

Exhibit A
Statement of Work

WATER ACTIVITY NAME - Regional Water Supply Infrastructure Feasibility Study

GRANT RECIPIENT – Pikes Peak Regional Water Authority (PPRWA)

FUNDING SOURCE - Basin/Statewide Funds

INTRODUCTION AND BACKGROUND

Water providers from central to northern El Paso County are heavily dependent on nonrenewable Denver Basin groundwater to meet current water demands. Water supply here is shrinking, demand is increasing, and the area is already water-short. This region represents the largest M&I gap in the Arkansas Basin; a critical municipal supply gap in this area could exist as early as the year 2020.

The common need for sustainable water supplies and the geographic proximity of these providers create opportunities for developing regional water supply and delivery projects. By sharing resources, objectives, and focus in joint regional projects, the participating water providers can better address growing water demands in the years ahead.

OBJECTIVES

The intent of this cooperative effort is to identify the critical water supply objectives of each of the participants, identify and analyze possible joint water supply projects to meet those objectives, and plan for the necessary agreements and actions to develop the more promising projects. The Study is a follow-up to the Water Infrastructure Planning Study (WIPS) completed for the Pikes Peak Regional Water Authority (PPRWA) in 2008, although the number and range of project participants has increased.

TASKS

Task 1 – Scoping Meeting and Project Objectives

Description of Task

The project will begin by refining the overall project objectives and scope.

Method/Procedure

A scoping meeting with all participants will be held to establish those objectives and limits for the study, and the levels of analysis to be performed within the constraints of budget and schedule. The scoping meeting will also be used to establish study and communication protocols to ensure effective coordination and communication throughout the study process. Forsgren Associates, Inc. will facilitate this task.

Task Deliverable: Electronic version of final scope and protocols.

Task 2 – Preliminary Analysis

Description of Task

This task includes a review of several documents providing important background information, individual entity meetings, a needs assessment, and the development of operations, infrastructure, and priorities summaries for each participant. Meetings with key nonparticipants will also be held in order to include their information for regional context.

Method/Procedure

2.1 Literature Review:

- Sources of Water and Nitrogen to the Widefield Aquifer, Southwestern El Paso County (USGS, 1985)
- Draft Feasibility Study for Interconnection of the Monument and Palmer Lake Water System (Black & Veatch, January 1998)
- Draft Final, El Paso County Water Report, El Paso County Water Authority (September 2002)
- Upper Black Squirrel Creek Basin Study (Colorado Geological Survey, 2006)
- Arkansas River Pipeline Study (Boyle Engineering, 2007-8), prepared for PPRWA
- Study of Alluvial Storage in the Arkansas Basin (CDM, 2007)
- WIPS prepared for the PPRWA (February 2008)
- Arkansas Basin Consumptive Use Needs Assessment (Applegate Group, July 2008)
- Arkansas Basin Nonconsumptive Needs Assessment Mapping (Arkansas Basin Roundtable)
- Considerations for Agriculture to Urban Water Transfers (Arkansas Basin Roundtable, September 2008)
- Water Supply and Needs Report for the Arkansas Basin (CDM, Modified August 2009)
- Projects & Methods to Meet the Needs of the Arkansas Basin (Arkansas Basin Roundtable, November 2009)
- Arkansas SWSI 2010 Basin Report (CDM)
- Pikes Peak Area Water Quality Management Plan (PPACG, 2010)
- Arkansas River Basin Plan, Statewide Water Quality Management Plan (CDPHE, June 13, 2011)
- Arkansas River Decision Support System Feasibility Study (Brown and Caldwell, December 2011)
- Widefield Aquifer Management Program (Presentation by WW Wheeler & Assoc.)

2.2 Individual Entity Meetings.

Forsgren Associates, Inc. will meet with managers and system operators from each participant to document current water supply system operations, obtain water supply system maps, identify their objectives and

concerns with water supply delivery, and discuss any plans for future changes in operations. They will also meet with key nonparticipants, such as Colorado Springs Utilities, to find out about their supply systems, infrastructure, and planning to include in the Study for regional context.

2.3 Needs Assessment.

Forsgren Associates, Inc. will develop a preliminary summary of projected water supply needs for all participating providers. The projection will focus on anticipated water availability and sources, as well as projected water demands in the years 2035 and 2050.

2.4 Operations, Infrastructure, and Priorities Summary.

Each entity's operations, basic infrastructure, needs and priorities will be summarized and compared, and a "partnering matrix" will be created showing the major water storage, treatment, and transmission components that each participant could "bring to the table" for cooperative water supply efforts. This information will be used to summarize data gaps, identify common priorities, identify possible joint and regional water supply projects and other cooperative opportunities ("alternatives"), and identify known significant political, technical or legal hurdles for the alternatives. This information will be presented to participants in a draft system summary report and partnering matrix for review and comment.

