

Statement of Work

WATER ACTIVITY NAME - Lower South Platte Water Cooperative Organizational Analysis

GRANT RECIPIENT – Lower South Platte Water Conservancy District

FUNDING SOURCE – South Platte Basin Roundtable WSRA account \$60,977
- Statewide WSRA account \$200,000

INTRODUCTION AND BACKGROUND

During the last decade, augmentation and aquifer recharge efforts have steadily increased in areas in the South Platte River Basin primarily from east of Kersey to the Colorado-Nebraska state line in order to augment out-of-priority depletions from alluvial wells in this area. It has become apparent that during this timeframe both operational and physical inefficiencies coupled with natural hydrology and water supply variations have created times of excess augmentation supplies for various augmentation plans in addition to times of inadequate augmentation supplies for several augmentation plans. During this same timeframe the need for additional water supplies for municipal and industrial growth within the South Platte Basin has rapidly increased. Numerous water providers and water brokers have purchased land within this area with the intent to dry-up the land and transfer the consumptive-use portion of water to municipal and industrial use.

Water users in this area determined that there was a need to research and develop a potential organization that could manage, retime and exchange excess augmentation water within Water Districts 1 and 64 (Kersey to the CO-NE Stateline). A Steering Committee of agricultural water users, water providers, and Colorado Division of Water Resources staff was formed during the first quarter of 2009 to research the feasibility and develop a concept for such an organization. Members of the Steering Committee proceeded to gather and compile data and information from the Colorado Division of Water Resources pertaining to recent augmentation accounting, river hydrology, diversions, and river calls in order to determine quantities and timing of river flows and excess augmentation water in addition to times and quantities of potential river exchanges. It was determined that an estimated 15,000 to 30,000 ac-ft of excess augmentation water exists during average to dry years within Water Districts 1 and 64 during various times of the year, (primarily March thru June) which may be available for retiming, exchanges and lease. Brown and Caldwell consulting engineers reviewed and compiled the data and developed a point flow model of the South Platte River for water years 2002 thru 2008 from Chatfield Reservoir to the CO-NE Stateline. This engineering work was funded as part of an Alternative Agriculture Transfer Method Grant received by the Corn

Exhibit A

Growers Association. Brown and Caldwell also created an exchange analysis during this same timeframe to determine the ability to exchange both excess augmentation water and water from potential alternative agricultural water transfers. Once these preliminary findings were prepared, the Steering Committee then approached the board of directors of the majority of ditch and reservoir companies, augmentation groups and conservancy districts in the area to present the findings and gather feedback and questions regarding the concept. The feedback was mostly positive so long as 1) a new organization was transparent, fair and open and, 2) operations of the plan worked within the framework of current water law and did not injure other water rights in the basin.

Some ditch and reservoir companies, augmentation groups and other water users also conveyed to the Steering Committee that in addition to retiming, exchanging and leasing excess augmentation water to local agricultural entities for improving local agricultural shortages, these groups would also like to have the ability to lease a portion of both their excess augmentation water and potentially their senior direct flow and reservoir water (via conventional or alternative agricultural transfer methods) to municipal and industrial end users. The Steering Committee and other interested parties believe that operations developed under a newly formed Water Cooperative could help address various amounts of existing agricultural shortages as well as a portion of projected municipal and industrial water shortages.

OBJECTIVES

The objectives of this project are 1) to analyze and determine the best organizational structure for a water cooperative in the Lower South Platte River, 2) analyze and determine water law issues related to a water cooperative, 3) research and determine the best fit operational planning for the water cooperative, and 4) finalize the findings to the point of potential initiation of a water cooperative organization.

TASK 1 – [Organizational Structure]

Description of Task

Research and evaluate existing organizational structures created for the management and leasing of agricultural water. Legal research regarding viable organizational form and structure. Development of legal opinions and recommendations regarding viable alternatives and prioritization of best fit alternatives. The engineering consultants will assist the legal consultants concerning development of an organizational structure and any technical issues related to such a structure. Water users will also

Exhibit A

be polled as part of this task to determine interest in and preferences for each organizational structure alternative.

