COLORADO
Colorado Water Conservation Board
Department of Natural Resources

1313 Sherman Street, Room 721
Denver, CO 80203

February 17, 2015

Southeastern Colo Water Conservation District
Attn: Jean Van Pelt
31717 United Ave.
Pueblo, CO 81001-4817

RE: Notice to Proceed – WSRA Grant – Water Quality Working Group in the Arkansas River Basin

Dear Jean:

This letter is to inform you that the purchase order request for the WSRA grant to assist in the Water Quality Working Group in the Arkansas River Basin was approved on February 13, 2015.

With the executed purchase order, you are now able to proceed with the project and begin invoicing the State of Colorado for costs incurred through March 31, 2016. Please provide the project name, contract or purchase order number, and basin when corresponding with or invoicing the State of Colorado for your project. Upon receipt of your invoice(s), the State of Colorado will provide payment no later than 45days after review and signed approval by the project manager. I wish you much success in your project.

Sincerely,

/s/

Brent Newman
Program Manager
Colorado Water Conservation Board
Water Supply Planning Section
1313 Sherman St, Rm. 71
Denver CO 80203
(303) 866-3441, ext 322(office)
brent.newman@state.co.us

STATE OF COLORADO
Department of Natural Resources

ORDER
Number: POGG1 PDAA 20150000000000000229
Date: 02/13/15
Description:
PDAA 2500 Ark SECWCD Water Quality Working Group
Effective Date: 02/13/15 Expiration Date: 03/31/16

BUYER
Buyer:
Email:

VENDOR
SOUTHEASTERN COLO WATER CONS DIST
31717 UNITED AVE
PUEBLO, CO 81001-4817

Contact: Jean Van Pelt
Phone: 7199482400

**** IMPORTANT ****
The order number and line number must appear on all invoices, packing slips, cartons and correspondence

BILL TO
COLORADO WATER BOARD CONSERVATION
1313 SHERMAN STREET, ROOM 718
DENVER, CO 80203

SHIP TO
COLORADO WATER BOARD CONSERVATION
1313 SHERMAN STREET, ROOM 718
DENVER, CO 80203

SHIPPING INSTRUCTIONS
Delivery/Install Date:
F.O.B: FOB Dest, Freight Allowed
VENDOR INSTRUCTIONS:

Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
1	G1000		0	0.00	$29,460.00	☐

Description: PDAA 2500 Ark SECWCD Water Quality Working Group

Service From: 02/13/15 Service To: 03/31/16

TERMS AND CONDITIONS
https://www.colorado.gov/osc/purchase-order-terms-conditions

DOCUMENT TOTAL = $29,460.00

Exhibit A

Project Proposal

Creation of Lower Arkansas Valley Water Quality and Water Use Efficiency Working Group

Overview

The management of water resources in the Lower Arkansas River Valley has evolved rapidly over the past decade. Regional solutions to water resources management have been increasingly important as evidenced by the approval of the National Environmental Protection Act (NEPA) Environmental Impact Statement (EIS) Record of Decision for the Arkansas Valley Conduit (AVC) (which will be administered by the Southeastern Colorado Water Conservancy District (hereafter the "District")) and the administration of Rule 10 and other water replacement programs being conducted and administered by the Lower Arkansas Valley Water Conservancy District (hereafter the "LAVWCD").

In addition, there has been an increasing willingness to share water supply infrastructure and resources between larger municipalities and smaller water companies and municipalities. La Junta, for example has constructed connections from its distribution system to Homestead and the Town of Swink. The sharing of regional resources is expected to become more important as water resources become scarcer and competition for these resources increase.

As part of the regional management of water resources, the District has developed, and is in the process of updating, a Regional Water Conservation Plan (RWCP). The RWCP was mandated by Reclamation and supported with funding from Reclamation and the Colorado Water Conservation Board. The RWCP addresses and supports improvements in water use efficiency for 38 AVC project participants. It is in the process of being expanded to include those organizations that were not party to the AVC but will be partners in the Excess Capacity Master Contract with the District. Among other things, the RWCP presents specific data and information on best management practices (BMPs) that water utilities and private companies can implement to improve local water use efficiency and reduce customer demand (through conservation practices).

