Area Councils of Government.
- The project should mitigate to reduce water quality impairment so that Fountain Creek can be removed from the State's § 303(d) list.

Colorado Department of Public Health and Environment

The Colorado Department of Public Health and Environment comment that the added volume of water that will accompany the SDS has the potential to significantly increase the erosion and sediment loading discharge into Fountain Creek.

The Sierra Club

The Sierra Club has submitted detailed comments in the EIS process, including the following:

- The impacts of population growth should be more explicitly included and discussed throughout the DEIS. The impacts of growth on Fountain Creek water flows are insufficiently analyzed. Flows will undoubtedly increase do to existing and new wastewater treatment plants in El Paso County using Fountain Creek as a 'natural pipeline' to the Arkansas River. Growth of residential, business, and industrial structures also shape water quality in the Fountain Creek Watershed, stormwater run-off will end up in

the Fountain Creek. Thus alternatives considering flooding and stormwater control should have been incorporated as feasible alternatives.

- Fountain Creek is an “effluent driven” stream. Most of the water in the Creek results from wastewater discharges – legal and illegal – and from urban/suburban runoff, all containing pollutants that can and do cause problems for downstream residents and other biota. Water quality in Fountain Creek is poor and has been a source of significant controversy for years, up to and including litigation.
- All three regulatory segments of Fountain Creek have been declared water quality “impaired” by the State of Colorado for bacteria or selenium or both. Heavy sediment loads cause channel instability and can contribute to flooding. Toxic organics from sewage discharges and agriculture are largely below the regulatory radar screen at the moment, but that is likely to change in the foreseeable future.

The Pueblo Chieftain

The Pueblo Chieftain formally submitted comments to the Bureau of Reclamation during the EIS process. The Pueblo Chieftain raised the following issues:

- There is a potentially damaging impact of the project on Arkansas River flows. The preferred alternative would divert 50,000 to 75,000 acre-feet of water annually directly from Pueblo Dam to the great detriment of Arkansas River flows through the City of Pueblo and the related recreational amenities.
- By exchange, SDS would take clean water from Lake Pueblo and return effluent – not only treated but raw sewage and stormwater runoff – causing unacceptable erosion, sedimentation, contamination and intensified flooding on Fountain Creek into Pueblo and the Lower Arkansas Valley.
- The EIS does not seriously address the alarming consequences of the fact that SDS is designed to double Colorado Springs estimated return flows down the Fountain by full build-out in 2040.
- Furthermore, consider that Colorado Springs projects during the same period a population growth to 900,000 residents, or 75 percent more than the city’s 2000 census. Add to that the fact that impervious surfaces (streets, parking lots, buildings, roof tops, drainage structures) totaled 85.3 square miles, or 17 percent of the Fountain Creek Watershed area, in 1964, and were estimated to have doubled to 166 square miles, 34 percent of the watershed area, in 2000.

- The impervious surface factor would only get worse upon full development in Colorado Springs. During Reclamation's April 9 open house on SDS in Colorado Springs, Chip Paulson, an engineer with MW, the primary consultants for the EIS, said the biggest risk of flooding downstream of Jimmy Camp Creek could come from increased impervious surfaces when the 24,000 Banning-Lewis Ranch is developed. Therefore, the prospects for residents in the Fountain Creek Watershed downstream of El Paso County are very bleak, indeed. Imagine a devastating flood like the one that hit Pueblo in 1965, where the impervious surfaces were only half of what they are today. The flood threat to lives and property in Pueblo is considered higher today. With the additional 75,000 acre-feet of water annually from SDS, the threat will become immeasurably worse in the future.
- Pueblo's levees, built in the 1970s, can no longer protect Pueblo's predominately poor and minority population on the Lower East Side and high-value retail commercial areas of west of Fountain Creek. Sedimentation and erosion have raised the level of the creek channel to the point where it would take far less flood water to overtop the levees today than in decades past.
- Of the mitigation measures identified, none include any cost estimates, funding guarantees, contractual guarantees or remedy for failure to comply.

El Paso County

El Paso County commented that the downstream impacts resulting from potential new water releases from Williams Creek Reservoir may be significant and result in substantial channel improvement costs, and potential ongoing maintenance responsibilities. Consideration should be giving to direct piping instead of in-channel releases.

Intergovernmental Agreement between Fremont County and the City of Colorado Springs (for SDS Alternative Application to Fremont County)

Following the precedent of the referenced IGA, mitigation may either be in the form of a list of specific actions to be taken by the City to reduce adverse impacts or as an amount of money to be paid by the City for the County's use in reducing adverse impacts.

17.164.030 APPROVAL CRITERIA

The applicant is subject to approval criteria under Section 17.164.030 of the Pueblo County Code based on its application, identifying that it is proposing Site Selection and Construction of Major New Domestic Water and Sewer Treatment Systems and Major Extensions of Existing Domestic Water and Sewer Systems.

- A. *There is sufficient existing and projected need to warrant and support the proposed activity.*

NEED FOR THE PROJECT (As Reported by the Applicant)

A significant concern is aging existing infrastructure. The Applicant's major raw water delivery systems range in age from about 20 years to 50 years old. Pueblo West is the only SDS Project Participant located on a major river system. As a result, other participants rely on major pipeline delivery systems or groundwater for most of their drinking water supplies. Aging infrastructure, the need for major maintenance activities, unplanned outages from system failure, future pipeline replacement, and loss or contamination of groundwater make these communities vulnerable. Redundancy is needed to reduce these risks. The SDS project will allow the Applicant to develop water storage, delivery, and treatment capacity to provide critical system redundancy.

Historically, the Applicant's major water delivery systems have been shut down for extended periods for both planned and unplanned reasons. For example, in 1990, the Otero Pipeline was unexpectedly shutdown for six months due to a major electrical switchgear failure and fire at the Otero Pump Station. The pipeline was shut down for two months in both 1999 and 2003 for planned and unplanned events, one month in 1999 for pipeline inspections, one month in 2002 to support construction projects, and one month in 2003 for repairs due to a lightning strike. The need for redundancy is critical because without the Otero System, Colorado Springs would lose over 50 percent of its raw water delivery capacity, and the reliance on one conveyance system for delivery capacity of over 50 percent of a population's water supply poses high risk. Additionally, in

1999, the FVA pipeline was shut down for approximately one year for repairs as a result of subsidence near Fort Carson. The SDS project will not only provide system redundancy, but will also provide greater overall service reliability for the Applicant.

To meet most or all of the future water demands of the SDS project Participants by utilizing their existing Arkansas River Basin water rights is also an important project need. Colorado Springs' water rights activities over the last 30 years were intended to develop senior rights of sufficient volume to meet the needs of Colorado Springs. This has resulted in an extensive portfolio of surface water rights in the Arkansas River Basin. Colorado Springs, Pueblo West, Fountain, and Security are all located within the Arkansas River Basin.

An additional need is to meet the demands that result in population growth in the Colorado Springs area. Population projections indicate that Colorado Springs should expect an average annual growth rate of 1.2 percent between 2000 and 2030. As population increases so do the water demands. The Project is necessary to meet community development and population demands in the

areas served by the Project. The SDS project will meet the future water demands caused by population growth for the next 40 years.

EXISTING/PROPOSED FACILITIES PERFORMING SIMILAR FUNCTION

Each Participant will utilize the SDS project to provide a safe, reliable water supply to meet future water demands. Detailed specific needs of Springs Utilities and Project Participants are described below, as reported by the applicant:

Colorado Springs

Springs Utilities' delivery of treated water to its customers is limited by its existing raw water delivery systems. Existing systems provide approximately 106.4 mgd of firm yield, which include:

- Local Systems (direct flow water rights and water from storage): 32.2 mgd
- Blue River System: 7.0 mgd
- Otero Delivery System: 57.8 mgd
- Fountain Valley Authority System: 7.4 mgd
- Groundwater System: 2.0 mgd

Each raw water supply source is conveyed to the Springs Utilities service area for treatment and distribution. The SDS project will provide over 70 mgd of raw water delivery capacity to Colorado Springs.

Pueblo West

The Project will meet water delivery needs for Pueblo West, allowing them to meet growth demands and to provide redundancy to their existing water supply and delivery system. As a Participant, Pueblo West rate payers would benefit from the Project by leveraging larger scale capital investments and sharing future maintenance and operating costs with the other Participants. The Project will not have significant adverse effects on the contiguity of development to the existing growth centers of Pueblo West.

Pueblo West owns and maintains its own water system and treatment facilities, and relies solely on one water system for its water supply, a raw water pipeline system originating at Pueblo Dam and terminating at Pueblo West's Water Treatment Plant (WTP). The primary water source is Twin Lakes water. The water is released from Twin Lakes, on a demand basis, and flows down the Arkansas River to the Pueblo Reservoir. The Pueblo West Pump Station is located next to the Arkansas River, downstream of the Pueblo Dam, connected to the JUM and can pump approximately 10.5 mgd from Pueblo Reservoir.

Pueblo West businesses and residents historically relied on ground water wells to provide their water supply, but these wells are now used for supplemental irrigation and emergency potable water use only. In the event of a system outage, Pueblo West would depend on its treated stored water, which would

provide two to five days supply of water for its customers. In a severe emergency, about 4 mgd of water typically used for non-potable irrigation of Pueblo West's Desert Hawk golf course, would be treated for potable consumption. The community of Pueblo West needs another water supply system to provide increased capacity, redundancy and service reliability for its existing delivery system and residents.

The Project would supply Pueblo West with up to 18 mgd of water, which is necessary to meet the communities' development and population demands and the desired redundancy for Pueblo West. If Pueblo West does not participate in the Project, they would develop a new intake on the Arkansas River below the Pueblo Dam. The Project will allow Pueblo West to obtain their water more efficiently and at a lower cost.

Fountain

Fountain relies on two water systems for its water supply: the Fountain Creek Alluvial Well field and the Fry-Ark Project through the FVC. The Fountain Creek Alluvial Well field provides 44 percent of Fountain's water supply, while the FVC provides the remaining 56 percent. Fountain's water supply consists of wells, storage reservoirs, pumps, regulating valves, and a network of distribution mains. Existing water supplies are capable of providing a firm yield of approximately 4.9 mgd, with an additional 3.0 mgd of water potentially available through a water exchange agreement with Widefield and Security.

Security

Security relies on four water systems for its water supply: the Widefield Aquifer, the FVC, Windmill Gulch Aquifer, and leased water from Colorado Springs. In 1987, the Widefield Aquifer was contaminated with tetrachloroethene, a carcinogenic compound used as a degreaser. Affected Security wells were either shut down or had water treatment systems installed to remove the contamination. This incident highlighted one of the risks associated with Security's reliance on a shallow aquifer for nearly half of its water supply, amplifying the need for a new delivery system to provide system redundancy. Current sources provide Security with firm yield of approximately 4.1 mgd.

BASIS OF DEMAND PROJECTIONS (As Reported by the Applicant)

Colorado Springs

Colorado Springs is the largest water provider in El Paso County. Population projections indicate that Colorado Springs should expect an average annual growth rate of 1.2 percent between 2000 and 2030. The Pikes Peak Area Council of Governments in conjunction with the Colorado State Demographer project that El Paso County would grow from its 2002 population of about 541,000 residents to about 800,000 residents by 2030 (an average annual population growth rate of 1.4 percent). It is projected that if Colorado Springs

grows slightly slower than El Paso County as a whole, Colorado Springs will have about 518,000 residents by 2030, an increase of about 145,000 residents from its 2002 city population.

Pueblo West

From 1992 through 2004, potable water use for Pueblo West has grown from less than 1,000 AF per year (0.89 mgd) in 1992 to about 3,800 AF per year (3.39 mgd) in 2001 and 2004. During these years, the number of accounts served by Pueblo West increased from about 1,950 to about 8,830—an average increase of nearly 13 percent per year. Pueblo West also provides raw water to the Desert Hawk golf course, with annual demands for this purpose averaging about 360 AF per year (0.32 mgd). Pueblo West currently provides water, sewer, and fire protection services to about 17,000 people. Pueblo West is anticipated to reach community build-out by 2018 with an expected population of approximately 47,000 people. The Project would provide Pueblo West with water to meet projected peak-day demands through build-out.

Fountain

Fountain projects a population growth from 15,197 in 2000 to 49,970 in 2030, at an average annual growth rate of four percent. Fountain's average day demand is projected to increase from 2 mgd in 2000, to 8.3 mgd in 2020, while its maximum day demand is projected to increase from 5.2 mgd in 2000, to 21.2 mgd in 2020. The City of Fountain Master Plan projects an average day demand of 11.8 mgd in 2046, and a maximum day demand of 30.2 mgd in 2046. The SDS project will supply Fountain with an approximate annual average of 2.25 mgd and a peak day of 5.625 mgd.

Security

Security projects a population growth from 18,000 in 2000 to 27,000 in 2030, at an average annual growth rate of 1.4 percent. The Security Water District-Water System Master Plan project an increased future demand from 4.8 mgd in 2006 to 5.8 mgd in 2022 during dry years. At build-out, in 2025, Security will have an unmet demand of 2.2 mgd. The SDS project will supply Security with 1.3 AF per year.

- B. New domestic water and sewage treatment systems shall be constructed in areas which will result in the proper utilization of existing treatment plants and the orderly development of domestic water and sewage treatment systems of adjacent communities.*

Based on planned flow capacities and projected usage, a specific number of new facilities are planned to store raw water, treat raw water, interconnect the SDS supply to existing distribution, intercept and treat wastewater, and manage and store exchange flows. The Southern Delivery System plan includes treatment

plants, water mains, and large reservoirs impounded behind dams. This Criterion, Pueblo Code 17.164.030 (B), indicates that new facilities should complement established water and wastewater services and also promote good planning for water and wastewater infrastructure in adjacent communities.

The DEIS discusses existing raw water treatment facilities in Section 1.5. Detailed statistics on capacity and usage of existing plants are not cited in the DEIS, but peak customer demands and the distribution of existing potable service mains in Colorado Springs supports the proponent's argument that new raw water treatment is needed to provide redundancy and relieve demand on existing raw water plants.

No new wastewater plant is required by the Southern Delivery System, as wastewater will be captured and treated within the capacity of existing wastewater plants. This solution will utilize the capabilities of existing sewage treatment at Colorado Springs Utilities' J.D. Philips Water Reclamation Facility and Las Vegas Street Wastewater Treatment Facilities. Please refer to Criterion D for additional discussion of existing wastewater capacity. Downstream communities and southern areas of Colorado Springs were originally slated to direct SDS-related sewage to a new regional facility known as the Clear Spring Regional Water Reclamation Facility, which has since been pulled from SDS plans. The orderly development of regional wastewater capacity may or may not be facilitated by the Clear Spring project.

C. Major extensions of domestic water and sewage treatment systems will not create growth and development which is incompatible with and cannot be accommodated by the local financial capacity of the area or resident to be served.

According to the DEIS Socioeconomic Effects Analysis, the costs of the Southern Delivery System will remain affordable to customers once billing rates are adjusted to include repayment of the construction cost.⁵ The financial impact of the project on residents of Pueblo County, specifically, is covered in Section E(4) of the 1041 application and is discussed below in reference to Pueblo County Code 17.172.130 (9) (Criterion 9).

Major adjustments to the rate structure of Colorado Springs Utilities and other Applicants may be necessary to repay capital outlay and other costs to bring the Southern Delivery System into operation. The costs of the project will total at least \$1.1 billion based on current estimates. However, the financial impact of the project on El Paso County residents is a concern for the purposes of this

⁵ Socioeconomic Effects Analysis, Sections 4.4.1.2 (Colorado Springs), 4.4.2.2 (Fountain), 4.4.3.2 (Security), and 6.4.1 (Pueblo West). See also Socioeconomic Effects Analysis, p. 9 ("Under all SDS alternatives, water services costs for Pueblo West (and residents of that community) would be modest in comparison with the other Project Participants.").

1041 review to the extent that risks of default or other financial problems are shared by residents of Pueblo County. The funding of government services related to water resource infrastructure in El Paso County is a subject of some concern following the failure of a general tax issue and multiple attacks on the ability of local jurisdictions to collect service fees.

- D. Major extensions of domestic sewage treatment systems will not overburden the existing systems and current and projected future demand for the service can be met within existing and proposed capacity.*

The Applicant has noted for the record that it believes this Criterion is inapplicable to its application; however, the Letter of Request formally included only one waiver of code requirements, unrelated to this Criterion, Pueblo Code 17.164.030 (D). This Criterion applies because any activity subject to Chapter 17.164 of the Pueblo Code is considered either major new construction or major extension of a domestic water and sewage treatment system. As a practical matter, overburdened or inadequate wastewater systems in the SDS service area, as needed to treat wastewater generated by SDS waters, would have potential impacts on Pueblo County. The Applicant notes its intent to respond to Pueblo Code 17.164.030 (D) at Section B (7) of the 1041 Application Document.

Because no new wastewater treatment plant will be specifically required as part of the construction of the Southern Delivery System, it is logical to ask whether existing wastewater treatment capacities can absorb the new flows through municipal systems, or whether the full realization of SDS might overburden the wastewater capabilities of those systems. Data to this effect is lacking in the record. As a general approach, the 1041 and DEIS are structured to discuss treatment and conveyance of water supply and conveyance and storage of return flows, leaving gaps at numerous points in the record concerning the operation and capacities of wastewater treatment facilities. Again, with no new wastewater facilities to develop in concert with the Southern Delivery System, there is a general concern under this Criterion D that the overall functionality of municipal and special district systems to be served by the project has been considered and has properly accounted for demands placed on wastewater treatment facilities.

- E. The activity can be supported by water possessed by the applicant of sufficient quality to meet the State's drinking water standards and in sufficient quantity to fulfill existing and projected future demands.*

The Applicant notes that the Municipal Outlet Works, as a proposed intake source for its Southern Delivery System water, has historically been used to provide raw water for municipal treatment and use.⁶ Treatment of raw water, to

⁶ 1041 Application Document, Section C (3).

be developed as a component of the Southern Delivery System, must address general water quality issues on the Arkansas River, including acid rock drainage in the headwaters and generally increasing salinity and other agricultural and municipal contaminants as waters make their way downstream.⁷

The use of water from Pueblo Reservoir has an effect on water quality for the City of Pueblo and other downstream users, increasing salinity to near (or a possible exceedence of) a salinity standard for drinking water.⁸ Fountain Creek return flows to Pueblo County will contain potential contaminants from wastewater effluent, discussed separately under Criterion 15 (Pueblo Code 17.172.130 (15)).

In terms of the sufficiency of the SDS project to fulfill existing and projected future demand, it should be noted that Fountain and Security, at a minimum, are known to have greater demands than the SDS will fulfill.⁹ Demand for water in the vicinity of Colorado Springs is generally expected to increase.¹⁰ It may be noted that a plan was recently publicized to develop another major water pipeline from Pueblo County to serve water consumers in El Paso County.

Overall, the applicant reports that the quality and quantity of water available to the Applicant is sufficient to justify the project as proposed. Though it is possible that optimizing water quality and quantity to address demands in the SDS service area could involve some refinement of the proposal, the 1041 application may be found in compliance with Pueblo County Code 17.164.030 (E). From the perspective of the primary proponent, Colorado Springs Utilities, the SDS project is reasonably anticipated to meet the needs, in terms of both ability to treat raw water to drinking water standards and quantitative demands, until 2040.

F. The activity will not create proliferation of special districts, or overlapping of the boundaries of special districts.

According to the text of the 1041 application, rather than encourage proliferation of special districts or overlapping of the boundaries of special districts, the SDS Project is a cooperative effort by the City of Colorado Springs, Pueblo West Metropolitan District, City of Fountain, and the Security Water District to provide for efficient transport and supply of water to accommodate future needs within these entities.

⁷ See DEIS, Section 3.2.8.

⁸ Socioeconomic Effects Analysis, Section 6.4.2.

⁹ DEIS Appendix B, Section B.5.

¹⁰ Population growth has exceeded projections within the Colorado Springs Utilities service area since the need and conveyance capacity for new major water supply system was developed. 1041 Application Document, Appendix A, pp. 3-5.

It is noted that the SDS 1041 application is not intended to modify or expand the service area or service plan of the Pueblo West Metropolitan District. For example, this review does not contemplate that Pueblo West will discharge wastewater effluent to the Pueblo Reservoir. Should any modification of the Pueblo West service plan or expansion of the service area be contemplated in the future, that action will be subject to future review apart from the SDS 1041 application.

G. Environmental impacts including, but not limited to, agricultural productivity potential, aquatic life, stream standards, groundwater, and in-stream water quality related to the proposed activity have been identified and will be mitigated or compensated for.

Criterion G is a broad and fundamental inquiry regarding the environmental impacts of a 1041 proposal. This Criterion is a requirement to identify and mitigate all significant adverse impacts of the Southern Delivery System on Pueblo County.

A number of water-related impacts are specifically enumerated in the language of Criterion G, at Pueblo County Code 17.164.030 (G). These criteria are each incorporated in the subject matter of other evaluation criteria, and full consideration should be given to relevant discussion in these other sections of this report:

- Agricultural Productivity Potential – Criterion 10, Pueblo County Code 17.172.130 (10); Criterion 24, Pueblo County Code 17.172.130 (24).
- Aquatic Life – Criterion 18, Pueblo County Code 17.172.130 (18).
- Stream Standards and In-stream Water Quality – Criterion I, Pueblo County Code 17.164.030 (I); Criterion 15, Pueblo County Code 17.172.130 (15); Criterion 23, Pueblo County Code 17.172.130 (23).
- Groundwater – Criterion 16, Pueblo County Code 17.172.130 (16); Criterion 28, Pueblo County Code 17.172.130 (28).

Pueblo County 1041 review criteria elsewhere cover a number of additional potential environmental impacts not specifically listed in Criterion G. These environmental impacts are within the scope of Criterion G, which is not limited to the enumerated list of concerns. This report discusses potential effects on Pueblo County under those specific criteria, as follows:

- Air Quality – Criterion 13, Pueblo County Code 17.172.130 (13).
- Visual Quality – Criterion 14, Pueblo County Code 17.172.130 (14).
- Water Quantities, Flow Conditions, Flood Hazards – Criterion 20, Pueblo County Code 17.172.130 (20); Criterion 25, Pueblo County Code 17.172.130 (25).

- Wetlands and Riparian Areas – Criterion 17, Pueblo County Code 17.172.130 (17).
- Terrestrial and Aquatic Plant Life – Criterion 18, Pueblo County Code 17.172.130 (18).
- Wildlife – Criterion 10, Pueblo County Code 17.172.130 (10); Criterion 18, Pueblo County Code 17.172.130 (18); Criterion 24, Pueblo County Code 17.172.130 (24).
- Soils and Geology – Criterion 20, Pueblo County Code 17.172.130 (20).
- Natural Hazards – Criterion 6, Pueblo County Code 17.172.130 (6).
- Aquifer Recharge Areas – Criterion 28, Pueblo County Code 17.172.130 (28).

In addition to the listing of environmental impacts above, commentators and application materials define several additional potential areas of environmental concern. These concerns include climate change, solid waste and other byproducts of water service, energy consumption and “carbon footprint,” as well as impacts to water levels in Lake Pueblo and other aesthetic and recreational resources.

This Criterion specifically requires mitigation or compensation for environmental impacts. According to the 1041 Application and DEIS, certain environmental impacts are unavoidable. Mitigation is the appropriate response for all significant adverse environmental impacts, whether identified by the Applicant, the DEIS, or this 1041 review process.

County staff acknowledges the various mitigation proposals included in the 1041 application. Construction impacts in Pueblo County are generally covered by Section H of the 1041 Document. The other primary source of mitigation proposals, the DEIS, is not specifically concerned with Pueblo County. For example, the Conceptual Geomorphology Mitigation Plan¹¹ presents projects in El Paso County that are “representative of the level of mitigation that may be appropriate to address effect directly associated with the SDS project.” Based on the short time available for review of the SDS application, there are unresolved questions regarding the comprehensiveness, or specific concern with Pueblo County impacts, of DEIS-generated mitigation proposals.

H. The proposed activity will not make demands upon natural resource, including, but not limited to, water, energy resources, and unique environmental areas, which demands are excessive when compared with the value of the activity.

Staff believes the Applicant could be compliant with this Criterion provided the project is subject to the recommended conditions of approval. The project

¹¹ DEIS Appendix C.

obviously puts demands on natural resources, particularly water, however these demands may not be excessive when compared to the value of the SDS Project with appropriate mitigation. An accounting of various environmental concerns is provided above in Criterion G, Pueblo County Code 17.164.030 (G).

- I. The proposed activity does not conflict with the Pueblo Regional Development Plan, Water Quality Management Plan, or other duly adopted plans of the County of Pueblo.*

The analysis below incorporates the response of the 1041 Application Document to this Criterion, as reported by the Applicant. The Board of County Commissioners may reserve the right to request additional analysis regarding this Criterion, as needed to ensure the applicant's compliance with the various duly adopted plans of Pueblo County.

REGIONAL DEVELOPMENT PLANS

Based on Pueblo's Comprehensive Plan, developed by the Pueblo Area Council of Governments, existing land use within and adjacent to the impact area associated with JPS and the 115 kV substation and overhead electric transmission facilities is classified as "Permanent Open Space."

The SDS Project complies with and is consistent with Pueblo's Comprehensive Plan. The Project conforms with, subject to the recommended conditions of approval, the Regional Development Principle: "Encourage efficient and prudent extensions of infrastructure in a manner that considers impacts to both service providers and taxpayers" (p.30); and Urban Development Principle: "Provide public services and infrastructure to areas of the Region that are environmentally and economically suitable for urban growth" (p. 30).

The surface waters to be affected by the Project include:

- The Arkansas River upstream of Pueblo Reservoir
- The Arkansas River through the City of Pueblo
- The Arkansas River downstream of the City of Pueblo
- Fountain Creek
- Pueblo Reservoir

Each of these surface waters will possess different project influences and are addressed in this section. Water quality data indicated in this section is referenced from current CDPHE sample data.

Upper Arkansas River

The Upper Arkansas River will be influenced by the Pueblo Reservoir lake levels generated by raw water extraction rates and volumes. According to recent sampling of the River water quality in the Upper Arkansas, water quality is

generally considered “good” or “unimpaired” relative to applicable water quality standards.

Arkansas River through Pueblo

The Arkansas River course through the City of Pueblo will be influenced by Reservoir levels and discharges from Pueblo Dam, as managed by Reclamation. Recent changes in water quality standards in the area have removed the Arkansas River from the list of streams impaired by high concentrations of naturally occurring selenium.

Lower Arkansas River

Water quality along the Lower Arkansas River varies. High levels of sediment in the water, caused by the erosion of unstable river banks and bottoms in different areas, make the water look cloudy and brown, but do not impact the use of the water for drinking water supplies or agricultural irrigation. Naturally occurring concentrations of selenium nearly exceed updated water quality standards in this stretch of the river. Concentrations of salinity (salt) in the Lower Arkansas River are above recommended levels for crop irrigation and drinking water sources.

Fountain Creek

The Fountain Creek watershed and various related planning activities are discussed elsewhere in these comments.

Pueblo Reservoir

The quality of water flowing into Pueblo Reservoir from the upper Arkansas River tends to contain no “impairments”. Pueblo Reservoir water strongly stratifies during the summer (i.e., develops horizontal layers of differing water temperatures and chemical qualities), which reduces mixing and can lead to periods of low dissolved oxygen near the bottom. The low dissolved oxygen causes some metals and nutrients, particularly manganese, to dissolve out of the sediments. Historically, the dissolving metals and nutrients have not been sufficiently widespread to affect water quality in the reservoir as a whole, or quality of releases downstream of the reservoir. Algae levels in Pueblo Reservoir are relatively low to moderate; due to the lower phosphorus nutrient levels limiting growth. Chlorophyll concentrations (a measure of green algae levels) indicate that Pueblo Reservoir borders between medium and high levels of nutrients and low dissolved oxygen content, which is indicative of moderate to high organic productivity (between mesotrophic and eutrophic) conditions in the reservoir.¹²

APPLICABLE REGIONAL WATER QUALITY MANAGEMENT PLAN

The County of Pueblo Department of Planning and Development prepared a “Section 208 Plan” for the Pueblo Area Council of Governments, as part of a

¹² DEIS, Water Quality Technical Report.

water quality program from 1977 to 1994. The 208 Plan, and subsequent updates, contains information regarding various bodies of water, as they relate to specific projects and developments planned for the region. Following a review of the 208 Plan, and updates, the Applicant did not identify any provisions in the Section 208 Water Quality Management Plan that apply to the Project. Per the 208 Plan Update, Volume VI, 1987, "Pueblo Reservoir's design, operation and maintenance are for the benefit of the municipalities and farmers that own the water". The SDS project will be utilizing the water rights owned by the Applicant in order to use the Applicant's water currently stored in Pueblo Reservoir. More detailed information may be found in an updated Pueblo Reservoir study, which was conducted as a part of the DEIS and contains information supplementing the Pueblo Reservoir Study contained in 208 Plan Update, Volume VI, 1987. Detailed Pueblo Reservoir water quality information can be found in the DEIS and Section F(3) of the 1041 Application Document.

Existing Data Monitoring Sources

Existing data monitoring sources are discussed in Section F(3)(b) of the 1041 Application Document. This referenced section includes detailed data tables from water quality monitoring at the FVA WTP and SDS project Pilot Plant studies.

Impact to Water Quality

Impacts to water quality were assessed in the DEIS using the best available modeling and estimating approaches. The results of the analysis are summarized below.

Upper Arkansas River

The Project would not impact water quality in the Upper Arkansas River due to a JUM connection and all construction activity occurring east of the Pueblo Dam and then a northerly pipeline alignment. Heavy metal concentrations, created by upstream non-Project activity, in the Upper Arkansas would be unchanged from existing conditions.

Arkansas River through Pueblo

Long-term water quality from operation of the SDS project would not change water quality from existing conditions. Construction operations may have limited and low level water quality impacts due to construction at the JUM and pipeline river crossing. The Project will be designed to minimize any impacts by construction and mitigation measures will be in place.

Lower Arkansas River

The Project diverts and returns water above this section of the Arkansas River. Concentrations of salinity (salt) in the Lower Arkansas River are unchanged from existing conditions, and continued use of the water is not expected to result in a significant impact.

Fountain Creek

The increased volume of treated and disinfected wastewater in Fountain Creek would dilute concentrations of E. coli.

Pueblo Reservoir

The U.S. Army Corps of Engineers CE-QUAL-W2 model (ver. 3.2) was used to simulate water quality in Pueblo Reservoir for the existing conditions and SDS project impact. Lake operations, water temperature, dissolved oxygen, TDS, dissolved ammonia, dissolved nitrate (measured as dissolved nitrite plus nitrate), dissolved orthophosphorus, total phosphorus, algal biomass (measured as chlorophyll a), and total iron were modeled. The SDS project impacts were modeled for three contiguous years, October 1999 to October 2002 (water years 2000 to 2002), representing a wet, average, and dry hydrologic cycle. For the SDS project conditions, the quality of inflows into Pueblo Reservoir would be similar to historical inflow quality and would not affect reservoir water quality.

Simulated hydrologic data shows that the average water depth in Pueblo Reservoir would typically be within three feet of existing conditions and the average residence time would decrease from an existing condition of 119 days to 110 days. Shorter residence times are generally beneficial to water quality in Pueblo Reservoir because nutrients can be flushed out of the water body before being used by algae. The SDS project would have minimal impacts to water quality overall in Pueblo Reservoir. Slightly higher concentrations of nutrients may be expected. Ammonia levels are expected to be low compared to water quality standards.

Groundwater Quality

The area impacted by the Project falls within the major Dakota-Cheyenne Aquifer boundary, which stretches broadly on the western boundary west along the Arkansas River, and east along the river beyond Lamar, Colorado. On the northern boundary the Aquifer stretches along Sandy Creek to Interstate I-70 and south along Interstate 1-25 to the New Mexico border, according to USGS surveys.

Project Impacts on Groundwater

The SDS project draws water directly from Pueblo Reservoir through the JUM and does not draw from waters that would directly impact groundwater levels. Discharge to Fountain Creek may create potential Aquifer recharge downstream and beyond to the Arkansas River. Overall, the project will not significantly impact alluvial groundwater, due to the use of the Reservoir source water, pipeline conveyance, and the fact that the Project does not use aquifers to store water or wells to extract water (DEIS, Section 3.6-Ground Water Hydrology, 2008).

Existing Stream Flows and Reservoir Levels

The surface waters to be affected by the Project are the Arkansas River upstream of Pueblo Reservoir, the Arkansas River through Pueblo, the Arkansas River downstream of Pueblo, Fountain Creek, and Pueblo Reservoir.

Upper Arkansas River

Colorado Springs supports and participates in the Upper Arkansas Voluntary Flow Management Program (UAVFMP) – a program that establishes target minimum water flow rates in the river to assure fishery and recreational needs are met. Currently, these flow rates are met about 345 days per year. Minimum flow targets of 190 cfs at the site of the Fremont County Rainbow Park Wastewater Treatment Facility discharge are met about 356 days per year.

Arkansas River through Pueblo

The river section below Pueblo Reservoir is controlled by releases from the reservoir. Summer streamflow in this reach of the Arkansas River is dominated by releases made for downstream irrigation. Flows in this reach are heavily impacted by inflows from Wildhorse Creek and diversions between Wildhorse Creek and Fountain Creek. Neither of these influences is related to Project activities. The Flow Management Program (FMP) plays an important role on this section of the Arkansas River. The FMP is the result of IGAs for a target flow program on the Arkansas River through the City of Pueblo. This river section includes the Legacy Project and the kayak course. The IGA parties – Colorado Springs, Pueblo Board of Water Works, City of Aurora, City of Pueblo, City of Fountain and the Southeastern Colorado Water Conservancy District (SECWCD) – agreed to reduce or limit the operation of Arkansas River exchange water rights operated through the City of Pueblo:

- To attain a year-round average daily flow of 100 cfs at the Above Pueblo Gage (below Pueblo Dam)
- To maintain a seasonal recreational flow between 100 and 500 cfs from March 16 through November 14 –the 245-day boating season.
- To cooperate with other agencies and water users to release water for special events planned on an annual basis.

Colorado Springs currently participates in the FMP, with water flow targets being met 220 out of the 245 days during the boating season.

Lower Arkansas River

The stream flow is highest just downstream of Fountain Creek, which has an average annual flow of 975 cfs for the existing condition. By the time the River reaches the Las Animas River, flow is down to 322 cfs as a result of irrigation diversions.

Fountain Creek

Non-storm flows on Fountain Creek have increased over the years as more treated wastewater from more residents is discharged into the creek. The

continuous flows in Fountain Creek now support vegetation and habitat that may not have been present during times when the stream did not flow continuously.

Pueblo Reservoir

Pueblo Reservoir is located on the main stem of the Arkansas River and is the largest reservoir in the Fry-Ark Project. The reservoir is a keystone in operations of the Arkansas River, including providing storage for the Fry-Ark Project, the Winter Water Storage Program, and numerous municipalities through short term and long-term excess capacity contracts. Changes in operations within the basin affect the demand for stored water in the reservoir. The Applicant will use existing rights to water in Pueblo Reservoir. The SDS project will allow additional water to be stored by Applicant under future storage contracts with Reclamation and to trade Pueblo Reservoir water for water storage in Reclamation's upstream Fry-Ark reservoirs near Buena Vista.

- J. All natural hazards affecting the proposal, including, but not limited to, floods, expansive and corrosive soils, unstable geologic features, such as mudflows, landslides and avalanches have been avoided or compensated for by the activity.*

With the exception of details regarding potential increases in flood hazard, the applicant and submittal materials reports avoidance or compensation for potential natural hazards affecting the project. A summary of each hazard is listed below.

Flooding

Both the DEIS and the US Army Corps of Engineers' Fountain Creek Watershed Study have evaluated flooding along Fountain Creek. Both studies agree on existing flood flows, but differ in their future flood flow predictions. The Applicant believes that the DEIS analysis is more accurate because it includes the incidental benefit of SDS facilities (flood attenuation from two new reservoirs to be located on tributaries to Fountain Creek) as wells as growth within the Applicant's service area. The Watershed Study, by contrast, includes growth in the watershed over which the Applicant has no impact, but does not account for SDS project facilities or benefits. The incidental storage within the two proposed reservoirs along Williams Creek has a small benefit to that subwatershed of Fountain Creek, but significant effects are still possible within the Fountain Creek watershed at large. Further consideration of flood risks is included below, under Criteria 6 (Pueblo County Code 17.172.130 (6)) and 20 (Pueblo County Code 17.172.130 (20)).

It should be noted that no event more significant than the modeled 100-year storm was considered in the 1041 application or related documents. The risks of an event over the 100-year design event may include catastrophic failure of detention basins, flood control structures, and massive surges of water downstream; however, given a 0.2 percent likelihood of, for example, the 500-

year storm occurring on any given year, such risks are frequently regarded as too remote for effective control by local government regulation.

Soils

The project will be affected by expansive and corrosive soils and shallow bedrock. To protect the pipeline from corrosive soils, a cathodic protection system will be used. To protect the pipeline from expansive soils, the pipeline will be encased in a low strength material, and flexible coupling will be used where ridged structures join the encased pipeline. When shallow bedrock is encountered, blasting or ripping techniques will be used.

Earthquakes/Landslides/Mudflows/Avalanches

The Applicant states that project is not located in areas of high susceptibility for landslides or earthquakes, according to USGS mapping, and will not cross any active geologic fault.

Lightning

Lightning strikes are a potential hazard, primarily to workers. Safety regulations will be enforced on site with regard to work stoppages due to lightning and thunderstorms in the vicinity of the work area. A lightning strike may also affect pipeline integrity and continuity of service; pipeline breaks are a contingency built into the pipeline control system and design.

Wildfire

The portion of the Project that is covered by the Pueblo County Community Wildfire Protection Plan will be located in minimal to moderate wildfire hazard areas. Construction operations will implement fire precautions common to these activities, such as using spark arrestors on all equipment, no smoking regulations, and fire extinguisher equipment availability.

K. The activity will not conflict or create any conflict with the surrounding lands either as they exist currently or as proposed by local plans and programs previously approved by the governing body of the territory in which the proposed activity lies.

Land use, both existing and planned, has been extensively reviewed and reported on throughout these staff comments. For a description of activities, please refer to the "Zoning and Land Use" section above. According to the applicant, there are no approved or proposed local plans or programs for lands in the vicinity of the raw water pipeline that would be materially impacted by the construction or operation of the pipeline in Pueblo County. Return flow and indirect impacts to lands affected by the Fountain Creek and Arkansas River are assessed with reference to other criteria under Pueblo County Code sections 17.164.030 and 17.172.130.

Several existing houses and some businesses will be impacted by construction of the pipeline alignment. The applicant has identified residential properties that will need to be acquired in fee to implement the pipeline corridor as proposed.

- L. The proposed activity is the best alternative available for the provision of water and/or sewer service to the geographical area affected by the proposal.*

The Applicant believes that this project is the best alternative to provide water to the project participants. It is our understanding, based upon the DEIS Supplemental Information Report, that the Pueblo Reservoir alternative (which is the subject of this 1041 application) is approximately \$216 million less expensive in capital costs than the Fremont County alternative (which is currently the subject of a Special Use application in Fremont County).

The downstream intake alternative (on the Arkansas River downstream of the confluence with Fountain Creek) has been assessed in the DEIS. As reported in the Supplemental Information Report, its capital cost would be about \$184 million higher than the applicant's proposal, but would yield 62 percent more dry-year water. The downstream intake alternative would reportedly almost double the operation and maintenance cost of the SDS project.¹³ Average monthly streamflows on the Arkansas River through Pueblo would be substantially higher with the downstream intake alternative.¹⁴ The Applicant has publicly stated that the downstream would cost approximately \$600 million more than the Pueblo Reservoir alternative and would create a significant solid waste disposal problem resulting from reverse osmosis water treatment.

Staff believes that the application can comply with this criterion provided that the final mitigation package and conditions of approval are acceptable in terms of the framework previously discussed.

- M. Economic impacts including, but not limited to, taxable property, agricultural, NPDES permitted facilities, and recreation related to the proposed activity have been identified and will be mitigated or compensated for.*

Staff believes that the application may comply with this criterion subject to the recommended conditions of approval. The applicant has identified economic impacts in its application and the associated EIS studies.¹⁵ The recommended conditions of approval, subject to further development, may mitigate and/or

¹³ It is not known whether the capital cost and operation and maintenance costs would be lower if the smaller quantity of water (as in the present 1041 application) was used for comparison.

¹⁴ DEIS, Table 33, p. 168.

¹⁵ See particularly the DEIS, in Sections 3.14 through 3.16, and the Socioeconomic Resources Technical Report and Socioeconomic Effects Analysis.

compensate for those impacts within reason. Specific concerns with recreational resources as an economic activity are addressed under Criterion 11, Pueblo County Code 17.172.130 (11), below.

- N. Additional permit for a major new domestic water supply system or major extension of an existing domestic water supply system. When the component water supply system for a major new domestic water system or major extension of an existing domestic water system is proposed to be developed for a new or increased diversion per year, or new or increased storage capacity, of 500 acre-feet or more, the additional criteria set forth in §17.172.130, which are incorporated by this reference, shall be satisfied as part of this designation and the activity will require a permit for a Municipal Water Project pursuant to §17.172.010 et seq.*

As part of 1041 review under Chapter 17.164 of the Pueblo County Code, the various review criteria of Section 17.172.130 are incorporated by reference. During completeness review, County staff found that this provision applies to the present case because a new diversion of water would occur at the intake of the Southern Delivery System and the project would include development of more than 500 acre-feet of new storage capacity for the SDS water supply.

- O. Documentation that prior to site disturbance for the Project, the applicant will have obtained all necessary property rights, permits and approvals. The Board may, at its discretion, defer making a final decision on the application until outstanding property rights, permits and approvals are obtained.*

To advance the Southern Delivery System project, the Applicant is managing a large number of permitting activities, arranging for service from utilities (e.g., electric power), and attempting to settle its needs for easements and title to properties on which pipelines, reservoirs, pump stations, and other project-related facilities will be situated.

A detailed explanation of the Applicant's approach to obtaining other permits and approvals is contained in Section C of the 1041 Application Document. The Applicant has accounted for a wide variety of permits and its approval status; depending on the start date for the construction project, and where site disturbance will occur on that date, the Applicant has demonstrated the ability to have necessary permits in place at that time. The Applicant's status with respect to property and easement acquisitions is less clearly defined. Because the project has involved a number of alternatives, including two still active, the Applicant had not, at the time of application, systematically engaged property owners along the proposed SDS alignment in discussions about future acquisitions. To ensure compliance with Criterion O, it may be appropriate for

Pueblo County to adopt a condition outlining expectations for notification and timely engagement with affected property owners in Pueblo County.