Method/Procedure

Task 1 primarily involves work by the legal consultants to research and identify viable organizational forms/structures that could be used for the Water Cooperative, and describe the necessary documents, other work, and potential costs that would be necessary under the identified alternatives. It is anticipated that standard legal research techniques would be used. Also included in this Task would be meetings and other communications with the Steering Committee and water users to discuss possible alternatives, and creation of a final report/opinion letter describing alternatives, analysis, conclusions, and recommendations.

Deliverable

Preliminary written communications and final report/opinion letter describing alternatives, analysis, conclusions, and recommendations.

TASK 2 – [Water Law and Water Rights]

Description of Task

Legal research and analysis of water law and water rights issues. Develop recommendations concerning legal requirements and necessary Water Cooperative water management operations and practices to address potential water rights issues and prevent injury. Augmentation decrees and other decrees within Water Districts 1 and 64 will be reviewed and evaluated to determine the ability and constraints to exchange, retire and lease excess augmentation water and/or other types of available water. Future exchange, change of use and new water right filings will also be evaluated as part of this task. The engineering consultants will assist the legal consultants by analyzing any technical issues related to water laws and water rights in conjunction with operational planning.

Method/Procedure

Exhibit A

Task 2 also primarily involves work by the legal consultants. It is anticipated that standard legal research methods will be used. Also included in this Task would be meetings and other communications with the Steering Committee and engineering consultants to discuss possible legal issues and potential injury related to operations under the Water Cooperative, and creation of a final report/opinion letter describing the legal research, identified legal issues, analysis, conclusions, and recommendations.

Deliverable

Preliminary written communications and final report/opinion letter describing the legal research, identified legal issues, analysis, conclusions, and recommendations.

TASK 3 – [Operational Planning]

Description of Task

Task 3 involves work by both the engineering consultants and legal consultants. In this task, a conceptual operations plan will be developed that matches available water supplies with potential demands. The operations plan will describe the locations and amounts of potential water supplies, the locations and amounts of potential water demands, necessary existing/new infrastructure or exchanges that would be needed to convey water between supplies and demands, data collection necessary to properly track water transactions, and accounting needs.

At this stage of work, the operations plan will be developed at a conceptual level. As described previously in this application, it is the intent of the Steering Committee to pursue an AATGP grant in September of 2010 to further develop the operations plan. If that grant application is successful, the conceptual plan developed under this grant will be used to enhance and further advance the detailed operations plan. If the AATGP grant is unsuccessful, the work funded under this grant will be very useful in advancing the concept and potential operations of the Water Cooperative to a point that potential cooperators will have the necessary information to decide whether or not to participate. Additional funding would then be sought to develop a detailed operations plan after the completion of the conceptual operations plan.

Several activities will be conducted in association with this task. These activities are described below:

Exhibit A

- *Identify locations and amount of potential supplies.* This activity will build on the work previously conducted as part of the CCGA's AATGP grant. In this task, augmentation plans with excess augmentation credits will be identified as well as the geographic location where the excess credits occur. Other sources of potential supply will also be identified, such as ditch companies that could engage in alternative agricultural water transfer programs. A conceptual level analysis of the amount of water that could result from alternative transfers will be conducted. The locations of available water from potential alternative transfers will also be identified. Additional water supplies to be explored are storage and direct flow rights that could be leased through the Water Cooperative.
- *Identify location and amounts of potential demands.* Previous work under the CCGA's AATGP grant included fairly broad assumptions as to where demands may be located. In this activity, the locations and amounts of demand for water will be explored in greater detail. Specific locations of agricultural, municipal, industrial, environmental and recreational demands will be identified. The potential amounts of these demands will be estimated.
- *Locations and capacity of infrastructure and exchanges.* This activity will further the work that was begun in the CCGA's AATGP grant. The previous work identified various exchange limitations in the South Platte River and examined one potential location where new infrastructure would help increase the exchange potential through this limiting area. In this activity, the evaluation of exchange potential and new infrastructure (including but not limited to: pumping stations, piping, recharge ponds and storage vessels) will be extended to the CO/NE state line. The locations and amounts of supply and demand identified in previous activities will be used in this evaluation.
- *Data collection needs.* Daily data collection needs will be identified that will be necessary in order to track the water available for transfer to other uses, to manage the water in the cooperative, and to provide the necessary data for accounting purposes.
- *Water accounting needs.* Necessary water accounting data and information will be identified.
- *Reporting.* A report describing the conceptual operations plan will be written. Recommendations for future work will be provided.
- *Legal Evaluation of conceptual operations plan.* The legal consultants will assist the engineering consultants concerning development of the conceptual operations plan and any legal issues related to such plan.