In recent years, there has also been a more clear understanding of the connection between water availability for municipal use and water quality. Many water companies and municipalities in the Lower Arkansas River Valley utilize source water that is impacted by metals, salts and/or radionuclides (see Table 1). The management of these source waters has become more complicated as a result of recent regulatory actions by the Colorado Department of Public Health and the Environment (CDPHE). Specifically, CDPHE has promulgated a new Solid Waste Regulation (Section 9) which may be applicable to the ongoing operations of those water providers that perform iron filtration and metals removal as part of their day-to-day water treatment.

Under this regulation, the water providers that do not have exempt facilities are required to either develop an engineering design and operation plan (EDOP) to operate a solid waste management facility or a Demonstration Plan showing site-specific data that the operations pose little risk to local groundwater resources. This requirement has created issues in the Lower Arkansas Valley for two reasons:

1. Most of the private water companies do not have the available resources to either develop the EDOP or the Demonstration Plan. To this point, it appears that none of the potentially regulated entities that operate "regulated water treatment operations" have filed either an EDOP or Demonstration Plan[1].
2. The State has not had the resources to interact with the potentially regulated group of water providers in a consistent manner such that some confusion currently exists regarding what is required and is not required.

Finally, and most importantly, the construction and the operation of the AVC is widely known as the best management practice to eliminate the need for iron treatment (see Table 2[2]) – which also improves local water use efficiency since water is not used and discharged to waste as a result of operating and backwashing iron filters. Therefore, the AVC construction and operation will eliminate the need for iron filter backwash, and in doing so will eliminate the operation of the water treatment facilities that have been targeted under the State solid waste regulations.

Given that the design and construction of the AVC is ongoing, and has been receiving federal funding consistently, there is some question regarding the need for those small and medium water providers in the lower Arkansas River valley to commit substantial resources for conducting expensive engineering studies and designs, as well as construction and operation of expensive new water treatment facilities to address the Section 9 regulations if the need for the new systems is fifteen years or less.

The Section 9 regulation has a clause that indicates the following:

> *"Based on a case-by-case determination by the Department, other waste impoundments may be exempt under Section 9.1.2 (A) (18) of the Solid Waste Regulations. If a facility wishes to pursue this exemption, the facility should contact the Department prior to making a formal request."*

This clause may be applicable to the temporary operation of the potentially regulated water providers; however for it to apply, the State would need to apply it consistently for those organizations in the valley that will benefit from the AVC in the future. Also noteworthy is that the management of the iron filter backwash water is/will be part of both local and regional water conservation efforts. Therefore,

[1] Based on phone conversations with CDPHE personnel; however this point requires additional clarification.
[2] According to the STAG, the Participant group with the most challenging water quality issues and concerns are those dealing with groundwater that has both metals (typically iron and sometimes manganese) and radionuclide content that provide challenges with meeting water quality regulations for potable water. The additional challenge associated with handling and disposing of residuals with high levels of radionuclides is also of concern. The participants facing metals and/or radionuclides concerns are listed in Table 2.

the District's updated RWCP (and some local water conservation plans) will need to include information regarding the BMP for this waste stream.

As part of the BMP, a working group is being proposed to bring together the key stakeholders with the following objectives in mind:

i) Identify workable solutions for the appropriate management of water resources in the Lower Arkansas Valley in light of new water supplies that are being planned to replace currently impacted water sources.
ii) Support local water companies that have limited financing options available to maintain and upgrade infrastructure and sustain regulatory response investments.
iii) Develop a consistent application of the applicable or relevant regulations to those entities that are either directly or indirectly impacted – including those requirements for water use efficiency, solid waste management, safe drinking water and overall water resources management while providing safe and affordable potable water to the served community.