The Applicant is exempted from the requirement to perform mineral notifications according to its waiver request.¹⁶

For additional discussion relevant to this Criterion, the reader is directed to the equivalent provision under Chapter 17.172 of the Pueblo County Code, Criterion 1 (Pueblo Code 17.172.130 (1)).

17.172.130 APPROVAL CRITERIA

The applicant is subject to approval criteria under Section 17.172.130 of the Pueblo County Code based on its application, identifying that it is proposing Activities Involving Efficient Utilization of Municipal and Industrial Water Projects.

- (1) *Documentation that prior to site disturbance for the Project the applicant will have obtained all necessary property rights, permits and approvals. The Board may, at its discretion, defer making a financial decision of the application until outstanding property rights, permits and approvals are obtained.*

Prior to disturbance in Pueblo County, the Applicant will obtain and provide documentation that provides proof that the necessary property rights, permits and applicable regulatory and technological requirements, as stipulated by regulatory authorities with jurisdiction over the project. The following is a listing of all potentially needed permits and requirements:

- **Bureau of Reclamation** – Execution of Contracts and Record of Decision
- **U.S. Fish and Wildlife Service** – Depredation Permit and Section 7 Consultation
- **U.S. Army Corps of Engineers** – 404 Permit
- **Colorado Department of Transportation** – Utility/ Special Use Permit and State Highway Access Permit
- **Colorado Department of Public Health and Environment** – 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,

¹⁶ See, 1041 Application Document, Section C (5).

- **Other State Permits/Approvals** – 401 Certification (Clean Water Act), Reservoir Plan and Dam Safety Preparedness Plan Approval, Section 106 Review (National Historic Preservation Act).
- **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.), Flood Plain Permits
- **Potential County Permits** – Excavation/Grading Permits, Driveway Access Permits, Land Use/Zoning Permits, Grading and Erosion and Stormwater Quality Control Permits, Air Quality Construction Permits, Individual Sewage Disposal System Permits.
- **Potential City Permits** – Excavation/Grading Permits, Land Use/Zoning Permits, Grading and Erosion and Stormwater Quality Control Permits, Driveway Access Permits.

Local and Regional agencies requiring permits may include:

- Pueblo Regional Building Department
- Pikes Peak Regional Building Department
- Pueblo County
- El Paso County
- Pueblo West Metropolitan District Department of Public Works

For detailed information on each of the above permit requirements please refer to the SDS Pueblo County 1041 Permit Application under Section 17.172.120.C. pages C-1 through C-4.

(2) *The Project will not impair property rights held by others.*

Staff believes the application meets this Criterion subject to the recommended conditions of approval listed previously in this report. Property will be taken by the applicant through permanent and temporary easements, fee purchase and as a last resort, condemnation. The Applicant has committed to acquire land in a manner that does not impair property rights. Moreover, the Applicant has the legal authority to acquire the land it needs under their powers of eminent domain.

(3) *The Project is consistent with relevant provisions of applicable land use and water quality plans.*

Staff believes the application may meet this Criterion subject to recommended conditions, subject to further development, with condition particularly to emphasize implementation of the various water quality plans for Fountain Creek. The applicant presented various land use and water plans and its rationale for compliance in the submittal materials; the discussion of this Criterion 3 should cross-reference the discussion of the applicant's submittal under Criterion I (Pueblo Code 17.164.030 (I)) and Criterion K (Pueblo Code 17.164.030 (K)) above.

- (4) *The applicant has the necessary expertise and financial capability to develop and operate the project consistent with all requirements and conditions.*

Staff believes the application likely meets this Criterion. Colorado Springs Utilities has developed and operated pipelines for many years and purports to have a good bond rating and financial situation to build and operate the SDS Project.

- (5) *The Project is technically and financially feasible.*

Staff believes the application meets this criterion. The Applicant has submitted a large volume of technical information including preliminary engineering designs. They have also submitted documentation as to how they will fund the project and have demonstrated its financial feasibility. The feasibility and safety of the dam outlet connections will need to be confirmed.

- (6) *The Project is not subject to significant risk from natural hazards.*

See above, Criterion J, Pueblo County Code 17.164.030 (J). Flood risks are also discussed below, under Criterion 20, Pueblo County Code 17.172.130 (20).

- (7) *The Project will not have a significant adverse effect on land use patterns.*

The applicant reported compliance with this Criterion in Section E(1) of its 1041 Application Document. Relevant text is excerpted, in edited form, as follows:

The raw water pipeline and related components of the Project will be constructed and operated within the corridor previously described. This raw water pipeline alignment was selected using a set of criteria that included such factors as technical feasibility, use of additional resources, cost effectiveness, and impacts to community, recreation, environment, and commerce. Overarching goals of the

project have always included achieving minimum disruption, effective utilization of resources, and reliable service delivery.

Pueblo's Comprehensive Plan shows that the existing land use in which the Juniper Jump Station and the 115 kV substation and overhead electric transmission facilities will be constructed is classified as "Permanent Open Space". The JPS will be situated near Pueblo Dam and near similar existing facilities. JPS will not be visible from most public vantage points, has been designed to blend with the surrounding land, and will not change the character of this "Permanent Open Space".

The 115 kV substation and overhead electric transmission facilities supplying power to JPS will be located on land owned by the United States Government, currently utilized by Lake Pueblo State Park, with a land use classification of "Permanent Open Space." Similar substations and electric lines are located northeast of JPS on property with the same "Permanent Open Space" land use classification. The Project facilities will not change the character of this "Permanent Open Space."

The route of the raw water pipeline through Pueblo West parallels a corridor for utility transmission facilities, and that has been used for such facilities since the mid-1950s.

The raw water pipeline and related components will be situated on and adjacent to lands that are currently used for utility facilities and activities, including the following:

1. Three overhead electric lines (two transmission lines and one distribution line) installed in 1956, 1965, and in the early 1970s
2. An underground natural gas transmission pipeline
3. An underground communications line
4. The FVC installed and in operation since 1981
5. Water lines, sewer lines, natural gas distribution lines, and fiber optic cables, which cross the pipeline's track at various points.

Near Pueblo Dam and south of Pueblo West, the raw water pipeline will be constructed on property owned by the United States Government. The FVC, Pueblo West Pipeline, and Pueblo Board of Water Works Pipeline are existing raw water pipelines currently located near the proposed raw water pipeline.

The raw water pipeline will cross portions of residential lots as it traverses portions of Pueblo West. The Applicant will coordinate with affected landowners along the raw water pipeline route to obtain approvals to enter their property and negotiate the appropriate agreements with the landowners to obtain easements, ROW's, or purchase of the parcel, and will not significantly impair the property rights held by others. The construction and operation of the raw water pipeline

will require that affected portions of the subject lots not be built upon or used in a manner that could damage the pipeline or affect its operation.

The raw water pipeline will cross certain roads. These roads are identified in the SDS Pueblo County 1041 Application document. The construction of the raw water pipeline does not require or call for any change in the width, elevation, or composition of any of those roads, nor will the raw water pipeline preclude the construction of future roadways as shown in Pueblo's Comprehensive Plan and described in the Pueblo Area Council of Governments 2035 Long Range Transportation Plan. Any impacts to County roads shall be subject to the requirements of the Pueblo County Public Works Department.

In summary, regarding Criterion 7, according to the applicant there are no approved or proposed local plans or programs for lands in the vicinity of the raw water pipeline that would be materially impacted by the construction or operation of the pipeline.

(8) The Project will not have a significant adverse effect on the capability of local governments affected by the Project to provide services, or exceed the capacity of service delivery systems.

The local governments (municipalities and special districts) affected by the Southern Delivery System provide a variety of services. The obvious effect of the Southern Delivery System on water supply for affected local governments is to enhance access to raw water. Treatment of this raw water to meet standards of potability would require new treatment facilities, but expansion of existing raw water treatment is an integral part of the Southern Delivery System planning.

Other services provided by local governments include public works, such as drainage facilities and roads, and emergency response. Section E(2) of the 1041 application document describes incidental impacts to local government services. The 1041 application does not provide a detailed road impact study, but notes that traffic control plans will be submitted to Pueblo West "and/or Pueblo County Department of Public Works" to deal with temporary road closures and other road impacts. There are two outstanding issues with impacts to roads, the first being the lack of study or acknowledgment of impacts along entire haul routes, not just the site of a crossing with temporary closures. Trucks with heavy loads will be using the Pueblo West and other County road infrastructure, and restoration of the County's road network to appropriate standards following construction will be essential to the success of the project in Pueblo County. Secondly, the County's Public Works Department will need a clearer definition of its role and authority to require appropriate traffic mitigation.

Based on reasonable assumptions, the 1041 application finds that the project will not have an adverse impact on the provision of emergency services in Pueblo

County. However, as an additional consideration, it is possible that deferred construction of the North River Outlet Works will strain the capacity of the Joint Use Manifold. Generally, the applicant is aware that steps should be taken to reduce the potential for the pipeline and appurtenances to become an attractive nuisance during construction and operations. For example, the Applicant stated in an open house for concerned Pueblo West citizens that it would commit to barring entrance to all unfinished segments of the pipeline at the close of work each day.

A clearance matrix for SDS pipeline crossings with other utilities is provided at section I(6) of the 1041 application. The information in this matrix is furnished without any examples of its application along the pipeline corridor in Pueblo County. The proposed alignment of the pipeline is in fact close to numerous other utilities, and the need for crossings is inevitable. While the dimensions provided in Applicant's clearance matrix do not preclude needed crossings, the number of possible conflicts leads to questions about the need for a variance procedure, and also a review of putatively "non-exclusive" easement language that may nonetheless restrict the operations of other utilities in the project area.

(9) The Project will not create an undue financial burden on existing or future residents of the County.

According to 1041 application materials, four distinct entities bear the financial burden of the Southern Delivery System project: Colorado Springs Utilities, the City of Fountain, the Security Water District, and the Pueblo West Metropolitan District. The concern of Pueblo County Code 17.172.130 (9) is therefore primarily directed in this case toward Pueblo County taxpayers with properties in the Pueblo West Metropolitan District.

While the exact amount of Pueblo West's rate adjustment to pay for its contribution to the Southern Delivery System is subject to further review, whatever financial burden this presents is probably not undue or unreasonable in light of near-capacity demands placed on Pueblo West's existing water supply. Additional raw water and treatment are needed in the Pueblo West Metropolitan District, whether the solution is SDS or something else.

Pueblo West faces no significant change in its financial risk as a partner in the SDS project. Colorado Springs Utilities, in its 1041 submittal, specifically provides that, "in case of default by any of the partner parties, Springs Utilities has full liability for payment of SDS project costs and repayment of the revenue bonds." Colorado Springs Utilities is also assuming full financial responsibility for raising capital to build the Southern Delivery System.

Pueblo West will pay a share of SDS costs through a surcharge on waters delivered by the system. The Applicant provides Pueblo West's current rate

structure in Appendix J to the 1041 application, but this Appendix does not show estimated rates following the delivery of SDS water to the District.

Pueblo West and other current users of the Joint Use Manifold could experience strain on their existing water supplies if construction of the North River Outlet Work is delayed. Given the current representation of the applicant that this facility will be built in the initial SDS construction, a detailed analysis of potential financial and service impacts was not undertaken at this time.

It is possible that the financial burdens of the Southern Delivery System could be indirect. For instance, if the Southern Delivery System were to exacerbate flooding or other risks related to conveyance of either raw water or return flows through Pueblo County, this could financially burden Pueblo County residents through higher insurance premiums or diminution in the County's equity value. It is notable that the DEIS found a number of designated high-risk populations, including lower income residents, in census tracts near SDS conveyances.¹⁷ Depending on the magnitude of economic effects, the Southern Delivery System could have a significant effect on lower income Pueblo County populations, given their susceptibility to relatively small changes in financial conditions.

The Southern Delivery System could present an undue financial burden on residents of Pueblo County if it had the effect of substantially diminishing the economic productivity of agricultural land or natural resources. Section E(9) of the 1041 application concludes that the project will not affect the quantity of water available to Pueblo County irrigators from their existing water rights. This conclusion is based on the Applicant's assessment that all potentially affected irrigators in Pueblo County have rights senior to the exchange rights that SDS will yield for the Applicants. While adjudication of water makes priority and ownership clear, it also has the effect of reallocating water resources on the ground when conditional rights are exercised. The Applicant excludes from consideration the potential displacement of any junior water rights, especially respecting water sources for local uses other than irrigation. In addressing the question of the potential economic effect of actual changes in quantity¹⁸ and quality¹⁹ of Pueblo County water resources, the Applicant does not seriously attempt to quantify effects of the Southern Delivery System from the standpoint of opportunity costs that Pueblo County may bear as new demands and impacts are placed on the County's resources, particularly as a downstream user of Fountain Creek waters.

(10) The Project will not significantly degrade any current or foreseeable future sector of the local economy.

¹⁷ See DEIS section 3.16.

¹⁸ See Criteria 24, Pueblo Code 17.172.130 (24), and 25, Pueblo Code 17.172.130 (25).

¹⁹ See Criterion 15, Pueblo Code 17.172.130 (15).

Staff believes that the application meets this criterion subject to the recommended conditions of approval. Construction dollars spent in Pueblo County and provision of more water to Pueblo West will add to those sectors of the economy. Please reference Criterion M (Pueblo County Code 17.164.030 (M)) and Criterion 11 (Pueblo County Code 17.172.130 (11)) for related discussion. It should be noted that deferred construction of the North River Outlet Works could have impacts on both recreational and agricultural users downstream of the Pueblo Reservoir; given the current representation of the applicant that this facility will be built in the initial SDS construction, a detailed analysis of potential financial and service impacts was not undertaken at this time.

Temporary impacts during construction are discussed in potential mitigation measures, above. For example, the open cut trench developed for pipeline installation should be interrupted and/or covered at intervals appropriate to allow livestock access to water and shelter on ranchlands.

(11) The Project will not have a significant adverse effect on the quality or quantity of recreational opportunities and experience.

Recreation is a significant economic activity in Pueblo County. Staff believes that the application meets this criterion subject to the recommended conditions of approval, particularly as they apply to water levels in Lake Pueblo, flow management in the Arkansas River, and management of water quality and fisheries²⁰ in general. The applicant addressed impacts to Lake Pueblo State Park, river corridor recreation below Pueblo Reservoir, the Honor Farms Property (the pipeline crosses Honor Farm property which is a planned park owned by the City of Pueblo).

(12) The planning, design and operation of the Project shall reflect principals of resource conservation, energy efficiency and recycling or reuse.

Resource conservation and energy efficiency in the design of the Southern Delivery System are comprehensively discussed in section B(5) of the 1041 application document.

According to the Applicant, a number of conservation techniques may be used if deemed "necessary and appropriate during the construction of the project." Construction mitigation measures include standard erosion control, revegetation, and weed management. Plant species of special concern will be avoided if and when located in a survey. Excess cut material will be disposed of in a permitted disposal site if the material cannot be given to an off-site user. While the

²⁰ See discussion of potential water quality impacts on fish and recreational users under Criterion 15, Pueblo County Code 17.172.130 (15), below.

construction phase offers limited opportunities for meaningful conservation, none of the suggested techniques is particularly costly relative to standard industry practice, and most suggested techniques in fact restate standard construction practices. The Applicant does not discuss procurement of locally manufactured materials, idle controls on vehicles, or other possible “green” construction techniques. Given the modest attempt to address conservation in the construction process, it is unclear why the Applicant would reserve discretion to opt out of the enumerated construction phase conservation techniques, as appears to be indicated by the 1041 application.

Criterion 12 not only requires resource conservation during the construction process, but that conservation and efficiency are reflected in the entire project, including planning, design and operation, before and after the construction phase. To this end, the 1041 application provides a short list of motor specifications to run its pump station. In terms of energy efficiency, the 1041 application does not provide any information concerning the opportunity for solar powered monitoring or other field equipment. Construction of the North Outlet Works has been mentioned as an opportunity to build new hydroelectric generation capacity in the proximity of the Juniper Pump Station, but plans at this time involve purchase of electric power for pipeline and pumping equipment from traditional electric line sources. Reverse osmosis in Fountain, as another example, is likely to generate solid waste in the form of recovered sediments, but provision for its reuse or efficient disposal are not considered in the 1041 document. The Southern Delivery System project does include plans to conserve resources regulated under other law, such as archaeological sites, but the project does not clearly demonstrate how it is otherwise specifically designed or operated to implement principles of resource conservation, energy efficiency, recycling or reuse.

Note that this Criterion is similar in theme to Pueblo Code 17.172.130 (25), as discussed below. Efficiency and conservation techniques specifically related to water use are reserved for analysis under that later section of code. However, it should be noted here that Colorado Springs is party to the Flow Management Program, supplying minimum stream flows to the Lower Arkansas River, based on its application for approval of the Southern Delivery System. The Flow Management Program helps to conserve water-dependant resources, but, as currently written, the timing and frequency of minimum flows has not met original expectations.

(13) The Project shall not significantly degrade air quality.

Air emissions during construction will primarily be dust and diesel exhaust from earthmoving equipment. The Applicant will prepare, submit and implement a fugitive dust control plan required by the Colorado Department of Public Health and Environment’s Air Pollution Control Division. Control methods will include,

but are not limited to, moistening the soil and using temporary road surface materials. Diesel equipment will be required to meet all State and Local emission and opacity standards.

During operation, the Juniper Pump Station will primarily be powered by electricity supplied by the Black Hills Corporation. A separate Land Use Application will be submitted for the transmission line and substation necessary to support the energy demands of the Juniper Pump Station. A propane system will be used for back-up generator fuel and building heating. These systems will be used infrequently and intermittently and are expected to produce only small volumes of air emissions. Propane is considered a relatively “clean” fuel.

Copies of all air permits and fugitive dust control plans shall be submitted to Pueblo County staff prior to operation. The project will not significantly degrade air quality during construction or operation.

(14) The Project will not significantly degrade existing visual quality.

The underground pipeline excavations will be restored to pre-existing grades and revegetated and/or landscaped. Various pipeline appurtenances, including access manways, blow off manholes, combination air release valve vaults, and isolation vaults, will be predominately located below grade.

The Juniper Pump Station (JPS) and associated equipment have been architecturally designed, via an Architectural Definition Workshop with Springs Utilities, Reclamation, and State Parks, to minimize visual impact by matching structures to the architectural characteristics of surrounding structures. In addition, the intake and JPS would be located near the lowest portion of the Pueblo Reservoir spillway. Although the overhead power lines to JPS would be visible from fishing areas and local roads near Pueblo Reservoir Dam, multiple facilities are already visible at this same location. Power lines will be constructed with non-shiny wire, non-reflective and opaque insulators, and light-colored, non-reflective finished poles.

According to applicant studies, the project has been adequately designed to prevent significant visual impacts.

(15) The Project will not significantly degrade surface water quality.

Significant degradation of surface water quality from the Southern Delivery System would potentially flow downstream to the City of Pueblo and other communities in Pueblo County without proper mitigation. In response to this concern, it is the general contention of the Applicant that the SDS project “will not significantly degrade surface water quality over the Project area or within Pueblo

County”²¹ and that compliance with federal law and other standards demonstrates that there will be no degradation. County staff notes, however, that water quality standards adopted in state or federal law are not necessarily reflective of the values emphasized in Pueblo County 1041 regulations. For example, the water quality standard for dissolved selenium on Fountain Creek, “due to natural sources of selenium, is based on ambient conditions and not the health of aquatic life.” If aquatic life is affected by degradation of water quality, this may be significant for the purposes of Pueblo County where such degradation may not trigger other compliance standards.

Urban development and wastewater treatment plants, as the filter through which SDS flows return to Fountain Creek and the lower Arkansas Valley, are known to increase concentrations of certain potential contaminants. Nitrates and nitrites, dissolved ammonia, and total phosphorus are constituents of Colorado Springs effluent that significantly elevate their respective baseflow concentrations in Fountain Creek downstream of municipal discharges.²² There are also sources of metal contaminants located in the Monument and Fountain Creek Watersheds, and some sources are mobilized during baseflow conditions. Mobilization of sediment is also a water quality issue raised by SDS plans; discussion of sediment and its effect on the surface water system is discussed in detail under Criterion 20, Pueblo Code 17.172.130 (20).

The ambient condition of surface waters in Pueblo County have changed with water development. Higher nutrient levels (e.g., nitrate, nitrite, phosphorus) stimulate the growth of algae once flows are diverted into storage or slow flow. While this is dismissed as a problem on Fountain Creek and the lower Arkansas River due to high turbidity, downstream reservoirs already suffer from eutrophic conditions. The water quality effect of SDS on downstream users is studied in semi-quantitative terms,²³ meaning that it is unclear how nutrients, bacteria, and other chemicals concentrated in municipal effluent may affect livestock and agricultural resources,²⁴ and even recreational uses such as fishing. Even attributes such as depth and flow rate may have an effect on the quality of Fountain Creek in Pueblo County for particular purposes.²⁵ While it is the opinion of the Applicant that the SDS project is consistent with the attainment of various water quality standards, the trend toward higher concentrations of certain contaminants signals that the Southern Delivery System may not achieve the goal of preventing water quality degradation.

²¹ 1041 Application Document, section F(3).

²² See, USACOE, Characterization of Stormflow and Wastewater Treatment-Plant Effluent Discharges on Water Quality, Suspended Sediment, and Stream Morphology for Fountain and Monument Creek Watersheds, Colorado, 1981-2006.

²³ See, Water Quality Effects Analysis, p. 166.

²⁴ It is unclear, for example, whether SDS return flows might influence the eligibility of downstream agricultural water users for organic certification.

²⁵ “Both depth and flow are important for aquatic resource effects evaluations.” Surface Water Hydrology Effects Analysis, p. 6. See also, Aquatic Resources Effects Analysis.

A category of federally unregulated discharges, known as “emerging contaminants,” is commonly present in wastewater effluent. Health risks to humans of synthetic hormones, pharmaceuticals, and other household chemicals unregulated in municipal discharges are unknown, subject to current research. According to the DEIS Water Quality Effects Analysis, reproductive abnormalities have been found in fish populations downstream from wastewater discharge. DEIS materials submitted for 1041 review acknowledge that, “[E]merging contaminants may be a concern for municipalities downstream of WWTP [wastewater treatment plant] return flows under Existing Conditions. Under Existing Conditions and all of the alternatives, a substantial amount of the streamflow in Fountain Creek would be treated wastewater.” Because wastewater return flows are a leading source of emerging contaminants, it would be expected that the Southern Delivery System would have an effect of increasing by some increment both concentration and overall load of emerging contaminants. This could present an unacceptable risk to recreational activities,²⁶ both from the standpoint of wildlife effects and unknown risks of exposure to humans.

As new flows move through the supply and waste systems of the participant SDS communities, breached pipes may present a hazard to water quality. As discussed in detail under Criterion 28, Pueblo Code 17.172.130 (28), below, protection of the Colorado Springs Utilities sewer crossings of Fountain Creek, as one example of necessary maintenance, may be appropriate to prevent the type of water quality issues the Creek has experienced in the past.

In this evaluation, according to Pueblo Code 17.172.130 (15), water quality could be found at risk of degradation resulting from the Southern Delivery System. The standard expressed by Pueblo County in its code is a policy against backsliding. The DEIS analysis set standards that can be attained; where, for example, salinity is not considered to adversely affect crop yield, yet higher salinity is acknowledged to affect agricultural users. The DEIS shows that backsliding will occur with respect to a number of water quality components that may affect Pueblo County goals. It should be noted that a negative trend is not inevitable, as the Applicant’s modeling shows, for example, that some water supply scenarios for the SDS could in fact reduce salinity-related problems.²⁷

The Applicant 1041 and DEIS analysis minimize potential concerns about emerging contaminants and the cumulative effects of pollutants introduced through urban runoff. Critically, to address any question about the effect of tens of thousands of new municipal taps in El Paso County, the Applicant assumes that El Paso County jurisdictions are held to current and future best practices.

²⁶ See Wildlife discussion under 1041 Application Document, section H(1): “Colorado’s wildlife form a significant part of this state’s recreational opportunities and therefore constitutes a large contribution to the area’s economy... Mitigation measures can never take the place of sound avoidance planning.”

²⁷ Water Quality Effects Analysis, p. 105.

Pursuant to Pueblo Code 17.172.130 (15), County staff is seeking reliable assurances under this Criterion that on-going efforts to address water quality in Fountain Creek will provide the anticipated benefits and ability to confront future needs.

(16) The Project will not significantly degrade groundwater quality.

The project draws water directly from Pueblo Reservoir through the JUM and does not draw from waters that would directly impact groundwater levels. Discharge to Fountain Creek may create potential Aquifer recharge downstream and beyond to the Arkansas River. Overall, the project will not significantly impact alluvial groundwater, due to the use of the Reservoir source water, pipeline conveyance, and the fact that the Project does not use aquifers to store water or wells to extract water.²⁸

(17) The Project will not significantly degrade wetlands and riparian areas.

The project is expected to permanently affect less than 1 acre of wetlands and 8 acres of riparian vegetation (primarily riparian shrublands) within Pueblo County due to pipeline construction. Near State Highway 50, the pipeline alignment crosses two intermittent drainages, both with cattail-dominated wetlands and surface water. These are classified as Category III wetlands (with Category I being a wetland of exceptionally high quality, and Category IV being a small, isolated wetland lacking vegetative diversity). No wetlands are associated with the Juniper Pump Station site, which is primarily a sandbar willow-dominated riparian shrubland. (See Appendix N of the 1041 application for a map of the wetlands and riparian areas, and the DEIS, Wetlands, Waters, and Riparian Resources Technical Report for more information.)

Within the Monitoring and Mitigation section of the 1041 application (page H-3), the Applicant states that there are "...no anticipated wetland or riparian habitat crossings in Pueblo County..." This statement is clearly disputed by the data described above, which was taken from Section F and Appendix N of the 1041 Application Document. Although some general mitigation ideas are presented, it is not clear whether the Applicant proposes to avoid or mitigate the specific impacts described in Section F of the 1041 application.

Based on the predominance of Class II and III wetlands in the area, and the quantity of similar riparian habitat both upstream and downstream of the Juniper Pump Station site, the applicant believes the project will not significantly degrade wetlands and riparian areas. Staff recommends, however, that the applicant

²⁸ DEIS, Section 3.6 (Ground Water Hydrology).

commit to specific mitigation or avoidance measures for each designated wetland.

The impact of new return flows and other flows associated with SDS to Fountain Creek wetlands and riparian areas is not discussed in the applicant's treatment of pipeline construction. See discussion below concerning geomorphology (Criterion 20, Pueblo County Code 17.172.130 (20)) and aquifer recharge areas (Criterion 28, Pueblo County Code 17.172.130 (28)) for additional discussion of river and shoreline conditions.

(18) The Project will not significantly degrade terrestrial or aquatic animal life or their habitats.

Terrestrial Animals

The Applicant contends there are no Federal threatened, endangered, or candidate wildlife habitat in the project area. Several species listed by Colorado as State threatened, endangered or species of special concern have the potential to occur in the project area. These include:

- Species associated with prairie dog towns (Black-tailed Prairie Dog, Western Burrowing Owl, and Mountain Plover);
- Wide ranging uplands species (Ferruginous Hawk, Swift Fox, Triploid Checkered Whiptail, 3 species of Skippers, Regal Fritillary);
- Riparian/Wetland species (Plains Leopard Frog and Northern Leopard Frog);
- Other species (Bald Eagle, Botta's Pocket Gopher)

The Project will have only a minor effect on these species, however, because impacts to their habitat would be small on a regional scale. Potential impacts and mitigation measures will be coordinated with the CDOW in the project planning phase. There will also be minor impacts to non-state listed game species, mule deer and pronghorn, because the project includes their winter range.

The Walker Ranch, through which the proposed SDS pipeline alignment passes in Pueblo County, is reportedly the location of certain critical habitat and/or individuals of threatened and endangered species, subject to protection under the federal Endangered Species Act (ESA). The potential impact on Walker Ranch resources has not been studied in detail for this analysis, as the applicant has represented that the pipeline project will not affect areas of the Ranch with ESA issues.

Aquatic Animals

The DEIS considered 17 fish species and three hybrids in Pueblo Reservoir. No data was available on the benthic invertebrate community of Pueblo Reservoir. The DEIS used the Indicators of Hydrologic Alteration (IHA) method to evaluate

impacts to aquatic life relative to predicted changes to Pueblo Reservoir. According to these indicators, expected changes in the reservoir will not adversely affect aquatic life.

A copy of the wildlife mitigation plan, approved by CDOW, must be submitted to Pueblo County staff prior to construction. With an appropriate mitigation plan in place, the project may not significantly degrade terrestrial or aquatic plant life or their habitats. However, comprehensive attention to water quality issues in any mitigation plan is indicated by the DEIS.²⁹

The Board of County Commissioners should note that concerns regarding invasive mussels, recently found in Arkansas River waters, and potential mobilization of this threat to local streams and aquatic ecology have not been studied in any detail for the SDS project.

(19) The Project will not significantly deteriorate terrestrial plant life or plant habitat.

Field surveys and aerial mapping methods were used to identify vegetation cover and rare plant communities within the project area. No Federal threatened, endangered or candidate plant species were found according to the Applicant. Five plant species listed by the State were found within the project area:

- Dwarf milkweed (critically imperiled)
- Rocky Mountain bladderpod (imperiled)
- Golden blazingstar (imperiled)
- Arkansas river feverfew (vulnerable)
- Showy prairie gentian (vulnerable)

Impact avoidance and mitigation measures will be put in place to minimize impacts to these listed plant species. Mitigation measures to protect these imperiled and vulnerable plants will include routing construction activities around plant communities of concerns where possible, relocating individual plants or plant communities, and protecting critical plant communities adjacent to the work area with barriers or fencing.

Mitigation measures related to vegetation in general include storing and replacing existing topsoil, using native seeds to reseed (and locally collected seed where possible), replacing lost trees with appropriate species, using certified weed-free mulch and seed, washing earthmoving equipment so that weeds are not spread from other sites, and reseeding as soon as possible after disturbance.

²⁹ See discussion above, Criterion 15, Pueblo County Code 17.172.130 (15), for example, concerning effects on fish and recreational users.

If the Applicant is willing to commit to the mitigation measures described in the 1041 Application, Section H, and summarized above, the project will not significantly deteriorate terrestrial plant life or plant habitat.

(20) The Project will not significantly deteriorate soils and geologic conditions nor cause significant erosion, sedimentation, or flooding.

The soil resource is directly and indirectly affected by the Southern Delivery System proposal. At a minimum, the project will remove an estimated 2,334 acres of soil from use (buried under new reservoirs or inside pump station and plant footprints) and disturb another 1,202 acres during construction. The SDS will, in gross, have the direct effect of removing soil from productive use and increasing susceptibility to both erosion and sedimentation along the stream channel.³⁰ The DEIS also identifies dissolved solids and particulate contaminants that affect the use of soils.³¹ Some direct geologic effects occur with the SDS, reducing recoverable gravel, but geologic hazards are not a significant factor under the DEIS. The review of 1041 Criterion 20, concerning “soil deterioration,” could focus on the direct effect of 3,500 acres of land disturbance, or it could look at soil stability across the watershed, or both.

In the study area of the SDS project, water is the primary agent of change relative to soils and geologic conditions. The 1041 Criterion, Pueblo Code 17.172.130 (20), cites significant erosion, sedimentation, or flooding as unacceptable risks to Pueblo County.

It should be noted that changes in channel and erosion characteristics may have a feedback effect, especially as loss of riparian vegetation accelerates erosion and further loss of vegetation.³² Sedimentation has feedback effects, though the 1041 and DEIS somewhat ambiguously associate sedimentation with both a potential increase in encroachment of woody vegetation in the Fountain Creek corridor³³ and a potential loss of riparian vegetation along Fountain Creek.³⁴ Based on all the relevant findings under this review, it is important to consider the cumulative effect of changes in flow on geomorphology. Because Fountain Creek is not at equilibrium and not stable over most of its length, small changes in water flows, especially water out of balance with the existing sediment load at the point of discharge into the stream, can trigger a sequence of conditions leading to significant changes in downstream erosive and depositional characteristics. As a general conclusion, the DEIS holds that Fountain Creek

³⁰ DEIS, Section 3.23.5.1.

³¹ For example, salinity.

³² See, for example, Riparian Vegetation Effects Analysis, p. 7 (referencing an “on-going cycle of riparian vegetation loss linked to increased erosion”).

³³ “Increased sedimentation could create sandbars on which riparian vegetation may establish.” Riparian Vegetation Effects Analysis, p. 11.

³⁴ Decreases in peak flow may adversely affect woody riparian vegetation establishment, which typically requires scoured areas for establishment. Riparian Vegetation Effects Analysis, p. 10.

downstream of Williams Creek will experience increased sedimentation if SDS is built as proposed by the proponents.

Projected baseflow changes from existing conditions to the DEIS action alternative, identical to the 1041 request, measured on Fountain Creek at Pueblo, are expressed in percentages of up to 47 percent, or 88 cfs more in July, after runoff has started to taper, and other significant numbers. Changes in baseflow from SDS return flows, a round number of 70 cfs for general comparison, are nowhere near the surge size of big storms or even a 1-year flood risk. It must be noted that 70 cfs is the most recent estimated return flow from new wastewater flows generated by SDS, but this number has not been consistently reported, and the applicant indicated that EIS modeling of return flows may not have used this flow rate. In any event, it is clear that the total change in baseflow due to SDS is potentially much higher than 70 cfs, as new releases for exchange rights are designed at 300 cfs, and the SDS enables and/or requires participants to make use of other water resources and flow rights. While channel capacity and flooding are not the primary concerns with baseflow changes once SDS is built, some concerns are raised and others discussed below.

Sediment transport effects are significant and form the primary concern related to baseflow changes according to most studies of the Fountain Creek. Baseflow mobile grain size is correlated to deposition of sediment on the lower Fountain Creek in Pueblo County.³⁵ The routine operations of the Southern Delivery System are expected to deposit approximately 100 tons of sediment each day in downstream reaches of Fountain Creek.³⁶

Peak flow sediment transport, the sediment load during a flood, is also capable of major effects on the Fountain Creek watershed. The Applicant argues fervently, and credibly, that well-known historic flood events on Fountain Creek have been primarily the product of natural topography and not the urbanization of Colorado Springs and other El Paso County communities. The DEIS is equally clear that peak flow sediment transport capacity changes on Fountain Creek in Pueblo County, such that sediment captured by flood conditions upstream will come out of suspension and deposit large amounts of material in the lower Fountain Creek and Arkansas Rivers in Pueblo County.³⁷

Both baseflows and peak flow contribute to sediment problems on Fountain Creek. Flood hazards are a related system, and they are a concern to Pueblo County because the County already has a problem with inundation in downtown Pueblo, with a 2-year storm. Flood hazards are defined by high flow conditions that recur on an interval of 2 years or more.

³⁵ Water Resources Effects Analysis, p. 70.

³⁶ Water Resources Effects Analysis, p. 79.

³⁷ See, Water Resources Effects Analysis, p. 51.

By definition, flood hazards are a product of extreme flow conditions. In terms of direct effects, according to the Applicant's modeling, the Southern Delivery System will not induce an increase of more than a fraction of one percent of the 100-year storm flow, and direct effects on other peak flows (e.g., modeled 2- and 10-year storms) are also characterized as negligible. Under SDS, the impoundment proposed on the Williams Creek drainage will reduce peak flows along that drainage, and, to a smaller degree, along Fountain Creek downstream of the Williams Creek confluence. This effect is incidental, however, and the DEIS notes that "none of the proposed reservoirs [for SDS] would have dedicated flood control storage."³⁸

Cumulative effects of urbanization facilitated by SDS may have significant impacts on flood hazards in Pueblo County if unmitigated. Urban development in SDS service areas not covered by the presumed benefits of the Colorado Springs Stormwater Enterprise,³⁹ and draining to the vast majority of the Fountain Creek watershed not tributary to Williams Creek, would have the cumulative effect of typical urban runoff, accelerating and increasing peak flows as SDS serves new development in Colorado Springs.

Smaller storms and surges, under a two-year design event, are considered channel-forming activities on a stream such as Fountain Creek.⁴⁰ The Fountain Creek is, in fact, constantly moving bed load. Baseflows, including SDS, play a significant role in sediment transport on Fountain Creek.⁴¹ Sediment transport is a controlling factor in flow rates and erosion risks.

Southern Delivery System baseflow will add erosive energy to flows in upstream portions of Fountain Creek, increasing sediment transport into Pueblo County. Deposition of sediment in Pueblo County may greatly amplify the flood depth effect of incremental new flows. The effects of deposition are already tangible, as there are currently plans to dredge reaches of Fountain Creek in Pueblo County with 500,000 cubic yards of deposited sediments, many inches thick in the bed of the stream. Artificially high flood channel elevations are coupled with aggradation on Pueblo County stream reaches.⁴² The Applicant characterizes as

³⁸ Water Quality Effects Analysis, p. 3.

³⁹ See Water Quality Effects Analysis, p. 22.

⁴⁰ See, Riparian Vegetation Effects Analysis p. 17, Water Resources Technical Report, p. 157 (associating erosion and sedimentation problems in lower Fountain Creek subwatershed with urbanization, including change to perennial baseflow). But see also, Water Resources Technical Report, p. 156 ("Changes in [Fountain Creek] channel width, length and location were only seen in photographs following streamflow events with a recurrence interval of five years or greater").

⁴¹ "Even during baseflow conditions, sediment moves along Fountain Creek. While there are numerous locations along the stream that erode and pick up sediment, there are also many areas where sediment is deposited during baseflow conditions. In general, the very lowest reaches of Fountain Creek experience deposition during baseflows." 1041 Application Document, Section I (2).

⁴² To be precise, aggradation causes change in flood elevations. See, Fountain Creek Watershed Plan, p. 4-47 ("The conveyance capacity between the dike systems [below Highway 50 in Pueblo County] may become inadequate to control the 100-year flood event if aggradation

minimal the impact of mobilizing 100 tons of new sediment that may be deposited in Pueblo County each day. Spreading the sediment load evenly across a long segment of channel, 100 tons of new sediment amounts to the thickness of a sheet of paper, according to the Applicant. Sediment may, however, accumulate unevenly in Pueblo County,⁴³ and small perturbations in sediment load may have larger effects on this stream system.⁴⁴

The SDS project will have direct, indirect, and cumulative impacts to the stability and potential hazard conditions of Fountain Creek. There are many assumptions and limitations in this aspect of the analysis of the SDS project. The 1041 application balances cumulative effects and incidental benefits⁴⁵ to find that they are offsetting. The DEIS simply grants that Colorado Springs Utilities is willing and able to guarantee the performance of its Stormwater Enterprise and other major projects.

For 1041 review in Pueblo County, it will be a substantial effort to quantify the exact geomorphic impacts of the SDS decision. For instance, the DEIS did not involve development of a sediment transport model for the Arkansas River.⁴⁶ The DEIS sediment transport model is generalized.

The DEIS and Applicant assume that there will be new flows in Fountain Creek, and it is correct to say that the Applicant has the right to use its water. However, the proposed Pueblo County preferred route for the Southern Delivery System is not being compared in this regulation to a NEPA alternative, but compared only to an existing condition and effect on its problems. Tabular reporting of flow impacts in the DEIS contains the formula “Effects (cfs) (Alternative – Alternative 1),” signaling the use of DEIS Alternative 1 as the basis for comparison, instead of existing conditions. The many comparisons relying on this formula do not always reveal the impact of baseline growth in water discharge.

continues.”). See also, U.S. Army Corps of Engineers, Watershed Management Plan (Nov. 2008), Section 4.1.1 (Pueblo Levees). Note that riparian encroachment along the lower Fountain Creek is also cited as a possible mechanism for reduced channel capacity over time. Water Resources Effects Analysis, p. 34.

⁴³ The spatial resolution of the study does not attempt to account for minor variations in sediment loading within larger regional trends on Fountain Creek. Water Resources Effects Analysis, p. 51 (“Actual sediment transport values were not determined because of the lack of available sediment transport data... For these areas [including Pueblo County], a decrease in sediment transport capacity was assumed to result in increased deposition”).

⁴⁴ “The spatial trends in [mobile grain size and sediment load] are important in geomorphology because of the importance of the influence of upstream reaches on downstream geomorphology. For example, sediment deposition in the Fountain Creek reach near Pueblo is highly influenced by the sediment load delivered to that reach from upstream reaches (e.g., Fountain Creek near Fountain).” Water Resources Effects Analysis, p. 53.

⁴⁵ Flood detention in freeboard capacity of SDS reservoirs. 1041 Application Document, Section I (3).

⁴⁶ Water Resources Effects Analysis, p.44.

Other limitations of the 1041 study as a basis for evaluation of this Criterion must be considered. Mobile grain size analysis as a proxy for erosion potential relies on a number of assumptions that depend on subjective verification.⁴⁷ In a number of ways, the Applicant's argument that median and average flow rates are reasonable modeling assumptions fails to account for impacts of the Southern Delivery System on Pueblo County, some of which impacts are related to timing of flow and overall volumes of return flow. Various commentators have also observed that use of median data tends to dampen projected impacts of the Southern Delivery System in abnormally wet or dry years. Overall, the Water Resources Effects Analysis, in its discussion of methods for sediment transport modeling, notes that results of sediment modeling are subjective and dependent on professional interpretations.⁴⁸ Though the Applicant can be credited with developing extensive quantitative analysis through the DEIS process, the Applicant's compliance with this Criterion, Pueblo Code 17.172.130 (20) and the application of the Applicant's data to the County's standard remains a fact-finding matter for the Pueblo County Board.

A conversation with Bruce Spiller, project engineer for the Applicant, occurred during the review of this project, in which we discussed the incremental effects of SDS on base flows and flood conditions. The Applicant contended that its contribution to the need for a flood control structure on Fountain Creek, to account for SDS, was a thin layer of water on a hypothetical Fountain Creek reservoir, contained by a relatively small amount of compacted soil added to lift the safe reservoir storage height the needed fraction of an inch. Applying this logic to the flooding hazard through the City of Pueblo, the Applicant submitted supplemental information on 9/24/08 that stated a 2-year flood would have "much faster flowing water and would be about 5.4 feet deep in the vicinity of 8th Street [in Pueblo] and cover the entire channel with water to a width of over 700 feet. The additional 70 cfs would add less than one half inch to the overall flood depth." While the Applicant's statement is true, it is also true that the same amount of water has different incremental effects at different depths. The Applicant's characterization of the incremental effect of 70 cfs on flooding is fairly debatable. In addition, the applicant may need to account for the total contribution of up to 400 cfs, as an estimate, of total return flows, exchange releases, and other incidental changes in baseflow due to SDS. The net downstream flows of the Southern Delivery System would be a significant contribution from an identifiable party that could develop, contribute to, use and maintain, or take responsibility for some flood levee or storage capacity, to avoid contributing to the existing flooding problem in Pueblo County.