Based on that input, further analyses of the more promising alternatives and variations chosen by the participants will be performed, including pros and cons, potential obstacles, conceptual costs, and conceptual timelines as further described in Task 3.

2.5 Coordination with Agencies.

The success of any of the anticipated alternatives will depend on coordination with regulatory and funding agencies at key stages of the study. The proposed effort will include coordination with the Colorado Water Conservation Board (CWCB), the Arkansas Basin Roundtable, and the U.S. Bureau of Reclamation.

2.6 Mapping.

Forsgren will compile maps of existing and planned water supply system components from individual participants, and use those overlays to consider opportunities to optimize supplies through regional cooperation. They will also obtain GIS mapping that is available at no charge from El Paso County, including general land-use information. The County may offer additional GIS data as an in-kind contribution, given that the Study is intended to promote regional water security for a large constituency of the County. This data may include aerial mapping, elevation contours, and parcel information.

Forsgren will use GIS to layer a regional map by groupings of features. For example, one layer could show a system of water storage reservoirs connected by creeks and the Arkansas River. Another could show a system of alluvial groundwater storage sites and their connections. In addition, Forsgren will prepare a layered map with clear overlays of each system for use in presenting the Study concepts to decision-makers and customers.

Task Deliverable: Draft system summary report, draft regional GIS map with layered features, and a draft display map.

Task 3 – Preliminary Development of Alternatives

Description of Task

Using the draft system summary report, selected alternatives for future water supply delivery will be developed. The alternatives will be organized according to the following geographical areas and operational considerations:

Method/Procedure

3.1 Area 1-Pueblo Reservoir to South Fountain.

Development of potential alternatives may include:

- Identification of potential water supplies with consideration of storage needs.
- Cooperative arrangements with the six parties of the IGA that operate storage at the confluence of Fountain Creek and the Arkansas River to pass return flows or operate upstream exchanges.
- Consideration of alluvial storage at Stonewall Springs along the Arkansas River.
- Means of participation in the SDS for delivery of Arkansas River water to the subject area, possibly using off-peak capacity.
- How WWSO's planning for development of JV Ranch could be integrated into delivery of water supply to other participants in northern El Paso County.
- Consideration of expanding gravel pit storage in the area of the Fountain Pit.
- Preliminary identification of necessary permits, legal limitations, costs, and potential agreements.

3.2 Area 2-South Fountain to Black Forest.

- The SDS Pipeline will terminate at a new water treatment plant in the Cherokee Metro District (CMD) service area.
- CMD is acquiring a dedicated corridor between their service area and Sundance Ranch, in the Black Forest area, to construct a new water transmission pipeline. The pipeline will convey Denver Basin groundwater to CMD from their new satellite wellfield at Sundance Ranch.
- Infrastructure in this corridor may be available to share or for transfer to another entity should other water supply options become available to CMD. Potential would be evaluated for use of this new waterline to convey water to other entities (either direction) and the potential for use of Sundance Ranch water by other entities, possibly as a drought or transitional supply.
- Other entities with infrastructure adjacent to this corridor may have interest in participating in a regional system that enhances the ability to move water through, or to, this corridor. The potential will be evaluated for shared use of other infrastructure in the area of this corridor.
- An alternative will be developed for installation of a new transmission line to facilitate delivery of water through this corridor from sources south of CMD.

3.3 Area 3-Black Forest to Palmer Divide.

- Analysis of up to three routes for delivery of water from the Black Forest area to a central point in northern El Paso County near the Palmer Divide.
- Preliminary identification of necessary permits, legal limitations, costs, and potential agreements.
- Requirements for delivery to northern El Paso County water systems, including evaluation of potential costs and modifications to operations necessary to get the water from transmission and into the individual systems.

3.4 Reuse.

- The participants in this study use Denver Basin groundwater as part of their water supply portfolio. That water serves as a fully consumable resource that can be optimized through reuse or exchange, or used to augment surface supplies.
- Some water providers have already implemented reuse irrigation. Additional opportunities will be considered based on the costs and benefits of local reuse vs. downstream exchanges, and the balancing act of local reuse costs vs. downstream transit losses.
- Methods and costs of local reuse within a jurisdiction
- Methods and costs of reuse, exchange, or augmentation within the corridors identified in Areas 1, 2, and 3.