The working group has been conceived to include those entities that have a stake in the outcome of the discussions and/or have a potential role in the development and implementation of solutions. This may include, but is not limited to, the following organizations:

- Local water providers in the Lower Arkansas River Valley (see Table 1)
- Bent, Crowley, Otero and Prowers County officials
- Lower Arkansas Valley Water Conservancy District
- Southeastern Colorado Water Conservancy District
- Arkansas River Basin round table
- CDPHE (solid waste and drinking water divisions)
- Colorado Water Conservation Board
- Department of Local Affairs
- US Bureau of Reclamation

Table 1 – Summary of Water Treatment Utilized by Water Companies and Municipalities in the Lower Arkansas River Valley (reproduced from the STAG Report (Black and Veatch, 2010))

NAME	GPD - Current Demands				Water Source	Treatment	Treatment System	Issues w/ Source	Additional Notes
	Summer Avg	Summer Max	Winter Avg	Winter Max	Surface or Ground	Method	Age (approximate)		
Avondale	13,000	243,750	70,000	131,250	Ground	Green Sand Presure filter and US GAC unit	29 years	TNT residual	US Army assists with treatment. Want to replace with 100% conduit water.
Bents Fort Water Co.	62,000	85,000	49,000	59,000	Ground	Sodium Hypochlorite	45 years	None reported	56k gallons per day, future avg. day
Boone, Town of	80,000		30,000		Ground	Chlorine Gas	47 years	None reported	No AVC interest indicated
Cheraw, Town of	50,000	70,000	25,000	30,000	Ground	Prechlorination, Sand Pressure Filters & Post-Chlorination if needed	8 years	Radium 226/228 Iron & Manganese filtration	CORAD list. Unknown % desired to blend for compliance.
Crowley County Water Assoc.	286,000	572,000	154,000	308,000	50% Ground / 50% Surface	Chlorine Gas	None	None reported	Surface water is ag use only. No AVC interest indicated.
Crowley, Town of	21,450	39,496	7,150	15,796	Ground	None	None	Hardness	Desire 100% replacement with AVC
Eads, Town of	300,000	700,000	125,000	200,000	Ground	Add blended phosphates and Chlorine Gas	19 years	Alkalinity 250, Hardness 250-487, TDS 1550 (winter)	CORAD list.100% winter supply through AVC & about 50% summer to blend.
East End Water Assn.	10,000	17,500	10,000	17,500	Ground	No Response	None	Radionuclides	CORAD list.
Eureka Water Co.	85,000	105,000	40,000	52,000	Ground	Filtration to remove Iron & Sodium Hypochlorite	42 years	Gross Alpha - Radium 226/228, use 100% of winter demand for conduit supply 60k per day	CORAD List. May consider connect to Rocky Ford, would need aug water. R/O treatment at tap preferred alternative (costs)
Fayette Water Assn.	11,032	12,076	10,812	13,520	Ground	Chlorination & Filtration	51 years	Radium 226/228	CORAD list. Want 6.5kgpd to blend, R/O at tap, should look at 100% replacement.
Fowler, Town of	375,000	850,000	190,000	0 (??)	100% Ground + Ag water	Conventional North Springs - Chlorine only Hammond Spgs - Chlorine + bag filter	20 years	Selenium	95k gpd, may be able to transfer other rights to AVC?
Hancock Inc.	8,813	33,750	2,938	11,250	Ground	American Standard unit Filter Sand & Ozone Oxidzer + Chlorine	40 years	Radium	CORAD list. Rocky Ford to take over.
Hasty Water Company	32,000	44,000	18,000	23,000	Ground	Chlorination	None	Iron	25Kgpd AVC desired
Hilltop Water Co.	46,000	89,000	32,000	45,000	Ground	Pressure Sand Filters Sodium Hypochloride	51 years	Poor quality, no details	Either purchase water from Rocky Ford or 100% AVC desired
Holbrook Center Soft Water	17,944	40,760	14,153	36,730	Ground	Cholrination - Calcium Hypochlorite	55 years	Radium 226/228	Under enforcement order not to drink water. Want 16 kgpd from AVC. Likely to need 100%
Homestead Improvement Assn.	7,900	10,500	4,250	5,500	Ground	Purchased from La Junta w/ exchange of Fry-Ark water	None	Radium 226/228 with Homestead's well	CORAD List. Currently hooked up to La Junta. Would use 100% AVC water
La Junta, City of	2,401,000	4,200,000	1,003,000	2,002,000	Ground & Surface Augmentation	Split between R/O & Press. Filters (80% R/O & 20% Filter), bleach disinfect. Cartridge filters pre-R/O & ports for bags.	5 years	Pressure filters for oxidation & removal of Iron & Manganese. Other source issues: TDS, selenium, uranium, radium & sulphates	TDS from 1400 ppm to 300 ppm. Want 1.2 mgd AVC and have other usable surface water rights
Lamar, City of	3,500,000	4,500,000	1,200,000	2,300,000	Ground + Ag	Chlorination, Fluoridation & Sequestering agent (iron & manganese)	49 years completing projct for pre-storage chlorination in Jan 2010	Surface water not used in potable system	Wells have TDS from 825 ppm to 1480 ppm. Desire 1 mgd from AVC
Las Animas, City of	574,000	935,000	296,000	296,000	Ground + surface	RO	13 years	Poor quality, no details	Concern of future R/O costs; 100% AVC preferred.
Manzanola, Town of	40,030	60,000	26,687	40,000	Ground	Iron removal filters & blending for radium Chlorine gas	8 years	Radium 226/228 & Uranium deep wells, hardness shallow wells	CORAD List. 75% AVC desired for blend with 25% well water. (31 kgpd)
May Valley Water Assoc.	525,000	600,000	230,000	280,000	Ground	high-flow sand filters & 10% sodium hypochlorite	48 years	Radum 226/228 & gross alpha	CORAD list. Details of water quality and % of AVC desired not stated
McClave Water Assoc.	61,500	85,000	43,000	43,500	Ground Fry-Ark surface + Agricultural	Blending. One well limited to 27% production due to poor quality.	None	Exceed the secondary MCL for Flouride, Radium 226/228	75 kgpd AVC desired, or 30 to 70% blend for water quality purposes
Newdale-Grand Valley Water Co.	65,000	135,000	31,000	65,000	Ground	Conventional; Green Sand Pressure Filters	45 years	Radionuclides	Either service from Rocky Ford or 100% AVC