⁴⁷ Water Resources Effects Analysis at 52, Appendix B, p. 21. Attempting to account for aggradation in Pueblo County, the study notes that this observed condition is because "the rate of aggradation might decrease; not necessarily that degradation would occur." But this implies aggradation concentrated at greater levels upstream of the Pueblo gages on Fountain Creek, a condition that is not observed. Ad hoc reconciliation by the modeler is required.

⁴⁸ Water Resources Effects Analysis, p. 47.

The mobility of sediment and instability of the Fountain Creek channel upstream from Pueblo must be controlled if flood hazards and sedimentation effects are to be abated. Previously, Pueblo County found insufficient data to conclude that there would be no significant impact from new baseflows and other effects of SDS; there is today insufficient data to conclude that the effect is de minimus. We find that the effect of SDS on geomorphology and watershed conditions in Pueblo County is significant. Some mitigation of geomorphological conditions on Fountain Creek is therefore appropriate.

Plans for the Fountain Creek Watershed call for more storage to mitigate flooding and provide other benefits. Such facilities could be either in-line or off-line of Fountain Creek.⁴⁹ Dredge programs have been suggested by the U.S. Army Corps and others. And, importantly, the SDS 1041 application assumes that comprehensive upstream flood control and water pollution control programs, such as the frequently-cited Colorado Springs Stormwater Enterprise, will be implemented in a meaningful, reliable way.⁵⁰ Finally, the Applicant submitted for consideration the Bureau of Reclamation's DEIS Appendix C, entitled Conceptual Geomorphology Mitigation Plan, which selectively covers issues noted above by honing in on certain mitigation strategies at sites in El Paso County. The relationship of this 1041 permit to the implementation of these various plans has not been well defined, though the Applicant has alluded in public meetings and reported quotes that it expects the SDS 1041 permit will provide assurances that this type of mitigation will occur.

In the absence of an agreed manner to divide responsibilities, formulation of an appropriate condition for the SDS project's influence on Pueblo County soils and geologic conditions under Pueblo Code 17.172.130 (20) may require rigorous study. Conditions to require erosion control for direct effects and mitigation of cumulative effects are widely adopted in practice. Relative to all the properties directly affected by pipeline construction, staff acknowledges the general sufficiency of Applicant's proposed erosion control program. However, at the scale of Fountain Creek and given the complexity of return flow impacts between Colorado Springs and Pueblo, mitigation plans to implement or perform functions identified in existing comprehensive water resource planning efforts may be the best avenue to address the incrementally small but persistent issues associated with adding many thousands of individual municipal water users served by the Southern Delivery System in all its participant communities.

(21) The Project will not cause a nuisance.

⁴⁹ The Fountain Creek Vision Task Force has identified the need to study both a dam on Fountain Creek and detention/retention systems that bypass bed load.

⁵⁰ See, for example, Water Quality Effects Analysis p. 16 (U.S. Army Corps of Engineers' modeling was altered to reflect hypothetical land use controls) and p. 18 (water quality analysis assumes that Colorado Springs Stormwater Enterprise holds future condition peak flows to the same level as existing peak flows).

Potential nuisances are discussed in Section E(8) of the 1041 Application Document. Further, a number of mitigation measures to address potential nuisances are detailed in Section H(1) of the 1041 Application Document. The SDS 1041 application may meet this criterion subject to the recommended conditions of approval, particularly with regard to construction mitigation and County road impact mitigation. However, it should be noted that the guidance provided by Pueblo County Code 17.172.260 (16) suggests that additional nuisance concerns may be found, subject also to potential mitigation.

(22) The Project will not significantly degrade areas of paleontological, historic, or archaeological importance.

A review of known sites registered with the Colorado Office of Archaeology and Historic Preservation (OAHP) identified twelve (12) sites in the project area with varying levels of cultural and historic value. Due to the confidential nature of this information, however, further description was not provided in the 1041 application or DEIS. The Applicants will enter into a Programmatic Agreement (see a draft of this agreement in Appendix K in the 1041 Application) with the Bureau of Reclamation, the Advisory Council on Historic Preservation, and the Colorado Historic Preservation Officer. Working jointly with experts from various cultural and historic authorities, the project will attempt to minimize impacts to cultural and historic sites via measures that include:

- Avoiding historic locations where possible and physically marking boundaries of areas to be avoided.
- Guiding mitigation via a Treatment Plan outlined in the Programmatic Agreement.
- Implementing a Discovery Plan regarding methods for construction monitoring and protocols for discovery situations, including human remains.
- Implementing a public cultural education program, to include informing the public about excavation status and, where possible, visual displays and explanatory written information within publicly accessed locations of the project area.

The final, signed Programmatic Agreement should be delivered to Pueblo County staff prior to construction. With this Agreement in place, and based on information available through the 1041 application, the project will not significantly degrade areas of paleontological, historic or archeological interest.

(23) The Project will not result in unreasonable risk of releases of hazardous materials.

Encountering Hazardous Materials During Excavation

The Applicant's project mitigation plan will include measures for scenarios in which hazardous materials are encountered during excavation. These measures will include having containment systems and personal protective equipment available to trained and certified construction personnel. However, based on an assessment of the proposed pump station and pipeline alignment in Pueblo County, there were no potential sites identified by the Applicant that may have produced hazardous materials or wastes in or near the excavation areas.

Use of Hazardous Materials During Construction

Hazardous materials used during construction will include:

- Paint
- Propane
- Radioactive materials (x-ray equipment and soils testing equipment)
- Explosive materials (used as needed)

The applicant states that contractors will create and implement Environmental, Health & Safety (EHS) plans in compliance with Federal, State and Local regulations regarding these materials, including Spill Prevention and Response plans. According to the applicant, Section 17.172.120.G of the 1041 Application discusses specific risk minimization measures for each of the hazardous materials, such as fencing and securing tanks during non-working hours and requiring specialty contractors for radioactive testing and blasting.

Use of Hazardous Materials During Operation

Hazardous materials used during operation will include:

- Paint
- Propane

The Applicant states that paint will not be stored on-site during operation of the project, but will be brought on-site for touch-ups as necessary. Four 1,000-gallon propane tanks will be required during operation of the Juniper Pump Station. These tanks will be buried underground, fabricated and tested in accordance with applicable engineering standards and codes. The tanks will be installed and tested in compliance with National Fire Protection Association and Pueblo County codes.

Radioactive and explosive materials will not be used during operation of the project. The Applicant must submit copies of EHS plans and Spill Prevention and Response Plans to the County prior to construction. As presented by the applicant, the SDS project does not pose an unreasonable risk of release of hazardous materials, subject to additional consideration of water quality concerns under Criterion 15, Pueblo County Code 17.172.130 (15), above.

- (24) The benefits accruing to the county and its citizens from the Project outweigh the losses of any natural, agricultural, recreational, grazing, commercial or industrial resources within the County or within areas which impact the County, or the losses of opportunities to develop such resources.*

Staff believes the application meets this Criterion subject to the recommended conditions of approval. Benefits accruing to the County include construction dollars spent in the County, flow management in the Arkansas River and additional water for the development of Pueblo West. Monetary mitigation for improvements to Fountain Creek based on SDS impacts would be a benefit to the County.

Staff had requested the Applicant to talk with the owners of the Walker Ranch to insure that grazing is not negatively impacted and/or grazing impacts are properly mitigated and that environmental values on the ranch are preserved.

- (25) The Project shall emphasize the most efficient use of water, including the recycling, reuse and conservation of water.*

An emphasis on the efficiency of water usage under this Criterion, under Pueblo Code 17.172.130 (25), is understood to require a good faith demonstration that efficiency is a central principle in the design of the Southern Delivery System as proposed.

The efficiency of the proposed Southern Delivery System from a water rights perspective is discussed extensively in the 1041 submittal and DEIS. One effect of the proposed Southern Delivery System is better ability on the part of Colorado Springs Utilities to utilize exchange water rights along the Fountain Creek and in the Arkansas Valley. Within legal limits, return flows are used to exhaustion. As noted in the DEIS, there is “a general upward trend in the amount of return flows that is available for exchange based upon increasing use of reusable transmountain water sources and return flows.”⁵¹ The yield from Colorado Springs water portfolio is reasonably expected to become more efficient with the SDS supply system in place.

The efficiency of water use is also related to the prevention of waste, including the Applicant’s specific efforts to address recycling, reuse and conservation of water. The Applicant’s approach to this topic is summarized in section B(6) of the 1041 application document. In this section, the Applicant asserts that “use of water in Colorado Springs is among the most efficient in the west.” To support this assertion, the application cites low usage relative to other cities in the Western U.S.; a Conservation Plan with new car wash, landscape, and “Water

⁵¹ Water Resources Technical Report, p. 44.

Waste Ordinance” regulatory programs; and a list of other rebates and programs involving voluntary participation. The expected savings and relation of conservation efforts to the Southern Delivery System are not quantified. The 1041 materials also cite development of a reclaimed water supply system for non-potable uses, but, again, the development of this system is an on-going effort of Colorado Springs Utilities, with no specific intent related to efficiency of the Southern Delivery System.

To the extent that the Applicants’ conservation, recycling and reuse scheme is assumed to benefit the Southern Delivery System, the overall demands placed on water resources in the greater Arkansas Valley are reduced. The Applicant should commit to continued funding for existing efficiency and conservation programs, as well as implementing appropriate new or expanded programs, as a requirement of operating the pipeline.

(26) The Project will not result in excess capacity in existing water or wastewater treatment services or create duplicate services.

According to the Applicants, one of the fundamental purposes of the connection of SDS to Pueblo West, Fountain, and Security is to provide redundancy. Colorado Springs has redundancy needs and is specifically seeking to increase capacity, creating newly available excess treated water capacity in the process. Redundancy by definition duplicates service capacity. The Southern Delivery System pipeline alignment is also in close proximity to a variety of other utility infrastructure, paralleling through Pueblo West and other parts of Pueblo County, for example, the Fountain Valley raw water pipeline to Colorado Springs (the rationale for and against hooking on to existing systems is presented in the Applicant’s 1041 application at section B(7) – capacity and duplication of services are not expressly discussed). Adding more pipe capacity directly impacts a number of properties in Pueblo County and changes return flow characteristics, among other less direct effects.

Excess wastewater capacity in the service territory of the Southern Delivery System will be reduced by the project, as the proposed regional wastewater plant near Fountain (Clear Spring Regional Water Reclamation Facility) has been eliminated from planning and all wastewater flows will pass through the Las Vegas Plant or the newer scalloping plant on the north side of Colorado Springs, both with excess existing capacity that would be absorbed by increased return flows.

The potential for a legal standard set by Pueblo Code 17.172.130 (26) in conflict with other provisions of the code prompted a preliminary discussion with legal counsel for Pueblo County. The Southern Delivery System is “another major delivery system to provide delivery system redundancy,” according to the DEIS.⁵²

⁵² Section 1.5.2.1

The entire delivery system is redundant because the Applicant is seeking to account for maintenance and other pipe failure risks in its existing system. The Southern Delivery System will provide a reliable means of delivering the firm yield needed by Colorado Springs Utilities if other critical supply lines are disabled, duplicating existing service capabilities, as well as providing excess capacity to meet growth-related needs in Colorado Springs.

On its face, the Southern Delivery System could warrant a potential negative finding given a strict interpretation of Criterion 26. However, it is the belief of staff that Criterion 26 allows for reasonable water planning activities, including redundancy and some excess capacity as part of a rational plan on behalf of a water utility. Through this review process the County may identify a situational standard, or an actual or implied exemption for rational planning activities and implementation of rational plans. There are reasons why excess potable water capacity could be allowed under the specific set of facts proposed by this applicant.

In the long term, the Southern Delivery System may be an efficient means to carry the Applicant's proven water rights, diverted to Colorado Springs at the Pueblo Reservoir. That is the Applicant's working hypothesis, but further analysis would be needed to show that the Southern Delivery System does not result in capacity beyond that needed to satisfy all project participants. It is possible, based on consideration of evidence to date, that the Southern Delivery System could and would provide excess water for sale to Fort Carson, Monument and the Tri-Lakes area, and other possible extensions of service beyond the assumed limits in the Applicant's 1041 modeling.

If Criterion 26 requires a rigorous study of the need for excess capacity and enforcement of policies to discourage water speculation, the Board of County Commissioners may find that there are concerns about the actual pumping capacity of the Southern Delivery System versus the capacity assumed for modeling purposes. The Applicant does not favor any specific limitation on pumping, even though a raw water throughput of 78 Mgalpd average capacity is a fundamental assumption of the Environmental Impact Statement and 1041 submittal. In the investigation of the "averaging" of pumped capacity, it was indicated that 78 Mgalpd is not necessarily the pumping capacity of the pipe, but a number more related to capacity needed to deliver a given number of acre-feet of water rights.

The Applicant is opposed to numeric pumping limits based on a desire to be able to "average" pumped capacity at will. Changes in baseflow hydrology, urban growth, stormwater and waste characteristics, are tied in the Application to average flow rates to deliver water to specific users in the Fountain Creek watershed. Increasing overall pumping or delivering water to new users could alter the results of numerous studies submitted for 1041 review.

The Southern Delivery System may have excess raw water and treated water capacity, depending on the interpretation of "excess." Existing wastewater capacity at Colorado Springs Utilities plants will be consumed by new waste flows originating in the City's sanitary sewers; there is no excess wastewater treatment capacity caused by the Southern Delivery System.

(27) The Project shall be necessary to meet community development and population demands in the area to be served by the Project.

Staff believes the Applicant meets this criterion and the Applicant has submitted substantial data and information to support this finding.

(28) Urban development, population densities, and site layout and design of storm water and sanitation systems shall be accomplished in a manner that will prevent the pollution of aquifer recharge areas.

The effect on aquifer recharge areas of the Applicant's plans for permanent facilities and the design of storm water and sanitation systems that will serve the Southern Delivery System is a significant issue. The Colorado Springs sewer system has spilled pollutants into the Fountain Creek on multiple occasions. This report takes notice of documented incidents in which untreated wastes were added to the Fountain Creek when deteriorating, inadequate pipes in the Colorado Springs Utilities system ruptured.

This review criterion covers contingencies with either contaminated surface water reaching wetlands and other sensitive bottomlands in Pueblo County or with groundwater flowing into Pueblo County contaminated by pollution to the aquifer at sites in El Paso County. If the Southern Delivery System is designed to a basic level of safety, polluted water should not be a risk to aquifer recharge areas in either El Paso or Pueblo County, and any risk of pollution to the aquifer in Pueblo County is of direct concern to the 1041 review process. The Southern Delivery System should not, through its effects on aquifer recharge areas, cause any water use or water user in Pueblo County to violate applicable pollution control law or cause other cognizable harms related to water pollution.

According to the Riparian Vegetation Effects Analysis, operation of SDS may prompt wetlands or other riparian vegetation in Pueblo County to encroach farther into the channel of Fountain Creek, as greater deposition of sand and sediment is anticipated to result from new return flows. As predicted by the Applicant's modeling, the addition of silty soil and/or hydrophytic plants may reduce aquifer recharge function, or the effect may be negligible. In El Paso County, a certain number of acres of wetlands and other riparian vegetation would be adversely affected by SDS-related groundwater drawdown, with less recharge and more surface water to transport sediment. From the regional

perspective of DEIS analysis, the effect of the Southern Delivery System on wetlands appears to be minor.

The locations of specific aquifer recharge areas are not explicitly covered in the hydrologic model for the project.⁵³ The Alluvial Ground Water Effects Analysis is confined to a study of pumping and river stage effects, and likewise does not locate specific aquifer recharge areas or attempt to study the transport of pollutants into the alluvium. The 1041 record does show that urban development upstream from Widefield is associated with low Total Dissolved Solids recharge to the shallow alluvial aquifer.⁵⁴ The 1041 application does not directly address how pollutants generated by the Southern Delivery System may be transferred into regional aquifers, concentrated in a wetland sink, or released to the stream in a manner that threatens aquifer recharge, but some indications of possible effects are given in the report.

The scope of the present 1041 review does not include a detailed engineering evaluation of the new pipeline. It is assumed that engineering certification of the new pipeline will be supplied when construction plans are prepared. In any event, pollution to aquifer recharge areas is not a major concern if there is a failure in the raw water pipeline. Worst-case scenarios with unlikely contingencies such as an impact or explosion⁵⁵ would include a break near outdoor storage, a landfill, or a building, where pollutants may be present and readily transported by uncontrolled water. No contaminated lands or significant deposits of pollutants are known to exist in the immediate vicinity of the Southern Delivery System raw water pipeline as of this writing. If such a hazard did exist, the potential impact of a worst-case raw water breach would be limited to the duration of uncontrolled flow before a problem is recognized at the controls and the pipeline shut down for repairs.⁵⁶

The effect on downstream aquifer recharge areas of urban development and population densities in future developed areas of Colorado Springs, southern El Paso County and Pueblo West, to be served by the Southern Delivery System, is not directly addressed in 1041 submittal materials. Indirectly, the analysis of overall hydrologic effects addresses the scope of state and federal water pollution control law. This analysis assumes that the build-out condition will reflect the implementation of an array of best practices and regulatory checks to

⁵³ Page 5 of the Hydrologic Model Documentation Report notes that, "Except for surface water accruals of return flows from explicitly modeled demands, ground water is implicitly simulated in the daily model. For the major agricultural and municipal demands, surface water accrual of return flows is simulated using MODSIM's built in accounting features.

⁵⁴ Water Resources Technical Report, p. 194.

⁵⁵ Apparently, one of the Colorado Spring Utilities West Slope pipelines burst when it was struck by lightning. See DEIS 1.5.2.1

⁵⁶ If designed correctly, with automated monitoring and emergency overrides, pumps should stop within minutes of a breach. A condition might be considered to require Colorado Springs Utilities to provide a summary of all controls and other technical information of critical importance to Pueblo County.

mitigate the hydrologic effects of urban development, with its attendant illicit drainage and non-point source pollution problems. The assumptions of the Southern Delivery System modeling may reflect commitments by the Applicant, or it may be necessary to seek adherence to these practices through a condition. If the applicant is unable to agree to a broad formulation of its commitment to regulatory best practices in all future development served by the Southern Delivery System, detailed analysis, not possible within the timeframe of the present review, would be necessary to determine the exact impact and appropriate mitigation program to satisfy this aspect of Pueblo Code 17.172.130 (28).

(29) The Project shall be reasonably necessary to meet projected community development and population demands in the areas to be served by the Project, or to comply with regulatory or technological requirements.

This Approval Criteria is substantially the same as Criterion A, above, see Pueblot County Code 17.164.030 (A).

REVOCATION OR SUSPENSION OF PERMITS

If the Permit Authority makes a preliminary determination that the provisions of any permit or the terms of any regulation have been violated by the holder of the permit, the permit authority may temporarily suspend the permit for a period of ninety (90) days. Before making such a temporary suspension, the permit authority shall give the permit holder written notice of the specific violation and shall allow the permit holder a period of at least fifteen (15) days to correct the violations. If the permit holder does not concur that he or she is in violation, he or she shall, within fifteen (15) days of his or her receipt of the notice, show cause to the permit authority why temporary suspension should not be ordered.

Either prior to or subsequent to a temporary suspension, the permit authority may permanently revoke or suspend the permit after conducting a public hearing in substantially the same manner and after substantially the same notice as for permit hearing, if it finds:

1. A violation of the provisions of the permit or any applicable regulation; or
2. That the applicant has failed to take substantial steps to initiate the permitted development or activity within twelve (12) months from the date of the permit, or, if such steps have been taken, the applicant has failed to complete the development or activity with reasonable diligence.

AMENDMENTS

According to Pueblo County Code 17.148.300, a 1041 permit is “valid only for the development or activity described in the application package and applicant's commitments of record, together with the conditions of approval, if any, imposed by the permit authority. Any change in the construction, use, or operation of the project shall require a permit amendment.” Substantial changes to the Southern Delivery System would therefore require an amendment to the 1041 approval.

FINANCIAL WARRANTY

The County Commissioners can, at their discretion, require the applicant to post a financial warranty to insure that the applicant faithfully performs all requirements of the permit or of the appropriate regulations. The permit will contain conditions of approval and these may be subject to an IGA between the applicant and the County.

ATTACHMENT A

PROOF OF PUBLIC NOTICE

COPY OF NOTICE MAILED

MAILING LIST

AFFIDAVIT OF PUBLICATION (*PUEBLO CHIEFTAIN*)

PUBLIC NOTICE

The Pueblo Board of County Commissioners will hold a public hearing 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 final action regarding an application for a Permit under the Pueblo County Regulations for Areas and Activities of State and Local Interest (1041 Permit Application).

This application has been submitted pursuant to Chapters 17.148, 17.164, and 17.172 of the Pueblo County Code.

HOUSE BILL 1041 PERMIT NO. 2008-002 - Colorado Springs Utilities, on behalf of the City of Colorado Springs, City of Fountain, Security Water District and the Pueblo West Metropolitan District

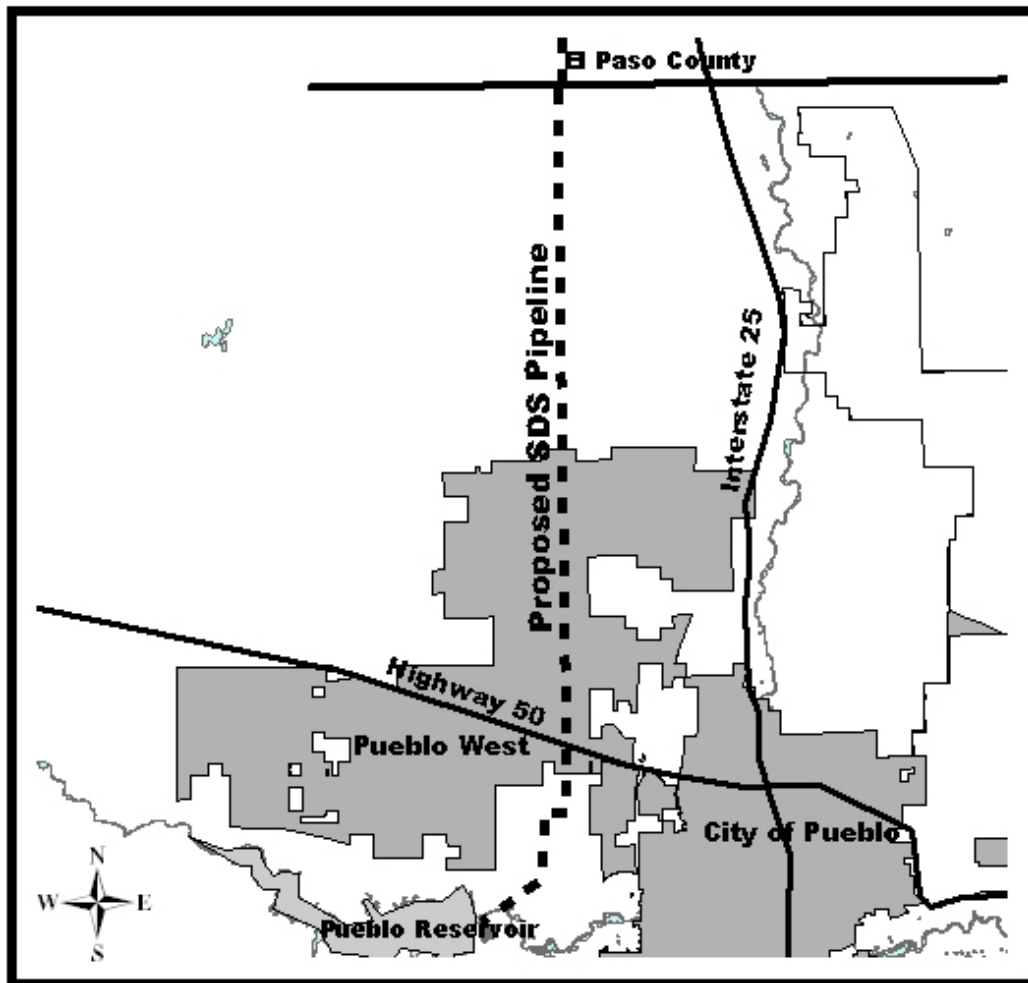
DESCRIPTION

Colorado Springs Utilities (CSU), on behalf of the project partners, the City of Fountain, Security Water District, the Pueblo West Metropolitan District and the City of Colorado Springs have submitted an application to Pueblo County under its Regulations for Areas and Activities of State and Local Interest, commonly referred to House Bill 1041 Regulations or simply 1041 Regulations. More specifically, the Application is intended to address Title 17, Chapter 17.172, "Regulations for Efficient Utilization of Municipal and Industrial Water Projects" and Title 17, 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" of the Pueblo County Code.

The proposed SDS project in Pueblo County would include: the proposed storage of the Participants' water (up to 42,000 AF annually) in Pueblo Reservoir under new proposed long-term contracts with the Bureau of Reclamation; the trade of water stored in Pueblo Reservoir, under new contracts with the Bureau, for water stored in other upstream reservoirs; the modification of one or two outlets of Pueblo Reservoir for connection to the SDS pipeline; the construction of a 14,000 square foot pumping station, office and parking lot below the dam in Lake Pueblo State Park with a pumping capacity of 78 million gallons per day; the construction of a 66-inch diameter pipeline through about 20 miles of Pueblo County, a portion of it through the urbanized area of Pueblo West; and the carriage of return flows from the SDS pipeline and other sources in Fountain Creek, for recapture through the SDS pipeline, directly or by exchange.

LOCATION

In Pueblo County, the project would begin at the base of Lake Pueblo Dam and extend northward out of Lake Pueblo State Park into Pueblo West crossing U.S. Highway 50 West approximately 3,600 feet east of Purcell Boulevard and continuing northward through the central portion of Pueblo West north of U.S. Highway 50. The pipeline generally parallels the existing Fountain Valley Authority pipeline through most of Pueblo West and exits Pueblo County approximately 3 and ½ miles west of Interstate 25.



MAP NOT TO SCALE
FOR ILLUSTRATIVE PURPOSES ONLY

If you have comments, concerns, or need further information contact the Department of Planning and Development, 229 West 12th Street, Pueblo, Colorado 81003-2810, or telephone (719) 583-6100.

The location of this public hearing is accessible to the disabled. Accommodations will be made at such hearing for individuals with sight or hearing impairments, if such accommodations are requested at least two (2) working days in advance by contacting the Department of Planning and Development at (719) 583-6100, or by TDD at (719) 542-0310.

Notice is being sent to owners of property located within 500' of the above described project and published in a newspaper of general circulation. The purpose is to assure that everyone affected is notified of their opportunity to declare themselves at this public hearing.

A link to a complete copy of the Application is available on the County's website (<http://www.co.pueblo.co.us/>) as well as links to copies of the Draft Environmental Impact Statement for the project, comments received by the Bureau of Reclamation regarding the Draft Environmental Impact Statement, Pueblo County Regulations for Areas and Activities of State and Local Interest and the applicable portion of the Colorado Revised Statutes. Additionally, copies of the application and the Draft Environmental Impact Statement are available for public review at the Robert Hoag Rawlings Public Library, 100 East Abriendo Avenue, Pueblo, CO 81004 and the Pueblo County Department of Planning and Development, 229 West 12th Street, Pueblo, CO 81003.

The most current agenda and weekly agendas of the Pueblo Board of County Commissioners can be found at <http://www.co.pueblo.co.us/>.

Mailing List of Property Owners Within 500 Feet of Impact Boundary

LAST NAME	FIRST NAME	MAILING ADDRESS	CITY	ST	ZIP	COUNTRY
2 KFN LTD		1760 OAKMOND CIR	NEW	TX	78132	
240 LLC		1292 S RENEE PL	PUEBLO WEST	CO	81007	U S A
ABAKA REPUBLIC MKTG INC		1415 E COLORADO ST	GLENDALE	CA	91205	
ADAMS	JOHN W & SANDRA J	12101 PEARL ST	SOUTHGATE	MI	48195	
ADAMSON	ERICA & JEFFREY	406 S ASHFORD DR	PUEBLO WEST	CO	81007-	
ADKINS	JAY & TORRI	1119 E PARAMOUNT DR	PUEBLO WEST	CO	81007	U S A
AGAG	ANTONIO R & ELEANOR A	1470 DILLINGHAM BLVD	HONOLULU	HI	96817-	
AGNES	GARY C & BARBARA J	1140 E RANCH DR	PUEBLO WEST	CO	81007	U S A
AHN	SOON J	36 CONLEY ST	THORNHILL	ON		CANADA L4J 2X5
AKEO	ADAM & GINA	1070 E KIRKWOOD DR	PUEBLO WEST	CO	81007	
ALCARAZ	MARIA DIOSA	6767 HAVENHURST AVE	VAN NUYS	CA	91406	
ALFREDSON	MARK N & MARY J	640 208TH LN NE	EAST BETHEL	MN	55011	
ALGRA	W & N J	9 CAROUSEL CIR	SAINT	ON	35404	CANADA L2N 6C9
ANDERSON	ARLEN M	8000 E 12TH AVE BLDG 9-	DENVER	CO	80220	USA
ANDERSON	DONNY C & KAREN K	1109 E SEQUOYA DR	PUEBLO WEST	CO	81007	U S A
ANDERSON TRUST	ROSALIE K	39531 S HOLLYWOOD	TUCSON	AZ	85739	U S A
ANDERSON	ROY & PATRICIA ANN	6620 SCOTTSBLUFF RD	KLAMATH FALLS	OR	97601	
ANGELOTTI	STEPHEN M & LINDA J	231 COPPERFIELD CT	PAINESVILLE	OH	44077-	
AQUILA INC		PO BOX 11739	KANSAS CITY	MO	64138	U S A
ASBERRY	VINCENT A & CECELIA M	1214 N KIRKWOOD DR	PUEBLO WEST	CO	81007	
ATKINSON	JOHN R & LINDA A	1440 BURNLEY CT	COLUMBUS	OH	43229-	
BAILEY	BENJAMIN H JR & SUSAN E	1121 BIRCH ST	BROOMFIELD	CO	80020	U S A
BAKER	LAURIE E	1052 E SEQUOYA DR	PUEBLO WEST	CO	81007	USA
BAKER	JOSEPH D & LINDA L	7156 MAPLE ST	LONGMONT	CO	80504	
BAKUN/GEISE	JOLEEN ANN	13867 45TH PL NE ST	MINNEAPOLIS	MN	55376	
BALCHUCK	LA VONA	1349 28TH LN	PUEBLO	CO	81006-	U S A
BALLOU	CHARLES A III	1045 E JAROSO DR	PUEBLO WEST	CO	81007-	
BANKS	JESSIE F	200 S BIRCHWOOD DR	PUEBLO WEST	CO	81007	
BARRA	RICHARD A	PO BOX 8173	PUEBLO	CO	81008	
BARRIENTOS	IGNACIO	4015 S 26TH ST	OMAHA	NE	68107-	
BAURES	WILLIAM D & ILLENE M	1013 VERNON AVE	MADISON	WI	53716-	
BELGER	RICHARD A & DEBRA A	S 56 W 29805	WAUKESHA	WI	53188	
BELL	W GREG	771 N PURCELL BLVD	PUEBLO WEST	CO	81007	
BELL	CURTIS N & BETTY M	PO BOX 801	OAKLEY	CA	94561	U S A

LAST_NAME	FIRST_NAME	MAILING_ADDRESS	CITY	ST	ZIP	COUNTRY
BENKE	MICHAEL	64 BURNHAMTHORPE	OAKVILLE	ON	91042	CANADA L6H 7C8
BERGMAN	KENNETH E& MICHELLE S	1110 E JAROSO DR	PUEBLO WEST	CO	81007	
BERRIER	PAUL RUSSELL	104 THISLEDOWN DR	HUMMELSTOWN	PA	17036	
BERTOGLIO	GORDON H & MISON	341 N 18TH CT	BRIGHTON	CO	80601	
BILLINGS	DANIEL W	1080 E LARAMIE AVE	PUEBLO WEST	CO	81007	
BLAIR	JAMES R	15268 AUTUMN RIDGE	FOSTERS	AL	35463	U S A
BLAND/GADDISON		1587 S PITKIN CIR	AURORA	CO	80017	U S A
BOGAN	FAYE E	3353 NEWPORT ST	DENVER	CO	80207	
BONACCORSI TRUST		43527 PUESTA DEL SOL	FREMONT	CA	94539	
BORGACZ/CHAVEZ		342 MOUNTVIEW LN	COLORADO	CO	80907	
BOTELLO	RICHARD G	20426 S VERMONT AVE	TORRANCE	CA	90502	
BOYD	SCOTT E	6450 YOUNG HOLLOW	PUEBLO	CO	81008	
BOYDSTON	DUANE E & LORETTA S	10901 SWEET WATER DR	LOUISVILLE	KY	40241	
BRAKE	JACK & NOREEN J	9820 WEDD ST	OVERLAND	KS	66212-	
BRANNEN	SPENCER S	733 N ILIFF DR	PUEBLO WEST	CO	81007	USA
BRATCHER	JOHN J & LINDA E	PO BOX 7811	PUEBLO WEST	CO	81007	
BREHM	DENNIS L	613 BLACK POWDER DR	LEWISBERRY	PA	17339	
BREWER	THOMAS & GEORGIA A	678 N MANCOS DR	PUEBLO WEST	CO	81007	U S A
BRILEY	RONALD L & DARLENE H	5416 STOWE TRL	CLARKSTON	MI	48348	
BROWN	PATRICK V & VERONICA M	750 N ILIFF DR	PUEBLO WEST	CO	81007-	
BROWN	CHARLES L	917 LAUREL WOOD DR	OREGON CITY	OR	97045-	U S A
BRUNSTRUM	JUDITH E	1138 E LINDA AVE	PUEBLO WEST	CO	81007	U S A
BUCHANAN	WARREN RAY & JENNIFER E	1104 E DESERT COVE	PUEBLO WEST	CO	81007	U S A
BUCKLEY	TAMMY L & MARVIN D	1103 E MARENGO DR	PUEBLO WEST	CO	81007-	
BUNDESEN	THELMA T WANDAH	228TH SIGNAL COMPANY	APO	AE	9366	
BURKE	HAL	8 BEAR CLAW CT	PUEBLO	CO	81001	
BURKE	VIRGIL G JR & PEGGY A	23387 COUNTY RD 2	CANON CITY	CO	81212	U S A
BURNS	LEILANI ANN RODRIGUEZ	1126 NORWOOD AVE	COLORADO	CO	80906	
BUTLER	KERRI S	PO BOX 952914	LAKE MARY	FL	32795	
BUTORAC	BARBARA J	587 N CANVAS DR	PUEBLO WEST	CO	81007	U S A
BYERS	JOHN L & CHENDA R	1242 N KIRKWOOD DR	PUEBLO WEST	CO	81007	
CAMERON	JOHNNY V & STEPHANIE G	695 N CANVAS DR	PUEBLO WEST	CO	81007	U S A
CAMPBELL	JOHN J	3809 CUSTER ST	SPOKANE	WA	99223	
CAMPBELL	DANIEL W	7304 DENISE DR	FORT WAYNE	IN	46815-	
CANDELARIA	JOSE FIDEL & CORDELIA ANN	PO BOX 750272	DALLAS	TX	75275	
CAPE	KENNETH B & ROBBYNE L	2008 WYOMING AVE	PUEBLO	CO	81004	U S A
CARBONNEAU	RICHARD S	13422 CORDOVA DR	LARGO	FL	81008	U S A

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CARDOS	JUAN & EMILIA	APARTADO 240 XATIVA	VALENCIA		48917-	SPAIN
CAREFREE CORP		1025 W FILLMORE ST	COLORADO	CO	80907	
CARVER	EDWARD P & DAWN F	1126 E LINDA AVE	PUEBLO WEST	CO	81007	U S A
CARVER	WILLIAM J & MARIE	1114 E LINDA AVE	PUEBLO WEST	CO	81007	USA
CASTILLO	MARILYNE F	18570 E HARVARD DR	AURORA	CO	80013	
CHAMBERS	BOBBY E & JOYCE A	1613 PUTNAM AVE	NORTH LAS	NV	89115	U S A
CHAPMAN	DON	4007 HILLSIDE DR	PUEBLO	CO	81008	
CHAVEZ	ANITA S	144 POLK ST	OCEANSIDE	CA	92057	U S A
CHHORN	DARAN S	7392 BRUSHWOOD PEAK	LAS VEGAS	NV	89113	
CIMINO		126 5TH ST	DACONO	CO	80514	U S A
CIMINO/ESPINOZA		1700 RAPID LN	BERTHOUD	CO	80513	USA
CIMMARON PROPERTY DEV		375 N DESERT COVE DR	PUEBLO WEST	CO	81007	
CITY OF PUEBLO		1 CITY HALL PL	PUEBLO	CO	81003	U S A
CLAYTON TRUST		3816 OXFORD CT	BEDFORD	TX	76021-	
CLEMENCE	LONTIE J	1030 E JAROSO DR	PUEBLO WEST	CO	81007	
CLINE	NATHAN D	1437 N PAINTED HILLS	PUEBLO WEST	CO	81007	USA
COLE	EDWIN DAVID & LUCILLE	1128 E RANCH DR	PUEBLO	CO	81007	
COLE	WILLIAM WALLACE	PO BOX 7551	BRECKENRIDGE	CO	80424	USA
COLEMAN	CHERYL LYNNE	14016 COUNTY RD 26 PO	FAYETTE	OH	43521	
COLES	ADAM A	246 GALAPAGO	DENVER	CO	80223	USA
CONNOLLY	MICHAEL L JR & SARA L	306 CHELSEA ST	CASTLE ROCK	CO	80104	
COURTNEY	FREDDIE & NARVA N	1398 N MOONBEAM DR	PUEBLO WEST	CO	81007	USA
CRIPPS	JAY B & JULIE HEARD	1104 E SEQUOYA DR	PUEBLO WEST	CO	81007	U S A
CROUDER	KEVIN D & TRACY L	563 VISTA DEL ESCUELA	EL CAJON	CA	92019	USA
CUEVAS	SOTERO FELIX	586 N MANCOS DR	PUEBLO WEST	CO	81007	
CYR	NOEL R & ANNETTE L	88 N ASPEN SKI WAY	PUEBLO	CO	81007	
DALTON	GREG K & TAMMY L	530 N MANCOS DR	PUEBLO WEST	CO	81007	U S A
DAMPIER	BILLY R & JUDITH D	298 N PURCELL BLVD	PUEBLO WEST	CO	81007-	
DANIEL	MYER S & KIM R	1206 PELHAM ST	NORFOLK	VA	23505	
DAUGHERTY	MICHAEL L	1566 N KEYMAR PL	PUEBLO WEST	CO	81007	U S A
DE CHABERT	SATURNINA V & PIERRE	6501 YOUNG HOLLOW	PUEBLO	CO	81008	U S A
DE FOE	MARCELLA H	211 S SPAULDING AVE	PUEBLO WEST	CO	81007	
DEARMAN		1801 LUCILLE AVE	LOS ANGELES	CA	90026	
DELEON	JAVIER VASQUEZ	21861 E 26TH AVE	AURORA	CO	80019	
DEPPE	JAMES M & LA VETTA K	2500 N DESERT LINKS	TUSCON	AZ	85715	
DEUTSCHE BANK NATIONAL		3 ADA	IRVINE	CA	92618	U S A
DILCHER	MATTHEW B	655 N CANVAS DR	PUEBLO WEST	CO	81007	
DIVISION OF PARKS + OUTDOOR RECREATION		1313 SHERMAN ST RM	DENVER	CO	80203	

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DOMINGUEZ	VALENZUELA LUIS R	6750 YOUNG HOLLOW	PUEBLO	CO	81008	U S A
DONNELL	RANDOLPH R	1736 PENNSYLVANIA	SUN PRAIRIE	WI	53590	
DORUFF	JAMES ROBERT & SANDRA LEE	11447 GALTIER DR	BURNSVILLE	MN	55337-	
DOSSANTOS	JOSE C & CHERIE L	235 N IVANHOE CT	PUEBLO WEST	CO	81007	
DUCHENEAX	ELMER	2524 E PIUTE AVE	PHOENIX	AZ	85050	
DUNKLIN	STEVE & MICHELE H	1830 ALEXANDER WAY	STEAMBOAT	CO	80488	
ELLIOTT	STEPHEN A & BLANCHE L	566 N CANVAS DR	PUEBLO WEST	CO	81007	
EMERY	STEPHEN A & ELIZA S	708 TODD CT	FERNLEY	NV	89408	U S A
ENGLISH	WALLACE L	5774 ROUTE 215	GIRARD	PA	16417	
ESPARZA	RAMON	14101 GOLETA ST	ARLETA	CA	91331	U S A
ESPINOZA	ROBERTO	407 S BIRCHWOOD DR	PUEBLO WEST	CO	81007-	
FADENRECHT	DEREK & AMANDA	823 N RAVENCLIFF DR	PUEBLO WEST	CO	81007	
FAHRION	JACK E & JILL	1103 E SHALLOW LAKE	PUEBLO WEST	CO	81007-	
FALSETTO		3306 AZALEA ST	PUEBLO	CO	81005	
FAMILY HOME + BUILDING		PO BOX 8065	PUEBLO	CO	81008	USA
FARQUHAR	CAROL A	35619 SALEM RD RR#8	PARKHILL	ON	95945	CANADA N0M2KO
FAULKNER	ROBERT P & ROXANNE	10420 TRESTLE RD	ST PARIS	OH	43072	USA
FELIX	ANTONIO & TERESA	1503 NEWCOMB AVE	MONTE VISTA	CA	81007	
FILLAS	ROSALIE B	4084 S YOSEMITE ST	DENVER	CO	80237	USA
FLORES	ALLISON M & HORACE F	1148 E KIRKWOOD DR	PUEBLO WEST	CO	81007	
FLORES	JOSE I & JANET L	6711 W 111TH AVE	BROOMFIELD	CO	80020	U S A
FOLTZ HOMES INC		463 S VENANGO DR	PUEBLO	CO	81007	
FOSTER	COLLEEN	716 DALMORE DR	FAYETTEVILLE	NC	28311	
FOX	EARLE & MARLA J	72 RADCLIFF LN	PUEBLO	CO	81005-	
FRAZIER	EDWARD J	4444 E OGDEN AVE	LAS VEGAS	NV	89110	
FRENTZ	RICHARD & HELEN L	27844 BENTLEY	LIVONIA	MI	48154	
FUNK	BEN & TAYLOR WANDA	2652 N GRANTLAND	FRESNO	CA	93722	
FURNEY	JAY W	6033 STATE HWY 78	PUEBLO	CO	81005	
FURNEY	STACEY J & RICHARD D	734 N CANVAS DR	PUEBLO WEST	CO	81007	U S A
GAMIAO	RODERICK T	1941 NORWALK AVE	LOS ANGELES	CA	90041	
GARCIA	MARIA LUISITA R	2192 CORTE ANACAPA	CHULA VISTA	CA	91914	USA
GIANESSI	JOSEPH EUGENE & RHONDA	584 N CANVAS DR	PUEBLO WEST	CO	81007	U S A
GIANNETTO	SALVATORE	295 W BALDWIN DR	PUEBLO WEST	CO	81007	USA
GILLESPIE	GILDA L	1725 BRANDON HALL DR	DUNWOODY	GA	30350-	
GILLIAM TRUST	DIANE L	PO BOX 298	COLORADO	CO	80901	
GILMORE	ROBERT JR	1124 E PARAMOUNT DR	PUEBLO WEST	CO	81007	U S A
GONZALEZ/MACALUSO		3117 NUCKOLLS AVE	PUEBLO	CO	81005	U S A
GOOD	JOSEPH L	PO BOX 7083	PUEBLO WEST	CO	81007	U S A