Exhibit A

- *Drafting of Operational Documents.* The legal consultants will assist with drafting of any necessary initial operations plan documents.

Method/Procedure

The methods and procedures to be used in this task are described below:

- *Identify locations and amount of potential supplies.* Previous work in identifying augmentation plans with excess credits will be used for this task. In addition, a conceptual level assessment of Lower South Platte ditch systems will be conducted to estimate the amount of water that could be transferred through alternative means. To conduct this assessment, information describing historical diversions, irrigation water demands, irrigated acreage, and previous change cases will be collected and assessed to develop rough estimates of the amount of historical consumptive use that could potentially be transferred using alternative (or conventional) methods. In addition, representatives from ditch companies interested in the Water Cooperative concept will be interviewed to verify or supplement information derived in this analysis. The locations and amounts of potential supply will be mapped in GIS and will be included in the report.
- *Identify location and amounts of potential demands.* The location and amount of potential demands will be better defined and mapped. Representatives of augmentation plan groups who have shown support for the Water Cooperative concept will be interviewed to better understand the amount, timing, and location of their water demands. Municipal water providers and their representatives will be interviewed as well. The results of this research, including the locations and amounts of demands, will be mapped in GIS and will be included in the final report.
- *Locations and capacity of infrastructure and exchanges.* This activity will use the analysis tools developed for the CCGA AATGP work. The analysis tools consist of a daily point flow model and exchange and infrastructure analysis spreadsheet model. These tools will be used to examine exchanges between points of supply and demand identified in previous activities associated with this grant. New infrastructure needs (i.e.

Exhibit A

pumping stations, piping, new storage, etc.) and their potential capacities will be assessed using this tool.

- *Data and water accounting needs.* These needs will be assessed from an engineering and legal perspective. The needs will be described in the report.
- *Report.* A draft report will be written to document the conceptual operations plan. The draft report will be reviewed by the Steering Committee members, project consultants, interested Water Cooperative participants and CWCB staff for comments and revisions. A final report will then be prepared.

Deliverable

Deliverables associated with this task include the following:

- Maps showing the location of potential supplies and demands, and locations of potential infrastructure improvements.
- Updated analysis tools for assessing exchange capacity and infrastructure
- Report describing the conceptual operations plan.

TASK 4 – [Water Cooperative Development]

Description of Task

Combine all information, analyses, and results of Tasks 1 thru 3 into a comprehensive set of guidelines and an overall summary of potential options for the organizational structure and operational plan of a new water cooperative. Summarize best fit alternatives including estimated costs, benefits, impacts and risks associated with each alternative. Initiate and facilitate meetings with interested water users to discuss findings and opinions, solicit feedback, and evaluate options. Revise alternatives based on water user feedback and comments. Draft initial organizational documents for interested water users to evaluate including, for example, draft bylaws, articles of incorporation, membership petitions and other necessary documents to initiate the potential formation of a Water Cooperative. Coordinate and assist water users with a plan to initiate development of a Water Cooperative organization.

Method/Procedure

Exhibit A

Task 4 will be a cooperative process between the Steering Committee, interested water users, and the legal and engineering consultants.

Deliverable

Final Report, guidelines and summary documents to CWCB, South Platte Basin Roundtable and interested water users and providers.

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

Lower South Platte Water Cooperative Organizational Analysis

Budget (Part 1)

Total Costs				
	Labor	Other Direct Costs	Matching Funds (If Applicable)	Total Project Costs
Task 1 - (Organizational Structure)	\$ 41,012.00	\$ 600.00		\$ 41,612.00
Task 2 – (Water Law and Water Rights)	\$ 43,620.00	\$ 600.00		\$ 44,220.00
Task 3 – (Operational Planning)	\$ 104,775.00	\$ 700.00		\$ 105,475.00
Task 4 – (Water Cooperative Development)	\$ 67,570.00	\$ 2,100.00		\$ 69,670.00
In-Kind Contributions (Current)	\$ 15,290.00	\$ 2,375.00		\$ 17,665.00
In-Kind Contributions (Previous)	\$ 10,300.00		\$ 10,063.00	\$ 20,363.00
Total Costs:	\$ 282,567.00	\$ 6,375.00	\$ 10,063.00	\$ 299,005.00
Total Grant Funds Requested: (deduct in-kind from total costs)	\$ 256,977.00	\$ 4,000.00	\$ -	\$ 260,977.00