Table 1 (continued) – Summary of Water Treatment Utilized by Water Companies and Municipalities in the Lower Arkansas River Valley (reproduced from the STAG Report (Black and Veatch, 2010))

NAME	GPD - Current Demands				Water Source	Treatment	Treatment System	Issues w/ Source	Additional Notes
	Summer Avg	Summer Max	Winter Avg	Winter Max	Surface or Ground	Method	Age (approximate)		
Olney Springs, Town of	73,953	100,000	21,496	25,000	Ground + Ag	None	None	Selenium, Manganese	Can put their surface water rights into the conduit. Limited good spring water. 100% replacement of bad water through AVC
Ordway, Town of	130,200	297,080	55,980	127,320	Ground	None	None	Poor quality, no details	Desires AVC water, but no amount stated. Also has water rights for augmentation of supply
Patterson Valley	17,500	42,000	7,500	18,000	Ground	Conventional / Bleach	48 years	Gross Apha 30 pCi/l Radium 226 / 228 27.3 pCi/l	CORAD list. Either service from Rocky Ford or 100% AVC
Rocky Ford, City of	1,000,000	1,200,000	512,000	600,000	Ground + Surface	Conventional	0 years (under construction now)	None reported	Desire 581 kgpd AVC. Surface water in litigation. Treatment Plant presently being upgraded
South Side Water Assoc. (LaJunta)	6,600	11,000	5,400	9,000	Ground	None	None	None reported	30 to 50% to blend with current
South Swink Water Co.	93,000	140,000	64,000	75,000	Ground	Chlorine Gas, presure sand, & anthracite filters	50 years	Gross Apha, Radium 226/228, TDS (800-1200) & Iron (1 - 3.5 mg/l)	CORAD list. 70 to 100% AVC desired. Have alternate source for AVC. Current wells don't meet standards
St. Charles Mesa Water District	2,000,000	4,000,000	750,000	1,100,000	12% Ground / 88% Surface	Chlorine Dioxide pre-treat., activated carbon, Micro-floc TR840 Alum & Polymer Addition	31 years	None reported	1.7 mgd back up and drought reserve. AVC alignment/locaiton will influence the district decision for participation
Sugar City, Town of	365,194	11,321,030	156,512	4,851,870	Ground + surface	not reported	?	None reported	
Swink, Town of	34,000	42,000	34,000	42,000	Ground	built 1976, method not stated, cl gas disinfection	33 years	Radium 228/228(5.6 pCi/l, Flouride (2.14 ppm)	25 kgpd AVC water for blending. (May need 100% per State.)
Valley Water Co,	43,200	60,000	20,000	36,000	Ground	Sand filter pressure vessel & chlorine gas	Well #1 - 46 years Well #2 - 15 years	Radium 226/228 (5pCi/l), Gross Alpha	CORAD list. Desires 30 kgpd AVC water for blending to bring radium into compliance (may need 100% per State)
Vroman	38,000	50,000	16,000	25,000	Ground	Sodium Hypochlorite sand/gravel/anthracite filter for iron removal	51 years	Radium 226/228, iron	CORAD list. Considering point of use R/O. Wants to keep AVC option open. (may need 100% per State)
West Grand Valley Water Inc.	20,000	45,000	25,000	35,000	Ground	New plant has ozone generator & pressure sand filters	8 years (2001 const.)- 2005 survey 52 years - 2009 survey	Poor water quality, details not reported.	Desire 16 kgpd to blend with existing or replacement source. Alternate to consider service from Rocky Ford.
West Holbrook Water	15,000	50,000	10,000	40,000	Ground	None	None	None reported	Desire 10 kgpd AVC water to supplement existing
Wiley, Town of	28,000	84,000	12,000	36,000	Ground	Conventional Chorination & Filtration	4 years		CORAD List. Didn't state level of interest in AVC.