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GOWDA		139 REGAL CT	MONROEVILLE	PA	15146-	
GRACE	MARCUS J	1972 W GUADALUPE LN	PUEBLO WEST	CO	81007	U S A
GRAFF		1206 N KIRKWOOD DR	PUEBLO WEST	CO	81007	
GRAVATT	KURT M & CHRISTINA L	546 QUILLAN AVE	PUEBLO	CO	81005	
GRAVATT	RONALD A	2214 SOUTH DR	PUEBLO	CO	81008	
GREGG	JACOB LEVI	1091 E LARAMIE AVE	PUEBLO WEST	CO	81007	
GREY	MARILYN C	1151 E SPAULDING AVE	PUEBLO WEST	CO	81007	
GUASTO	BENJAMIN & KATHLEEN T	2340 VANTAGE DR	COLORADO	CO	80919-	
GUIMONT	SHERMAN T & RAMONA J	2864 S WINONA CT	DENVER	CO	80236-	
HAGGARD	ROY WESLEY JR	10931 W 100TH WAY	WESTMINSTER	CO	80021	U S A
HALL	JACKIE L	1073 E LINDA AVE	PUEBLO WEST	CO	81007-	
HALL	JACKIE N & URSULA	1865 JUNTURA CT S	SALEM	OR	97302	
HAMMOND	CARMAN V	RR 3 STATION MAIN	HANOVER	ON	81007	CANADA
HANEY	BRANSON A	788 E ALAMEDA LN	PUEBLO WEST	CO	81007	
HARRISION	STEPHEN D & DEBORA K	84 PINION RIDGE DR	WILLIAMSBURG	CO	81226	
HARRISON	FRED M & MARIE B	PO BOX 892	FRUITLAND	NM	87416	
HART	RALPH P	1117 E LILAC CT	PUEBLO WEST	CO	81007	USA
HARTSELL	R LYNN	1178 CROSS CREEK	PICKERINGTON	OH	43147-	
HARVEY	KELLY	729 N CANVAS DR	PUEBLO WEST	CO	81007	U S A
HAURY	BERT W	5149 W 183RD ST	COUNTRY CLUB	IL	60478	
HAWKINS	DON D & MICHELLE A	1103 E IVANHOE DR	PUEBLO WEST	CO	81007	U S A
HEIN	KENT B	74 N 15494 STONEWOOD	MENOMONEE	WI	53051	
HEISEY	DAVID L & JOYCE G	4616 CHALKSTONE DR	RAPID CITY	SD	57701	USA
HEMBERGER	WILLIAM A	14673 SUMMER	CHESTERFIELD	MO	63017-	
HENDRICKSON	DANIEL A & JUDY L	1119 E SHALLOW LAKE	PUEBLO	CO	81007	USA
HERNANDEZ	ROBERT & SHERYL	1136 E PARAMOUNT DR	PUEBLO	CO	81007	U S A
HERNASY	RICHARD P & CAROLINE	563 N CANVAS DR	PUEBLO WEST	CO	81007	U S A
HETHERINGTON	DAVID A & LINDA	13596 MILLPOND WAY	SAN DIEGO	CA	92129	
HEYDEL	BRENT L & KATHY D	15044 SE GREENVIEW	MILWAUKIE	OR	97267	
HICKERT	GEORGE	1131 MILKY WAY	COLORADO	CO	80906	
HIGHLINE	MARY A	1300 N ELIZABETH ST	PUEBLO	CO	81003	U S A
HILDRETH	CHRISTOPHER A & SARAH B	1102 E ORCHID DR	PUEBLO WEST	CO	81007	U S A
HILL	RICHARD F & KELLY M	1221 W 29TH ST	PUEBLO	CO	81008	U S A
HIMMELBERG	ERIK T	578 N MANCOS DR	PUEBLO WEST	CO	81007	U S A
HIRSCH	DAVID & CONNIE	14540 GORDON	CANYON	TX	79015-	USA
HOLDERFIELD	GLEN P & KELLY R	220 BERRY CT	MORGAN HILL	CA	95037	U S A
HOME PARTNERS FINANCE		1154 HIGHLAND AVE	CHESHIRE CT	CT	6410	
HOUSMAN	BOB	63 CORNELL CIR	PUEBLO	CO	81005	USA

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HOUSMAN	MELONIE & BRIAN	5 YALE AVE	PUEBLO	CO	81005	USA
HUDDLESON	RENEE A	353 N ESCAMBIA DR	PUEBLO WEST	CO	81007	U S A
HUDSON	GERALD E	38 LUNA CT	CANON CITY	CO	81212	
HUSKIN	KYLE	245 N IVANHOE CT	PUEBLO WEST	CO	81007	U S A
HYATT	DAVID L & ESTHER J	1123 DOVE CREEK DR	PUEBLO WEST	CO	81007	
IDOLOR	GASPAR P JR & LORNA V	400 BLOSSOM FIELD RD	FOUNTAIN	CO	80817-	
INGRAM	CAREY D JR & BETTY K	1034 N KIRKWOOD DR	PUEBLO WEST	CO	81007	
JACOBSEN	GARY L & MARY A	198 NORTHLAND AVE	STILLWATER	MN	55082-	
JANES	DANIEL J & DENISE M	1061 E BLACKSTONE	PUEBLO WEST	CO	81007-	U S A
JARVIES	CLINTON B & JENNIFER L	514 MAIN ST	MANASSA	CO	81141	
JEFFRIES	CHAD & TIMME KIMBERLY	1107 E ORCHID DR	PUEBLO WEST	CO	81007	U S A
JEWETT	ROGER M & MARY A	PO BOX 1113	PAGE	AZ	86040	U S A
JOHNSON	CASEY & LELA	7989 MCKISSIC AVE	FREDERICK	CO	80530	U S A
JOHNSON	IRA JR & JANICE M	405 DE SOTO ST SE	ALBUQUERQUE	NM	87123	USA
JONES	MICHAEL L & AWILDA K	1405 RD 132	ELIZABETH	CO	80107	
JOWA	ALEXANDER & ALEXANDER I	PO BOX 1346	TROY	MI	48099-	
KAMAN	RANDALL BOB & JANELLE RENE	371 W LOOKOUT DR	PUEBLO WEST	CO	81007	
KATZER	NICKOLAS J	1737 N SILVER OAK LN	PUEBLO WEST	CO	81007	
KAY	LAVETTA	1104 E RANCH DR	PUEBLO WEST	CO	81007	U S A
KAZAN	SAMI G	6935 CORN TASSLLE DR	COLORADO	CO	80911	
KEEN		1266 S THOREAU PL	PUEBLO WEST	CO	81007-	
KENNEY	NOAH	579 N CANVAS DR	PUEBLO WEST	CO	81007	U S A
KENT	WENDEL G ROTH IRA	401 MAIN ST	LONGMONT	CO	80502	
KIMBRELL	LILIANE M TR	600 W HUBBARD ST	COEUR D	ID	83814	U S A
KIRK	LOUIE A	6237 CAMINO VERDE DR	SAN JOSE	CA	95119	
KNIEGGE	BRUCE A & KATHRYN L	619 AGAPE WAY	FT COLLINS	CO	80524	
KNOWLES	BILLY L JR & ROSALYN	PO BOX 8666	PUEBLO	CO	81008-	U S A
KOCH	DAVID A	1902 COUNTY RD 1600 N	URBANA	IL	61801-	
KOEHLER	KENNETH MARK	2036 REIDSVILLE RD RR	AYR	ON	44444-	CANADA N0B 1E0
KOEHLER	KIM LORNE	239 DINISON CIR	KITCHENER	ON	81050	CANADA N2E2S5
KONYHA	KENNETH S & SANDRA L	24125 KREITZ RD	CAMBRIDGE	PA	16403	
KORB	ROBERT M	3923 AUGUSTA LN	PUEBLO	CO	81001-	
KOSSMAN	FREDERICK M & STACY A	828 FOXWOOD DR	COLORADO	CO	80911	USA
KRAMER LIVING TRUST		53 SAVAGE LOOP	CANON CITY	CO	81212	
KRELOVICH	VICTOR A & PAT	PO BOX 1513	RIFLE	CO	81650	
KRUPP	HERBERT W JR & DEBRA L	620 HAGERER ST	RACINE	WI	53402	
KURETSKI	PETER J	1149 S SABINAS DR	PUEBLO WEST	CO	81007	
KUSPER	KYZYSZTOF & RENATA	6042 S KILDORE AVE	CHICAGO	IL	60629	

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KYLE	DAVID C	5541 PRONGHORN RD	PUEBLO	CO	81008-	
L GANG ENTERPRISES LLC		PO BOX 3217	PUEBLO	CO	81005	
LAND MARKETING CO		PO BOX 7161	PUEBLO WEST	CO	81007	
LANTZ	LYNN D & C CECILE	6590 E BETHANY PL	DENVER	CO	80224	USA
LE VASSEUR	PAUL E	1104 E CANARY DR	PUEBLO WEST	CO	81007-	
LEBLANC	PAUL A & JILL A	35 LARGAY LN	GLENBURN	ME	04401	
LEGACY HOMES OF		PO BOX 7327	PUEBLO WEST	CO	81007	
LEHMAN	CHARLES R & DIANNE C	27 GREENDALE CRES	KITCHENER	ON	80901-	CANADA N2A2R5
LEONHARDT	ALBERT UDO & PATRICIA ANN	47131 COACH RD	MIRAMONTE	CA	93641	
LEWIS RENEE	CASANOVA & DYAN	5038 PASADENA WAY	BROOMFIELD	CO	80023	U S A
LIEBGOLD	AARON DANIEL	309 DONNYBROOK DR	ASHVILLE	NC	81007	U S A
LINK	LORENE	7016 E COSTILLA DR	CENTENNIAL	CO	80112	U S A
LLOYD	JAMES M & MARY M	19191 E GARDEN PL	AURORA	CO	80015	
LOEFFEL	TIMOTHY R & TERRI L	7614 SISTINE LN	FOUNTAIN	CO	80817	
LONCOSKY	SHANE A JR & JENNIFER A	1850 N BAT MASTERSON	PUEBLO WEST	CO	81007	
LONGO	JUSTIN W & DANA L	1064 N THORPE DR	PUEBLO WEST	CO	81007	U S A
LOPEZ	JORGE	1154 E INDUSTRIAL BLVD	PUEBLO WEST	CO	81007	USA
LOVATO	RICHARD & ALFREDA C	1087 E IVANHOE DR	PUEBLO WEST	CO	81007	
LOVEN	RONALD A JR	1134 E RANCH DR	PUEBLO WEST	CO	81007	U S A
LUBLINER	WARREN & DIANNA	1950 ROUGH CT	CASTLE ROCK	CO	80109	U S A
LUTTRELL/DAUGHERTY		1703 N BEAR BULCH LN	PUEBLO WEST	CO	81007	U S A
LUXON	ROBERT M & BARBARA A L	RR 1	MILLGROVE	ON	L0R 1V0	CANADA L0R1V0
M + W HOMES INC		450 W STRAWBERRY DR	PUEBLO WEST	CO	81007	
MADDUX	RAYMOND P & LORETTA J	1869 N BAT MASTERSON	PUEBLO WEST	CO	81007	U S A
MADRID/MANZANARES		132 LARCH DR	SECURITY	CO	80911	
MANCUOSO	SHARON	1080 E DESERT COVE	PUEBLO WEST	CO	81007	
MANES	STEVE	24579 BIRDSONG DR	PUEBLO	CO	81006	U S A
MANGROBANG	DEL E & DIONICIA L	91 KEHUE ST	EVA BEACH	HI	96706	
MANJI	ROSHANA H	2700 SATTLEY CIR	LAS VEGAS	NV	89117	U S A
MANNINO	DOMINIC & MARIA	PO BOX 8567	PUEBLO	CO	81008	U S A
MAPLES	CURTISS RANDAL & SUSAN	1208 DORA ST	BEDFORD	TX	76022	
MARSH	SANDRA L	1160 N THORPE DR	PUEBLO WEST	CO	81007	
MARTINEZ	ROGELIO & ROSA ALICIA	594 N MANCOS DR	PUEBLO WEST	CO	81007	
MARTINEZ	JERRY D & GAIL L	2288 FALLVIEW DR	PUEBLO	CO	81006-	
MARTINEZ	RUEBEN JR & JACQUELINE	9855 E 112TH WAY	HENDERSON	CO	80640	
MASTER	BRUCE J	4475 N BROADWAY #49B	BOULDER	CO	80304	
MATHER	ELIZABETH ANN	PO BOX 7534	PUEBLO WEST	CO	81007-	
MATTISON	JOHN R & GINA R	650 E MANCOS DR	PUEBLO WEST	CO	81007	U S A

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MAXWELL	DWAIN B & HELEN E	1123 N KIRKWOOD DR	PUEBLO WEST	CO	81007	U S A
MCGRANAHAN	WILLIAM RICHARD J & KAREN J	3334 NW BUNGALOW DR	BEND	OR	97701	USA
MCCORMICK	JARED S & LISA A	1446 N PAINTED HILLS	PUEBLO WEST	CO	81007	
MC GEE/SWARTWOOD		1146 N THORPE DR	PUEBLO WEST	CO	81007	U S A
MCGHGHY	THOMAS R	1180 W BELLA CASA DR	PUEBLO WEST	CO	81007	U S A
MCHENRY	GEORGE B III & ASHLEY A	1119 E CANDLEWOOD	PUEBLO WEST	CO	81007	U S A
MCLAIN/ALLENBACK	ROBIN LYNN & RHONDA LEE	3116 FRANKLIN AVE	PUEBLO	CO	81008	
MCLAUGHLIN/VARGAS		40483 CAMBRIDGE ST	MURRIETA	CA	92563	U S A
MEDINA		5633 LORELEI AVE	LAKEWOOD	CA	90712-	USA
MEINERS	HARLEY C & JOANNE K	210 N SUNSET BLVD	CALEDONIA	MN	55921-	USA
MELKERS	RAIMOND R & GUDRUN O	6950 YOUNG HOLLOW	PUEBLO	CO	81008	
MENS	EDWARD L & ISABEL J	975 LOGAN LN	SOUTH SAINT	MN	55075	
MEYER	HEATH	108 N INDUSTRIAL WAY	PUEBLO WEST	CO	81007	
MICHEL	RICHARD G	1168 S MONTCLAIR DR	PUEBLO WEST	CO	81007-	
MID WEST HOMES LLC		PO BOX 8096	PUEBLO	CO	81008	
MIDWAY DEVELOPMENT CO		2454 WAYNOKA RD	COLORADO	CO	80915	U S A
MIDWAY DEVELOPMENT CO		4730 QUAIL RD	PUEBLO	CO	81008	
MILLER	LISA M	1111 E CANDLEWOOD	PUEBLO WEST	CO	81007	U S A
MILLER	SEAN MICHAEL & JAMIE L	745 N ILIFF DR	PUEBLO WEST	CO	81007	
MILLER	JUDITH A	PO BOX 266	MOGADORE	OH	44260-	
MIND YOUR OWN BUSINESS		19955 E PEAKVIEW CT	CENTENNIAL	CO	80016	USA
MOLL	PHILIP	1008 E KIRKWOOD DR	PUEBLO WEST	CO	81007-	
MONTNEY GERALD		519 SALANO DR	COLORADO	CO	80906	
MORRSEY	LOVANNE M	1113 E CANARY DR	PUEBLO WEST	CO	81007	
MOSHER	ANGELA S CALLOW	320 W 50TH ST	LOVELAND	CO	80538	
MOYA	DIANA M	7595 ZUNI ST #406	DENVER	CO	80221	USA
MULLER	JAMES V & DONNA N	1021 N KIRKWOOD DR	PUEBLO WEST	CO	81007	
MUNSHI	MARY D	13753 KINBROOK ST	SYLMAR	CA	91342	U S A
NAB	BILLY	1047 E DESERT COVE	PUEBLO WEST	CO	81007	
NACHTSHEIM/CHAPIN		8620 S ZEPHYR ST	LITTLETON	CO	80128	U S A
NAGEL	ROBERT J & ESTHER L	1107 E DOVE CREEK DR	PUEBLO WEST	CO	81007	USA
NEFF	ROBERT A	146 E COUNTRYSIDE DR	PUEBLO WEST	CO	81007	
NGUYEN	NGUNG	1841 S PUEBLO BLVD	PUEBLO	CO	81005	
NICHOLS	CHASE	30671 SUN CREEK DR	EVERGREEN	CO	80439	U S A
NIEMIEC/KOSAKOWSKI		5175 PINE RIDGE OVAL	INDEPENDENCE	OH	44131	
NOLEN	TIMOTHY R	355 S BIRCHWOOD DR	PUEBLO WEST	CO	81007	
NORRIS	RODGER L & LINDA S	1825 W SMOKETREE	APACHE	AZ	85220	
NOVOSEL	REID C & TROY M	16 BEAR GULCH RD	WILLIAMSBURG	CO	81226	

LAST_NAME	FIRST_NAME	MAILING_ADDRESS	CITY	ST	ZIP	COUNTRY
NOWACK	JARED M	623 N CANVAS DR	PUEBLO WEST	CO	81007	U S A
O CONNELL		7563 W KIMBERLY WAY	GLENDALE	AZ	85308	U S A
OGLESBY	GREGORY D & PATRICIA	662 N MANCOS DR	PUEBLO WEST	CO	81007	U S A
OLEJNICZAK	ZENON & JADWIGA	400 E DIANE DR	PALATINE	IL	60074-	
OLIVAS	LUIS F	1105 SAPINERO DR	PUEBLO WEST	CO	81007	USA
OLSON	PATRICIA ANN	PO BOX 390704	DENVER	CO	80239	
OLVERA	MARTIN & CYNTHIA M	1524 S PITKIN CIR	AURORA	CO	80017-	
OQUENDO	CECILIA R	620 S ARDEN ST	ANAHEIM	CA	92802	
P A L CONSTRUCTION INC		961 R ST	PENROSE	CO	81240	
PACHAK		1104 E SAPINERO DR	PUEBLO WEST	CO	81007	
PACKARD	LEONARD E & JACKIE L	1414 N MOONBEAM DR	PUEBLO WEST	CO	81007	U S A
PADILLA	LISA L	92 N LILAC DR	PUEBLO WEST	CO	81007	U S A
PADILLA /HUNGERFORD		16473 DAWNLIGHT DR	FENTON	MI	48430	
PALACIO	FRANK & SHIRLEY	1115 E HOLIDAY DR	PUEBLO WEST	CO	81007	
PARADA	LUCY EVELYN & OLIVIA MARY	728 E CUCHARRAS ST	COLORADO	CO	80903-	
PARADAY	LARRY L & DEBORAH L	1266 N KIRKWOOD DR	PUEBLO WEST	CO	81007	
PARKER	JASON J & JENNIFER L	1078 E MARENGO DR	PUEBLO WEST	CO	81007	USA
PARKER	RONALD A & VONA J	1058 E SEQUOYA DR	PUEBLO WEST	CO	81007	U S A
PELLEGRINI	WILLIAM D SR	6510 CROSSWOODS CIR	CITRUS	CA	95621	
PERKINS	RANDALL S & MARY C	411 SOUTH 5TH ST	CORNELL	WI	54732	USA
PETERSEN	BARRY JOHN	1078 E WILD ROSE LN	PUEBLO WEST	CO	81007	
PETTIGREW	MICHAEL R & JESSICA L	1104 E SHALLOW LAKE	PUEBLO WEST	CO	81007	
PINTOR	PETE L & LINDA M	1116 E DOVE CREEK DR	PUEBLO WEST	CO	81007-	
PIPAL	MARIA TERESA	3343 SANTA ROSA ST	COLORADO	CO	80909-	
PISHOTTA	RITA J	738 S WATERMELON DR	PUEBLO WEST	CO	81007	
PLUMMER	GARY D & VALERIE D	1490 ANTRIM LOOP	COLORADO	CO	80910	
POLAK		3 HOGAN CT FLORHAM	FLORHAM PARK	NJ	7932	U S A
PORTER	WESLEY M & PATRICIA G	14381 HILLSIDE LN	WILLIS	TX	77318	
PRADO	ESTRELLA	23708 OAK CIR	NEWHALL	CA	91321	
PRECIADO	JOSE G	1760 SOMERSET	PUEBLO	CO	81006	
PRESTON	JAMES N & ROXANA L	1110 E ESCONDIDO	PUEBLO WEST	CO	81007	U S A
PROBST	JEFFREY C	7191 NE RIDGE DR	HILLSBORO	OR	97124	
PROCTOR	C T	DRAWER 3430	PUEBLO	CO	81005	
PROVIDERS INC		PO BOX 9050	AVON	CO	81620	
PUEBLO COUNTY		215 W 10TH ST	PUEBLO	CO	81003	
PUEBLO WEST METRO		PO BOX 7005	PUEBLO WEST	CO	81007-	
PUEBLO WEST REAL		905 W BELLA CASA DR	PUEBLO WEST	CO	81007-	
QUINT CONSTRUCTION INC		35 N PRECISION DR	PUEBLO	CO	81004	

LAST_NAME	FIRST_NAME	MAILING_ADDRESS	CITY	ST	ZIP	COUNTRY
QUINTANA	HELIODORO V & LILLIAN	259 N IVANHOE CT	PUEBLO WEST	CO	81007	
QUINTANA	RANDY & PATSY	PO BOX 206	MINTURN	CO	81645	
QUINTANA	THOMAS L & BEATRIZ M	3525 PONY TRACKS DR	COLORADO	CO	80922	
R + H ENTERPRISES LLC		PO BOX 4215	WINDSOR	CO	80550	
RAMIREZ	FRANCISCO & LETICIA	27449 HILLSIDE RD	PUEBLO	CO	81006	
RAMOS	ORLANDO M & LINDA	1107 E JAROSO	PUEBLO WEST	CO	81007	
RANA	TAHIR M & SAMIA	15900 E SUMMIT FOX	PARKER	CO	80134	U S A
REED	ROBERT C	1408 C ST	LA PORTE	IN	46350-	
REESE TRUST		19931 GLENHAVEN DR	YORBA LINDA	CA	92886	
REETZ	ROGER T & BERNADETTE R	1163 N KIRKWOOD DR	PUEBLO WEST	CO	81007-	
REITER	DAVID PAUL & DIANE MARIE	10200 CASEY LN	PARKER	CO	80138	
REKLAW PARTNERS LP		PO BOX 620660	LAS VEGAS	NV	89162	USA
REPOLLO	GEORGE E	66 WANINI ST	WAIALUA	HI	96791	U S A
REYES	HENRY L JR	1087 E MARENGO DR	PUEBLO WEST	CO	81007	U S A
REYNOLDS	GLEN H & KAREN L	12501 CTY RD H	ORDWAY	CO	81063	USA
RICKARD	CLEMENT & DELPHIN	1090 MAOHU ST	MAKAWAO	HI	96768	
RICKS	EVERETT S & PATRICIA D	779 N PURCELL BLVD	PUEBLO WEST	CO	81007-	
RIEGEL	GARY & GRACE	1871 WASHINGTON ST	LARAMIE	WY	82070	U S A
RIOS	THOMAS A & DOLORES P	11501 SAN ANTONIO DR	ALBUQUERQUE	NM	87122	
RITTER	RANDALL D & THERESA L	1413 MT EVANS DR	LONGMONT	CO	80501	
ROBINSON	JASON W	329 S BIRCHWOOD DR	PUEBLO WEST	CO	81007	
ROBINSON		1130 N THORPE DR	PUEBLO WEST	CO	81007-	
RODIGHIERO	JOHNSON JUNE	1386 N MOONBEAM DR	PUEBLO WEST	CO	81007	USA
RODRIGUE	STEVEN & AMY A	8035 NW CORN	ALBUQUERQUE	NM	87114	USA
RODRIGUEZ	A REY & LUCY T	1006 STONE AVE	PUEBLO	CO	81004	
RODRIGUEZ		PO BOX 554	FREDERICK	CO	80530	
ROGERS	STEPHAN L & SHARON C	145 E DEL RIO DR	PUEBLO WEST	CO	81007	
ROGERS/PIERS	MARVIN D & KEITH A	1505 E PLATTEVILLE	PUEBLO WEST	CO	81007	
ROMERO	BERNARD P SR & REBECCA A	1043 E MARENGO DR	PUEBLO WEST	CO	81007	
ROSS/DICLEMENTI	MARY K & JEANNIE D	4017 COLEMAN DR	FT WAYNE	IN	46804-	U S A
ROSS TEDT	SCOTT L & JANET M	17620 N 43RD AVE	PLYMOUTH	MN	55446	
ROTH	WENDEL G	401 MAIN ST	LONGMONT	CO	80502	
SABATKA/BAZANELE	SEAN A & CHRISTINA M	1110 N THORPE DR	PUEBLO WEST	CO	81007	
SAGAL	ROBERT A	12802 W CYPRESS PASS	CYPRESS	TX	77429-	
SALAS	JAMES & TINA	1045 E SESQUOYA DR	PUEBLO WEST	CO	81007	
SALER	JANET M & JAMES P	1096 E DESERT COVE	PUEBLO WEST	CO	81007	U S A
SALMAN	MO & CAROLE	1143 LAWRENCE DR	FT COLLINS	CO	80521	U S A
SAMSON	BERNARD E & RHONDA L	1118 E PARAMOUNT DR	PUEBLO WEST	CO	81007	U S A

LAST_NAME	FIRST_NAME	MAILING_ADDRESS	CITY	ST	ZIP	COUNTRY
SANDOVAL	WILLIAM L & TERESA M	1038 E DESERT COVE	PUEBLO WEST	CO	81007	
SANDOVAL	MERCY J & MICHAEL D	703 N CANVAS DR	PUEBLO WEST	CO	81007	U S A
SAUL	MOISES G	1246 LEVINSON ST	TORRANCE	CA	90502	U S A
SCHADEN	EVELYN T & PAUL H	254 CALLE DE LA	FALLBROOK	CA	92028	
SCHILLING	THOMAS C	539 N CANVAS DR	PUEBLO WEST	CO	81007	
SCHLEGEL	MATTHEW A & KIMBERLY D	1122 N THORPE DR	PUEBLO WEST	CO	81007	U S A
SCHRAM	VIRGIL A & VIRGINIA M	9621 US 23 NORTH	ALPENA	MI	49707-	
SHERMAN	RICHARD B & SHEILA A	310 CRESCENT DR	GRAVENHURST	ON		CANADA L1J6M3
SHISLER	CHARLES	1064 N KIRKWOOD DR	PUEBLO WEST	CO	81007	
SIEFFORD	LINDA R	816 N RAVENEUN CLIFF	PUEBLO WEST	CO	81007	U S A
SIMPSON	WALTER L & AMBER R	1192 N THORPE DR	PUEBLO WEST	CO	81007	
SMITH		141 N CANDLEWOOD DR	PUEBLO WEST	CO	81007	USA
SMITH	DENNIS P	10512 BETHOUD WAY	PARKER	CO	80134	U S A
SMITH	JEFFREY S & KARYN J	1124 E LILAC CT	PUEBLO WEST	CO	81007	U S A
SMITH	STEVEN M & KELLY N	1154 N THORPE DR	PUEBLO WEST	CO	81007-	
SMITH	THOMAS R & CAROLYN KAY	1112 E CANARY DR	PUEBLO WEST	CO	81007-	
SMITH	MARY ANN MICHELLE	1065 N KIRKWOOD DR	PUEBLO WEST	CO	81007	
SMITH	WILLIAM E	1082 SUSHANA CIR	EAGLE RIVER	AK	99577	
SMUCZEROWICZ	ROGER J	18044 S HIGHLAND AVE	TINLEY PARK	IL	60477-	
SNYDER	JAMES L	2715 S GREENWOOD ST	PUEBLO	CO	81003	U S A
SO COLO POWER DIVISION		115 W 2ND ST	PUEBLO	CO	81003-	
SOPKOWIAK	JOHN E SR & LANOR A	600 BIO HONDO	RIO RANCHO	NM	87124	
SPARKS	ROLAND & Sandra	29464 WAGON CREEK LN	MENIFEE	CA	92584	
SPENCER	J B & BLOSSOM M	8729 HIGHWOOD WAY	APPLE VALLEY	MN	55124	USA
SPENCER		1586 KAMOHOALII ST	HONOLULU	HI	96819	
SPERA HOMES INC		458 W PIN HIGH DR	PUEBLO WEST	CO	81007	
STAACK	DENNIS E & BONNIE S	1714 OVERTON DR	CASTLE ROCK	CO	80109	
STADLER	WAYNE H & JUDITH L	1070 W BELLA CASA DR	PUEBLO WEST	CO	81007	USA
STARK	RALPH C & ADELINE O	14668 EUROPA WAY	APPLE VALLEY	MN	55124	
STATE OF COLORADO	DEPT OF NAT. RES. DIV OF	1375 SHERMAN ST	DENVER	CO	80203-	U S A
STEWART	SEAN M & MICHELLE A	1191 N KIRKWOOD DR	PUEBLO WEST	CO	81007	U S A
STEWART	EDWARD P & PAULA J	205 WINDY OAK DR	HEBRON	IN	46341	U S A
STOLL	RICHARD	4655 MEREDITH AVE	LAS VEGAS	NV	89121	USA
STREBE	ARNOLD G & NOBUKA	1117 E LINDA AVE	PUEBLO WEST	CO	81007	U S A
SURNIAK	CYNTHIA & BERNARD	1049 LARAMIE ST	ANAHEIM	CA	92806	
SWICK	BECKY A	3832 DEVONSHIRE LN	PUEBLO	CO	81005	
TANO	DARREL G	46 HEEIA ST	KANEOHE	HI	96744	
THOMAS	BRIAN & RITA	10915 WATERTON RD	SAN DIEGO	CA	92131	

LAST_NAME	FIRST_NAME	MAILING_ADDRESS	CITY	ST	ZIP	COUNTRY
THOMPSON	KENNETH P & BONNIE L	11867 LAWNDALDE DR	PARMA	OH	44130-	
THORNTON	CHARLES & PATRICIA JANNELL	607 CANVAS DR	PUEBLO WEST	CO	81007	
TIBBS	ROBERT	109 S BURLINGTON DR	PUEBLO WEST	CO	81007	
TINNIN	CHAD L & JULIE L	730 S MCKINLEY AVE	FT LUPTON	CO	80621	USA
TORRES	JACOB A & REBECCA R	1240 N THORPE DR	PUEBLO WEST	CO	81007	
TORRI	NATE & TRACEY	1851 N BAT MASTERSON	PUEBLO WEST	CO	81007	U S A
TREVIZO	GUSTAVO	521 TYLER ST	PUEBLO WEST	CO	81004	
TREVIZO	GUSTAVO IVAN	1717 S 8TH ST	COLORADO	CO	80906	
TRINITY EVANGELICAL		715 W EVANS AVE	PUEBLO	CO	81004	
TRUJILLO	DAVID J JR & CONCETTA C	1057 E SEQUOYA DR	PUEBLO WEST	CO	81007	U S A
UHING	GERALD A & MARY J	14724 MIAMI ST	OMAHA	NE	68116-	
UNDERHILL/SMITH		1097 N KIRKWOOD DR	PUEBLO WEST	CO	81007	USA
UNITED STATES OF		BLDG 20 DENVER FED	DENVER	CO	80225	
UPDEGRAFF	JOLENE R	1017 E LINDA AVE	PUEBLO WESET	CO	81007	U S A
VALDOVINES	IGNACIO & ESTHER	1216 N THORPE DR	PUEBLO WEST	CO	81007	
VELASQUEZ	ELOVEIDA B	1115 E IVANHOE DR	PUEBLO WEST	CO	81007	U S A
VIERNES	RICARDO P & LUVIMIN P	3878 W 103RD AVE	WESTMINSTER	CO	80031	USA
WALKER	MICKEY LEE	1139 E IVANHOE DR	PUEBLO WEST	CO	81007	
WALKER	J HARDY & TORY	1014 E BLACKSTONE DR	PUEBLO WEST	CO	81007	
WALKER RANCHES LLP		7170 TURKEY CREEK	PUEBLO	CO	81007-	U S A
WALLACE	STEVEN M & DEBORAH L	1130 E PARAMOUNT DR	PUEBLO WEST	CO	81007	U S A
WALSH	HERBERT S & KATHERINE L	1131 N KIRKWOOD DR	PUEBLO WEST	CO	81007	U S A
WANSKY	STEPHEN D	4852 BIXBY RIDGE DR E	GROVEPORT	OH	43125-	USA
WARNER	TERI L	18960 SW BROOKLAWN	PUEBLO WEST	CO	81007	
WEATHERS	LAURIE A	1070 E SEQUOYA DR	PUEBLO WEST	CO	81007	
WESTERLAGE	DAVID M	1112 E PARAMOUNT DR	PUEBLO WEST	CO	81007	U S A
WETZEL	JEFFREY L & CATHERINE	PO BOX 4056	GYP SUM	CO	81637	U S A
WHEELER	SCOTT L & MICHELLE L	1380 N MOONBEAM DR	PUEBLO WEST	CO	81007	U S A
WHITE	LESTER A	538 N MANCOS DR	PUEBLO WEST	CO	81007	U S A
WILBER	TERRY B	29682 FORRESTAL AVE	BIG PINE KEY	FL	33043	
WILLE	CHRISTOPHER M & LINDA M	4735 NW 191ST AVE	PORTLAND	OR	97229-	
WILLIAMS	ANNE L	149 N CANDLEWOOD DR	PUEBLO WEST	CO	81007	USA
WILLIAMS	PAUL L & PAMELA L	1081 N KIRKWOOD DR	PUEBLO WEST	CO	81007	USA
WILLIAMS	DANIEL O	24368 WOODLAND ST	FLAT ROCK	MI	48134-	
WILLIAMS	ROGER A & CLINT O	717 N CANVAS DR	PUEBLO WEST	CO	81007	U S A
WILSON	STEVEN A	1090 E LINDA AVE	PUEBLO WEST	CO	81007	
WILSON	VERNON L & MARGARET	590 N CANVAS DR	PUEBLO WEST	CO	81007	
WOLF	ROBERT J & ALBERTA Z	770 S HARRISON ST	DENVER	CO	80209	

LAST_NAME	FIRST_NAME	MAILING_ADDRESS	CITY	ST	ZIP	COUNTRY
WOLFF	GARY E	22 TETILLA RD	SANTA FE	NM	87505	USA
WOOD	MICHAEL & CONSTANCE	524 E SKYLINE DR	PUEBLO WEST	CO	81007	
YACHYM	LANCING J & PENELOPE SUE	15032 E BAILS PL	AURORA	CO	80012	
YI	SANG HUN & JAE HI	29 RIVERVIEW	GATINEAU	QU	0	CANADA J9H4S7
YORK	MIRJAM H & GREG L	1511 N PLATTEVILLE	PUEBLO WEST	CO	81007	
ZAGGY	CAROLYN S	10770 ROEDEL RD	FRANKENMUTH	MI	48734-	
ZAPIEN	JAIME F	1156 E BEARDSLEY PL	PUEBLO WEST	CO	81007-	
ZAUTCKE	CAROL	PO BOX 206	CASCADE	CO	80809-	
ZAVALA + COCOLETZI		PO BOX 17840	SOUTH LAKE	CA	96151	
ZOPH	LINCOLN E JR & BETTY R	2107 GABRIEL AVE	ZION	IL	60099-	

THE PUEBLO CHIEFTAIN

State of Colorado)

Pueblo Chieftain

COUNTY ZONING ADMINISTRATOR
229 W 12TH ST
PUEBLO CO 81003

REFERENCE: 812830
L42375 HEADING AND ENDING

Nancy R. Branip being first duly sworn upon her oath and says: That she is a representative of THE STAR-JOURNAL PUBLISHING CORPORATION, and has personal knowledge of the facts set forth herein; that said Corporation is a corporation organized under the laws of the State of Colorado and that its principal office and place of business is in the city of Pueblo, in the County of Pueblo, in the State of Colorado; that it is the proprietor, printer and publisher of THE PUEBLO CHIEFTAIN, which is, and at all times herein mentioned was a daily newspaper of general circulation printed and published in said City of Pueblo; that said newspaper is, and at all times was published daily, has been admitted to the United States Mails as a second class matter under the provisions of the Act of Congress of March 3, 1879, and any amendments thereof, and is duly qualified for publishing legal notices and advertisements within the meaning of the laws of the state of Colorado of which is attached a true copy cut from said newspaper and was published on the following dates:

PUBLISHED ON: 11/01

FILED ON: 11/02/08

In witness whereof I have hereunto set my hand this 4th day of November A.D. 2008

Subscribed and sworn to before me this 4th day of November
My commission expires November 29, 2011.
Notary

PUBLIC NOTICE

The Pueblo Board of County Commissioners will hold a public hearing 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 final action regarding an application for a Permit under the Pueblo County Regulations for Areas and Activities of State and Local Interest (1041 Permit Application).

This application has been submitted pursuant to Chapters 17.148, 17.164, and 17.172 of the Pueblo County Code.

HOUSE BILL 1041 PERMIT NO. 2008-002 - Colorado Springs Utilities, on behalf of the City of Colorado Springs, City of Fountain, Security Water District and the Pueblo West Metropolitan District

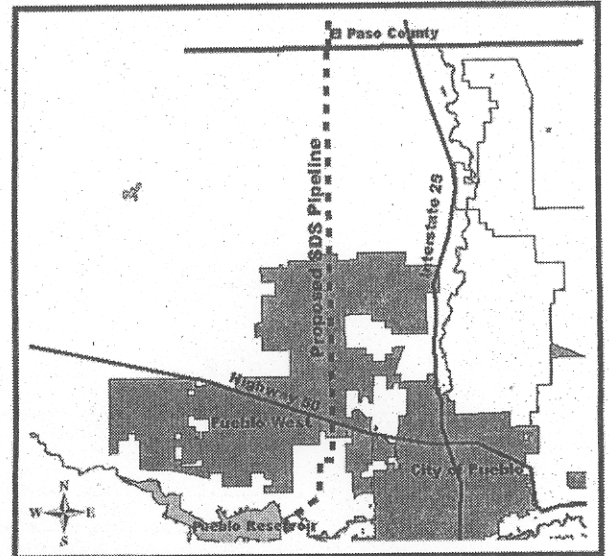
DESCRIPTION

Colorado Springs Utilities (CSU), on behalf of the project partners, the City of Fountain, Security Water District, the Pueblo West Metropolitan District and the City of Colorado Springs have submitted an application to Pueblo County under its Regulations for Areas and Activities of State and Local Interest, commonly referred to as House Bill 1041: Regulations or simply 1041 Regulations. More specifically, the Application is intended to address Title 17, Chapter 17.172, "Regulations for Efficient Utilization of Municipal and Industrial Water Projects" and Title 17, 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" of the Pueblo County Code.

The proposed SDS project in Pueblo County would include: the proposed storage of the Participants' water (up to 42,000 AF annually) in Pueblo Reservoir under new proposed long-term contracts with the Bureau of Reclamation; the trade of water stored in Pueblo Reservoir, under new contracts with the Bureau, for water stored in other upstream reservoirs; the modification of one or two outlets of Pueblo Reservoir for connection to the SDS pipeline; the construction of a 14,000 square foot pumping station, office and parking lot below the dam in Lake Pueblo State Park with a pumping capacity of 78 million gallons per day; the construction of a 66-inch diameter pipeline through about 20 miles of Pueblo County, a portion of it through the urbanized area of Pueblo West; and the carriage of return flows from the SDS pipeline and other sources in Fountain Creek, for recapture through the SDS pipeline, directly or by exchange.

LOCATION

In Pueblo County, the project would begin at the base of Lake Pueblo Dam and extend northward out of Lake Pueblo State Park into Pueblo West crossing U.S. Highway 50. West approximately 3,600 feet east of Purcell Boulevard and continuing northward through the central portion of Pueblo West north of U.S. Highway 50. The pipeline generally parallels the existing Fountain Valley Authority pipeline through most of Pueblo West and exits Pueblo County approximately 3 and 1/2 miles west of Interstate 25.



MAP NOT TO SCALE
FOR ILLUSTRATIVE PURPOSES ONLY

If you have comments, concerns, or need further information contact the Department of Planning and Development, 229 West 12th Street, Pueblo, Colorado 81003-2810, or telephone (719) 583-6100.

The location of this public hearing is accessible to the disabled. Accommodations will be made at such hearing for individuals with sight or hearing impairments, if such accommodations are requested at least two (2) working days in advance by contacting the Department of Planning and Development at (719) 583-6100, or by TOD at (719) 542-0310.

Notice is being sent to owners of property located within 500' of the above described project and published in a newspaper of general circulation. The purpose is to assure that everyone affected is notified of their opportunity to declare themselves at this public hearing.