- The value of this resource as a means of trading for Arkansas River water with possible delivery from Pueblo Reservoir, or sale to Arkansas Basin irrigators to augment their alluvial well production.
- Strategies to further develop the spot market for sale of return flows or excess water to Arkansas Valley farmers or irrigation augmentation groups.
- Water accounting practices for possible optimization based on interviewing representatives of the Division of Water Resources, Colorado Springs Utilities, Pueblo Board of Water Works, and the Arkansas Groundwater Users Association.
- The Fountain Creek transit loss model maintained by the USGS.

3.5 Other Exchange or Trade Opportunities.

- The participants in this study, some of whom share system interconnections, may have opportunities to optimize their infrastructure investments through trading renewable water supplies
- Entities that could benefit from a trade or exchange of water.
- The core delivery infrastructure that would be necessary.
- Additional system interconnects.
- Municipal code, charter requirements, and policies of the City of Colorado Springs and Colorado Springs Utilities (as determined by the Utility Policy Advisory Committee, UPAC) that could affect the ability to include use of their infrastructure as part of the trade or exchange strategy.

3.6 Other Proposed Regional and State Water Projects.

- Study participants may have interests in a variety of other water supply projects to benefit the region, such as agricultural transfers, Greenland Ranch, Blue Mesa, and Flaming Gorge. The study will include a brief overview of those projects of interest. The study will also identify how those water supply projects could be integrated with the regional water supply infrastructure envisioned for Areas 1 - 3.

Task Deliverable: Revised draft section describing preliminary assessment of alternatives.

Task 4 – Project Work Session

Description of Task

The objective of the work session will be to clarify objectives, preferences, and goals for the project and further narrow down the number of alternatives to carry forward for more detailed analysis so that the remaining analyses can be focused and efficient.

Method/Procedure

The preliminary assessment will be presented by Forsgren Associates Inc. for review and discussion at a Project Work Session.

From the Project Work Session, and follow up meetings if necessary, participants will develop up to six alternative actions incorporating part or all of each focus area on which to complete a detailed evaluation.

Task Deliverable: Presentation materials for Work Session. Meeting minutes documenting discussion and decisions.

Task 5 – Develop Feasibility Study

Description of Task

The results of the data review, preliminary analysis, and work session will be used to complete the analysis of the six alternatives. It is anticipated that the proposed feasibility study will include the following for each alternative analyzed.

Method/Procedure

5.1 – 5.4 Alternatives Development, Prioritization of Preferred Alternative, Life-Cycle Cost Analysis, Final Cost Estimates and Water System Financing

We will use the following information to rank alternatives and provide recommendations for implementation.

1. Statutory compliance with water rights and state water policy.
 - a. Recommend technical and legal activities necessary for compliance of proposed action.
 - b. Develop costs for inclusion in project cost estimate.
2. Ability of proposed water source to meet availability, quantity, and timing requirements.
3. Water quality and related costs/tradeoffs.
4. Technical feasibility.
 - i. Route availability and easement/ROW needs.
 - ii. Known surface and subsurface conditions for proposed site/route.
- b. System capacity requirements (with associated preliminary design and cost estimates).
5. Environmental/permitting issues.
6. General qualitative effects on nonconsumptive uses such as environmental and recreational value.
7. Financial feasibility including capital, O&M, and cost recovery.
8. Funding availability.
9. Facilities management methods and requirements.

5.5 Presentation to Boards

A summary of the study findings, alternatives analysis, and proposed study recommendations will be presented to each of the participating water purveyors. The presentation will provide a forum for participating entities to clarify findings and give input on study recommendations.

5.6 Presentation/Coordination with Arkansas Basin Roundtable

A summary of the study findings, alternatives analysis, and study recommendations will be presented to the Arkansas Basin Roundtable. Forsgren will also coordinate with the Roundtable to provide the Study results as part of the Roundtable's input to the State Water Plan.

5.7 Study Recommendations

Based on the project findings and input from the presentation to boards, recommendations will be prepared for project implementation, including timeline and budget.

5.8 Finalize Study

Task Deliverables: Draft Water Supply Feasibility Study document, Final Regional Water Supply Feasibility Study document, Presentation for participant boards and Arkansas Basin Roundtable (electronic file), finalized GIS map with layered features, and finalized display map with overlays.

Task 6 – Project Administration

Description of Task

Administration and grant accounting.

Method/Procedure

Balanced Management Services Co. will provide services.

Task Deliverable: Invoicing and Project Deliverables coordinated with CWCB.

The above statements are true to the best of my knowledge.