Table 2 Water Companies and Municipalities with Metals and/or Radionuclides (reproduced from the STAG Report (Black and Veatch, 2010))

Participant	CDPHE Radionuclide List*	Treatment Focus/Concern	Preferred Action
Cheraw, Town of	No	Oxidation prior to pressure filters for Fe & Mn removal /Radium in sludge	Blend AVC water
East End Water Association	Yes	Not provided	Not provided
Eureka Water Company	Yes	Filtration for Fe removal/Gross Alpha & Radium	Service from Rocky Ford or R/O at tap
Fayette Water Association	Yes	Filtration (probably for metals)/Radium	Blend AVC water or R/O at tap
Hancock, Inc.	Yes	Filtration (probably for metals), Radionuclides	Water supply is to be provided by Rocky Ford.
Hilltop Water Company	No	Filtration (probably for metals), Radionuclides	Service from Rocky Ford or 100% AVC water
Holbrook Center Soft Water	No	No treatment/Radium, under CDPHE enforcement not to drink water	Want AVC water to blend for compliance
Homestead Improvement	Yes	No treatment/Radium – currently purchase water from La Junta	Want 100% AVC water
Manzanola, Town of	Yes	Filtration for Fe removal/Radium & Uranium	75% AVC water to blend
May Valley Water Assoc.	Yes	Oxidation prior to filtration (probably for metals)/Radium & Gross Alpha	No details on amount of AVC water desired
McClave Water Assoc.	No	Blending wells/Fluoride & Radium	30 to 70% AVC water to blend
Newdale-Grand Valley Water Company	No	Greensand pressure filters (probably for metals)/Radionuclides	Want service from Rocky Ford or 100% AVC water
Patterson Valley	Yes	Filtration (probably for metals)/Gross Alpha & Radium	Service from Rocky Ford or 100% AVC water
South Swink Water Co.	Yes	Sand Press. Filters and Anthracite Filters/Gross alpha, Radium, TDS and Fe concerns	Want 70 to 100% AVC water (have other rights they'd like to use through AVC)

Table 2 Water Companies and Municipalities with Metals and/or Radionuclides (reproduced from the STAG Report (Black and Veatch, 2010))

Participant	CDPHE Radionuclide List*	Treatment Focus/Concern	Preferred Action
Valley Water Company	Yes	Sand. Press. Filters (probably for metals)/Radium & Gross Alpha	Desires 30 kgpd AVC water for blending.
Vroman	Yes	Oxidation & multimedia filtration for Fe/Radium & Fe	R/O at tap first choice, AVC water second choice
Wiley, Town of	Yes	Filtration/none listed	No commitment to AVC

* On CDPHE Southeast Colorado Radionuclide (CORAD) MCLs list – Note that the preferred action listed in this table may have altered since this report was produced in 2010. Some of the entities have since committed to the AVC as their preferred action in the period since 2010.