A link to a complete copy of the Application is available on the County's website (<http://www.co.pueblo.co.us/>) as well as links to copies of the Draft Environmental Impact Statement for the project, comments received by the Bureau of Reclamation regarding the Draft Environmental Impact Statement, Pueblo County Regulations for Areas and Activities of State and Local Interest and the applicable portion of the Colorado Revised Statutes. Additionally, copies of the application and the Draft Environmental Impact Statement are available for public review at the Robert Hoag Rawlings Public Library, 100 East Abriendo Avenue, Pueblo, CO 81004 and the Pueblo County Department of Planning and Development, 229 West 12th Street, Pueblo, CO 81003.

The most current agenda and weekly agendas of the Pueblo Board of County Commissioners can be found at <http://www.co.pueblo.co.us/>.

ATTACHMENT B

**PUEBLO COUNTY DEPARTMENT OF
PUBLIC WORKS COMMENTS**

MEMORANDUM

TO: Jeffrey Woeber, Planner II
Department of Planning & Development

THRU: Greg Severance, Director of Public Works

FROM: David Benbow, General Services Engineer

DATE: November 6, 2008

SUBJECT: 1041 Permit Application No. 2008-002 – Colorado Springs
Utilities, Southern Delivery System

We have reviewed the proposed 1041 Permit Application No. 1041 2008-002 for approval of a Permit pursuant to Chapter 17.168 of the Pueblo County Code (Areas and Activities of State and Local Interest), Site Selection and Construction of Major Facilities of Public Utilities (1041 Application). The Colorado Springs Utilities (CSU) Southern Delivery System (SDS) project proposes a 66 inch diameter pipeline traversing from the Pueblo Reservoir north to the Pueblo/ El Paso County line approximately 20 miles in length. The line is proposed to parallel an existing easement for the Fountain Valley Authority along the majority of the project. A new 60-foot minimum width right-of-way adjacent to that easement is proposed across public and private property. The partners in this application are Colorado Springs Utilities, City of Fountain, Security Water District and the Pueblo West Metropolitan District.

INFRASTRUCTURE

The proposed pipeline route will cross numerous Pueblo County rights-of-way (Exhibit 1) and drainage channels as it traverses through the Pueblo West Metropolitan District. The applicant has identified methods of crossing these rights-of-way/roads; either through open trenching or boring under the roadway. We do have a concern for disrupting traffic on the higher traffic volume roadways that were noted as being open cut. Further, some of the bored roadways may be able to be open cut under certain defined conditions using detours and temporary roadways. The applicant will need to comply with Pueblo County Resolution 86-283 which regulates excavation within Pueblo County right-of-way. An excavation permit will be required for all road right-of-way crossings. The applicant shall provide a traffic control plan which complies with the applicable standards of the Manual on Uniform Traffic Control Devices with each excavation permit.

STAGING AREA

The pipeline route has been identified as a “staging area” for the construction project. The applicant will be required to apply for an access permit with this office for each identified access point onto the staging area from a public roadway and to comply with the conditions of the permit. The easement/staging area traverses through residential properties which may be adversely affected by use of the easement as a staging area outside normal working hours and typical construction practice and methods. The applicant has not indicated the type of excavation method to be used on this project; however, this area is prone to rock subgrade conditions. If the use of explosives is determined to be necessary the applicant will provide a blasting plan for review prior to blasting. The applicant will need to enter into an Inter-governmental Agreement with Pueblo County defining the use of the easement as a staging area, construction work times, material delivery hours, noise, dust abatement and construction methods.

HAUL ROUTE AND CONSTRUCTION MAINTENANCE PLAN

The applicant has submitted a Haul Route Plan (Plan) which lists the Pueblo County roads that will be utilized as haul routes for bringing material and equipment to the staging area/project corridor. The proposed Plan roads will need to be evaluated to determine their suitability for this use. Most of the roadways in this area are not constructed to handle this type or level of use and would be expected to be adversely affected. Further, there are roadways currently identified in the Plan that are scheduled to be upgraded prior to or during this project. It would be more advantageous for the applicant to participate in the scheduled maintenance activity than to do maintenance and reconstruction with SDS and possibly hold up scheduled maintenance. Pueblo County reserves the right to restrict or modify the use of Plan roads. The applicant will need to enter into an agreement with Pueblo County concerning the use of the Plan roads to provide for maintenance of the roads during the project, re-construction upon completion of the project and participation in scheduled maintenance activity. Plan road re-construction shall comply with the Pueblo County Roadway Design and Construction Standards (Standards).

DRAINAGE

The applicant will need to provide details on the blow-off valves for the pipeline and to provide detailed information on the amount of water released and necessary measures to alleviate erosion that might occur through the use of the valves. Article 7 of the Standards, Drainage states: “The roadway drainage system is for the protection of the Pueblo County roadway and right-of-way. It is not designed or intended to serve the drainage requirements of abutting properties beyond the levels which have historically flowed to the County right-of-way. Drainage to the County right-of-way shall not exceed the undeveloped historical flow.”

By State regulation if a project disturbs more than one acre a Storm Water Management Plan (SWMP) is required. This project will disturb more than one acre; therefore, the applicant will be required to have an accepted SWMP from the responsible jurisdiction and incorporate it into the construction plans. A SWMP may be necessary for reconstruction of the Haul Route Roads as well.

FUTURE RIGHT-OF-WAY

The proposed route for SDS crosses one future right-of-way corridor for the Joe Martinez Boulevard extension from State Highway 47 to Purcell Boulevard. The SDS route will traverse the north half of Pueblo County. We would request that the applicant's easements not unreasonably prohibit the installation of future roadways and utilities. Future roadways are expected to be surface crossings at existing grade for a typically defined roadway section in the Standards. The applicant shall enter into an agreement with Pueblo County for the future crossing of the SDS easement property for future roads and utilities.

CONCLUSION

We have reviewed all provided documents for this project and would note that none of the documents provided were identified as a final document. The comments and suggested conditions are based upon the general conceptualization provided by these documents. Although we have endeavored to provide detailed comment, until such time as final documents are submitted and reviewed we can only provide general comments. We would request the right to make further comment and conditions upon review of the final plan documents. If the Board of County Commissioners chooses to approve this 1041 permit, we would request that the following condition items be placed upon that approval:

1. The applicant shall submit an excavation permit to this department for each road crossing and comply with all conditions of that permit.
2. The applicant shall make application for an access permit with this department for each access point onto a County roadway and comply with all conditions of that permit.
3. The haul route from the staging area to the State Highway System shall be limited to those roads identified in the Haul Route Plan.
4. The applicant shall submit a traffic control plan for the project which conforms to applicable standards of the Manual on Uniform Traffic Control Devices.

5. The applicant shall enter into an Inter-Governmental Agreement with Pueblo County for use of the roads identified within the Haul Route Plan to provide for maintenance of the roads during the project, re-construction upon completion of the project and/or participation in maintenance activity. All construction and design work shall comply with the Pueblo County Roadway Design and Construction Standards.
6. The applicant shall enter into an Inter-Governmental Agreement with Pueblo County defining the use of the easement as a “staging area”, defining construction work times, material delivery hours, noise, dust abatement and construction methods.
7. The applicant shall provide drainage calculations performed by a professional engineer licensed to practice in the State of Colorado with detailed plans on the “Blow-off Valves”. The plans shall include any necessary drainage structures and erosion control measures.
8. The applicant shall submit a Stormwater Management Plan accepted by the responsible jurisdiction and incorporate that Stormwater Management Plan into the construction plans.
9. The applicant’s easements shall not unreasonably prohibit the installation of future roadways and utilities. Future roadways are expected to be surface crossings at existing grade for a typically defined roadway section in the Standards.
10. Pueblo County reserves the right to review final construction plans and specifications, final Haul Route Plan, other supporting documents and to modify these conditions of approval based upon that review.

If you have any questions or require further information, please do not hesitate to contact this office.

Exhibit: 2: Haul Route and Construction Maintenance Plan

C: Alf Randall, County Engineer
File

EXHIBIT 1

Road Name	Description	Surface	Crossing
Spaulding East/Ashford Dr.	Int. w/Ashford Dr.	Gravel	Open Cut
Grouse Drive	East of Briscoe	Gravel	Open Cut
Holiday Drive	East of Lilac	Gravel	Open Cut
Industrial East	East of Lilac	Gravel	Open Cut
Ivanhoe Drive	East of Candlewood	Gravel	Open Cut
Paramount Drive	West of Ivanhoe	Gravel	Open Cut
Ranch Drive	East of Purcell	Gravel	Open Cut
Sapinero Drive	East of Purcell	Chip Seal 2007	Open Cut
Sequoia Drive	West of Escambic	Chip Seal 2007	Open Cut
Marengo Drive	West of Escambic	Gravel	Open Cut
Desert Cove Drive	West of Canvas	Chip Seal 2008	Open Cut
Platteville Blvd.	West of Canvas	Paved	Trenchless
Iliff Drive	West of Canvas	Gravel	Open Cut
Purcell Blvd.	West of Jaroso	Paved	Open Cut
Jaroso Drive	West of Purcell	Chip Seal 2008	Open Cut
Linda Avenue	East of Thorpe	Chip Seal 2007	Open Cut
Sandusky Drive	East of Thorpe	Gravel	Open Cut
Kirkwood Drive	East of Thorpe	Gravel	Open Cut
Platteville Blvd.	East of Keymar	Paved	Trenchless
Blackstone Drive	East of Keymar	Gravel	Open Cut

All roads crossed are public right-of-way, County-maintained and HUTF eligible.

SOUTHERN DELIVERY SYSTEM
PUEBLO COUNTY
DRAFT HAUL ROUTE PLAN

Legend

— CENTERLINE OF 100' PROPOSED CONSTRUCTION LIMITS
— FVA PIPELINE

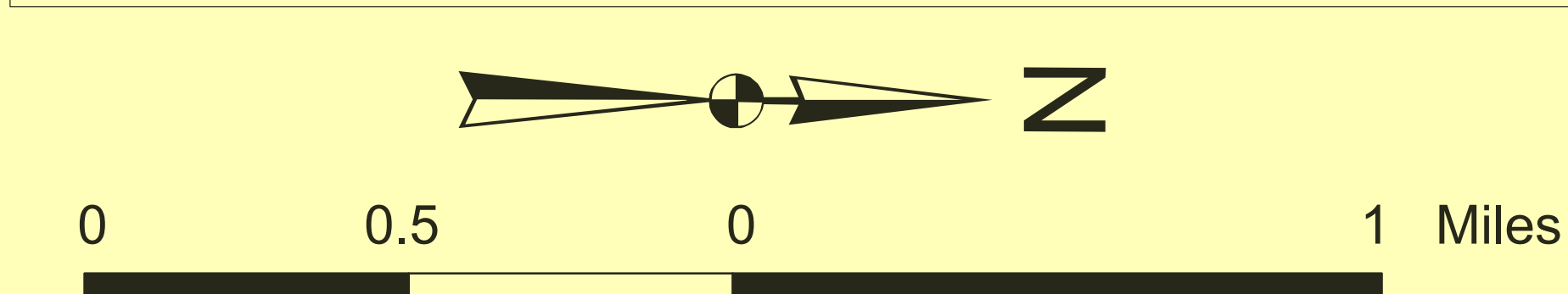
1234567890 ADT/AM PEAK/PM PEAK 1234 DAILY HEAVY TRUCK VOLUME

— PUEBLO COUNTY PARCEL BOUNDARY

← SOUTH SEGMENT ← CENTER SEGMENT ← NORTH SEGMENT

✕ ACCESS POINT

NOVEMBER 11, 2008



SOUTH SEGMENT

- South Segment: 3 Loops / 3 Access Locations
1. US50W to Purcell Blvd to Spaulding Ave to Access Point to Ashford Dr to Spaulding Ave to US50W
 2. US50W to Purcell Blvd to Greenway Dr to Access Point to Purcell Blvd to US50W
 3. US50W to HWY45 to HWY 96 to Juniper Road to Access Point to Juniper Road to HWY 96 to HWY45 to US50W

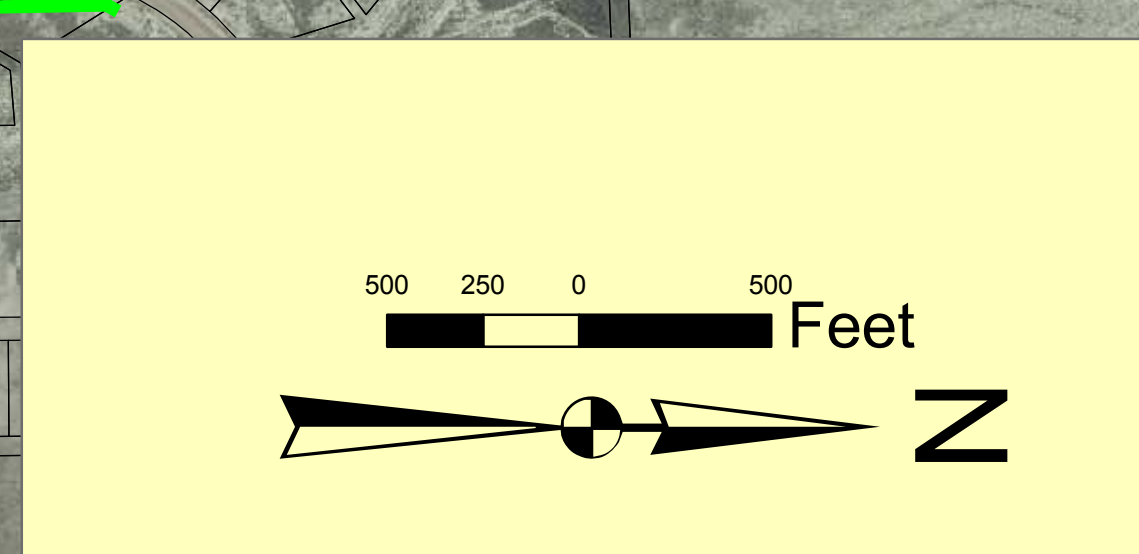
CENTER SEGMENT

- Center Segment: 15 Loops / 13 Access Locations
1. I-25S to Purcell Blvd to Platteville Blvd to Access Point to Wild Rose Lane to Platteville Blvd to Purcell Blvd to US50W
 1. I-25S to Purcell Blvd to Platteville Blvd to Laramie Ave to Blackstone Dr to Bat Masterson Ln to Access Point to Platteville Blvd to Purcell Blvd to US50W
 3. I-25S to Purcell Blvd to Platteville Blvd to Access Point to Wild Rose Lane to Platteville Blvd to Purcell Blvd to US50W
 4. I-25S to Purcell Blvd to Platteville Blvd to Wild Rose Lane to Access Point to Linda Ave to Purcell Blvd to US50W
 5. I-25S to Purcell Blvd to Linda Ave to Access Point to Wild Rose Lane to Platteville Blvd to Purcell Blvd to US50W
 6. I-25S to Purcell Blvd to Access Point to Linda Ave to Purcell Blvd to US50W
 7. I-25S to Purcell Blvd to Access Point to Desert Cove Dr to Purcell Blvd to US50W
 8. I-25S to Purcell Blvd to Desert Cove Dr to Access Point to Purcell Blvd to US50W
 9. I-25S to Purcell Blvd to Desert Cove Dr to Access Point to Sapinero Dr to Purcell Blvd to US50W
 10. I-25S to Purcell Blvd to Sapinero Dr to Access Point to Desert Cove Dr to Purcell Blvd to US50W
 11. I-25S to Purcell Blvd to Sapinero Dr to Access Point to Ranch Dr to Purcell Blvd to US50W
 12. I-25S to Purcell Blvd to Ranch Dr to Access Point to Sapinero Dr to Purcell Blvd to US50W
 13. I-25S to Purcell Blvd to Ranch Dr to Access Point to Holiday Dr to Blythe Dr to Industrial Blvd to Purcell Blvd to US50W
 14. Highway 50W to Purcell Blvd to Spaulding Ave to Briscoe Dr to Grouse Dr to Access Point to Grouse Dr to Briscoe Dr to Spaulding Ave to Purcell Blvd to US50W

NORTH SEGMENT

- North Segment: 2 Loops / 2 Access Locations
1. I-25S to Midway Ranch Road to Peace Pipe Heights Road to Access Point to Peace Pipe Heights Road to Midway Ranch Road to I25N
 2. I-25S to Purcell Blvd to Platteville Blvd to Laramie Ave to Blackstone Dr to Bat Masterson Ln to Access Point to Bat Masterson Ln to Blackstone Dr to Laramie Ave to Platteville Blvd to Purcell Blvd to Highway 50 to I-25N

CENTER SEGMENT DETAIL



ATTACHMENT C

**MITIGATION MEASURES PROPOSED BY THE
APPLICANT IN THE 1041 APPLICATION AND**

**MITIGATION MEASURES BEING CONSIDERED BY
THE BUREAU OF RECLAMATION**

Summary of Primary Mitigation Measures Being Considered by the Bureau of Reclamation

- Wetlands
 - In order of priority: 1) Avoid and minimize impacts. 2) Mitigate on-site where the disturbance occurs to replace existing function and value. 3) Off-site wetland creation. Monitor to ensure successful mitigation.
- Noxious Weeds
 - Wash construction vehicles to minimize spreading between construction sites. Use weed-free mulch and seed mixes following construction. Monitor invasive plant populations.
- Wildlife
 - Use best management practices and state and federal guidelines to avoid and minimize impacts on wildlife. Conduct clearance surveys for a broad range of species (including endangered, threatened, state-listed, and special concern) prior to construction.
- Trails
 - Ensure trails are safely and reasonably routed around construction areas. Post signs directing trail users. If long-term impacts occur, work with local municipality to establish alternate route.
- Parks and Open Space
 - Within developed parks, replace/repair turf and irrigation systems and other facilities that are impacted. Within open space lands, revegetate with native vegetation. Monitor and maintenance to ensure efforts are successful.
- Upper Arkansas River corridor
 - Work with Colorado State Parks and Bureau of Land Management (BLM) to establish or enhance angling and boating access points and other facilities. For Alternatives 1 and 7, reconstruct Ark-Otero diversion for safe boat passage. For Alternatives 1, 3, 4, and 7, work with BLM to ensure river access points are compatible with proposed facilities.
- Aquatic Resources
 - Consult with CDOW on updated effects shown in the Supplemental Information Report. Consider providing assistance with aquatic habitat improvements and supporting state hatcheries and stocking programs.

- Lower Arkansas River Reservoirs
 - Seek opportunities to enhance angling, boating, or other recreational activities at affected reservoirs (Lake Henry, Lake Meredith, and Holbrook).
- Water Quality
 - Monitoring at key locations for key water quality parameters, including implementation of adaptive management to mitigate adverse effects of SDS.
- Flood Hydrology, Floodplains and Geomorphology
 - Monitor flood/erosion/geomorphology effects of the project, including implementation of adaptive management to mitigate adverse effects of SDS.
- Socioeconomics
 - Acquire properties and easements through voluntary, willing participant agreements to the maximum extent practicable by mutually agreed upon compensation.
- Land Use
 - Use best management practices to avoid or minimize impacts to surrounding properties.
- Cultural Resources
 - Implement avoidance measures during construction by physically marking boundaries around historic property locations; implementing treatment and discovery plans consistent with applicable regulations; and, preserve and protect eligible sites either in-place or by curation of project collections in approved curatorial facilities (e.g. museums, public education facilities).
- Indian Trust Assests
 - Coordination of tribal and other cultural resource issues will continue among Reclamation, the Colorado State Historic Preservation Officer, the Project Participants, and 15 tribes through a Programmatic Agreement.
- Noise and Vibration
 - Construction equipment will conform to applicable noise emission standards. Adhere to work hour restrictions during construction within 500 feet of populated areas. Limit public access in loud construction zones. House project operating equipment (e.g. pump stations) in structures designed to minimize radiant noise and conform to local noise ordinance requirements.

- Visual Resources
 - Revegetate disturbed areas to match existing vegetation. Restore existing grades to the extent practicable following pipeline excavations. For above ground facilities, match architectural designs to the surrounding area. Install baffles on construction lighting to direct light onto the construction area only. Construct overhead powerlines with non-specular (non-shiny) wire, insulators and poles.
- Traffic
 - Trenchless construction would be used as much as practicable when crossing railroads, state highways, county roadways, and major city roadways in densely populated areas. Traffic control plans would be prepared for approval by state and local traffic authorities and followed by contractors during construction. Improvements to existing access roads or construction of temporary access roads would be constructed as directed by state and local traffic authorities. Bridges would be modified or reconstructed when load limits are not adequate and other access routes are not reasonable.
- Geology and Paleontology
 - Survey and salvage resources prior to construction. Use a qualified paleontologist for identification, cataloguing, and curation, and of resources. Provide reporting and documentation. Monitoring during construction to avoid impacts and temporarily cease construction when necessary to allow for salvage of resources.
- Soils
 - Minimize time and extent of soil disturbance. Remove and stockpile topsoil for reuse in the area where it is excavated. Contain soils within the study area using sediment control measures such as silt fencing, trenches, and sediment traps. Promptly revegetate disturbed areas following construction.
- Air Quality
 - Implement standard control practices, such as watering, to minimize dust emissions in construction areas. Ensure construction equipment meets opacity standards for emissions. Promptly revegetate disturbances.
- Hazardous Materials
 - Prior to construction, existing waste disposal sites would be removed, characterized, and properly disposed at a permitted waste disposal facility. The ground surface would be inspected, sampled and analyzed (if necessary) for evidence of hazardous materials, and any hazardous materials would be excavated and properly disposed at a permitted waste disposal facility. If hazardous materials are encountered during construction, the same practices would be implemented.

- Environmental Management System and Adaptive Management
 - Implement an Environmental Management System (EMS) incorporating adaptive management as part of the selected alternative to bring about compliance with laws, regulations, permit requirements and mitigation measures identified in the EIS.

17.172.120.H Monitoring and Mitigation Plan

In addition to being responsive to *Pueblo County Land Use Code, Title 17, Chapter 17.172*, the following information also addresses criteria described in *Chapter 17.164* sections 17.164.030.(G), (H), (I), (M).

(1) Description of all mitigation that is proposed to avoid, minimize or compensate for adverse impacts of the Project and to maximize positive impacts of the Project.

(a) Describe how and when mitigation will be implemented and financed.

(b) Describe impacts that are unavoidable that cannot be mitigated.

When will Mitigation be Implemented?

The Applicant possesses significant knowledge in planning, designing, and implementing projects that minimize adverse impacts to citizens, communities, economies, and the environment. The Applicant seeks to provide mitigation measures that ensure a successful project for all stakeholders. A proper construction project focuses not only on the actual mitigation measures, but more importantly on the identification of potential impacts and strategies designed to avoid those impacts to the extent possible.

Mitigation begins in the planning and design phase of the SDS project. The general area of Project impact was assessed to determine a specific location for the Project equipment and facilities that would create the least amount of impact and thus the least amount of mitigation required. The Project design continues the process of continuously evaluating potential impacts and evaluating potential mitigation strategies that reduce nuisance, time, and cost.

Prior to construction, mitigation measures are being implemented in the way of community outreach and dissemination of information to citizens, well in advance of any construction activities. This allows questions and concerns to be addressed prior to field activities commencing. Most community and citizen concerns can be alleviated with proper information and education regarding efforts being taken by the Project to protect and minimize impacts.

Mitigation during the construction mobilization phase will include initiatives such as clear signage and detours; containment of work areas to protect the public, and measures to protect wildlife, aquatic life and vegetation. Construction personnel will receive briefings as part of the mitigation measures to ensure that individuals working on the Project are aware of the sensitive elements of the work areas, proper impact avoidance strategies and mitigation measures.

During construction, mitigation measures focus on building and maintaining systems that were designed to protect the public, wildlife, aquatics, and vegetation from the impacts of construction. Post-construction activities focus on repair of impacted areas and returning or improving the area to conditions prior to construction.

Mitigation efforts will occur throughout the SDS project, from early planning to final clean-up and restoration. As much, or more, effort must be taken to properly plan the avoidance of impacts and protect against impacts than providing restoration.

The following listing provides specific details on mitigation planning, avoidance, protection and restoration efforts that are proposed for the SDS project. Proposed mitigation efforts include, but will not be limited to, the following (additional mitigation details can be found in the DEIS attached):

Noise and Vibration

The predominance of the SDS project will occur away from inhabited areas or areas with high public visitation, therefore noise and vibration associated with construction will be minimal to the public. In those areas that may have a potential noise and vibration impact, a mitigation plan will be prepared and implemented. The mitigation plan steps start in the planning phases with the selection of proper equipment, sound suppression measures, barricades and other strategies that could be used in sensitive areas. Public awareness of the potential noises, vibration and their levels, will be important to create an awareness well before the start of work activities. Noise and vibration levels of permanently operating equipment, such as large electric motor pumps, will be suppressed by enclosure in specially designed buildings to minimize their effect. Other measures to minimize noise and vibration include:

- Construction equipment used by contractors will function as designed, be properly maintained, and conform to applicable noise emission and safety standards.
- Unless previously authorized, contractor will adhere to project work hour restrictions (7 a.m. to 6 p.m.) within 500 feet of residences, hospitals, schools, churches, and libraries.
- Access to construction areas will be restricted so that the public could not be in close proximity to loud equipment or blasting.
- Coordinating work hours with local traffic flows.
- The pumping facilities will be housed in structures designed to minimize radiated noise outside the structure, and will meet local noise ordinance requirements.

The Project is not anticipated to have a significant noise and vibration impact on local structures, citizens, environment or community.

Air Quality

The primary source of air emissions during construction of the Project will be related to construction operations. These operations will be typical of large civil earthmoving projects and will include dust and diesel exhaust. Dust can be effectively controlled via numerous methods, including moistening the soil, shortening distances vehicles have to travel and the application of temporary road surface material to name a few. The Project will incorporate these types of measures in a dust control plan developed before Project operations begin. Diesel operated equipment used on-site will be required to meet all State and Local emission standards before being allowed to operate on-site. Additional measures will include:

- A fugitive dust control plan will be prepared, submitted, and implemented as required by CDPHE's Air Pollution Control Division.
- Standard control practices, such as watering, will be developed and implemented to minimize particulate and dust emissions from construction work sites as specified in the fugitive dust control plan.

- Construction equipment (especially diesel equipment) will be ensured to meet opacity standards for operating emissions.
- Disturbed areas will be revegetated.

The Project will not significantly degrade air quality.

Visual Resources

It is the intent of the SDS project to minimize the obtrusiveness of permanent and temporary installed structures. Efforts will be made to minimize the visual impacts structures may have to local citizens and the community. The Project will not significantly degrade existing visual quality. Typical mitigation measures may include:

- Disturbances associated with the construction of facilities will be revegetated and/or landscaped with plants.
- Underground pipeline excavations will be restored to pre-existing grades.
- Pump station equipment in structures will be matched to the architectural characteristics of the surrounding structures.
- Power lines will be constructed with non-specular (not shiny) wire, non-reflective and opaque insulators, and light-colored, non-reflective finished poles.

Wetlands, Waters, and Riparian Vegetation

The Applicant recognizes the value that wetlands and riparian ecosystems add to the semi-arid Colorado environment. The Applicant also recognizes the sensitive nature of these ecosystems and importance of significant planning to avoid impacts. Based on current designed alignments, there are no anticipated wetland or riparian habitat crossings in Pueblo County, and the Project will not significantly degrade wetlands or riparian habitat. Typical measures for mitigation of these sensitive areas would include:

- Final alignments and facilities will be designed to first and foremost, minimize wetland impacts. No wetland or riparian crossings are anticipated in the proposed raw water pipeline alignment.
- Unavoidable impacts will be mitigated to 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.
- Alternative construction methods for pipeline crossings (i.e. directional drilling v. open cut) will be assessed to minimize wetland/stream impacts.

Wildlife

Colorado's wildlife form a significant part of this state's recreational opportunities and therefore constitutes a large contribution to the area's economy. SDS project participants recognize this importance, not only from an economic standpoint, but also a quality of life and ecosystem diversity standpoint. Avoiding wildlife impacts is a significant component to the planning and design process. Where potential wildlife encounters may occur during construction of the Project, mitigation or protection efforts will be taken to minimize impact. Mitigation measures can never take the place of sound avoidance planning. The Project will not significantly degrade terrestrial or aquatic animal life or their habitats. The SDS project efforts may include:

- Best management practices and state and federal guidelines will be used to conform to minimize short- and long-term effects on wildlife.
- Promptly revegetating disturbed areas may restore native wildlife habitat.
- Clearance surveys for state listed species will be conducted following standard protocols prior to construction.
- Proposed avoidance and mitigation measures for wetlands will be followed to mitigate impacts to state-listed amphibian species.
- Seasonal restrictions will be imposed on construction where needed to avoid sensitive large game winter habitat.
- Temporarily disturbed areas will be revegetated with native species that provides species diversity and food and cover for large game and other wildlife.
- Raptor nest surveys will be conducted prior to construction. Recommended buffers (generally ¼ to ½ mile) and seasonal restrictions will be imposed around active raptor nest sites and heron rookeries during construction.
- Artificial nests will be constructed in suitable habitat or prey habitat enhanced to mitigate any unavoidable loss of raptor nests.
- Construction schedules will be developed 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 would be flagged and avoided, or construction would be scheduled outside of the nesting season.
- Nesting deterrents (netting and other physical deterrents) will be installed to prevent nesting before April 1 and deterrents removed no more than 24 hours before initiation of construction.
- Pre-construction surveys will be conducted for Botta's pocket gopher. USFWS experts will be consulted to identify species located in and around the work areas.

Vegetation

Vegetation is critical to protection of the working area for several reasons, and will be factored into avoidance strategies and mitigation plans. Vegetation is critical for erosion control, topsoil preservation, wildlife species support, maintaining ecosystems and aesthetic purposes. Planning for protection of existing vegetation and replacement of vegetation is a large component of any construction mobilization process, including the design of on-site traffic lay-outs, placement of storage areas and education of staff to the existence, location and protection of critical plant species. The Project will not significantly deteriorate terrestrial plant life or plant habitat. Mitigation measures may include:

- Existing topsoil will be stored and replaced to a maximum of 6 inches where topsoil previously existed.

- Appropriate native seeds will be used to reseed. If possible, only locally collected seeds will be used, especially when replacing plant communities of concern.
- Trees lost will be replaced with appropriate species.
- Locations of S1 and S2 plant communities of concern and other sensitive vegetation will be reviewed to determine if there are design changes needed to minimize impacts.

The following measures would mitigate for effects on plant species of concern:

- Construction activities will be routed around areas with plant communities of concern and other sensitive vegetation such as large trees to the extent practicable.
- In the appropriate season prior to construction, the areas with known populations of plant species of concern will be resurveyed and each individual plant or area of high density will be relocated. If possible, the construction areas will be adjusted to avoid these plants.
- Plants found nearby but outside of the construction zone, will be protected by fencing or other types of barriers or high density areas.
- If avoiding individual plants is not possible, these individual plants may be transplanted to nearby undisturbed areas; many rare species, however, do not transplant successfully.

The following measures would reduce the spread of noxious weeds:

- Certified weed-free mulch will be used after seeding.
- Appropriate vegetation will be reseeded as soon as practicable after disturbance.
- Only seed that does not contain any noxious weed seed will be used.
- Prior to delivery to the construction site, earthmoving construction equipment will be washed so that noxious weeds are not spread from other construction sites.

Soils

Productive growing soils in the Arkansas River Basin are very shallow and critical to protect. Agricultural soils will require different protection and replacement methods than Sagebrush flats; however, the SDS project soils conservation measures will include strategies for the various encountered areas requiring protection. The Project will not significantly deteriorate soils and geologic conditions nor cause significant erosion, sedimentation or flooding. Mitigation strategies may include:

- Measures will be implemented to minimize the loss of soil material before, during, and after construction.
- The area of disturbance will be confined to define construction limits and limit the time bare soil is exposed.
- Soils within the analysis area will be contained through temporary sediment control measures such as silt fences, sediment logs, trenches, and sediment traps.
- Topsoil will be removed and stored as an initial phase of earthwork operations.
- Woody vegetation will be removed prior to topsoil salvaged and, to the extent possible, topsoil will be salvaged within tree stump roots.

- Topsoil salvage methods will be used, including windrowing topsoil at the limits of construction, and pulling the soil back on slopes during reclamation.
- Selective topsoil will be redistributed to soil deficient areas as needed.
- Topsoil (up to 6-inches in depth), soil amendments, fertilizers, and mulches will be applied as appropriate, and selective seeding will be applied during favorable plant establishment climate conditions to match site conditions and revegetation goals.
- Disturbed areas will be promptly revegetated following construction for long-term soil protection.
- To the extent feasible, irrigated lands will be avoided during final design.
- To the extent feasible, continued use of lands crossed by project facilities will be allowed after construction.
- Where the proposed pipeline crosses prime farmland soils, a soils handling plan will be developed that separates the top 6 inches and the soils between 6 and 36 inches for subsequent reclamation.

Traffic

Traffic control and the protection of existing streets and roadways are paramount to the Project safety and roadway impact mitigation strategy. Traffic management plans will include designs of temporary roadways, detours and road protection measures to minimize the impacts of construction traffic to the community. Most construction traffic will occur over one particular working area for an average 30 to 90 day period. The working face of the pipeline excavation will progress over time, minimizing overall impacts to one particular area. The JPS is the only facility where construction will occur over a longer period. The Project will not create a significant nuisance during construction or operation. Specific measures to mitigate impacts caused by construction traffic may include:

- Trenchless construction will be used appropriately when construction features cross railroad lines, state highways, county roadways, and major city roadways in densely populated areas.
- Traffic control plans will be prepared for approval by state and local traffic authorities and followed by contractors during construction.
- Traffic signage, signals, acceleration, and deceleration lanes will be constructed as directed by state and local traffic authorities for access to the pump station and pipeline access points.
- Improvements to existing access roads or construction of temporary alternate access roads to the pump station and pipeline access points will be constructed as directed by state and local traffic officials.

Geology and Paleontology

The Applicant will work cooperatively with federal and state authorities to identify specific geological and paleontological areas of interest, and protective or salvage efforts that may be required. The Project will not significantly degrade areas of paleontological, historic or archaeological importance. Measures may include:

- A preliminary survey and surface salvage will be conducted prior to construction.
- Monitoring and salvage will occur during excavation.
- Agreements will be made containing provisions for work to cease and have material evaluated by a qualified paleontologist, and work to resume within a specified timeframe.

Hazardous Material

Any valuable mitigation plan includes mitigation measures in the eventuality that hazardous materials are encountered during excavation. The Project mitigation plan will include measures for this eventuality; however, based on an assessment of the proposed pump station and pipeline alignment in Pueblo County, there were no potential sites identified that may have produced hazardous materials or wastes, in, or adjacent to, the area of installation. The Project will not result in unreasonable risk of release of hazardous materials. As precaution the Project will:

- Trained and certified construction personnel will be provided with proper personal protective equipment should hazardous materials be encountered. Containment systems will be employed to eliminate potential releases to the surrounding environment.
- Unexpectedly encountered hazardous materials will be containerized and transported to an appropriate hazardous material/waste disposal facility.

Cultural Resources

Working jointly with experts from various cultural and historical authorities, the Project will work cooperatively to minimize impacts to sites that may contain information regarding area inhabitants and their heritage. Working cooperatively will lead to:

- A Programmatic Agreement implemented and executed between Reclamation, the Advisory Council on Historic Preservation, the Applicant, and the Colorado State Historic Preservation Officer.
- Final alignments and facilities for the selected alternative designed to avoid and minimize effects on cultural resources.
- Avoidance measures will be implemented during construction, including physically marking boundaries around historic property locations in order to avoid construction related impacts where practicable. This practice may include monitoring of such sites during construction activities.
- Sites, where practicable, will be protected through "in-place" protection of those cultural resources that may be subject to occasional impacts.
- Mitigation will be implemented for unavoidable adverse effects that remain after all appropriate and practicable avoidance and protection has been achieved. Cultural resource mitigation will be guided by a Treatment Plan that provides a research design that addresses:
 - 1) characteristics of the physical environment and the associated culture
 - 2) related historic contexts and specific property types

- 3) field and laboratory methods employed while working with historical and archaeological sites and materials
 - 4) proposed work to be conducted on specific historic properties
 - 5) reporting standards
 - 6) standards for curation of project collections in approved curatorial facilities
 - 7) standards for public participation and Native American involvement
- A Discovery Plan will be developed and implemented to provide details relating to:
 - 1) methods and standards for construction monitoring
 - 2) protocols for discovery situations, including the presence of human remains
 - A program will be developed to educate the public regarding the importance of cultural resources. The public will be informed about the status of excavations and, where possible, visual displays and explanatory written information will be provided, especially within publicly accessed locations of the project area. Signage and other interpretive techniques may also be implemented as mitigation measures. There will not be any significant impact to cultural, historical or archaeological resources during the Project.

Socioeconomics and Land Use

The SDS project recognizes the need to protect local landowners, residents, and the community from potential construction impacts. Working with residents prior to construction activities and soliciting feedback through community outreach will provide the Applicant with valuable information regarding potential impacts and value of mitigation measures. The Project management plan will incorporate this feedback, as well as other potential measures as those listed below:

- A construction management plan will be developed to outline best management practices to minimize impacts to surrounding properties.
- Open sources of information will be maintained regarding the project, including a project website, information pamphlets, resource center, and other pre-construction informational sources.
- Early and clear expectations will be established regarding the potential impacts and what measures can best alleviate impacts to the residents.
- Affected landowners will be coordinated with along the pipeline route to obtain approvals to enter their land, and negotiated with to secure appropriate agreements to obtain easements, rights-of-way, or purchase of the parcel.

The Project will not create an undue financial burden on existing or future residents of Pueblo County, nor will it significantly impact land use or property rights. In addition, the Project will not significantly affect any current or future sector of the local economy.

Recreation

Recreation in Pueblo County provides citizens and tourists diverse opportunities within and adjacent to the Pueblo State Park. These local and out of County visitors bring a tremendous economic influx to Pueblo County. The Applicant recognizes this County resource and will

devise construction plans to minimize this impact, and ultimately avoid a majority of impacts. It is the Project's intent to hire local Pueblo County contractors for this work. Contractor's employees use these facilities for recreation and appreciate the importance of the resource to the County.

The Project will not have a significant adverse effect on the quality or the quantity of recreational opportunities and experience in the County.

- During short-term construction activities that require trail closures, a safe and reasonable detour will be designated around the project site. Signs will be posted directing trail users.
- Construction activities requiring trail closures will be conducted during winter months when trail use may be lower.

The following measures are proposed to mitigate effects to open space areas during construction:

- Where temporary effects occur within open space lands, affected areas will be revegetated with native vegetation. Follow-up monitoring and maintenance will be provided to control noxious weed infestations and ensure that revegetation efforts are effective.
- In areas with permanent, aboveground project facilities, park facilities that may be affected will be reconfigured and facilities visually screened from other park uses with vegetation, berming, or attractive fencing.

Aquatic Life

The SDS project has studied the potential impacts to aquatic life during construction and operation of the JPS and pipeline. A significant impact to aquatic life from the JPS facility or pipeline is not anticipated, beyond what would be anticipated by a pump station of a significant dam structure. Stream crossings represent the most significant impact to aquatic life along the alignment. A crossing of the Arkansas River just below Pueblo Reservoir Dam to connect the JUM with the JPS is anticipated. The crossing will be designed to minimize impacts to aquatic life by managing some of the key factors affecting aquatic life in streams, primarily silts, temperature, and oxygen levels. Specific mitigation measures will be developed as the SDS project design progresses.

Water Quality

The most effective mitigation measure is a monitoring program at key locations of raw water sources combined with adaptive management strategies. These measures would apply to operation of the project, rather than construction, which is not likely to have significant water quality effects.

How will Mitigation Measures be Financed?

Mitigation measures are considered a cost of the Project and will therefore be estimated and budgeted as a Project cost. Typical mitigation costs, based on industry standard practice for large civil infrastructure projects, are less than two percent of construction costs. As detailed in Section 17.172.120.D of this application, the SDS project will be revenue bond financed.

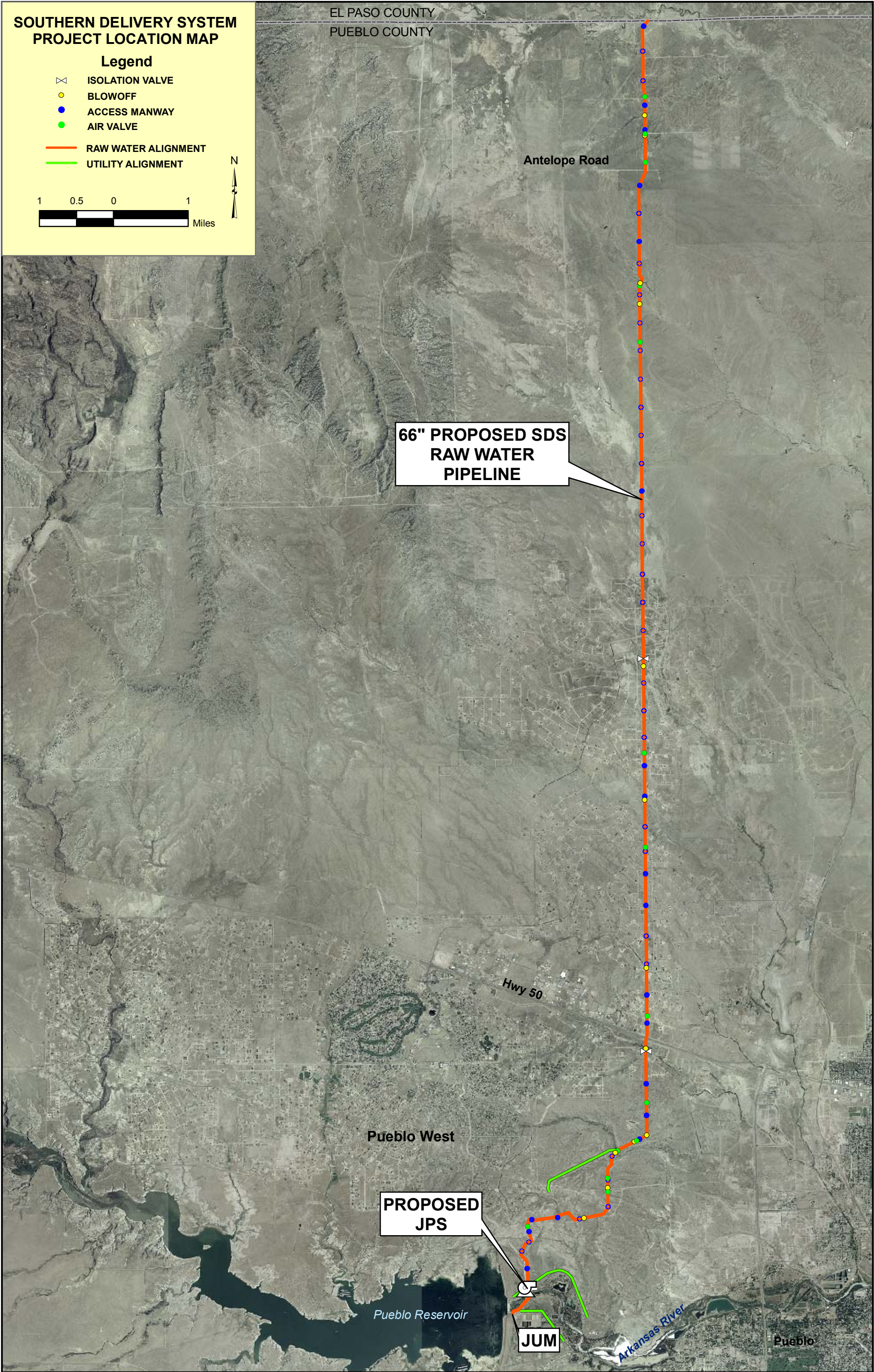
Unavoidable Impacts that cannot be Mitigated

Not all potential impacts can be avoided, as the Project involves construction. The key to any major construction project is to focus on plans and strategies to avoid impacts (thus the need for mitigations), and to minimize impacts that are unavoidable due to the nature of the work.