Signature of Applicant:

Applicant's Name: Pikes Peak Regional Water Authority

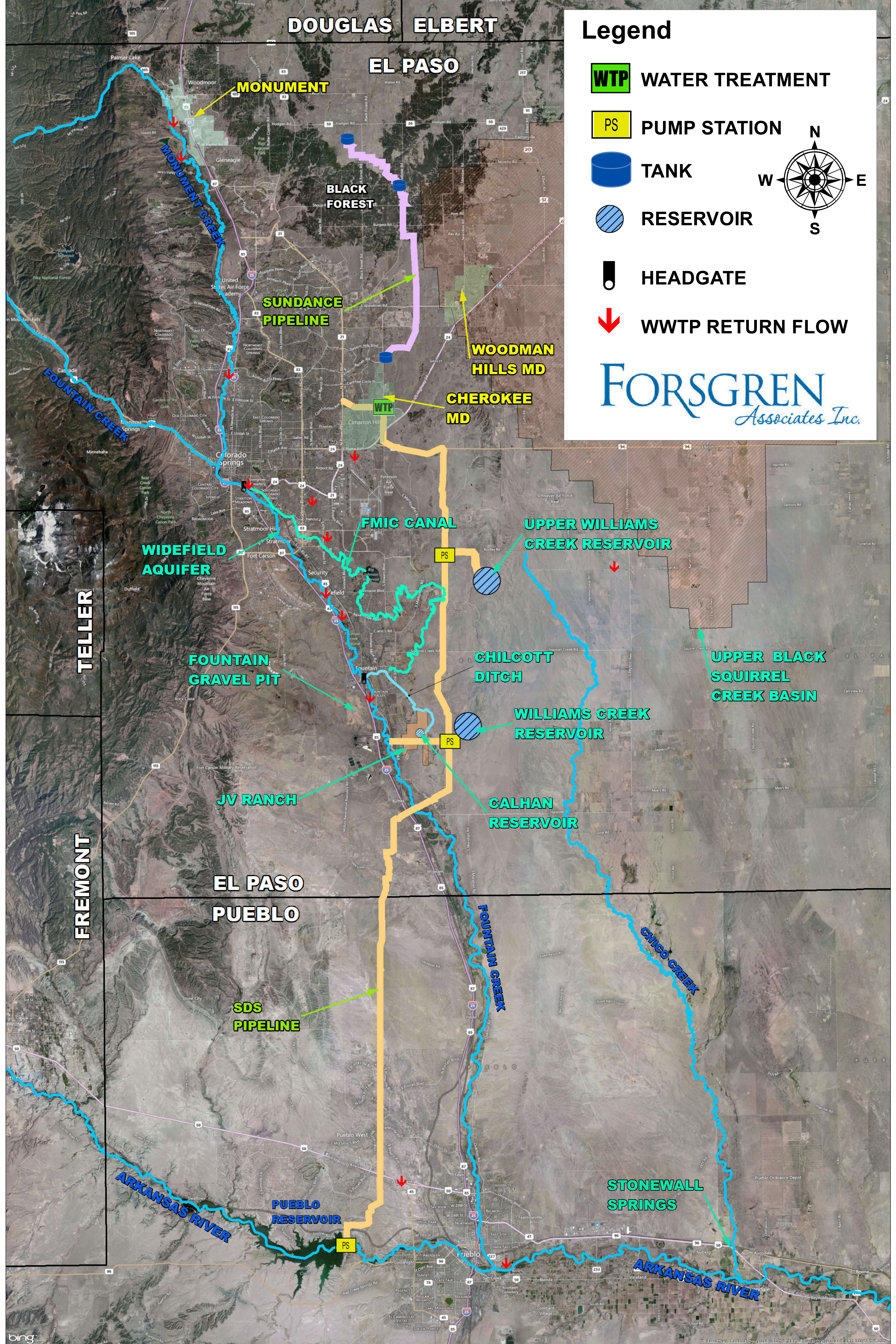
Project Title: **REGIONAL WATER SUPPLY INFRASTRUCTURE FEASIBILITY STUDY**