Grant Request

The scope of work includes those activities that will be used to address those objectives stated above. Specifically, the scope includes the following:

- Preparing for and facilitating five working group meetings, held approximately every other month from February to October 2015;
- Conducting various objective data collection activities related to understanding and framing the issues to support working group facilitation;
- Providing for meeting set-up (e.g., coordination of logistics), meeting follow-up (e.g., preparing and delivering meeting minutes), and scenario development (i.e., developing assessments associated with potential options for compliance outcomes and policy revisions) as required to keep the working group focused and supported; and
- Conducting project administration, which includes invoicing and preparation of progress reports.

The proposed scope relates to the initial development and centering of the working group members into a team, and the identification of activities that will help meet the combined needs of the diverse working group participants. Additional funding may be needed to support further meetings, additional scenario development and related exercises that the working group identifies as needed to support the needs of the local water utilities and companies, the CDPHE and the local community.

Detailed Scope of Work

The scope of work will proceed in four separate tasks that will occur first consecutively then concurrently. These tasks are as follows:

- Task 1 – Data Collection
- Task 2 – Working Meetings
- Task 3 – Reporting and Communications
- Task 4 – Project Administration

Each of these tasks will be described below.

Facilitating the working group will progress using the ORID method of data collection, assessment and integration as a means to move the process forward and identify (and assess) potential solutions to the radionuclide and solid waste issues that exist in the Lower Arkansas River Valley. The ORID method involves collecting and organizing the information related to the issues that the working group will attempt to address in the following manner:

i) Objective – collect information related to “what do we know about the issues?”
ii) Reflective - collect and summarize information related to “what have been some of the challenges in the past regarding the issues?”
iii) Interpretive – collect and summarize information related to “what have we learned from our experiences about what might work (and what doesn’t work) regarding the issues?

iv) Decisional – integrate the ORI data into resolutions and actions for the group to consider and implement.

Task 1 – Data Collection

This task will include the collection of objective and interpretive data from a selected set of potential working group members, including some key staff from CDPHE, CWCB, and some of the local water providers. This task will be used to create a "read ahead" working group position paper to help those interested entities understand the goal of the working group and to help clarify ground rules and manage expectations. Up to three meetings are envisioned, in addition to numerous phone calls and emails.

The results of data collection will be summarized in a white paper prepared to support the planning and facilitation of the first working group meeting. The white paper will be circulated to those organizations and entities that have shown interest in attending the working group meetings and those that maintain a stake in any potential outcomes from the working group.

Task 2 – Working Meetings

Currently five (5) working meetings are envisioned, occurring on an every other month basis, beginning in February and going through October. The meetings are envisioned to be two to two one half hour long events, which will be held in appropriately sized venues (e.g., locations that will comfortable hold about 20-30 persons with bathroom facilities, parking and seating). Current locations that are under consideration include the Southeastern District's Board Room, CSU Pueblo, and Otero Junior College[3]. The meetings will be publicized via emails and targeted phone calls.

This portion of the scope of work includes:

- Setting up and reserving the meetings room(s)
- Providing limited refreshments during the meeting (water, coffee)
- Providing limited handouts and read ahead information in a printed format for the attendees convenience
- Conducting the meeting – keeping the discussions focused, results-based, and comfortable for the open expression of issues and ideas
- Taking notes during the meeting to support the preparation and circulation of meeting minutes
- Keeping the meeting participants engaged in the process
- Maintaining a list of all meeting attendees and their contact information

Task 3 – Reporting and Communications

Prior to and after each of the five (5) proposed meetings, the project team will conduct activities. Prior to each meeting, a meeting announcement and agenda will be circulated, along with any additional resources that are deemed appropriate. Meeting set-up will also include arranging for all the logistics

[3] The project budget includes the cost of room rental and refreshments associated with each of the five working group meetings.

of the meeting, including room reservation, and preparation and organization of meeting equipment and props as needed; arrangement and coordination of meeting speakers, as needed; and room set-up and clean-up prior to after the meeting occurs.