Although most impacts are not deemed to be significant in nature, relative to similar civil construction projects, some impacts would be unavoidable and include land disturbance, impacts to wildlife, wetlands, and riparian areas, impacts to historic or archaeological sites, noise, visual impacts, and vibration. These impacts are a part of construction. The mitigation measures and information provided in this application, and the DEIS, will help alleviate the impacts associated with the construction of the SDS project.

ATTACHMENT D

LOCATION OF THE SDS PROJECT



ATTACHMENT E

CURRENT ZONING AND PROJECT ALIGNMENT

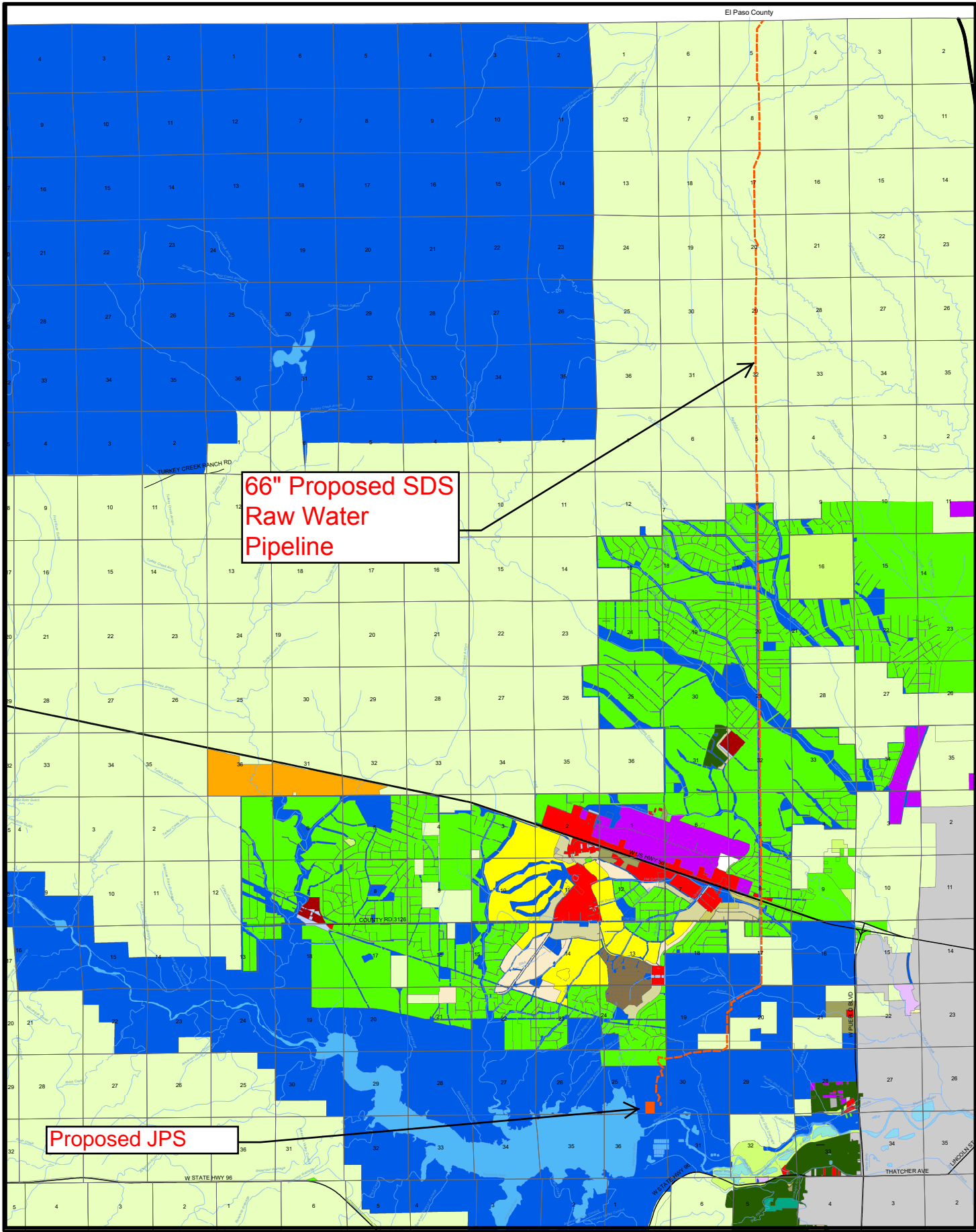


Figure I-1
2007 Map Exhibit
depicting Pueblo
County's Current
Zoning and the
Project Alignment



0 1 2 3 MI

Legend

- | | | |
|-------------------------------------|-------------------------------|--------------------------------------|
| ----- Proposed Alignment | B-1 Neighborhood Business | R-5 Multi-Residential & Office |
| ■ Proposed JPS | B-4 Community Business | R-6 Multi-Residential & Commerical |
| ■ City of Pueblo Corporate Boundary | O-1 Neighborhood Office | R-7 Mobile Home Park District |
| Pueblo County | I-1 Special Industrial | R-8 Mobile Home Subdivision District |
| Zone Districts | I-2 Light Industrial | S-1 Public Use |
| A-1 Agricultural | I-3 Heavy Industrial | S-3 Flood Plain District |
| A-2 Agricultural | R-1 Single Family Residential | S-4 Parking District |
| A-3 Agricultural | R-2 Single Family Residential | PUD Planned Unit Development |
| A-4 Agricultural | R-3 Single Family Residential | RLUP Rural Land Use Process |
| R-A Residential-Agricultural | R-4 Mixed Residential | |

ATTACHMENT F

FEMA FLOOD PLAINS IN RELATION TO SDS

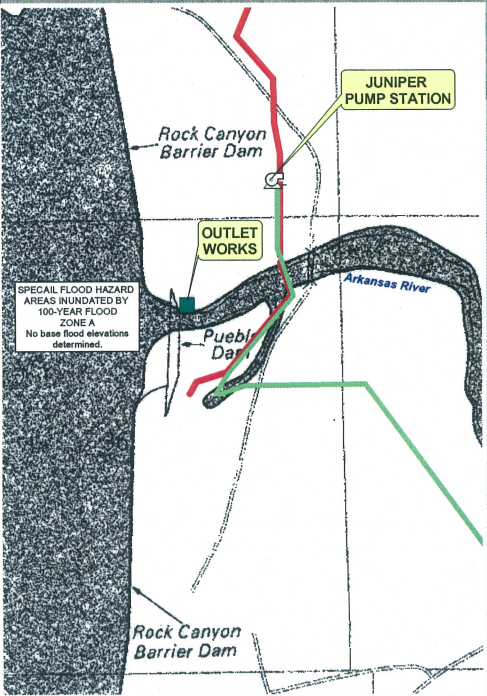
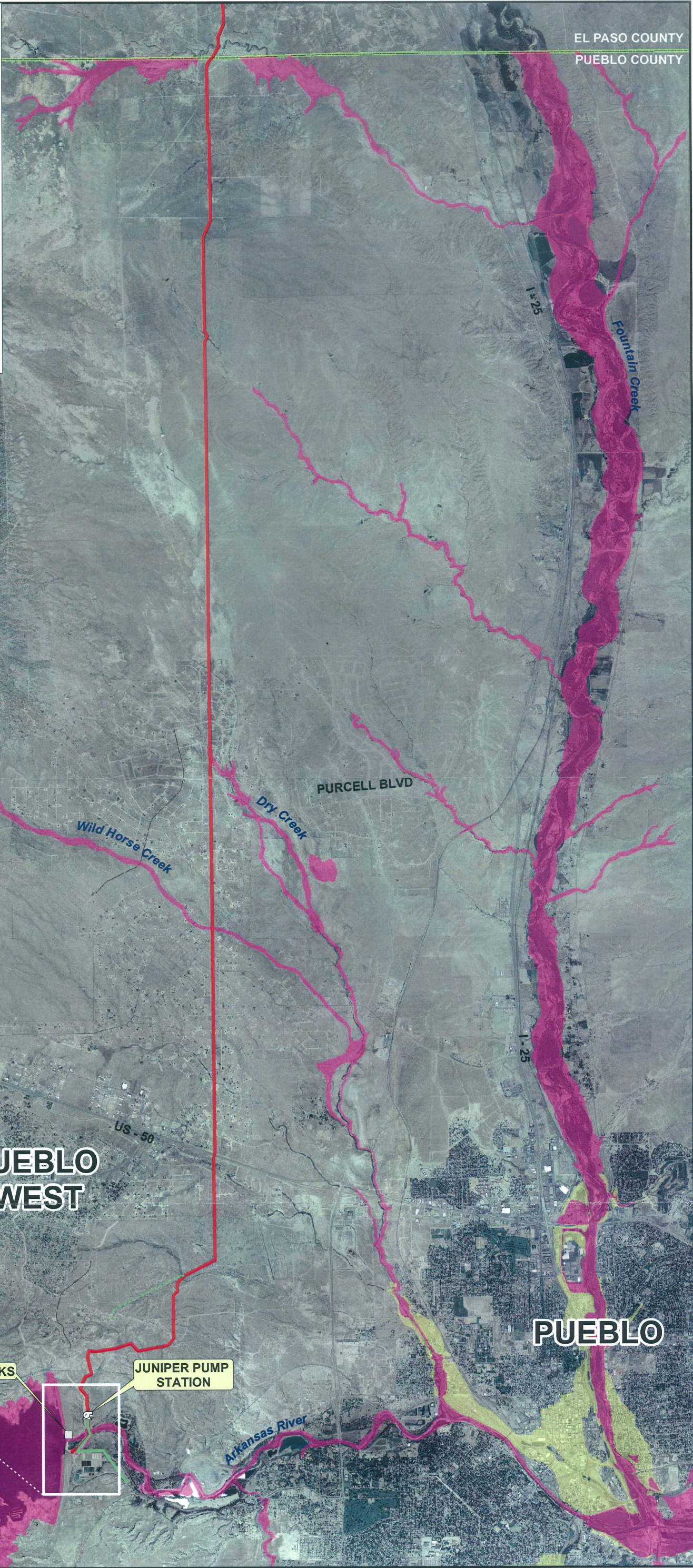
SOUTHERN DELIVERY SYSTEM
PUEBLO COUNTY
COMPONENTS PLAN AND
FEMA FLOOD PLAINS
October 20, 2008

LEGEND

- RAW WATER ALIGNMENT
- FIBER OPTICS ALIGNMENT
- POWER ALIGNMENT
- FEMA
 - AREAS OF 100-YEAR FLOODS
 - AREAS OF 500-YEAR FLOOD



1 0.5 0 1 Miles



ATTACHMENT G

**DISTRIBUTION LIST REQUESTING
REFERRAL COMMENTS**

DISTRIBUTION LIST
SDS 1041 PERMIT APPLICATION
REQUEST FOR COMMENTS

A		B	C	D
1	Entity	Name		
2	Avondale Water and Sanitation District			
3	Bessemer Irrigation Ditch Company			
4	Black Hills Energy			
5	Blende Sanitation District			
6	Bureau of Reclamation			
7	City of Florence			
8	City of Pueblo	Dave Gail		
9	Colorado Ute Electrical Association			
10	Colorado Board of Land Commissioners			
11	Colorado Department of Mineral and Geology			
12	Colorado Department of Public Health and Environment (Pueblo Office)	Gary Soldano		
13	Colorado Department of Public Health and Environment (Water Quality Div)			
14	Colorado Department of Transportation			
15	Colorado Division of Parks and Outdoor Recreation			
16	Colorado Division of Wildlife			
17	Colorado Interstate Gas			
18	Colorado State Engineer - Division of Water Resources			
19	Colorado Water Conservation Board			
20	Comcast Cable			
21	Environmental Protection Agency - Region VIII			
22	Federal Emergency Management Agency-Region VIII			
23	Fort Carson	Tom Warren		
24	Fountain Valley Authority			
25	HQ, Fort Carson - Directorate of Environmental Compliance and Management			
26	Lower Arkansas Vally Water Conservancy District			
27	Natural Resource Conservation Service			
28	Pike Peak Area Council of Governments			
29	Public Service of Colorado			
30	Pueblo Board of Water Works	Allan Hamill		
31	Pueblo Chieftan	Robert Rawlings		
32	Pueblo City-County Health Department	Heather Maio		
33	Pueblo County Attorney	Dan Kogovsek		
34	Pueblo County Commissioner	Anthony Nunez		
35	Pueblo County Commissioner	John Cordova		
36	Pueblo County Commissioner	Jeff Chostner		

DISTRIBUTION LIST
SDS 1041 PERMIT APPLICATION
REQUEST FOR COMMENTS

	A	B	C	D
37	Pueblo County Office of Emergency Management	Steve Douglas		
38	Pueblo County Public Works	Greg Severance		
39	Pueblo County Sheriff	Kirk Taylor		
40	Pueblo Economic Development Corporation (PEDCO)			
41	Pueblo Rural Fire District			
42	Pueblo State Park Recreation Area			
43	Pueblo West Committee of Architecture			
44	Pueblo West Metropolitan District	Don Saling		
45	Pueblo West Metropolitan District Fire Department			
46	Pueblo West View			
47	Salt Creek Sanitation District			
48	San Isabel Electric			
49	School District 60			
50	School District 70			
51	Sierra Club	Ross Vincent		
52	Southeastern Colorado Water Conservancy District			
53	Special Assistant County Attorney	Gary Raso		
54	St Charles Mesa Sanitation District			
55	St. Charles Mesa Water District			
56	State-Historic Preservation Officer			
57	Trout Unlimited	Drew Preterrell		
58	Turkey Creek Conservation District			
59	U.S. Army Corps of Engineers (Albuquerque)			
60	U.S. Army Corps of Engineers (Pueblo Office)			
61	U.S. Geological Survey			
62	Utility Notification Center of Colorado			
63	Xcel Energy			
64	El Paso County		added 10-8-08	
65	Fremont county		added 10-8-08	
66	Lake County		added 10-8-08	
67	Baca County		added 10-8-08	
68	Otero County		added 10-8-08	
69	Chaffee County		added 10-8-08	
70	Bent County		added 10-8-08	
71	Las Animas County		added 10-8-08	
72	Prowers County		added 10-8-08	

10/8/2008

ATTACHMENT H

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AND OTHER DOCUMENTS REVIEWED BY STAFF
IN THE COURSE OF PREPARING THE STAFF
COMMENTS**

PART 1: DOCUMENTS SUBMITTED BY APPLICANT

1041 PERMIT APPLICATION

Pueblo County 1041 Permit Application

Southern Delivery System *Draft Environmental Impact Statement* (DEIS), February 2008, (CD dated August 2008), containing DEIS Executive Summary, DEIS with Appendices, and Supporting Technical Documents.

<http://www.co.pueblo.co.us/planning/Southern%20Delivery%20System%20-%201041%20Permit%20Application/1041%20Permit%20Application/>

[Appendix A Applicants Financial Technical Capability.pdf](#)

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[Appendix B Location Map Design dwngs specs.pdf](#)

[Appendix C SDS Schedule July2008.pdf](#)

Southern Delivery System Project, Management Summary Schedule and Monthly Report, July 2008.

[Appendix D Existing Facilities.pdf](#)

[Appendix E Adjacent Property Owners.pdf](#)

Adjacent Property Owners to Permanent Easement Information current as of 08/17/2008.

[Appendix F Federal State Consultation Correspondence.pdf](#)

Page 52953 Federal Register / Vol. 68, No. 173 / Monday, September 8, 2003 / Notices.

[Appendix G Applicants Water Rights.pdf](#)

Tabulation of Water Rights to be Exercised for the Southern Delivery System.

[Appendix H Landowners Along Project Route.pdf](#)

Landowners Along Project Route current as of 08/17/2008.

[Appendix I Zoning Map.pdf](#)

Figure I-1: 2007 Map Exhibit depicting Pueblo County's Current Zoning and the Project Alignment.

[Appendix J Pueblo West Fees Rates.pdf](#)

Website designed by John R. Barker, Jr., Page 4 of 4 Pueblo West Metropolitan District -- User and Tap Fees.

<http://www.pueblowestmetro.com/usefee.php>

Pueblo West Metropolitan District 07 DATA WEST NEW RATE CODES wo equivs Feb 2007 Created on 5/22/2008 Matches Resolution 1712.

[Appendix K Programmatic Agreement.pdf](#)

Programmatic agreement among the Bureau of Reclamation, Eastern Colorado Area Office. The advisory council on historic preservation, Colorado Springs Utilities, and the Colorado State Historic Preservation Officer regarding the Southern Delivery System Project. Final Draft 3:12/04/2007.

[Appendix L State Ambient Air Quality.pdf](#)

Department of Public Health and Environment, Air Quality Control Commission. Ambient Air Quality Standards.

[Appendix M Vegetation Cover Maps.pdf](#)

ERO Resources Corp. December 8, 2006. Southern Delivery System- FIGURE M-1 –M6 Vegetation Cover Types.

[Appendix N Wetlands Riparian Area Maps.pdf](#)

FIGURE N-1 thru N-3

ERO Resources Corp. 2003-2007. Southern Delivery System- Wetlands and Other Water Bodies Riparian Habitat.

[Appendix O Dakota Cheyenne Aquifer and Wells.pdf](#)

[Appendix P Terrestrial Animal Habitat Maps.pdf](#)

Figure p-1 thru p-5 animal habitats

[Appendix Q Geologic Data.pdf](#)

CH2M HILL and GEI Consultants Southern Delivery System Geologic Data Reports, dated various dates between 2004 and 2005

[Appendix R Radioactive Material.pdf](#)

PUEBLO COUNTY SDS 1041 APPLICATION DRAFT EIS

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- 2) MWH. November 2007. Daily Hydrologic Model Documentation Report, Southern Delivery System Environmental Impact Statement. Prepared for U.S. Bureau of Reclamation.
- 3) MWH. December 2007. Surface Water Hydrology Effects Analysis, Southern Delivery System Environmental Impact Statement. Prepared for U.S. Bureau of Reclamation.
- 4) MWH. November 2007. Alluvial Ground Water Effects Analysis, Southern Delivery System Environmental Impact Statement. Prepared for U.S. Bureau of Reclamation.
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- Cease and Desist Orders, Compliance Orders, Comments and Other communication related to spills
 - EXH 68, 69,80,147,149,150,175,217,229,285,306, and 313
- Stipulations between the parties
 - 306-1 revised stips
 - 250 Ex1 ww chart
 - 250 Ex2 nonpot chart
 - 250 Ex 3 chlorine chart

- EXH 28-Spill Notices affecting Pueblo County
- EXH 50- City of Colorado Springs Capital Improvements Program & Needs Assessment
- EXH 56- Tabulation spills from WWTP in Fountain Creek watershed

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- Executive Summary Appendices Technical Documents
- Supplemental Information for Construction of North Outlet Works
- Special Review Use Fremont County – September 2008
- USACOE Fountain Creek Watershed Study Hydrology Study
- FONSI Reference Documents

COMMENTS RECEIVED BY BUREAU OF RECLAMATION ON DRAFT ENVIRONMENTAL IMPACT STATEMENT

Located on Pueblo County Website: http://www.sdseis.com/com_index.html

- 1 - [Tom Piltingsrud](#), City of Florence
- 2 - [Nicole Rosa](#)
- 3 - [Tom Goss](#)
- 4 - [Sharon & Jonathan Enabnit](#)
- 5 - [Larry Lusk](#)
- 6 - [Becky Andrews](#)

- 7 - [Lee Sternal](#)
- 8 - [Scott Estep](#)
- 9 - [Myles Standish](#)
- 10 - [Patrick Espinoza, Jr.](#)
- 11 - [Doug Fitzgerald](#)
- 12 - [Ron Barbour](#)

13 - [Cameron Philips](#)
14 - [Ken Gennetta](#)
15 - [Mark Murphy](#)
16 - [Jill Ball](#)
17 - [Marvin Carter](#)
18 - [Lola Griesan](#)
19 - none
20 - [Michele Bobyn](#)
21 - [Michael Griffin](#)
22 - [Carla Hendrickson](#)
23 - [Ken Weber](#)
24 - [Warren J. Dlodoso, Jr.](#)
25 - [Anonymous](#)

26 - [Jerry Kedward](#)
27 - [Jay Zarr](#)
28 - [Cameron Philips](#)
29 - [Kelvin Melton](#)
30 - [Dan Shake](#)
31 - [Martin McClelland](#)
32 - [Jane Green](#)
33 - [Bill Alt](#)
34 - [Anonymous](#)
35 - [Velma L. Campbell](#)
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37 - [Katherine Trujillo](#)
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43 - [James Satt](#)
44 - [Rick Klein](#)
45 - [Anonymous](#)
46 - [Anonymous](#)
47 - [Gary Paulu](#)
48 - [Nelda Thelin](#)
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90 - [Bala Bhayani](#)
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100 - [Katie McCallister](#)

- 101 - [Donna Murphy](#)
102 - [Patricia Angel](#)
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105 - [Mark Morley](#)
106 - [Judy Skinner](#)
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113 - [Gavin Vitt](#)
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116 - [Beverly Shonts](#)
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120 - [Charles E. Conser](#)
121 - [Todd Ahlenius](#)
122 - [T. Louise Colvin](#)
123 - [Greg Rodrigues](#)
124 - [Maurita Casper](#)
125 - [Elizabeth Duran](#)
- 126 - [Rick Stewart](#)
127 - [Rebecca Pierce](#)
128 - [Joseph P. Garcia](#)
129 - [Felix "Joe" Esposito](#)
130 - [Charity Kovac](#)
131 - [Francine Hansen](#)
132 - [Bill Boggs](#)
133 - [Valerie Babitz](#)
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141 - [John Sorenson](#)
142 - [Jim Colson](#)
143 - [Paul Herd](#)
144 - [Dennis Jones](#)
145 - [Sam Taylor](#)
- 146 - [Sam Gerrish](#)
147 - [David Schulthies](#), State Rep.
148 - [Larry G. Liston](#), State Rep.
149 - [Ron May](#), State Senator
150 - [Ralph R. Williams](#)
- 151 - [Tom Hickman](#)
152 - [Fletcher Pool](#)
153 - [Elizabeth Ann Morgan](#)
154 - [Knute E. Cotton](#)
155 - [Derek Strickler](#)
156 - [Terry R. Book](#), Pueblo BWW
157 - [Bill Brill](#)
158 - [Dave Miller](#)
159 - [Louise Keach](#)
160 - [Anonymous](#)
- 161 - [Leonard & Judy Walgren](#)
162 - [Robert Enck](#)
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172 - [Wendell & Kathy Turner](#)
173 - [Mark S. Malone](#)
174 - [Earl & Constance Highland](#)
175 - [Ray Smith](#)
- 176 - [Jack Gloriod](#)
177 - [Fred Foster](#)
178 - [Jeff Cahill](#)
179 - [Deborah A. McMurtrey](#), USAF
180 - [Paulette Flohr](#)
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194 - [Kirk Johnson](#)
195 - [Warren Paul](#)
196 - [Dick & Olga Anson](#)
197 - [Don Moore](#), Fremont County
198 - [Chris Cole](#)
199 - [Elizabeth Duran](#)
200 - [G. Barry Baum](#)

201 - [Joanne Housh](#)
202 - [Bill Baldrice](#)
203 - [Ross Vincent](#)
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205 - [Sal Pace](#)
206 - [Jane Rhodes](#)
207 - [Bill Alt](#)
208 - [Marilyn June](#)
209 - [Carol McDaniel](#)
210 - [Michael Cantin](#)
211 - [Bud James](#)
212 - [Michele Bobyn](#)
213 - [Jane Rawlings](#)
214 - [Faustino W. Lopez](#)
215 - [Jim Colson](#)
216 - [Frank Star](#)
217 - [Robert Enck](#)
218 - [Liane "Buffie" McFadyen](#), State Rep.
219 - [Velma L. Campbell](#)
220 - [Joseph M. Santarella Jr.](#)
221 - [Bob Popovich](#)
222 - [M.D. Butch Batchelder, Jr.](#)
223 - [Tony Fagnant](#)
224 - [Andy McElhany](#), State Senator
225 - [Jeri Howells](#), Mayor - Fountain

226 - [Rick Hearn](#), Fountain PC
227 - [Douglas L. Lamborn](#), Congressman
228 - number not used
229 - [Tony Keenan](#)
230 - [Mark Morley](#)

231 - [Anonymous](#)
232 - [Dan Prenzlow](#), Colorado Div. of Wildlife
233 - [Oliver E. Watts](#)
234 - [Phil Steininger](#), Pikes Peak Regional Water Authority
235 - [John P. Morse](#), State Senator
236 - [Glen Everett](#), Upper Arkansas Water Conservancy District
237 - [H.E. "Cap" Proal](#), Security Water District
238 - [David P. Joyal](#)
239 - [Stella Garza-Hicks](#), State Rep.
240 - [Lyn Brown](#)
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245 - [Bruce Hamilton](#)
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249 - [James L. Rodgers](#)
250 - [Larry LeRoy](#)

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252 - [James E. Edwards](#)
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254 - [Keith & Claudia Jones](#)
255 - [Larry Liston](#), State Rep.
256 - [Peter Udall](#)
257 - [Ross Vincent](#)
258 - [Gerry Corwin](#)
259 - [Lupe N. Quintana](#)
260 - [David McDivitt](#)
261 - [Chris Weaver](#)
262 - [Stephanie Thomas](#)
263 - [James E. Strub](#)
264 - [Robert Merrion](#)
265 - [Walt Pleimann](#)
266 - [Jimmie W. Lloyd](#)

267 - [Jason Madsen](#)
268 - [Mary Webb](#)
269 - [Mark Morley](#)
270 - [Tom Gallagher](#)

271 - [Donald Boarda](#), USACE
272 - [Robert Rawlings](#)
273 - [Karen Micheli](#)
274 - [Robert S. Gardner](#), State Rep.
275 - [Dennis Hisey](#), El Paso
Commissioner

276 - [Eugene Montoya](#)
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278 - [Dennis Jones](#)
279 - [Joe Gallegos](#)
280 - [David Grossman](#)
281 - [Laura Russmann](#)
282 - [Larry Frazier](#)
283 - [Paul F. Valdez](#)
284 - [Velma L. Campbell](#)
285 - [Lionel Rivera](#), Mayor-Colorado
Springs
286 - [Clarence & Margit Lints](#)
287 - [Linda Kressler & Miguel
Gomez](#)
288 - [Amy Stephens](#), State Rep.
289 - [Susan Linner](#), US Fish &
Wildlife Service
290 - [Jay Gupta](#)
291 - [Tyler Stevens](#), Pikes Peak
Area Council of Governments
292 - [Victor C. Andrews & David
Csintyan](#)
293 - [Michael Cantin](#), Colorado
Centre Metropolitan District
294 - [Richard Ikelman](#)
295 - [Norman & Silke Sauppe](#)
296 - [Dave Miller](#)
297 - [John W. Barry](#)
298 - [Jerry Forte](#), Colorado Springs
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299 - [Paul Butcher](#), City of Colorado
Springs
300 - [Ron Mitchell](#), City of Colorado
Springs

301 - [Bill Healy](#), City of Colorado
Springs
302 - [Steven W. Cox](#), City of
Colorado Springs

303 - [Russ Dispense](#)
304 - [Annette Cantin](#)
305 - [Tom Warren](#), Dept. of the
Army, Fort Carson
306 - [Ed Bircham](#)
307 - number not used
308 - [Dean Winstanley](#), Colorado
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309 - [Robert W. Hamilton](#),
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Conservancy District
310 - [Vernita Y. Myrick](#)
311 - [John Foss](#)

312 - [Jan Pardalis](#)
313 - [Cindy Monroe](#), Colorado
Centre Metropolitan District
314 - number not used
315 - [Ronald E. Mares](#)
316 - [Gerald Knapp](#), City of Aurora
317 - [Jonell Gist](#)
318 - [Valerie Etter](#)
319 - [Ruth M. Malott](#)
320 - [Willie Olsen](#)
321 - [Laurie Warwick](#)
322 - [Ivo Fronzaglia](#)
323 - [Eric Mitchell](#)
324 - [Scott Howell](#)
325 - [Rick L. Warner](#)

326 - [Mary Anne Haas](#)
327 - [Donald L. Steerman & Glenn
Wilson](#), Amity Mutual Irrigation Co.
328 - [Darlene Smith](#)
329 - [Brian N. Geddes](#)
330 - [Dawn Warner](#)
331 - [SeEtta Moss & Gary Graham](#)
332 - [George Tackels](#)
333 - [Gary Rapp](#)
334 - [Beth Kosley](#)
335 - [Raymond L. Petros, Jr.](#), Pueblo
County
336 - [Harold E. Miskel](#)
337 - [John Fredell](#), Colorado Springs
Utilities
338 - [Western Resources Advocates](#)

[& others](#) Bart Miller, Becky Long,
Pam Kiely, Susan LeFever, Kathleen
Atero, Steve Glazer, Joseph M.
Santarella Jr.

339 - [Joel Bolduc, Jason Morin, &
Joe Lovett](#)

340 - [David Barfield](#), Kansas Division
of Water Resources

341 - [Andrew & Brooke Colosimo](#)

342 - [Manuel Hidalgo](#), Peterson Air
Force Base

343 - [Steve & Janet Rummel](#)

344 - [Marianne Horvath](#)

345 - [Anonymous](#)

346 - [Anonymous](#)

347 - [Northwestern University](#)

Spencer Burke, Cristina

Couloucoundis, Brian Cunningham,
Eric Simpson, & Jessica Spanier

348 - [Stephen D. Harris](#)

349 - [El Paso County](#)

350 - [Anonymous](#)

351 - number not used

352 - number not used

353 - [Jack Gillespie](#)

354 - [Mark Earle](#), Colorado Springs
Airport

355 - [Deborah Cunningham](#)

356 - [Richard Stantaent](#)

357 - [Gary R. Martinez](#), Summit

County

358 - [Ron L. Masinton](#), Bureau of
Land Management

359 - [Julie & Phil Foster](#)

360 - [Anonymous](#)

361 - [Drew Peternell](#)

362 - [Don G. Schley](#)

363 - [Rebecca Wilcox Dow &
Andrew C. Emrich - Part 1, Part 2,
Part 3](#)

364 - [C. Ike Ikelman](#)

365 - [Anonymous](#)

366 - [Dick Anson](#)

367 - [Patrice Quintero](#)

368 - [Lon P. Matejczyk](#)

369 - [Barbara Ahlers](#)

370 - [Dave Gardner](#)

371 - [Richard Plush](#)

372 - [Harvey & Frances McAnulty](#)

373 - [Steven H. Gunderson](#),

Colorado Department of Public
Health and Environment

374 - [Sherry Rosenwinkel](#)

375 - [Tom Verquer](#)

376 - number not used

377 - [Terry Steele](#)

378 - [Larry Svoboda](#), Environmental
Protection Agency

379 - [Don G. Schley](#)

ATTACHMENT I

LETTERS

**PETROS & WHITE, LLC LETTERS TO U.S.
BUREAU OF RECLAMATION**

PETROS & WHITE LLC

ATTORNEYS AT LAW

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November 15, 2005

VIA: U.S. MAIL
EMAIL: pmangan@do.usbr.gov

Mr. Pat Mangan
USBR – Eastern Colorado Area Office
11056 W. County Road 18E
Loveland, CO 80531-9711

Re: Comments on the Southern Delivery System Alternatives/ Pueblo County

Dear Mr. Mangan:

Our law firm serves as special counsel to Pueblo County. I am submitting this letter at the request of the Pueblo County planning staff and its County attorney, Daniel Kogovsek, Esq. This letter expands upon the comments made by me and Gary Raso, Esq., special land use counsel to Pueblo County, at the October 11, 2005 meeting hosted by USBR in Colorado Springs. A primary purpose of that meeting was to solicit comments from public agencies on the need for any additional alternatives for further study in the EIS process for the SDS project.

The primary SDS Participants are the City of Colorado Springs, the City of Fountain, and Security Water District. We are informed that Pueblo West Metropolitan District has been added as a Participant, but only in the event the SDS pipeline is constructed from Pueblo Reservoir and jointly used for delivery of water to Pueblo West.

Our understanding of the SDS proposal is that it involves the use by the Participants of 42,000 acre-feet of storage in Pueblo Reservoir; a 43 mile-long pipeline from the Reservoir to a water treatment plant south of Colorado Springs; a pipeline capacity of 78 mgd; and eventually, perhaps, a 30,500 AF terminal storage reservoir at the new treatment plant on Jimmy Camp Creek, and a 28,500 AF reservoir on the upper or lower Williams Creek. The proposed cost is nearly \$1 billion.

At this time, proposed alternatives include different routes for the pipeline from the Arkansas River east of Pueblo, different locations of the Williams Creek Reservoir, and the construction of a pipeline from Colorado Springs to deliver treated wastewater for discharge in the Arkansas River above Pueblo Reservoir. The "No Action Alternative" is the construction of the Williams Creek and Jimmy Camp reservoirs without the pipeline from Pueblo or without storage in Pueblo Reservoir.

**RECENT ADOPTION BY PUEBLO COUNTY OF
REGULATIONS OVER WATER PROJECTS**

On September 29, 2005, the Pueblo County Board of Commissioners adopted a resolution revising its current "1041" Regulations requiring permits for the site selection and construction of new or enlarged domestic water and sewage treatment systems located wholly or partly in Pueblo County (Pueblo County Code, Chapter 17.164 et seq). Pueblo County also adopted new "1041" regulations requiring permits for the efficient utilization of municipal and water projects located wholly or partly within Pueblo County. (Pueblo County Code, Chapter 17.172 et seq).

These new and revised regulations can be found online at the Pueblo County website, www.codes.co.pueblo.co.us. We suggest that the SDS website maintained by the USBR be revised to describe these new Pueblo County regulations, including the SDS website sections entitled "SDS Project Participants and Regulatory Agencies" and "Permits."

Under the Pueblo County regulations for the efficient utilization of municipal and industrial water projects, no person or entity may engage in "development, including construction, expansion, reoperation, or other significant change in use, of a municipal and/or industrial water project wholly or partially within unincorporated Pueblo County, without first obtaining a permit pursuant to the County regulations." Approval criteria include: that the water project emphasize the most efficient use of water, including recycling, reuse and conservation of water; that the water project will not cause significant erosion, sedimentation, or flooding; and that the water project will not significantly degrade water quality, nor degrade wetlands and riparian areas.

Pueblo County staff would encourage the USBR to further incorporate reuse, flood control, and water quality features in its selection and study of SDS alternatives. In this regard, we propose that the USBR consider the SDS alternative described in this letter and previously discussed at the October 11, 2005 meeting.

**SDS ALTERNATIVE: FOUNTAIN CREEK RESERVOIR
(REUSE, FLOOD CONTROL & SUPPLEMENTAL USE OF SDS PIPELINE)**

Several of the current SDS alternatives now feature a long pipeline for delivery of treated wastewater generated by the SDS Participants to the Arkansas River near Florence, Colorado and upstream of the Pueblo Reservoir. Presumably, as Mr. Raso noted at the October 11, 2005 meeting, this return pipeline is being studied to mitigate the effects of flooding and minimize water quality degradation from wastewater discharge into Fountain Creek. The proposal suggested in this letter offers a more direct solution.

The study alternative which we propose for further study involves the construction of a multipurpose reservoir on the Fountain Creek mainstem near the El Paso County and Pueblo County boundary. It would be located below most of the major tributaries of the Fountain Creek, including Sand Creek, Jimmy Camp Creek and Williams Creek.

This Fountain Creek Reservoir would capture, store and regulate the flows in Fountain Creek attributable to wastewater and irrigation return flows, natural flows, stormwater flows, and flood flows. The water behind this dam could be treated by natural processes such as aeration and wetlands. The Reservoir would also be used as a forebay to pump water to a treatment plant for initial treatment before it is delivered to the proposed Williams Creek Reservoir and/or Jimmy Camp Creek Reservoir, and/or for recharge in the Widefield aquifer or other aquifers for later withdrawal by the SDS Participants. From the Williams Creek Reservoir, water can then be pumped to the Jimmy Camp Creek Reservoir for additional treatment for potable use or for nonpotable uses by the SDS Participants. The Fountain Creek Reservoir would be the first component of an effective multiple barrier system to treat the water for indirect potable reuse by the SDS Participants or for nonpotable uses.

This use of the local water resources would defer or downsize the proposed SDS pipeline from either Pueblo Reservoir or the Arkansas River east of the City of Pueblo. The pipeline, if needed and constructed, would serve as a supplemental source to the local Fountain Creek water sources. Water from the SDS pipeline could be blended at either the Fountain Creek Reservoir or Williams Creek Reservoir to achieve desired water quality. An alternative pipeline from east of Pueblo, or from Lake Meredith and Lake Henry, could become even more attractive with improved water quality in the Arkansas River below its Fountain Creek confluence.

Use of the Fountain Creek Reservoir would avoid pumping equivalent amounts of water through a pipeline from Pueblo, saving pipeline construction and pumping costs over approximately 30 miles to the Fountain Creek Reservoir. The capture of the water at the Fountain Creek Reservoir would also avoid the large stream transit losses associated with delivering the reusable return flows down the Fountain River for exchange into Pueblo Reservoir.

This proposal would in effect reverse the phasing of the SDS project. It would require the construction of the Fountain Creek facilities prior to the SDS pipeline. This reversed phasing would ensure that no new water is introduced into the Fountain Creek Watershed until facilities are in place to protect against flooding, sedimentation, and erosion which would otherwise result from the importation of new water and its return flows to Fountain Creek, and from the increased stormwater runoff from the additional impervious surfaces generated by the urban growth attributable to the SDS.

The use of the Fountain Creek Reservoir would allow the SDS Participants to recapture their reusable return flows directly, rather than by delivering those flows down the Fountain Creek and taking an equivalent amount of water upstream from Pueblo Reservoir for delivery through the SDS pipeline. Additionally, water stored in Pueblo Reservoir by the SDS Participants could be released from Pueblo Reservoir into the Arkansas River through Pueblo to replace their diversions and storage of Fountain Creek flows. Downstream water rights owned by the SDS Participants could be also be released or left in the River as replacement for the Fountain flows rather than traded for water upstream in Pueblo Reservoir for delivery through the SDS pipeline. Both these replacements into the Arkansas River for the Fountain Creek flows

would benefit the flow management program through Pueblo and improve water quality downstream on the Arkansas River.

Utilization of the Fountain Creek water resources would diminish damaging flows down the Fountain Creek, prevent sedimentation and erosion, and improve water quality in the Fountain Creek and Arkansas River below Pueblo. The costs of this solution would be borne more fairly by those communities responsible for generating the problems, rather than placing those costs on downstream entities.

The Fountain Creek Reservoir also could be a functional equivalent of an enlarged Pueblo Reservoir, offering additional storage to Colorado Springs but possible cost participation by the Federal Government for flood control. The dam would also serve a flood control function on the Fountain Creek not possible with the Pueblo Reservoir. The Fountain Creek Reservoir also could prove to be an effective flow management tool used by the State Engineer for detaining flood flows and better regulating water deliveries to downstream users and John Martin Reservoir for compact purposes.

The Fountain Creek Reservoir could also offer the recreational environmental amenities of a regional park and greenbelt. Similar reservoirs in the Denver Metro area serve these purposes very well.

This alternative, by moving, deferring, or downsizing the SDS pipeline from Pueblo Reservoir, could preserve more space and outlet capacity in Pueblo Reservoir for the use of other Arkansas Valley users. This could be of benefit to the proposed Arkansas Valley Conduit.

The Fountain Creek Reservoir could be used in tandem with other stormwater and flood control facilities to detain and clarify stormwater on the Fountain Creek or its tributaries. In fact, it would benefit from and preserve the value of the enhanced water quality of flows from these costly measures. The Fountain Creek Reservoir could also function as a barrier to protect the lower Fountain Creek from accidental spills of untreated sewage.

Without further study, it should be remembered that the location proposed for the Fountain Creek Reservoir is now conceptual. If the Fountain Creek Reservoir cannot be built near the proposed location, the USBR should nevertheless investigate the siting of one or more reservoirs at other places in the Fountain Creek watershed which could serve similar water supply, reuse, and flood control purposes.

RATIONALE FOR ALTERNATIVE

We encourage the USBR and the SDS Participants to study the Fountain Creek Reservoir Alternative for several reasons, including the following considerations:

1. Consistency with Fountain Creek Watershed Plan. The Fountain Creek Watershed Plan (November 2003) was initiated in 2000 and adopted by the Pueblo and Pikes Peak Area Councils of Government. It was a collaborative effort between 12 regional

governmental entities in the Fountain Creek Watershed, including Pueblo County, the City of Colorado Springs, Colorado Springs Utilities and the City of Fountain. The Plan describes the severe problems and issues related to erosion, sedimentation and flooding within the watershed and makes specific technical and policy recommendations.

The Plan concludes that many of the problems being experienced now in the watershed are related to rapid population growth that has occurred in the upper watershed in the past 15-20 years. Population growth has caused an increase in impervious surface areas, an increase in wastewater treatment plant discharge, and an increase in importation of transbasin water. It reports that increases in stream flow in the Fountain Creek, which now make it a continuously flowing river, "are primarily a result of increased wastewater treatment plant discharge, importation of transbasin water, and management of the Fountain Creek transbasin return flow exchange decree." [The Plan, at 7-1.]