BUDGET - REGIONAL WATER SUPPLY INFRASTRUCURE FEASIBILITY STUDY
BUDGET BY FUNDING SOURCE

Task #	Task Description	Matching Funds	Grant Funds	Total Expense
1	SCOPING MEETING AND PROJECT OBJECTIVES	\$ 2,820		\$ 2,820
2	PRELIMINARY ANALYSIS			
2.1	Literature Review	\$ 8,560		\$ 8,560
2.2	Individual Entity Meetings	\$ 11,975	\$ 9,855	\$ 21,830
2.3	Needs Assessment	\$ 5,305	\$ 5,305	\$ 10,610
2.4	Operations, Infrastructure, and Priorities Summary	\$ 11,990	\$ 11,990	\$ 23,980
2.5	Coordination with Agencies	\$ 2,025	\$ 2,025	\$ 4,050
2.6	Mapping	\$ 1,785	\$ 1,785	\$ 3,570
3	PRELIMINARY DEVELOPMENT OF ALTERNATIVES			
3.1	Area 1-Pueblo Reservoir to South Fountain	\$ 6,125	\$ 6,125	\$ 12,250
3.2	Area 2-South Fountain to Black Forest	\$ 3,255	\$ 3,255	\$ 6,510
3.3	Area 3-Black Forest to Palmer Divide	\$ 4,775	\$ 4,775	\$ 9,550
3.4	Reuse	\$ 3,950	\$ 3,950	\$ 7,900
3.5	Other exchange or trade opportunities	\$ 3,765	\$ 3,765	\$ 7,530
3.6	Other proposed regional and state water projects	\$ 685	\$ 685	\$ 1,370
4	PROJECT WORK SESSION	\$ 3,195	\$ 3,195	\$ 6,390
5	FEASIBILITY STUDY			
5.1	Alternatives development	\$ 3,035	\$ 3,035	\$ 6,070
5.2	Prioritization of preferred alternatives	\$ 1,895	\$ 1,895	\$ 3,790
5.3	Life-cycle cost analysis and final cost estimates	\$ 1,160	\$ 1,160	\$ 2,320
5.4	Water system financing	\$ 1,015	\$ 1,015	\$ 2,030
5.5	Presentation to boards	\$ 1,620	\$ 1,620	\$ 3,240
5.6	Presentation/coord. with Arkansas Basin Roundtable	\$ 1,765	\$ 1,765	\$ 3,530
5.7	Study recommendations	\$ 1,455	\$ 1,455	\$ 2,910
5.8	Finalize Study	\$ 4,845	\$ 4,845	\$ 9,690
6	GRANT ADMINISTRATION	\$ 1,500	\$ 1,500	\$ 3,000
Totals:		\$ 88,500	\$ 75,000	\$ 163,500

TIMELINE - REGIONAL WATER SUPPLY INFRASTRUCTURE FEASIBILITY STUDY

[illegible]



DOUGLAS ELBERT

EL PASO

MONUMENT

BLACK
FOREST

SUNDANCE
PIPELINE

WOODMAN
HILLS MD

CHEROKEE
MD

FMIC CANAL

UPPER WILLIAMS
CREEK RESERVOIR

WIDFIELD
AQUIFER

FOUNTAIN
GRAVEL PIT

CHILCOTT
DITCH

WILLIAMS CREEK
RESERVOIR

UPPER BLACK
SQUIRREL
CREEK BASIN

JV RANCH

CALHAN
RESERVOIR

EL PASO
PUEBLO

SDS
PIPELINE

PUEBLO
RESERVOIR

STONEWALL
SPRINGS

ARKANSAS RIVER

FOUNTAIN CREEK

CHICO CREEK

ARKANSAS RIVER

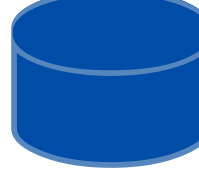
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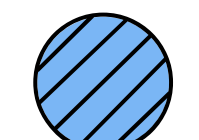
WATER TREATMENT



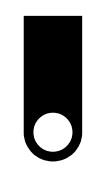
PUMP STATION



TANK



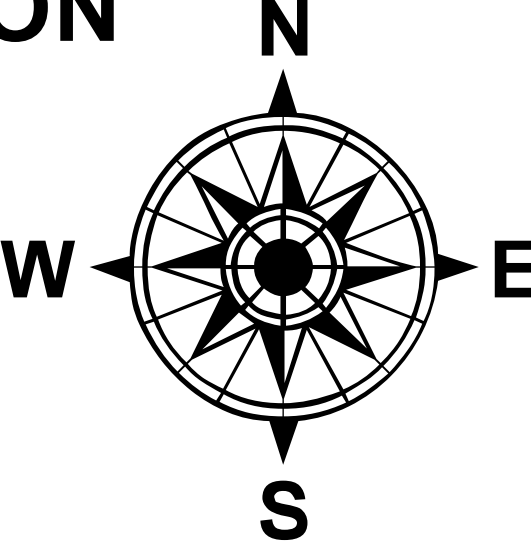
RESERVOIR



HEADGATE



WWTP RETURN FLOW



FORSGREN
Associates Inc.

TELLER

FREMONT