Meeting follow-up will involve preparing and circulating to the meeting all meeting related documentation including meeting notes, presentations, and other related content. Meeting follow up will also include the circulation of survey monkey, or other related online tool, to track meeting successes and identify changes or adjustments that may be useful to improving the working group process.

One additional component of reporting and communications that is contained within the proposed scope involves the development of "scenarios" that will be conceived as a part of the facilitated meetings. The scenarios relate to those potential actions and policies that the working group determines are worthy of consideration as a means to address the management of radionuclides and other water treatment related solid waste while continuing to provide reliable potable water to the local community(s). Scenario development will include assessing the current regulatory framework, the options (and cost) for local compliance, human health and environment risk (qualitatively) of ongoing and continued operations, and the options for alternative programs. It is possible that additional, more rigorous assessments may be needed to support the working group in its efforts to evaluate and identify best management practices; however, this scope includes the preliminary assessment of scenarios within the limits and boundaries of currently available data, funding, and identified local needs, regional needs, and state regulatory needs.

Scenario development deliverables include the preparation of white paper(s) related to the characterization and assessment of up to three (3) alternative radionuclide management scenarios that have been identified by the working group as reasonable alternatives to address the needs of the stakeholders and the regulatory community.

Task 4 – Project Administration

This task includes the preparation of project invoices and the preparation of project progress reports for the CWCB at 50% and 75% complete.

Proposed Project Budget
Creation of a Lower Arkansas Water Quality and Water Use Working Group
Southeastern Colorado Water Conservancy District

		Bouvette		Expenses	Van Pelt		Working Group Members	
Tasks		hours	$ 120		hours	$ 57.40	hours	$ 60
1	Data Collection							
	Interviews/Data Collection	50	$ 6,000	$ 1,450	30	$ 1,722	32	$ 1,920
	Intrepretations	32	$ 3,840		10	$ 574	0	$ -
		82	$ 9,840	$ 1,450	40	$ 2,296	32	$ 1,920
2	Working Meetings							
	February	12	$ 1,440	$ 1,210	8	$ 459	37.5	$ 2,250
	April	12	$ 1,440	$ 1,210	8	$ 459	37.5	$ 2,250
	June	12	$ 1,440	$ 1,210	8	$ 459	37.5	$ 2,250
	August	12	$ 1,440	$ 1,210	8	$ 459	37.5	$ 2,250
	October	12	$ 1,440	$ 1,210	8	$ 459	37.5	$ 2,250
		60	$ 7,200	$ 6,050	40	$ 2,296	187.5	$ 11,250
3	Reporting/Communications							
	Meeting Set-Up	24	$ 2,880		40	$ 2,296	15	$ 900
	Meeting Follow-Up	60	$ 7,200		42	$ 2,411	30	$ 1,800
	Scenario Development	60	$ 7,200		16	$ 918	15	$ 900
		144	$ 17,280		98	$ 5,625	60	$ 3,600
4	Project Admin							
	Invoicing	14	$ 1,680		6	$ 344	0	$ -
	Progress Reporting	8	$ 960		4	$ 230	0	$ -
		22	$ 2,640		10	$ 574	0	$ -
	Total	308	$ 36,960	$ 7,500	188	$ 10,791	279.5	$ 16,770
				$ 44,460				
				$ 29,460.00	Grant Request			$ 44,460.00
				$ 72,021.20	Total Project Cost			
				$ 7,500.00	District Match (cash)			
				$ 7,500.00	LAVWCD Match (cash)			
				$ 10,791.20	District In-Kind Match			
				$ 16,770.00	Other-In Kind Match			
				$ 42,561.20	Total match			$ 72,021.20
				59%	Match			

Proposed Project Schedule
Creation of a Lower Arkansas Water Quality and Water Use Working Group
Southeastern Colorado Water Conservancy District

		2015										2016	
	Task	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
1	**Data Collection**												
	Interviews/Data Collection												
	Intrepretations												
2	**Working Meetings**												
	March												
	May												
	July												
	September												
	November												
3	**Reporting/Communications**												
	Meeting Set-Up												
	Meeting Follow-Up												
	Scenario Development												
4	**Project Admin**												
	Invoicing												
	Progress Reporting												