The Plan warns that without "a proactive vision towards the future, damage will be more frequent and severe." [The Plan, at 7-2.] It further reports that "[f]or decades, public and private entities have independently developed stormwater management, flood mitigation, erosion control, channel stabilization or other water resource projects, often without fully considering other potential impacts throughout the watershed." [The Plan, at 1-1.]

One of its recommended strategies is that water and wastewater discharge rates be reduced through the use of water conservation, increased use of nonpotable water and alternatives to direct discharge of treated effluent into streams. "By decreasing the demand for water and using existing resources as efficiently as possible, the need for future water, discharges per capita and flows can be reduced." [The Plan, at 7-10.]

2. Coordination with Army Corps of Engineer Watershed Study. In furtherance of the Watershed Plan, the U.S. Army Corps of Engineers began a study ("ACOE Watershed Study") to further evaluate the problems identified in the Plan, compile hydrologic, water quality, and soils data, and ultimately identify possible programs to mitigate existing damage and prevent future damage in the watershed. The study is the result of a cooperative effort between the Corps and eleven local governments, with the City of Colorado Springs as the local sponsor. Joint funding of the study by the entities is provided pursuant to an IGA between ACOE and the eleven local governments.

The Study was begun in April 2003 and is anticipated to be completed by April 2007. Preliminary reports have been completed on hydrology, water quality, soils, and projections of existing and future impervious areas. Once existing conditions are analyzed, the study will attempt to identify and prioritize remedial projects, both structural and non-structural, which address flood control, erosion, sedimentation and environmental restoration in the basin. Potential projects will also be evaluated as to their eligibility for federal involvement. The USBR should coordinate the development of its SDS alternatives with the ongoing Study by the ACOE.

3. Problems Caused by Increased Flows in Fountain Creek. The Watershed Plan and Watershed Study highlight a number of very severe and dangerous problems caused by the increased flows in Fountain Creek, problems which could be exasperated by the additional imported flows proposed by SDS:

- The mean annual flow of Fountain Creek has risen from an historical average of approximately 60 cubic feet per second (cfs) to greater than 230 cfs. ["Watershed Facts," Fountain Creek Watershed website (http://www.fountain-crk.org/watershed_facts.htm) maintained by the Pikes Peak and Pueblo Area Council of Governments.] It is reported that the stream channel in the lower Fountain Creek once was dry during parts of the year but now has a continuous base flow. [The Plan, at 4-44.]
- Large changes in the amount of impervious surface area have occurred as a result of development in the upper Fountain Creek watershed above Fountain. Impervious surface area has doubled from 85.3 square miles in 1964 to 166 square miles in 2000, which corresponds to a change in the amount of imperviousness from about 17% to 34%. [The Plan, at 2-18.]
- Increased flows have caused severe erosion, sediment transport and channel instability on Fountain Creek. [The Plan, at 4-44.] Bridges, roads, and other public infrastructure are being placed in jeopardy.
- Sedimentation and the resulting river bed aggradation are causing silting in of structures, loss of flood channel capacity, and plugging of storm drainage outlets along the lower Fountain Creek in Pueblo County and otherwise rendering them unusable as the creek bed level rises from sediment deposits. Sediment discharged from Fountain Creek also is building up in the Arkansas River channel downstream of the confluence, and as a result, the outfall from the Pueblo Wastewater Treatment Plant does not discharge properly and is impeded in function. In other words, increased flows from the upper watershed are impairing stormwater and wastewater discharge in Pueblo County. [The Plan, at 4-44 to 4-56.]
- Buildup of sediment in the floodplain in the lower Fountain Creek likely means that FEMA floodplain delineation is obsolete and therefore the predicted 100-year floodplain extends beyond current delineated limits. It is reported that over 90% of the City of Pueblo's 100-year floodplain is developed and includes residential, commercial, industrial and public properties. Parts of Pueblo's downtown business district lie directly within the historic floodplain of Fountain Creek. ["Watershed Facts", previously cited.]
- Preliminary data reported in the Watershed Study show a 15% increase in the severity of peak floods in the next 20 years on Fountain Creek at the Pinon Bridge and at the confluence of the Arkansas River. [ACOE Fountain Creek Watershed Study, Draft Final Hydrology Report, Prepared by URS Group, Inc., September 2005; Table 5-10, at Page 5-5.] At the confluence, that would mean peak flows in a 100-year flood would increase to 51,000 cfs from 44,000 cfs if development to the north in El Paso County continues

without mitigation. Perhaps just as important, flows are expected to increase by about 20% for the two-year storm event at Pinon, from about 4,500 cfs to 5,600 cfs. Graham Thompson of URS Engineering, a consultant engineer for the Corps, was quoted in an October 22, 2005 Pueblo Chieftain article by Chris Woodka as saying that "it's the smaller, two-year storms that drive things like sedimentation, salinity and the shape of the channel. We're seeing impacts all the way down Fountain Creek." Thompson said flood control projects should be designed to handle small events as well as monumental ones.

- Millions of dollars of damage resulted from flooding on the Fountain Creek that occurred during the last day of April and the first few days of May 1999. Flood flows peaked at 20,100 cfs at the USGS gage on Fountain Creek near Fountain and at 18,900 cfs at the USGS gage on Fountain Creek at Pueblo. This flood resulted in a federal disaster declaration for several counties within the Fountain Creek watershed and downstream on the Arkansas River. Floodwaters destroyed bridges, utility lines and agricultural lands. High flows caused wastewater system backups in the City of Colorado Springs. [ACOE Fountain Creek Watershed Study, Final Hydrology Report, Prepared by URS Group, Inc., September 2005; at Page 2-1.]

4. Impacts of Additional Imported Water and Stormwater Generated by SDS. The SDS proposal is for a 45-mile long pipeline, with a capacity of 78 mgd (120 cfs), capable of importing an additional 87,000 acre-feet into the upper Fountain Creek watershed. This is almost four times the size of the existing Fountain Valley conduit from Pueblo Reservoir, which has a reported capacity of 31 cfs and approximately 20,000 acre-feet per year. [SECWCD Website, History and Description of the Fry-Ark Project.] It is 20% larger than the Colorado Springs Homestake Pipeline from Twin Lakes through South Park. [See attached schematic of the CSU water system from the CSU Website, at page 80.] The SDS pipeline would double the amount of water usage by Colorado Springs and would contribute to a population in the area of about one million people, with the resulting increases in stormwater from the impervious surfaces.

5. Amounts of Wastewater Plant Discharge. The Watershed Plan and Watershed Study state that there are now eleven existing wastewater treatment plants discharging into Fountain Creek or its tributaries. The capacity of these plants is currently about 93 mgd, or about 144 cfs, of which 79 mgd (122 cfs) is the attributable to the wastewater plants of the SDS Participants (Colorado Springs, Security Sanitation District, and Fountain Sanitation District). [Coincidentally, this rate of discharge by the SDS Participants is equal to the projected delivery rate to them of 78 mgd through the SDS pipeline.] Colorado Springs is currently constructing another wastewater treatment plant, its Northern Water Reclamation Facility in the northern part of the city, which will initially treat 20 mgd of wastewater, with a 30 mgd capacity at full build-out. Completion is expected in the first quarter 2006. Upon completion of the Northern Plant, the total wastewater treatment plant capacity in the upper Fountain Creek Watershed will be 113 to 123 mgd, or about 175 cfs to 191 cfs of discharge into the Fountain Creek, of which 99 to 109 MGD (153 cfs to 169 cfs) is attributable to the SDS Participants in El Paso County. [Fountain Creek Watershed Study, Task Order No. 2, "Water Quality," August 2005, by URS, Table at 4-5.]

6. Reuse of Return Flows. It is reported that between 80% - 85% of the water used in the Colorado Springs water system consists of water imported into the region. ["Watershed Facts," previously cited.] A tabulation of the City's annual total deliveries to its potable water system, its total imported deliveries, its percentage of wastewater returns, and its annualized reusable wastewater returns are set forth in an attachment to this letter; these figures are obtained from the Colorado Springs' annual Blue River reports to the USBR. For the water years 1991-2004, water deliveries to Colorado Springs' system was as high as 94,000 acre-feet, of which about 75,000 acre-feet was imported. For the years 2003 and 2004, annual water usage declined substantially to about 73,000 acre-feet, of which about 55,000 acre-feet was imported. Reusable wastewater return flows in the Colorado Springs system are now about 35,000 - 40,000 acre-feet per year, with approximately another 2,800 acre-feet of reusable irrigation returns. At the present time, it is reported that Colorado Springs only utilizes about 10,000 acre-feet per year of these reusable returns by augmentation of wells, exchanges, or nonpotable reuse. Consequently, approximately 20,000 - 25,000 acre-feet of return flow at this time (not including irrigation returns) is not being captured by the City of Colorado Springs for use in its municipal water system. This existing annual source of reusable return flows, if captured by the City of Colorado Springs in the proposed Fountain Creek Reservoir as an example, would be more than 25% of the amount of water that would otherwise be delivered annually by the SDS pipeline [higher, if successive reuses are calculated.]

7. Wasteful Transit Losses. Under the SDS proposal, the SDS Participants would recapture their reusable return flows by delivering this water down Fountain Creek and trading for an equivalent amount of water out of Pueblo Reservoir. Reportedly, 20% or more of this reusable effluent is lost in transport down the Fountain Creek and becomes unavailable to the SDS Participants. This is a considerable loss of water. Assuming current reusable flows of about 40,000 acre-feet as an example, transit losses would amount to 8,000 acre-feet of water per year, or enough water to serve 16,000 homes. Assuming the USBR's calculated value of \$25,000 per acre-foot of firm yield used in the SDS EIS, the value of that lost asset would be \$200 million.

8. Legal Obligations to Reuse Imported Water Efficiently. Colorado Springs diverts Colorado River water from the Blue River tributary near the Hoosier Pass, subject to a Federal Court Decree known as the "Blue River Decree." The October 12, 1955 Decree in consolidated cases 2782, 5016, and 5017, U.S. District Court for the District of Colorado (the "Blue River Decree") adjudicated certain water rights in the Blue River to Denver, Colorado Springs, and to the USBR's Green Mountain Reservoir. The findings of fact and conclusions of law entered October 12, 1955 incorporate the terms of an October 5, 1955 stipulation between the parties as amended on October 10, 1955 that is referenced in the Decree. The Blue River Decree and Stipulation were ratified by Congress in the 1956 Colorado River Storage Project Act, 43 U.S.C. §620j, by reference in the 1968 Colorado River Basin Project Act, P.L. 90-537, 1968, U.S. Code Congressional and Administrative News at 1045-1046; and in Senate Document No. 80, 75th Congress, 1st Session (1937). §4(f) of the Stipulation includes a requirement that Colorado Springs maximize its use of water diverted from the Colorado River System by reuse, successive use, and exchange, to the extent legally and economically feasible, or suffer a penalty in reduced

diversions from the Blue River. That obligation is enforced by the Secretary of the Interior through the USBR. Given this legal obligation, it is imperative that the USBR study water supply options for the City of Colorado Springs in the context of maximizing its reuse imported flows from the Colorado River system in the most efficient, timely, and least wasteful manner. The Fountain Creek Reservoir alternative, which would recapture such reusable returns without the associated transit loss in delivering such water down to the confluence with the Arkansas River, would presumably further the objective of the Blue River Decree by making more water available to Colorado Springs.

In addition, the Southeastern Colorado Water Conservancy District allocates Fry-Ark project return flows to the entities on the basis of the water they acquire from the project. In other words, under the current policy of SECWCD, Colorado Springs and the other SDS Participants have the right of first refusal to repurchase the Fry-Ark return flows resulting from its initial deliveries. Furthermore, if the Fountain Valley Authority purchases Fry-Ark project return flows, it is entitled to sell, sign, lease, or trade such return flows to any member entity within the Fountain Valley Authority. Under paragraph 15 of its current April 15, 2004 Policy of SECWCD concerning sale of return flows from Fryingpan-Arkansas project water, purchasers "shall not waste Fry-Ark Return Flows." [SECWCD Website, History of Fry-Ark Project.] The concept of capturing the reusable Fry-Ark flows near the southern metropolitan area of Colorado Springs and avoiding the transit loss would further this stated policy against waste of such return flows.

9. Adequacy of Physical Supplies. The physical flows in Fountain Creek below the Colorado Springs metropolitan area have been increasing dramatically. Those increased flows would likely supply the same amount of water or more than that obtained by pumping water through the SDS pipeline. Attached to this letter is a tabulation of average monthly mean stream flows in the Fountain Creek near Fountain, Colorado based upon USGS data. For the period 1995-2004, the average monthly mean stream flows below the Town of Fountain are more than the 120 cfs of flows that could be pumped through the pipeline. To the extent such flows are inadequate at any given time, however, carryover storage of these local sources could be used from the Fountain Creek Reservoir and Williams Creek and Jimmy Camp Creek Reservoirs. These sources eventually could be supplemented by water pumped from the SDS pipeline, either from Pueblo Reservoir or the Arkansas River east of Pueblo. An obvious benefit to the SDS Participants would be the savings in the pumping of such local water over the thirty miles of pipeline from the Arkansas River to the Fountain Creek Reservoir or Williams Creek Reservoir.

10. Conservation. The attached table of reported water deliveries to Colorado Springs shows that it was able to reduce demand by about 30% over each of the past two years. These conservation savings should be considered by the USBR in evaluating the demand of Colorado Springs for purposes of the SDS and its various alternatives. Significantly, though, the amount of wastewater returns did not decrease nearly as much (about 10%), presumably because most of the conservation occurred as a result of reduced lawn irrigation, as evidenced by the much higher percentage of return flows (from about 53% before, to as high as 68% in 2004). This information is important for at least two reasons: it demonstrates the firm yield of reusing

wastewater as a water supply; but, it also demonstrates that, despite conservation, there is still a problem of what to do with wastewater flows in Fountain Creek if not captured and reused.

11. Feasibility of Indirect Potable Reuse. In its May 2005 Southern Delivery System fact sheet on its website, Colorado Springs Utility reports that it has “spent over \$40 million over the last decade to achieve one of the highest levels of wastewater treatment in the Arkansas River Basin, routinely surpassing instream State and Federal water quality standards, and often delivering higher quality water to Fountain Creek than is in the Creek itself.” It is also reported that Colorado Springs plans to construct state of the art technology for stormwater detention facilities. [Pueblo Chieftain article, October 22, 2005, quoting Thompson, previously cited.] That being the case, the quality of such discharge should not be degraded by transporting it down Fountain Creek, for exchange into Pueblo Reservoir, but instead should be recaptured locally for indirect potable reuse or direct nonpotable reuse within the City.

Indirect potable reuse is not novel; communities along the Arkansas River for decades have been using water in the River derived from upstream discharged wastewater. Indirect potable reuse also is the basis for some of the SDS alternatives now proposed for study in the EIS which involve the construction of a pipeline to discharge Colorado Springs’ effluent above Pueblo Reservoir; presumably, the purpose of this return pipeline is to blend this wastewater with other sources in Pueblo Reservoir. However, such a return pipeline would then pass on the costs of indirect potable reuse to entities other than the SDS Participants who are generating the effluent.

Other communities are planning water reuse. As reported in a Pueblo Chieftain article by Chris Woodka on November 13, 2005, the Arapahoe County Water and Wastewater Authority and Cottonwood Water and Sanitation District plan to bring an indirect potable reuse system online in 2007 in the Cherry Creek Basin. Aurora is also working on its project to recycle its reusable wastewater returns by recapturing wastewater return flows, filtering them through aquifers and piping them back to Aurora. In its current EIS on its northern system alternatives, the Denver Water Board is also considering an alternative for piping its reusable effluent and blending it with water from its Moffat Collection System. Finally, as reported at the 20th Annual Water Reuse Symposium held in Denver on September 18, 2005, the City of Dallas is planning an indirect potable reuse project that would ultimately serve 140 mgd, almost double the proposed deliveries and treatment through the SDS pipeline. See paper written by Michael Mikeska, P.E., Dallas Water Utilities, “City of Dallas Recycled Water Implementation Plan: A Creative Alternative to Traditional Water Supplies.” See also paper written by Rick P. Arbor, P.E., Lakewood, Colorado, “Colorado’s First Indirect Potable Reuse Project” concerning the reuse project of the Arapahoe County Water and Wastewater Authority and the Cottonwood Sanitation District.

12. Use of Water for Aquifer Recharge. Recently, in Case No. 05CW58 (90CW28), the Security Water District has applied in the Water Court for a finding of due diligence on its conditional water right to use its Fry-Ark water return flows to recharge the Widefield aquifer and thereby augment Security’s well withdrawals from that aquifer. The Fountain Creek

Reservoir could conceivably help to facilitate this recharge plan, as well as other recharge plans in aquifers used by the SDS Participants.

13. Use of Colorado Canal Water Rights. Colorado Springs Utility owns the majority ownership of three mutual irrigation companies, the Colorado Canal Company, the Lake Meredith Reservoir Company and the Lake Henry Reservoir Company. The Colorado Canal System consists of a major diversion from the Arkansas River near Boone, Colorado through the Colorado Canal to Lake Meredith (41,000 acre-feet capacity) and Lake Henry (approximately 10,000 acre-feet). The annual water yields for Colorado Springs are approximately 14,000 acre-feet per year which can be used by Colorado Springs by exchange upstream to Colorado Springs' existing or proposed diversion facilities. ["Water Resource Plan for Colorado Springs Utilities (1996) by Black & Veatch, at IV-13.] In lieu of exchanging this water upstream, this water instead could be delivered to the Arkansas River as replacement for the non-reusable flows on the Fountain Creek which are owed to the downstream water users on the lower Arkansas. This replacement could avoid the impacts of exchanging this water upstream to Pueblo Reservoir and depleting the River through Pueblo. Conceivably, especially with improved water quality downstream of Pueblo, Colorado Springs could connect these lakes by pipeline to the Fountain Creek Reservoir for blending and direct use, instead of using a pipeline from Pueblo Reservoir.

14. Avoidance of Costs to Third Parties. An advantage of the Fountain Creek Reservoir Alternative would be that the cost of collecting, regulating, and treating the wastewater flows and stormwater flows would be borne by those entities in El Paso County generating such flows. When performing a cost/benefit analysis, we would encourage the USBR to balance any additional costs of treatment against the savings to downstream communities and property owners who would otherwise have to absorb the cost of increased flows in the Fountain and the degradation of water quality. This topic, and the need to incorporate extrinsic costs in the evaluation of the financial feasibility of reuse projects, is the subject of a paper given at the recent 20th Annual Water Reuse Symposium in Denver on September 18, 2005, entitled, "An Economic Framework for Evaluating Water Reuse and Desalinization Projects: What are the Benefits and Do They Exceed the Costs" written by Dr. Robert S. Rousher, Stratus Consulting Inc., Boulder, CO.

15. Immunity from Liability for Stormwater Discharge. The Colorado Governmental Immunity Act was recently amended to provide immunity to state and local governments in Colorado from damages in tort caused to other parties by operation of stormwater facilities, or use of a natural watercourse for transporting domestic water supplies or for discharging wastewater. See §§24-10-103(5.5) & (5.7) and 24-10-106, C.R.S. (2005). Colorado Springs has been sued for damages under prior law for operation of its stormwater facilities. *Powell v. City of Colorado Springs*, ___ P.3d ___, (Colo App No. 03CA2030, September 8, 2005); and *Speight Family Partnership v. City of Colorado Springs*, ___ P.3d ___, (Colo App No. 03CA2030, September 8, 2005). This recent release of cities from tort liability serves to reinforce the need to control imported return flows and stormwater flows in the planning of new water supply facilities by the SDS Participants.

16. Alternative to Enlarged Pueblo Reservoir. The Preferred Storage Option Plan, dated September 21, 2000 describes potential enlargements of Pueblo Reservoir ranging from and additional 25,000 AF to 75,000 AF, and ranging in cost from \$43.4 million to \$109.7 million. Most of this storage would be for the benefit of the SDS Participants to supply water through the SDS. This money might be better spent on constructing one or more dams on Fountain Creek, which would serve the additional purpose of flood control on Fountain Creek.

18. Recreational Benefits. The Fountain Creek Reservoir could be similar to the flood control Reservoirs serving the Denver metro area – the dams and parks known as Bear Creek Lake, Chaatfield Reservoir, and Cherry Creek Reservoir. As such, the Fountain Creek Reservoir could become a regional recreational amenity, and a catalyst for greenbelt corridors, wetlands, stream channel restoration, and trails along the Creek. At the October 11 meeting, Mr. Wally Stealey, President of the SECWCD board, remarked that a properly regulated Fountain Creek might allow Puebloans to embrace the self-image of a “two-river” city.

17. Win/Win Solution. The Fountain Creek Reservoir alternative could offer numerous benefits to the Arkansas Valley, including:

- flood control
- improved water quality
- decreased water treatment costs for downstream cities
- reduced sedimentation and erosion
- Fountain Creek Channel stability
- avoidance of elevated stream beds
- increased flows on the Arkansas River through Pueblo
- stable and more natural flows on the Fountain Creek through Pueblo County
- preservation of outlet capacity in Pueblo Reservoir for the Arkansas Valley Conduit
- possible avoidance of pipeline right of way disturbance, and
- a regional recreational amenity.

The Fountain Creek Reservoir alternative also has many benefits for the SDS Participants in El Paso County:

- a local, reliable, water source
- reduced pipeline construction costs, and more flexibility in sizing and timing
- reduced pipeline pumping costs and resulting energy conservation
- a pro-active, responsible solution to their stormwater management problems
- compliance with legal obligations for diligent reuse without waste, and
- a potential \$200 million savings of reusable water supplies, now lost by delivery down Fountain Creek.

CONCLUSION

We hope that USBR will find these comments useful in evaluating the SDS and its alternatives in the EIS process. We wish to emphasize that our law firm, at the request of Pueblo County staff and its attorney, prepared this letter in its role as water rights consultant and legal

advisor to Pueblo County. The comments and conceptual alternative in this letter are intended to further the discussion of alternatives for study rather than be an endorsement by the County at this time of any particular alternative. Importantly, this letter does not necessarily reflect the opinions of the County Commissioners, and in any event, it definitely should not be construed as their judgment on a particular form of the SDS project that would be submitted later to the County for permit approval.

Pat, at the October 11 meeting when I presented this proposal, you indicated that flood control might not be one of the project objectives the USBR could study in the EIS. The alternative presented in this letter, however, is a water supply alternative, not just flood control, and it involves the use of Pueblo Reservoir by the SDS Participants for at least replacing Fountain Creek flows and possibly a pipeline from the Reservoir or from the Arkansas River for blending and as a supplemental supply.

I am of course available to you to answer any questions about the comments in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Petros, Jr.', with a stylized, cursive script.

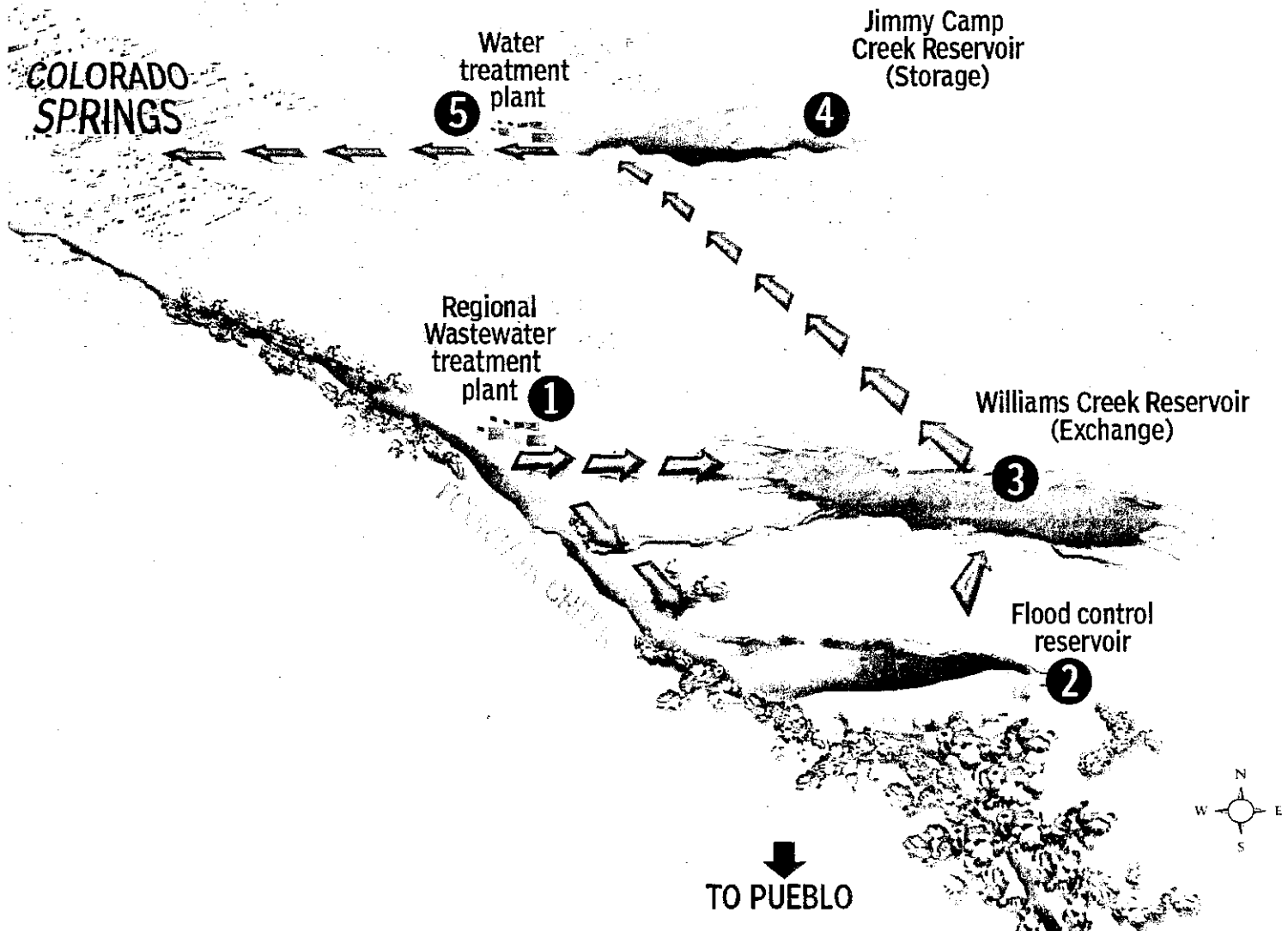
Raymond L. Petros, Jr.

RLP/jd

Attachments: Attachment 1: Drawing of Proposed SDS Alternative: Fountain Creek Reservoir
Attachment 2: Fountain Creek Watershed Study Map
Attachment 3: Fountain Creek Stream Flow Data
Attachment 4: Base and Storm Flow Graph
Attachment 5: Summary of CSU Water Usage
Attachment 6: Schematic of CSU Water System

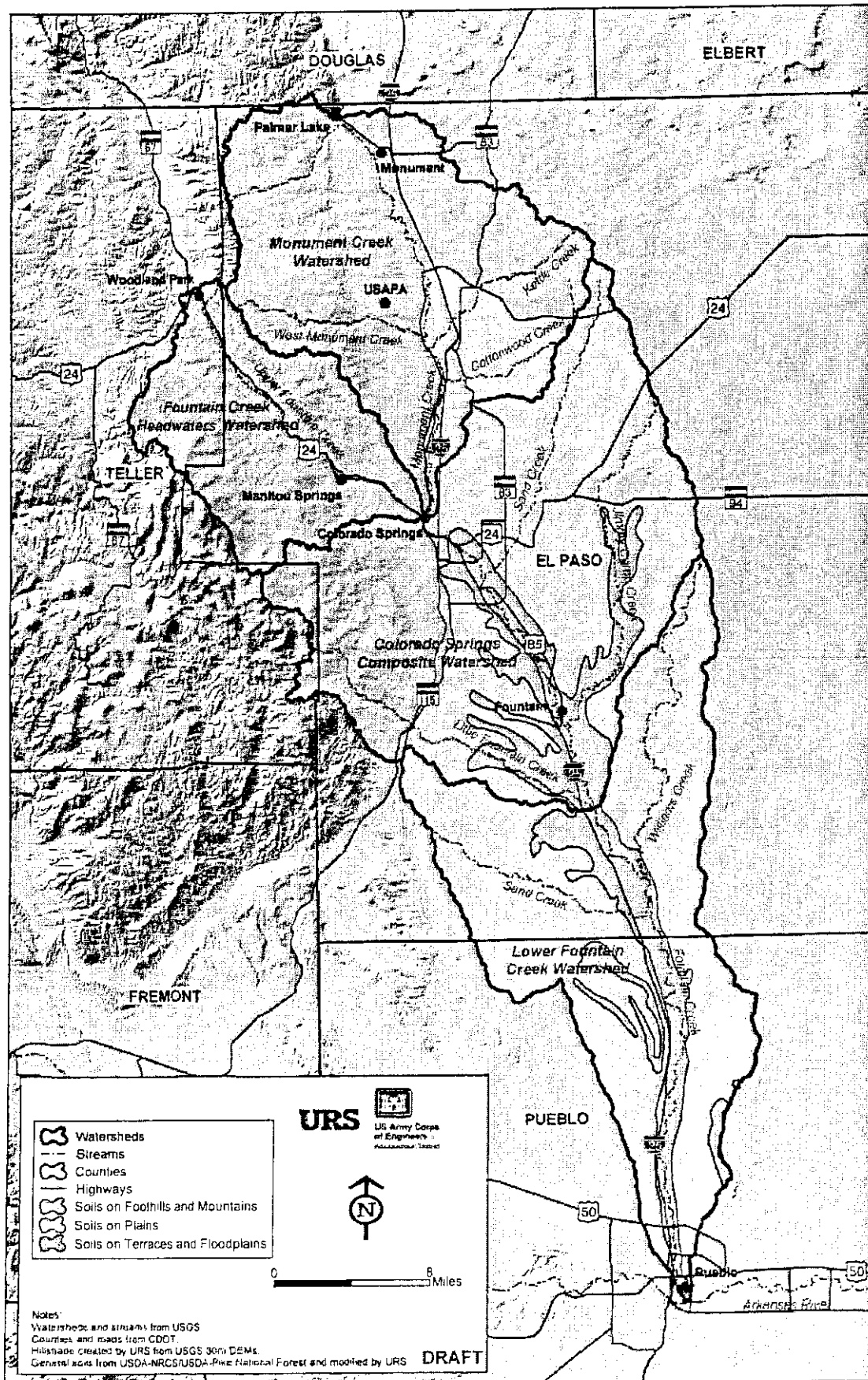
Proposed SDS Alternative: Fountain Creek Reservoir

(Reuse, Flood Control, and Supplemental Use of the SDS Pipeline as needed)



Fountain Creek Watershed Study

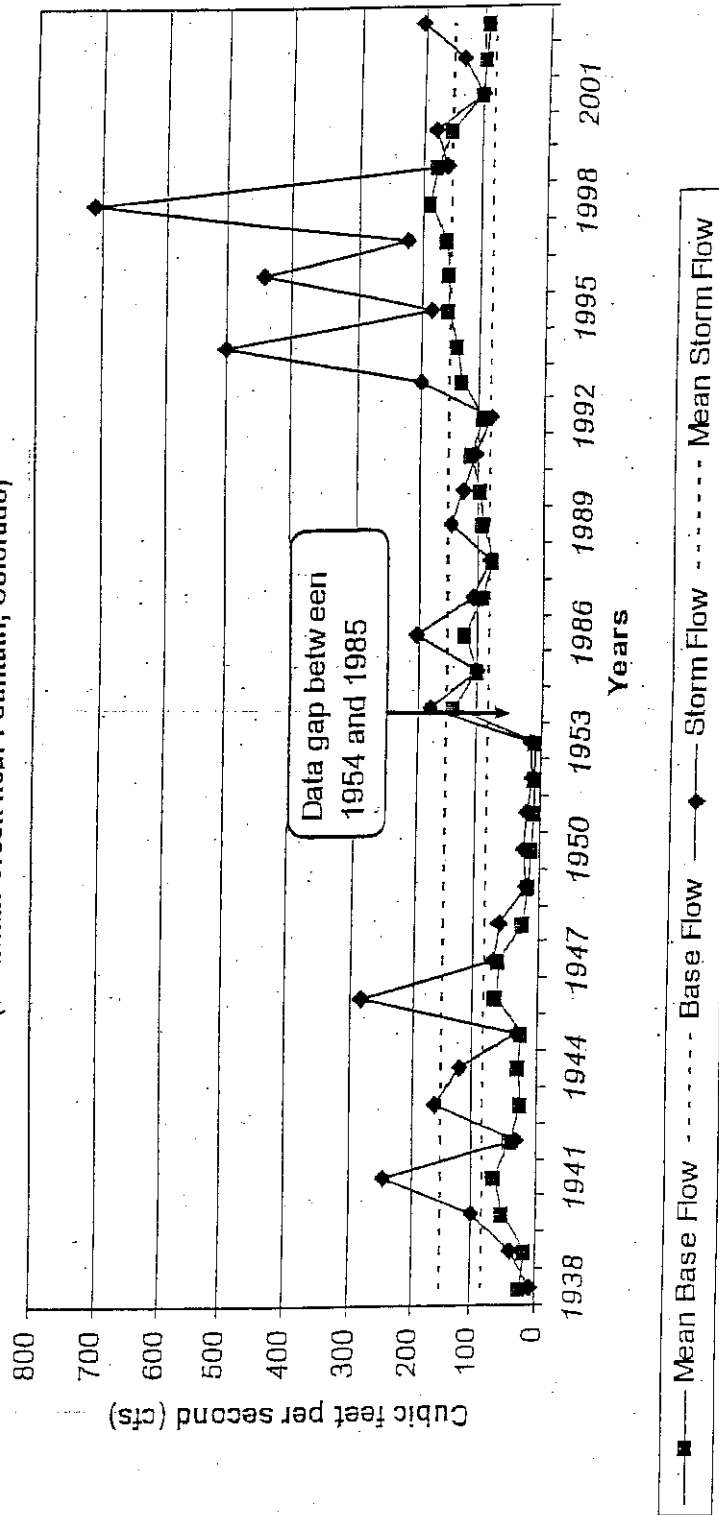
Figure 1-1. General Physiographic Soil Regions



USGS 07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO.												
YEAR	Monthly mean streamflow, in ft ³ /s*											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1938										19.9	22.1	38.5
1939	26.5	47.3	59.1	91.5	24.6	6.82	4.4	10.4	1.31	3.78	10	8
1940	25	30	12.6	16.1	96.8	20.6	63.1	4.87	22.3	16.3	14.7	7.88
1941	12.4	6.08	6.39	114	242	118	57.1	59.4	36.4	96.8	134	57.1
1942	33.5	50.5	78.7	590	602	329	131	125	42.3	75.3	95.6	57.6
1943	70.5	54.2	55.8	22.3	49.2	19.9	31.5	41.5	13.2	9.19	24.1	36.7
1944	30.5	26.7	19.9	108	468	172	117	34.1	23.2	20.6	22.2	27.4
1945	19.3	27.5	16.4	19.1	22.5	17	64.3	476	20.5	32	30.5	32.9
1946	38	24.6	13.7	22	30.4	8.76	25.8	90.5	13	14.1	38.2	15.3
1947	21.8	30.2	46.6	29.8	736	251	306	97.5	25.1	90.4	120	69.7
1948	64.3	88	107	122	110	133	23.7	58.8	13	14.1	32.5	57.6
1949	31.3	32	22.7	14.1	22.4	171	45.6	32.3	24.5	15.3	19.5	23.9
1950	24.2	27	12.4	11.1	9.78	9.12	26.9	25.4	26.4	10.1	14.7	8.65
1951	16.7	10	13.5	8.28	23.9	16.6	27.1	49.6	3.6	10.1	13.5	8.44
1952	6.99	8.37	14.6	15	41.5	9.06	3.47	35.6	6.81	7.78	12.1	5.14
1953	7.28	17.9	8.17	10.5	12	4.5	20.2	16	1.99	3.7	11	11
1954	7.6	6.1	7.5	4.3	17.5	54.1	5.83	3.15	2.55			
1985								210	146	117	137	155
1986	108	90.8	88.1	85.7	59.7	101	76.7	177	95	78.5	125	114
1987	114	133	199	188	349	297	125	144	94	81.4	97.7	90.6
1988	117	139	133	103	88.4	125	103	166	61.2	44.4	74.3	58.7
1989	81.4	98.5	99.8	63.4	63.4	80.9	93.1	104	71.3	49.7	66.1	56.6
1990	66.6	77.5	145	126	203	62.9	254	156	60.7	92.8	105	79.2
1991	104	104	99.8	86.9	84.2	146	104	225	67.1	52.5	131	89.2
1992	104	118	196	186	99	178	54.2	138	64.4	64.5	112	85
1993	85.6	101	101	89.9	58.6	119	62.2	67.7	96.9	85.4	98.8	84.2
1994	98.9	109	126	136	447	209	60.2	131	149	201	123	121
1995	123	123	136	191	899	819	432	182	173	147	158	135
1996	167	152	147	92.6	125	112	232	228	207	176	162	128
1997	116	134	138	225	305	1,080	236	391	193	164	201	179
1998	156	146	216	320	306	165	245	270	132	121	166	142
1999	137	126	110	787	1,602	609	382	713	242	266	253	231
2000	214	201	224	217	184	146	106	222	125	123	156	128
2001	162	161	170	158	234	148	191	170	136	109	165	119
2002	111	122	138	70.9	104	95.3	129	89.9	92.4	68.6	91.5	82
2003	90.8	113	127	87.9	93.5	222	104	141	101	80.5	99.8	63.3
2004	63.4	104	112	199	85.5	194	313	319	108			
Average streamflow**												
1995-2004	134	138	152	235	394	359	237	273	151	139	161	134
1986-1994	98	108	132	118	161	147	104	145	84	83	104	87
Average streamflow by decade**												
AVG 00	128	140	154	147	140	161	169	188	112	95	128	98
AVG 90	116	119	141	224	413	350	206	250	139	137	151	127
AVG 80	105	115	130	110	140	151	99	160	94	74	100	95
AVG 50	13	14	11	10	21	19	17	26	8	8	13	8
AVG 40	35	37	38	106	238	124	87	102	23	38	53	39
AVG 30	27	47	59	92	25	7	4	10	1	12	16	23
* The streamflow data from 1938 to 2004 from the USGS stream gauge number 07106000 (Fountain Creek near Fountain, Colorado) was reproduced from the USGS website at http://waterdata.usgs.gov/co/nwis/monthly/?site_no=07106000&agency_cd=USGS .												
**The average streamflow values were calculated by Petros & White, LLC on November 14, 2005.												

Base and Storm Flow Station 6000

(Fountain Creek near Fountain, Colorado)



Source: Fountain Creek Watershed: Impervious Surface Area and Watershed Health Analysis by Pikes Peak Area Council of Governments, Appendix C-6 (October 2005).

Summary of Blue River Project Operations Reports submitted by Colorado Springs Utilities to the U.S. Bureau of Reclamation for the Water Years 1991 to 2004*

Water Year	Total deliveries to CO Springs potable system	Total imported deliveries	CO Springs % wastewater returns***	Highest monthly % wastewater return	Lowest monthly % wastewater return	% wastewater return / total imported deliveries**
1991	63,967	41,223	60	41	88	24,734
1992	xx	xx	xx	xx	xx	xx
1993	xx	xx	xx	xx	xx	xx
1994	73,480	51,439	61	100	36	31,378
1995	66,731	45,197	74	100	42	33,446
1996	78,935	58,967	59.258	92.294	38.434	34,943
1997	xx	xx	xx	xx	xx	xx
1998	83,677	62,707	59.803	100.000	33.779	37,501
1999	xx	xx	xx	xx	xx	xx
2000	94,247	75,200	53.570	95.025	32.987	40,285
2001	92,340	72,641	53.319	90.323	31.649	38,731
2002	87,791	72,943	xx	xx	xx	xx
2003	73,637	56,583	63.064	93.841	40.323	36,009
2004	72,915	52,002	68.016	96.849	48.369	35,370

* The data in this table is reproduced from the Blue River Project Operations Reports submitted by Colorado Springs Utilities to the U.S. Bureau of Reclamation for the water years 1991 to 2004.

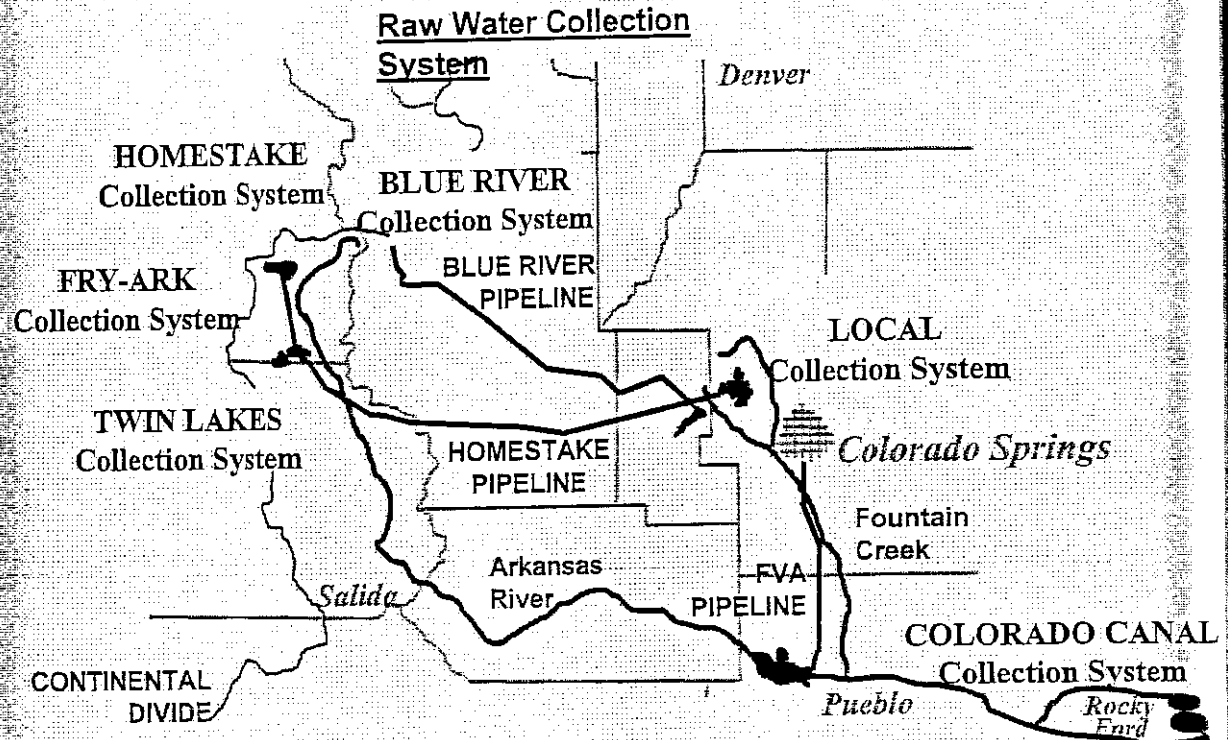
** These values were calculated by Petros & White, LLC on November 14, 2005 applying the percent of Colorado Springs wastewater returns to Colorado Springs total imported deliveries.