Detailed Labor Costs								
Project Personnel:	Sr. Attorney / Project Manager	Other Attorney	Senior Engineer (Technical Review)	Project Engineer	Design Engineer	LSPWCD Engineer	LSPWCD Clerical	Total Costs
Hourly Rate:	\$250.00	\$185.00	\$199.00	\$ 166.00	\$ 106.00	\$ 60.00	\$ 25.00	
Task 1 - (Organizational Structure)	62	102		37		5	8	\$ 41,012.00
Task 2 – (Water Law and Water Rights)	75	100		35		6	8	\$ 43,620.00
Task 3 – (Operational Planning)	90	70	23	190	308	6	8	\$ 104,775.00
Task 4 – (Water Cooperative Development)	150	100		60	10	5	10	\$ 67,570.00
Total Hours:	377	372	23	322	318	22	34	
Cost:	\$94,250	\$68,820	\$4,577	\$53,452	\$33,708	\$1,320	\$850	\$256,977

Lower South Platte Water Cooperative Organizational Analysis
Budget (Part 2)

Other Direct Costs					
Item:	Copies	Materials	Equipment/ Supplies	Mileage	Total
Units:	No.	LS	LS	Miles	
Unit Cost:	\$ 0.10	1	1	\$ 0.50	
Task 1 - (Organizational Structure)	1000	0	0	1000	\$ 600.00
Task 2 – (Water Law and Water Rights	1000	0	0	1000	\$ 600.00
Task 3 – (Operational Planning)	2000	0	0	1000	\$ 700.00
Task 4 – (Water Cooperative Development)	6000	0	0	3000	\$ 2,100.00
Total Units:	10,000.00	-	-	6,000.00	
Total Cost:	\$ 1,000.00	\$ -	\$ -	\$ 3,000.00	\$ 4,000.00