*** The values reported above do not reflect irrigation return flows. The *Water Resource Plan for Colorado Springs Utilities*, prepared by Black & Veatch (1996) at page IV-13 indicates that reusable irrigation return flows are approximately 2,800 acre feet per year and are projected to increase to around 12,000 acre feet per year in 2040.

Colorado Springs Utilities

It's how we're all connected

Water Supply



Colorado Springs is the only Front Range city, which is not located on a major river. To offset this lack of a natural water delivery system, Colorado Springs has built an extensive array of water collection systems and pipelines to bring adequate water supplies to our city. In the 1950s, Colorado Springs developed its first transmountain diversion of water bringing water from the Blue River near Breckenridge to Colorado Springs. In the 1960s, Springs Utilities formed a joint venture with Aurora for the construction of the Homestake Project near Tennessee Pass, which delivers water through the Homestake Pipeline. From the early 1970s to today our water system has grown to include the Fryingpan-Arkansas project, the Twin Lakes Reservoir and Canal Company, and the Colorado Canal Companies.

2005 Raw Water Supply Sources

FVA	12.0	MGD
Homestake Pipeline	64.0	MGD
Blue River Pipeline	9.0	MGD
Local Yield	18.6	MGD
New projects	13.3	MGD
Total	116.9	MGD

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June 13, 2008

VIA US MAIL AND E-MAIL (klamb@gp.usbr.gov)

Bureau of Reclamation
11056 W. County Road 18E
Loveland, CO 80537-9711
Attn: Ms. Kara Lamb

Re: Draft Environmental Impact Statement (DEIS) for the proposed Southern
Delivery System

Dear Ms. Lamb:

Our law firm serves as special legal counsel to the Board of County Commissioners for Pueblo County and its staff on land use and water right matters. I am submitting this letter at the request of the Pueblo County planning staff and its County attorney, Daniel Kogovsek, Esq. to furnish comments on the SDS DEIS dated February, 2008. This letter supplements our previously submitted comments letter to the Bureau dated November 15, 2005.

The Southern Delivery System project would be a transformational activity within Pueblo County and the Arkansas Valley. Pueblo County government wishes to ensure that the costs of SDS are borne by the SDS participants and not imposed unfairly and involuntarily upon Pueblo County residents and its governmental entities. Pueblo County also wishes to ensure that the environment in the County is protected from the SDS impacts.

It is anticipated that the SDS participants will submit a permit application to the Board of Pueblo County Commissioners for approval of the SDS project. The SDS participants have already informed Pueblo County planning staff that they will be relying upon the subject environmental impact statement and accompanying technical reports to support their application to the County. Consequently, we offer these comments so that members of the public and various governmental decision makers are as informed as much as possible as to the costs, impacts, and consequences of SDS.

COMMENT 1. The DEIS does not disclose sufficient information about the SDS facilities within Pueblo County to be able to assess costs and impacts.

In its 600-pages, the DEIS fails in its important objective of disclosing the elements of the SDS project within Pueblo County so that its impacts can be analyzed effectively. Pueblo County has independently learned about many more defining elements of the SDS project within the County as a result of documents and information obtained from the City of Colorado Springs

in the City's pending litigation against the County regarding land use regulations over SDS. The following critical elements of the Proposed Action need to be disclosed in the DEIS to apprise the Bureau, the public and regulatory agencies of the sizeable impacts of the project:

- The Juniper Pump station, proposed to be located at the base of Pueblo Dam, would be a 14,000-sq. ft. building, 42-feet high with associated office, parking lot, and auxiliary power facilities.
- A 60-inch wide pipeline, 20-miles in length from Pueblo Reservoir would be constructed through urbanized areas of Pueblo West in unincorporated Pueblo County, including through many existing residential lots.
- At least 20 concrete vaults, partially buried, would be constructed in Pueblo County along the length of the pipeline, between 300 and 1,300-sq. ft. each. These vaults would house air vents for the pipeline and water discharge points to empty the pipeline into nearby drainages along the pipeline length.
- About 40 manholes would be constructed along the pipeline in Pueblo County.
- 24 Pueblo County roads would be crossed by the pipeline.
- The pipeline would cross an estimated 130 separate parcels in Pueblo County; the SDS participants though, have not acquired any land or easements for these facilities.
- An estimated 26 residential lots in Pueblo County with existing homes on them would be crossed by the western pipeline.
- Approximately 340-acres in Pueblo County would be required for permanent and temporary easements for the Proposed Action; importantly, these easements would be located outside of any existing easements or rights-of-way for the nearby Fountain Valley Authority pipeline – this fact is not well-known by the Pueblo West residents and has not been publicized effectively.
- 50 separate drainage crossings would be made by the pipeline within Pueblo County.
- Approximately 63% of the pipeline deliveries, together with other reusable water, would be carried down Fountain Creek through Pueblo and

exchanged for upstream water in Pueblo Reservoir; by 2046, Colorado Springs estimates it will be delivering 74,000 acre-feet annually of foreign water (not native to Fountain Creek) down Fountain Creek for use in the SDS project; these flows are in addition to increased storm water flows originating from new impervious surfaces and development in the upper Fountain Creek basin above Pueblo County.

The DEIS is wholly deficient in notifying the public and regulatory agencies of the magnitude of these facilities within Pueblo County.

COMMENT 1.1. Insufficient notice is given in the DEIS as to the size, configuration and appearance of the Juniper Pump Station building proposed to be located within Lake Pueblo State Park.

As noted previously, the large 14,000-sq. ft. Juniper Pump Station is not effectively described in the DEIS. From conversations with representatives of Colorado Springs, we understand that the Bureau has conducted some architectural design review meetings on this building. Because this building is proposed to be located within Lake Pueblo State Park, the Bureau should solicit public review and comment upon its location and architectural design. The two pages of the DEIS devoted to the visual effects of the project incorrectly and misleadingly state that the visual effects of this pump station would be "negligible." This conclusory statement is not tested by informed public review and public agency review.

COMMENT 1.2. The existence and location of proposed electrical substation(s) in Lake Pueblo State Park and elsewhere in Pueblo County are not described or evaluated in the DEIS.

Again, from information learned by the County from Colorado Springs representatives outside of the DEIS, we understand that one or more electrical substations and overhead electrical transmission lines would need to be located within Lake Pueblo State Park and perhaps along the pipeline in Pueblo County.

COMMENT 1.3. The DEIS characterizations of the proposed SDS pipeline facility through urbanized areas of Pueblo West are misleading and substantially understate impacts on effected properties.

As noted previously, an estimated 130 separate parcels in Pueblo County would be crossed by the proposed SDS pipeline in its western alignment. The DEIS states the pipeline will be running "parallel" at times with the Fountain Valley Authority pipeline or "along" its corridor. The DEIS does not disclose that the proposed SDS pipeline would be outside of the right-of-ways and easements for the FVA pipeline and will encumber an additional 340-acres in Pueblo County for permanent and temporary easements. Many lots in Pueblo West may be

rendered unsuitable for further development or will otherwise require property lot line adjustments. The large pipeline and associated open-cut trench will run through the lots of many existing residences and businesses in Pueblo West. The DEIS is wrong to the extent it claims visual and sound impacts would be negligible.

COMMENT 1.4. The effects and additional costs on future infrastructure (roads, water and sewer lines) in crossings of the proposed pipeline within Pueblo County are not assessed or mitigated in the DEIS.

Independent of the DEIS, Pueblo County has learned that SDS pipeline easements would likely preclude parallel utility infrastructure located within the proposed 100-foot wide permanent easements. We are concerned that such exclusivity would interfere with the future location of water and sewer lines and other infrastructure in Pueblo West or in other areas of the County crossed by a large SDS pipeline. In addition, future road crossings and perpendicular utility crossings would be made much more expensive as a result of the siting of the pipeline, unless those crossings were taken into effect at the time of the pipeline design and construction. Pueblo County planning staff is concerned also about the effects of the pipeline on future major roadways which are planned in the area of the pipeline, such as a major thoroughfare planned from I-25 to Highway 50. The effects of the pipeline on the costs of future infrastructure are not analyzed in the DEIS. This omission is especially important when comparing the estimated costs of the pipeline at its proposed location as opposed to locations in non-urbanized areas east of Pueblo.

COMMENT 1.5. The DEIS does not assess the costs of road improvement and restoration in Pueblo County required for heavy construction trucks and traffic.

The two pages of the DEIS devoted to effects on traffic do not properly assess or account for the need to improve and restore local County roads required for pipeline construction and/or road crossings. The cost to upgrade or restore roads must be fully assessed in the DEIS when estimating the cost of the Proposed Action, particularly through the urbanized areas of Pueblo West, and the cost therefore fully borne by the SDS participants.

COMMENT 1.6. The design and construction costs for the eastern downstream pipeline in Pueblo County are not as developed as for the proposed western pipeline through Pueblo West; therefore a fair comparison between the two pipeline routes cannot be made in the DEIS.

In the documents produced by Colorado Springs in its lawsuit against Pueblo County, the City of Colorado Springs acknowledged that its design for the eastern pipeline and its components was not as far advanced as that for the western pipeline. This disparity in stages of design impedes a fair comparison of the relative benefits and costs of the two pipeline locations within Pueblo County.

COMMENT 2. The DEIS fails to disclose and assess the projected changes to historical conditions on rivers and reservoirs.

The DEIS compares the direct and cumulative effects of the various SDS alternatives to "existing" conditions. However, these "existing" conditions are simulated and are substantially different from historical baseline conditions. The effect of using a simulated existing condition as a baseline comparison is to significantly understate the effects of the SDS alternatives and cumulative future conditions. In addition, the DEIS compounds the confusion by comparing the "action alternatives" against only the hypothetical "No Action" alternative rather than to an existing baseline condition.

COMMENT 2.1. The DEIS does not use actual historical data as its baseline of existing conditions of rivers and reservoirs, and as a result, understates the future impacts of the SDS to known conditions.

The DEIS uses a comparison to "existing" conditions to quantify the changes in rivers and reservoirs caused by the various alternatives. It is only upon a laborious comparison of those "existing conditions" to the quite different values for "historical" stream flows and reservoir contents contained in the voluminous technical appendices that one begins to realize that "existing" condition is actually a synthetic calculation rather than observed historical conditions. The scrambled data also becomes apparent when comparing the quite different values for "existing" conditions for rivers and reservoirs reported in the March 2007 Environmental Assessment by the Bureau for the Aurora contracts to the "existing" conditions used in the SDS DEIS.

As an example, the historical mean monthly stream flow is reported at being 726 c.f.s. at the Arkansas River near the Wellsville gage. (MWH, Water Resources Technical Report, December 2007, Table 4, p. 8) That is similar but not identical to the existing condition reported in the March 2007 Aurora EA of 724 c.f.s. (Aurora EA, March 2007, Table A-5.) However, the existing condition reported in the DEIS at the same gage is only 673 c.f.s., or 11% less than the historical stream flow at this location. (DEIS, Table 31, p. 163; see also MWH, Hydrologic Model Documentation Report, November 2007, Table 4, p. 15.) Consequently, when comparing the effect on the projected 678 c.f.s. of flow at this river location for the Proposed Action, the DEIS concludes there will be no significant difference as against existing conditions when in fact, compared to historical conditions, it is actually 48 c.f.s. or 7% lower. (DEIS, Table 31, p. 163 and p. 147.)

As another example, the historical Arkansas River flow at the above Pueblo gage (just below Pueblo Reservoir) is reported to be 725 c.f.s. (MWH, Water Resources Technical Report, Table 4, p.8.) However, the existing condition reported in the Aurora EA is only 622 c.f.s. (Aurora EA, Table A-7.) and in the DEIS it is reported at only 614 c.f.s. (DEIS, Table 31, p.

163.) The DEIS then predicts the stream flow at this gage under the Proposed Action to be 529 c.f.s., about a 14% decrease (DEIS, Table 31, p. 163); however, when compared to historical average stream flows, the Proposed Action is a decrease in flow of approximately 196 c.f.s., or an annual average reduction of about 27%.

As another example, the historical annual average of Pueblo Reservoir is reported as 181,434 acre-feet. (MWH, Water Resources Technical Report, Table 6, p. 11.) This is similar but not identical to the reported existing condition of 181,857 acre-feet used in the Aurora EA. (Aurora EA, Table A-6.) However, the reported existing simulated condition in the DEIS is only 173,700 acre-feet – this difference in existing baseline is about 8,000 acre-feet on an annual average or a difference of about 4% less than historical storage volumes. Consequently, the reported direct effects to the average annual storage in Pueblo Reservoir for the Proposed Action (163,900 acre-feet) is a 6% decline from “existing” conditions, but compared to historical conditions it is almost a 10% decline. (DEIS, Table 35, p. 178.) The cumulative effects to average annual volumes in Pueblo Reservoir attributable to the Proposed Action (140,100 acre-feet) represents a decline of over 40,000 acre-feet on average, or about a 22% decrease from historical storage conditions. (DEIS, Table 37, p. 185.)

As another example, existing conditions for Fountain Creek flows at Pueblo are reported in the DEIS as 196 c.f.s. on an annual average (DEIS, Table 31, p. 163); by contrast, historical stream flow at the same location is reported to be 167 c.f.s. (MWH, Hydrologic Model Documentation Report, Nov. 2007, p. 18, Table 7.) The use in the DEIS of the larger “existing” baseline flow (an additional 29 c.f.s. or 17%) has the misleading effect of comparing the projected flows on Fountain Creek for the Proposed Action (273 c.f.s.) as being 77 c.f.s. rather than 107 c.f.s. higher (DEIS, Table 31, p. 163); in other words, the DEIS understates significantly the increase in Fountain Creek flows caused by SDS.

The use of these simulated existing conditions in the DEIS hides from public view the actual changes of reservoir and river conditions from that experienced historically. At the very least, the DEIS should be modified to include a column for historical river flows and reservoir storage for all of the tables which compare the effects of the various alternatives on river and stream conditions.

COMMENT 2.2. The DEIS appears to incorporate as an “existing condition” the effect of the recent Bureau approval of the long-term storage and exchange contracts with the City of Aurora, and as a result, the Bureau avoids a complete analysis of the combined impact of the SDS and the Aurora contracts.

The DEIS classifies the recent Bureau approval of the Aurora exchange and storage contracts in Pueblo Reservoir and the Fry-Ark system as an “existing” condition. (DEIS, p. 130.) It is not clear, however, whether the DEIS also incorporates the operation of the Aurora contracts in the simulated existing conditions for rivers and reservoirs in the DEIS for

comparative purposes. From the data in the DEIS, it does appear that the Aurora contracts are indeed embedded in the existing baseline conditions for river flows and reservoir contents. As an example, the DEIS uses 614 c.f.s. for the average existing simulated flow of the Arkansas River above Pueblo (DEIS, Table 31, p. 163); this value is similar to the projected gage flow at this location of 621 c.f.s. of the Proposed Action in the Aurora EA (Aurora EA, Table A-7, p. A-7.) For annual storage conditions at Pueblo Reservoir, the DEIS uses 173,700 acre-feet for average annual volumes as an existing condition, compared to the projected 174,963 acre-feet for the Proposed Action in the Aurora EA (Aurora EA, Table A-6, p. A-6.)

The Aurora EA, which was finalized in March 2007, did not study the combined impacts of the Aurora contracts with the impacts of the SDS, because the Bureau found that the SDS was not a reasonably foreseeable action. This finding conflicts with the Bureau's current identification of the Proposed Action as being the agency preferred action in the DEIS, which was published less than a year later than the Aurora EA.

By the artifice of not construing the SDS as a reasonably foreseeable future action for the Aurora EA, and now embedding the Aurora storage and exchange operations in the existing conditions of the DEIS, the Bureau escapes responsibility for assessing the combined impacts of both the Aurora contracts and the SDS. This calculated fragmentation of environmental reviews does not allow for effective assessment of impacts.

COMMENT 3. The DEIS discloses and relies only upon average river flows and reservoir storage conditions and does not disclose dry year or wet year variables.

In the March 2007 Aurora EA, the Bureau employs comparative tables to show the effects of the Proposed Action not only in average years, but also in typical wet-year and dry-year scenarios. Such variables can be important. The DEIS is deficient for its failure to include such comparative tabulations.

COMMENT 3.1. Tabulations and assessments of dry-year and wet-year changes and conditions are necessary to analyze potential effects and mitigation measures.

COMMENT 3.2. The Bureau included dry-year and wet-year tabulations in its Aurora EA but fails to do so in the SDS DEIS for unexplained reasons.

COMMENT 4. The Bureau's refusal to quantify the benefits, if any, of the Pueblo Flow Management Program ("PFMP") is a substantial deficiency of the DEIS.

The DEIS assumes the PFMP is in place for all alternatives with pipelines out of Pueblo Dam. It states that an analysis of a single alternative comparing the effects of that alternative with the PFMP and without the PFMP would show the impact of the PFMP but that analysis was

not performed as a part of the DEIS. Therefore, the "DEIS does not offer conclusions about the impact/benefit of the PFMP." (DEIS, p. 135.)

It is critically important for an informed analysis of the alternatives what the benefits, if any, are of the PFMP on the Pueblo Reservoir pipeline alternatives. Proponents of the Proposed Action cite the PFMP as a chief advantage of the Proposed Action over the No Action alternative or other alternatives not using a Pueblo Reservoir pipeline. These claims for the benefits of the PFMP must be validated.

COMMENT 4.1. Quantifications of the benefits, if any, of the PFMP is necessary to compare the relative benefits of the alternatives.

When assessing the average monthly stream flow effects on the Arkansas River at the above Pueblo gage for the Proposed Action (Pueblo Reservoir pipeline which incorporates the PMFP), the EIS reports that the average annual stream flows would be 529 c.f.s. However, the average stream flow effects for the No Action alternative (an intake at Highway 115 with no Pueblo Reservoir storage), shows that the average monthly stream flow effects is higher, namely 543 c.f.s. even without the benefits of the PFMP; higher river flows are also reported for the Highway 115 alternative (Highway 115 intake, with Pueblo Reservoir storage and without PFMP) which is reported at 531 c.f.s. Similarly, the Downstream Intake Alternative, which also does not incorporate the PFMP, shows a much higher annual stream flow of 611 c.f.s. and much higher monthly average stream flows in all months when compared to the Proposed Action. (DEIS, Table 33, p. 168.) The same relative comparisons hold true for average stream flow conditions when considering cumulative future effects. (See DEIS, Table 36, p. 184; [Proposed Action, 503 c.f.s.; No Action, 529 c.f.s.; Downstream Intake, 584 c.f.s.; and Highway 115 Alternative, 507 c.f.s.]). Contrary to the claims of the proponents of the Proposed Action, the PFMP does not appear to offer much, if any, benefit over other alternatives. To facilitate the discussion on this subject, the DEIS should quantify and state the benefits of the PFMP with respect to the Proposed Action, and then compare those values to other alternatives.

COMMENT 4.2. If the PFMP has substantial benefits, it should be a mitigation term common to all federal agency actions on SDS and binding on all SDS participants.

The PFMP is conceptually designed to preserve flows downstream of Pueblo to protect fisheries and recreation, as well as the federal and local investment in the river improvements known as the Legacy Project. As such, the PFMP should be required as a term and condition for any federal action (Bureau or otherwise) required for the No Action alternative and all Action alternatives. The PFMP in fact was included as a term and condition of the Bureau's FONSI approval of the Aurora contracts for long-term storage and exchange in Pueblo Reservoir. (Aurora FONSI, March 22, 2008, pp. 12-13.) The flow management terms would be similar to bypass flow requirements which have been required by federal agencies as a term and condition of federal permitting of other water projects, such as the bypass requirement for Dillon

Reservoir, for Denver Water's operation of its Frasier River Intake, and those required for the CB-T and Windy Gap projects below Granby Reservoir.

COMMENT 4.3. The DEIS fails to include a table showing the percent of time target flows are met for the PFMP under the cumulative effect scenario.

The DEIS includes a Table 34 to show the percent of time target flows are met for the direct effect scenario for each of the alternatives at the PFMP measurement location. Inexplicably, the DEIS omits a similar table to show the percent of time target flows are met in the future under the cumulative effects scenario; this information is essential for the decision makers and the public to know how often the PFMP would be met under future conditions so that appropriate mitigation measures can be taken in the DEIS and elsewhere or steps taken to modify the PFMP. Such a table was produced in the Aurora EA; its omission in the DEIS is unexplained and should be a cause of concern. (See March, 2000 Aurora EA, Table 310, p. 44.)

COMMENT 5. The DEIS does not quantify comprehensively the direct and cumulative effects of SDS on the Upper Arkansas Flow Management Program ("UAVFMP").

The UAVFMP is important to the recreational industry and economic well being of the Arkansas Valley Basin. The effects of the SDS alternatives on the UAVFMP should be studied and reported in the DEIS, including the effects of the federal agency approvals of any components of the SDS alternatives.

COMMENT 5.1. The DEIS does not simulate the UAVFMP for the No Action or Proposed Action; as in the case of the Bureau's decision on the Aurora EA, compliance with the UAVFMP should be a condition of any federal action.

The DEIS states it does not simulate the UAVFMP for the No Action or Proposed Action; it is not clear why this was not done since both actions require federal agency approval. (See e.g., DEIS, Statement Summary, p. 10.)

COMMENT 5.2. The DEIS fails to quantify the cumulative effects on the UAVFMP of the SDS and foreseeable future actions.

The DEIS only tabulates the direct effects of some of the SDS alternatives on the UAVFMP. (DEIS, Table 32, p. 163.) An important omission of the DEIS is the quantification of the percent of time UAVFMP target flows are met in the future for cumulative effects. By comparison such a tabulation was prepared for the Aurora EA. (March, 2007 Final Environmental Assessment, Table 3.9, p. 41.)

COMMENT 5.3. As in the FONSI for the Aurora contracts, the Bureau should impose terms and conditions and obtain commitments from the SDS participants to participate in the UAVFMP and PFMP.

As part of the FONSI, the Bureau required Aurora to comply with the UAVFMP and the PFMP, and to agree to curtail exchanges of water into Pueblo Reservoirs whenever flows in the Arkansas River below Pueblo Reservoir are less than 100 c.f.s. (March 2007 FONSI, pp. 12-13.) At a minimum, any federal agency approval should also require such terms and conditions and commitments of record by the SDS participants for the No Action and all Action alternatives.

COMMENT 6. The DEIS identifies the Proposed Action as the agency preferred alternative based upon its perception of lower project costs and energy use, but the Bureau fails to make the underlying reports on cost estimates and assumptions available to the public on its website so that these cost estimates can be readily obtained and scrutinized independently.

On its SDS website, the Bureau makes available to the public many of the technical reports used to support the DEIS. Inexplicably, the website omits the reports dealing with cost estimates for the various alternatives. Because cost of the project is apparently a critical factor for the Bureau, all such cost reports should be posted on the website so that these studies and analyses can be subject to independent scrutiny. The comment period on the DEIS should therefore be extended an appropriate amount of time so that additional comments can be received on such cost estimates.

COMMENT 6.1. In its cost evaluation, the DEIS fails to analyze and tabulate the comparative effect of the SDS alternatives on rate payers of the SDS participants.

To inform the public of the consequences of the SDS alternatives, the DEIS should contain information concerning the anticipated increases in rates over representative periods of time caused by the various SDS alternatives to rate payers within the service areas of the SDS participants.

COMMENT 7. The Downstream Intake Alternative (Alternative 6) should be further refined in the DEIS as to location, facilities and treatment options.

Pueblo County Planning staff has been contacted over the past few months by several different groups of landowners and gravel mine operators about their water storage developments within Pueblo County several miles east of the Pueblo City limits. Many of these inquiries involve gravel pits proposed for reservoir storage in the vicinity of the Excelsior Ditch along the north side of the Arkansas River east of Pueblo. These gravel pit water storage reservoirs offer opportunities for tens of thousands of acre-feet of water storage.

The DEIS, however, only studies a direct diversion facility just below the Fountain River confluence for purposes of studying the Downstream Intake Alternative. Given the ample opportunities for gravel pit storage available further downstream, and the potential for pipeline alignments further east of the Pueblo city limits that would avoid already urbanized areas, the DEIS should include the option of the use of these downstream reservoir opportunities and a pipeline located further to the east. The gravel pit storage could help subsidize the cost of reservoir construction. The gravel pits could serve as settling ponds and forebay storage for the eastern pipeline. In-situ gravel might also be used for preliminary water treatment, as now being constructed by the City of Aurora on the South Platte River for its Prairie Water Project. Gravel pit storage could also serve as ROY ("Recovery of Yield") reservoirs to help facilitate management of flows downstream of Pueblo Reservoir.

The movement of the pipeline alignment to the east, the use of the gravel pit storage for forebay storage, and in-situ gravel treatment may well reduce the cost of this alternative for purposes of comparison to other alternatives.

COMMENT 7.1. The Downstream Intake Alternative offers many advantages but the Bureau does not appear to have given it the same level of planning and investigation as the No Action or Proposed Action alternatives.

In introducing the Downstream Intake Alternative, the DEIS states that "some residents of Pueblo in the Arkansas River Valley expressed an interest in the participants diverting and treating water from the Arkansas River below Fountain Creek." (DEIS, p. 76.) This statement betrays a bias and predisposition against this alternative by the Bureau and the SDS participants. In its lawsuit against Pueblo County, the City acknowledged in its pleadings and discovery responses that the planning and design of this eastern pipeline alternative was not as advanced as for the western pipeline out of Pueblo Reservoir, again evidencing that this alternative is not being given the serious consideration it deserves for the DEIS.

In spite of the limited investigations of the Downstream Intake Alternative, the data in the DEIS shows that this alternative might offer several distinct advantages:

- The Downstream Intake Alternative has a 62% higher firm yield than the No Action alternative (Highway 115 intake, with no Pueblo Reservoir storage) or Proposed Action (Pueblo Reservoir pipeline), and nearly an 80% higher firm yield than the Highway 115 alternative (Highway 115 intake, with Pueblo Reservoir storage). (DEIS, Statement Summary, Table S-3, p. 20.)
- The Downstream Intake Alternative would have 16% higher average annual flows below Pueblo Reservoir, considering both direct and

cumulative effects than the No Action or Proposed Action, even without the benefit of the PFMP (Pueblo Flow Management Program).

- The Downstream Intake Alternative would have similar storage volumes in Pueblo Reservoir but with lower average residence times in the reservoir which the DEIS notes should improve water quality of the reservoir. (DEIS, Table 35, p. 178; Table 37, p. 185; and Table 52, p. 236.)
- The Downstream Intake Alternative would have about the same or higher total Fry-Ark storage (cumulative effects) as the No Action, Proposed Action or Highway 115 alternatives (DEIS, Table 37, p. 185.)
- The Downstream Intake Alternative would likely avoid disruption caused by pipeline construction in urbanized areas of Pueblo West and in Lake Pueblo State Park.
- The Downstream Intake Alternative would avoid Fountain Creek and I-25 crossings caused by the No Action, Proposed Action, and Highway 115 alternatives.
- The Downstream Intake Alternative would preserve outlet capacity in the joint use manifold of Pueblo Reservoir for existing users; it would avoid disruption to the users of the joint use manifold otherwise caused by pipeline construction; it would avoid the cost of the improvements to the north side reservoir outlet at Pueblo Reservoir; and it would avoid the siting of the Juniper Pump Station in Lake Pueblo State Park.
- The proposed mitigation for Fountain Creek would be the same for the Downstream Intake, Proposed Action, and Highway 115 alternatives.

The preliminary cost estimates show that the cost per acre-foot of firm yield is less for the Downstream Intake Alternative, although the total project and energy costs would be higher. Presumably (because these cost estimates were not made available on the public website), the additional project and operating costs relate to the construction and operation of an RO (Reverse Osmosis) treatment plant to treat some of the water. However, gravel pit forebay and sedimentation storage, in-situ gravel treatment, and direct releases of water stored in Williams Creek to the eastern pipeline, might decrease these costs significantly. Further study of the Downstream Intake Alternative and consideration of possible options for storage and treatment is warranted before the EIS is finalized, as set forth in the following comments:

COMMENT 7.2. The Downstream Intake Alternative should be modified to include the option of available gravel pit storage as forebay and sedimentation storage, as exchange storage and as ROY storage, and to include the option of using in-situ gravel treatment in lieu of RO treatment.

COMMENT 7.3. The Downstream Intake Alternative should also be modified to consider the direct delivery of water from Williams Creek Reservoir for blending into the eastern pipeline at its halfway point to save on energy pumping costs from the Arkansas River and to avoid costly and wasteful water transit losses down Fountain Creek.

COMMENT 8. The DEIS is deficient by not studying the feasibility of multipurpose storage projects in Fountain Creek (i.e., projects combining water supply, flood control, recreation and stream flow management).

By artificially limiting the scope of the DEIS to exclude flood control as a project purpose, the Bureau has unreasonably limited its investigation of multipurpose storage projects on Fountain Creek, which could reduce environmental impacts and could result in lower project costs for the El Paso County SDS participants. We reiterate and incorporate herein our comments to the Bureau in this regard from our November 15, 2005 letter. The lack of coordination between federal agencies -- the Bureau and the U.S. Army Corp of Engineers which is studying flooding issues on Fountain Creek -- is one of the obstacles to environmental review that the NEPA process was designed to avoid.

COMMENT 8.1. The flood control benefits of the Williams Creek Reservoir illustrate the potential benefit of a study of multipurpose reservoir project(s) on Fountain Creek.

COMMENT 9. The DEIS is deficient by its omission of a Reuse Alternative for local water supplies in Fountain Creek.

The initial No Action alternative proposed by the SDS participants included a study of reuse options on Fountain Creek involving the indirect reuse of reusable return flows and the capture of additional Fountain Creek flows caused by further development and impervious surfaces upstream. By its Alternatives Analysis Addendum, December 2007, the Bureau unreasonably decided not to pursue further study of the reuse alternatives because of its perceived higher cost.

Further study of the reuse options should be made before finalization of the EIS, for the following reasons:

COMMENT 9.1. The higher cost of the reuse option is unfairly predetermined by the assumption that Fountain Creek flows would need to be blended with flows taken

from a pipeline out of the Arkansas River. The Arkansas River pipeline effectively doubles the cost of the reuse option and may not be necessary.

COMMENT 9.2. The December 2007 Addendum does not study the option of only capturing water in Fountain Creek at times when effluent returns constitute less than 50% of the flow in the creek.

COMMENT 9.3. The assumption that the Fountain Creek water must be blended on a 50/50 basis with Arkansas River water may not be based on current scientific information; further analysis and investigation should be performed on this matter and it should be subjected to public review.

COMMENT 9.4. When assessing the comparative costs of the reuse option, it does not appear that the Addendum considers the benefit and offsetting value of additional water not lost to stream transit losses down Fountain Creek in an exchange to Pueblo Reservoir. The value of such water savings should be calculated using the assumed firm yield value of \$25,000 per acre-foot elsewhere used in the DEIS.

COMMENT 10. The DEIS is deficient because it understates the SDS effects on erosion and sedimentation in Fountain Creek. The proposed mitigation is indeterminate and is not proportionate in scale to the large value of the SDS to its El Paso County participants and to the large impacts of SDS.

The DEIS and its Appendix C acknowledge that increased return flows and releases from the Williams Creek Reservoir will cause additional erosion in the upper segments of Fountain Creek with the resulting increased sedimentation and erosion and channel instability in the lower reaches of Fountain Creek in Pueblo County.

COMMENT 10.1. The DEIS simulates an existing condition for Fountain Creek stream flows that are much higher than historical flows, thereby unreasonably reducing the stated changes to Fountain Creek caused by the SDS alternatives and minimizing the required mitigation.

COMMENT 10.2. The DEIS studies only the effects of increased reusable return flows as a result of SDS instead of the impact of all reusable flows that will be exchanged and stored in Pueblo Reservoir and or diverted through the pipeline intakes (existing and future, estimated by Colorado Springs in its litigation with the County as being as much as 102 c.f.s. or 74,000 acre-feet after local reuse in 2046).

COMMENT 10.3. The DEIS assumes that Colorado Springs will continue the funding of its Storm Water Enterprise Fund to construct channel improvements, and that the City will enforce regulations on new development to prevent increased peak storm

water flows through detention ponds. This assumption is used to reduce the effects on Fountain Creek, but the DEIS offers no enforcement mechanism to ensure compliance by Colorado Springs.

COMMENT 10.4. The DEIS unreasonably assumes that growth in Colorado Springs and resulting increased stream flows in Fountain Creek would continue even without the benefit of water supply projects approved by the Bureau or by other federal agencies in the case of the No Action alternative.

COMMENT 10.5. The proposed mitigation measures for Fountain Creek, namely monitoring and an "adaptive management program," are inadequate because the DEIS provides no means to ensure funding and compliance by the SDS participants.

The DEIS and its Appendix C provide that Fountain Creek mitigation would include monitoring of problems on Fountain Creek over time by the SDS participants and an adaptive management program which would mitigate the perceived effects of SDS. However, as presently proposed, such long-term monitoring and an adaptive management program do not appear workable. The program lacks specific guidelines and benchmarks for monitoring and requirements for mitigation. It lacks an enforcement mechanism to ensure permit compliance by the SDS participants to any required mitigation measures. It lacks a sustainable funding mechanism (such as reclamation bonding or escrowed funds) to ensure that recommended monitoring and mitigation is funded by the SDS participants and not subject to the contingencies of annual appropriations by the public entities.

COMMENT 10.6. The DEIS identifies three possible areas on Fountain Creek for channel stabilization but does not identify in sufficient detail what those measures are or the costs and timing of the implementation of those measures.

The potential channel stabilization work proposed as mitigation is not specifically identified in the DEIS other than possible locations. The development of such measures should be subject to extensive public review and public agency comment. Those measures should be specifically described before the EIS is finalized. In any event, the finalization of the EIS should await the outcome of the ongoing Fountain Creek studies by the U.S. Army Corp of Engineers and other local agencies.

COMMENT 10.7. Stream improvements, wetland construction and other mitigation are not sustainable without flood control on Fountain Creek.

Periodic, heavy flooding is predictable on Fountain Creek. Mitigation measures to control erosion and sedimentation and to construct wetlands likely would be undone by periodic floods. Consequently, in the development of Fountain Creek mitigation, mechanisms must be put in place to fund and restore any such mitigation measures as a result of flooding.

COMMENT 11. Adverse water quality effects of upstream return discharges above Pueblo Reservoir are a significant cause for concern and should be evaluated more extensively, particularly for multi-year accumulative impacts of increased loading of nutrients and contaminants.

The USGS study of water quality impacts of the SDS alternatives on Pueblo Reservoir was only recently released for public review on the SDS website in May, and the public comment period should be extended so that it can be reviewed properly.

The study concludes that the Upstream Return Flow Scenarios (including proposed discharge by Pueblo West) would result in the introduction into Pueblo Reservoir in 2046 "substantially larger" concentrations of potential contaminants and nutrients for algae growth than for the other alternatives. The study does not contain qualitative judgments as to the potential consequences of such increased concentrations.

It is not clear from the DEIS or the USGS study what the accumulating effect of such increased concentrations over many years would have on the water quality of Pueblo Reservoir.

COMMENT 12. Use of the Joint Use Manifold for the SDS pipeline, without the contemporaneous approval and construction of the pipeline connection to the North Reservoir Outlet, would jeopardize the water supply to current users and to the Arkansas Valley Conduit.

In its April 15, 2008 comments letter to you, the Pueblo Board of Water Works raises a very important concern that the proposed SDS use of the joint use manifold would co-opt its required capacity for the future use by the City of Pueblo, Pueblo West and other exiting users. The SDS connection also could reduce the gravity flows in the pipeline to Pueblo's water treatment plant. SDS could also interfere with the proposed connection to the Arkansas Valley Conduit, which was an original component of the Fry-Ark Project.

Pueblo Water also requests contract assurance that its prior reservation of capacity in the outlet would be honored by the Bureau in its contract with SDS participants. However, a contract priority of use for future Pueblo uses may become meaningless if the SDS pipeline already is being used to serve several hundred thousand people in El Paso County.

We understand the Bureau is in the process of reviewing plans for the construction of the additional connection of the SDS pipeline to the North Outlet of Pueblo Reservoir. Any approval of the SDS pipeline at the Pueblo Reservoir should be conditioned upon the approval and contemporaneous construction of this additional outlet connection by the SDS participants.

COMMENT 13. The DEIS relies upon many limiting assumptions which have the effect of minimizing the impacts of the SDS alternatives. The Bureau should consider converting these implied conditions into explicit terms and conditions of any federal approval.

COMMENT 13.1. Project Yield Limits. The DEIS assumes that the proposed pipeline out of Pueblo Reservoir will not be operated at maximum capacity, but only at about 60% of capacity. This assumption reduces the impacts studied for mitigation and should be incorporated in maximum average annual rates of flow and volumes through the pipeline.

The firm yield of the proposed Pueblo Reservoir pipeline to El Paso County entities is 42,400 acre-feet and the SMAPD is 52,900 acre-feet. The daily average of deliveries to the El Paso County entities is assumed to be 49 m.g.d. (DEIS, p. 12.) These annual volumes are much less than the full-time capacity of the Pueblo Reservoir pipeline which would be 87,000 acre-feet per year, and much less than the 78 m.g.d. flow rate of the pipeline. Consequently, absent modeling the impacts of withdrawals through the pipeline at these maximum rates of flow and volumes, any approval of the pipeline and/or other alternatives should be restricted to the lower yield numbers (60% of capacity) without further environmental review and approval.

COMMENT 13.2. Use of Existing Water Rights. The DEIS is based upon the representation by the SDS participants that only existing water rights would be used for the project. Any approval should condition the use of the project on the use of only existing water rights, and not the acquisition of additional water rights without further environmental study and review.

The DEIS does not consider the impacts of converting additional agricultural water rights for municipal use through the SDS project, nor the resulting impacts of permanent dry-up of farmland. This representation by the SDS participants that only existing water rights would be used in the SDS Project was purposeful to avoid the environmental analysis and mitigation of the use of new water rights. The SDS participants should be held to those commitments of record.

COMMENT 13.3. No additional users. Particularly as it relates to the City of Colorado Springs, the DEIS does not consider the impacts associated with Colorado Springs supplying raw water or substantial amounts of treated water outside its city boundaries. Such water contracts could increase the amount of water projected to be delivered through the pipeline, and the rates and timing of such amounts as modeled. Also, locations of return flows could change or the scheduled uses of water could be accelerated through the pipeline. Additional taps to the pipeline could mean unplanned growth and impacts along the pipeline. A specific term and condition should be considered as necessary to avoid such uses which have not been evaluated for impacts in the EIS nor mitigated.

COMMENT 13.4. Terminal Reservoir Storage Contingency. Appropriate terms and conditions should be fashioned to avoid the effects of the possible failure to construct terminal reservoir storage by the City of Colorado Springs – such a contingency has not been addressed in the DEIS.

When evaluating the SDS alternatives that involve terminal reservoir storage either at Jimmy Camp Creek Reservoir or at Upper Williams Creek Reservoir, the DEIS does not evaluate the effects to Pueblo Reservoir and to stream flow if such storage is not built as planned. Without such terminal storage, Pueblo Reservoir levels would decrease and fluctuate substantially with only direct deliveries through the SDS pipeline. These changes are not analyzed nor mitigated in the DEIS.

COMMENT 13.5. Williams Creek Reservoir Contingency. Appropriate terms and conditions should be fashioned to avoid the effects that would occur if Williams Creek Reservoir were not constructed as proposed.

For those SDS alternatives premised upon the construction of Williams Creek Reservoir, appropriate terms and conditions should be considered to address the situation if Williams Creek Reservoir is not built. Williams Creek Reservoir, for example, is considered a mitigation measure to reduce the effects of increased flows on Fountain Creek for purposes of the DEIS.

COMMENT 13.6. Storm Water Enterprise Fund and Regulation Contingency. Additional mitigation and environmental reviews would be necessary in the event Colorado Springs eliminates its storm water enterprise fund and fails to implement its storm water regulations to detain increased storm water from new development.

As discussed previously, the impacts analysis on Fountain Creek is minimized as a result of the presumption that Colorado Springs would fund its Storm Water Enterprise for required storm water management structures, and that it would enforce storm water regulations to prevent increased flows on Fountain Creek. Appropriate enforcement mechanisms should be developed for such a contingency, including additional approvals of environmental reviews and cessation of SDS storage and deliveries.

COMMENT 13.7. Williams Creek Reservoir Release Rates. The DEIS assumes that releases from Williams Creek Reservoir will not exceed 300 c.f.s. to avoid downstream erosion effects on Fountain Creek. That restriction on releases should be considered as an explicit term and condition.

COMMENT 13.8. Participation in PFMP. Participation in the PFMP, to the extent its benefits, if any, are embedded in the EIS analyses, should be incorporated as a

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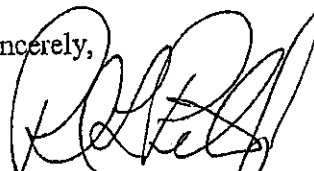
term and condition of any federal approval and binding on all SDS participants, regardless of their participation in the PFMP IGAs.

COMMENT 13.9. Conservation and Non-Potable Water Usage Programs. The DEIS represents that conservation, use of non-potable water, and other water savings programs would be continued by the SDS participants, despite the availability of greater water supplies from the SDS project; those commitments also should be evidenced by explicit terms and conditions for federal approval.

CONCLUSION

We hope that these comments will be useful to the Bureau in the EIS process for the SDS. We request that another draft of the DEIS be issued in response to these comments and those of other parties; we also request that a final EIS be deferred until completion of Fountain Creek studies by the Corps of Engineers and other entities. We would be happy to discuss and meet with you concerning the issues raised by this letter.

Sincerely,



Raymond L. Petros, Jr.

RLP/lah

cc: Mr. Daniel Kogovsek, Pueblo County Attorney
Mr. Kim Headley, Pueblo County Planning Department
Mr. Gary Raso, Special Counsel