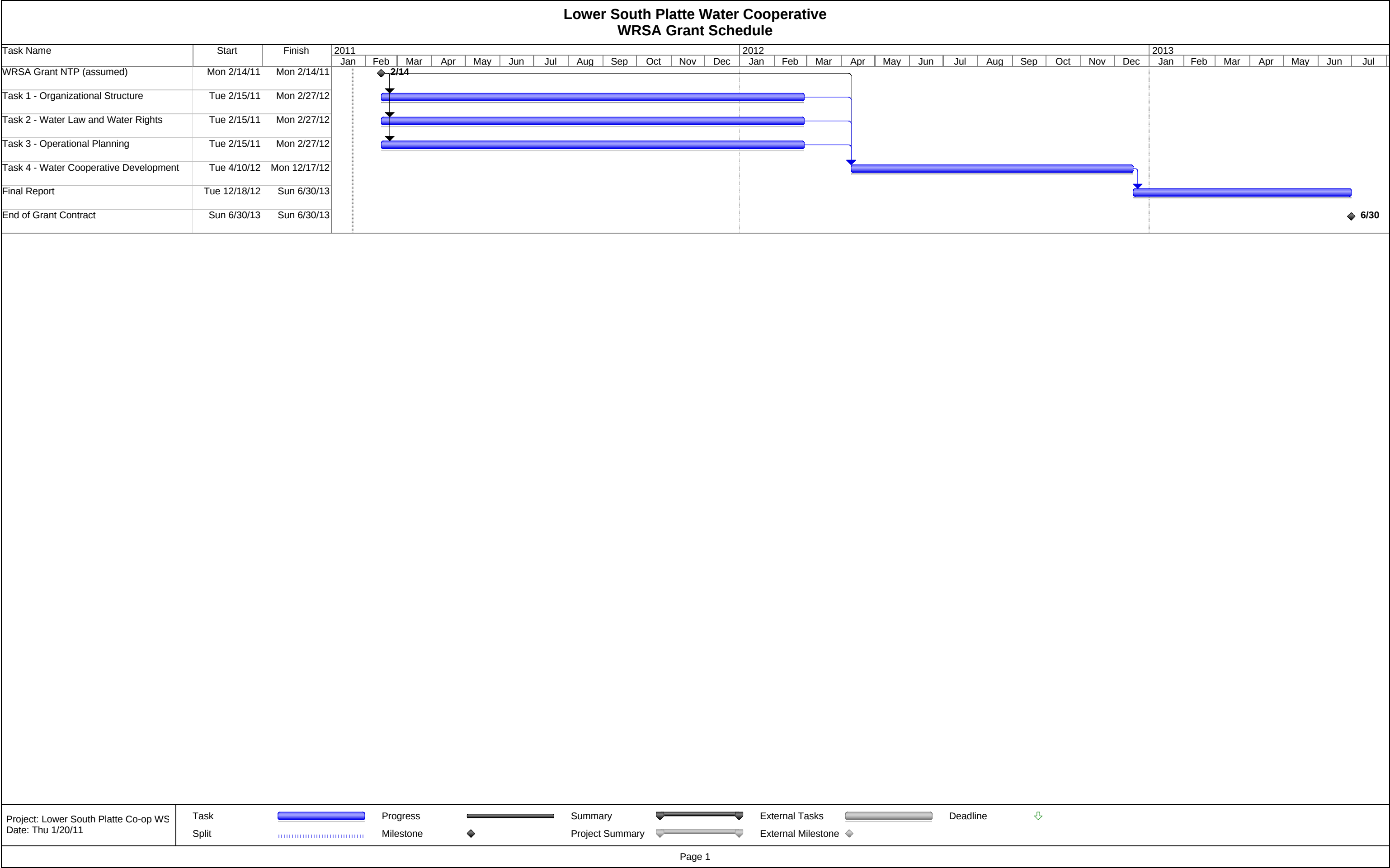
Other Direct Costs (In-Kind)					
Item:	Copies	Materials	Equipment/ Supplies	Mileage	Total
Units:	No.	LS	LS	Miles	
Unit Cost:	\$ 0.10	1	1	\$ 0.50	
Task 1 - (Organizational Structure)	200	200	0	750	\$ 395.00
Task 2 – (Water Law and Water Rights	200	100	0	750	\$ 395.00
Task 3 – (Operational Planning)	300	100	0	500	\$ 280.00
Task 4 – (Water Cooperative Development)	300	500	0	750	\$ 405.00
Total Units:	1,000.00	900.00	-	2,750.00	
Total Cost:	\$ 100.00	\$ 900.00	\$ -	\$ 1,375.00	\$ 2,375.00

Lower South Platte Water Cooperative Organizational Analysis
Budget (Part 3)

In-Kind Contributions (Current Grant Request)					Total
Project Hourly Rate:	LSPWCD Engineer \$ 60.00	LSPWCD Clerical \$ 25.00	Other Engineer \$ 60.00	Financial Payments	
Task 1 - (Organizational Structure)	30	12	20		\$ 3,300.00
Task 2 – (Water Law and Water Rights)	32	12	22		\$ 3,540.00
Task 3 – (Operational Planning)	30	12	20		\$ 3,300.00
Task 4 – (Water Cooperative Development)	40	14	40		\$ 5,150.00
Total Hours:	132	50	102		
Total Cost:	\$ 7,920.00	\$ 1,250.00	\$ 6,120.00		\$ 15,290.00

* In-Kind Contributions (Previous Related Work - Within 9 months)					Total
Project Personnel: Hourly Rate:	LSPWCD Engineer \$ 60.00	LSPWCD Clerical \$ 25.00	Other Engineer \$ 60.00	Financial Payments from Groves Farms (Legal Services)	
Steering Committee Development, Exchange Analysis, Water User Meetings, related work	95	4	75	\$ -	\$ 10,300.00
Cash Payments (Legal)	\$ -	\$ -	\$ -	\$ 10,063.00	
Total Hours:	95	4	75		
Total Cost:	\$ 5,700.00	\$ 100.00	\$ 4,500.00	\$ 10,063.00	\$ 20,363.00

* There have been significant in-kind contributions and financial payments associated with this project prior to October 6th, 2009. However, contributions prior to October 6th, 2009 will not be used as in-kind contributions towards this grant proposal.



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Lower South Platte Water Cooperative Organizational Analysis
Budget (Part 3)

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