Exhibit A
Scope of Work
New Pioneer Ditch Diversion Reconstruction Project
Newell Geer, Silver Spur Land & Cattle

April 29, 2008

The applicant is a private individual running a ranching operation in the North Park area near Walden. The New Pioneer Ditch has multiple appropriations in Water District 47 for a total of 50.1 cfs dating back to 1890. There are three principle shareholders on this ditch. The water is diverted from the Canadian River located on the Silver Spur Ranch. The North Park Angus Ranch and Walden Ventures, LLC also receive water. The ditch irrigates up to 950 acres of native grasses for high quality, high protein fine stemmed hay.

Under the current conditions, the New Pioneer Ditch may not be capable of delivering the necessary water for agriculture in the ditch service area. The existing diversion structure cannot seal off the river and jeopardizes the ability of the ditch to facilitate a call. The existing headgate also cannot effectively regulate water coming into the ditch. Extreme bank erosion has developed on both banks of the Canadian River at the point of diversion. This is reducing the amount of prime agricultural land and adding significant volumes of sediment to the river. Sediment loading to the river reduces water quality and increases the likelihood of listing on the Clean Water Act Section 303(d) list of impaired waters. If listed, additional funding will be required to develop a Total Maximum Daily Load (TMDL), a watershed plan, and implementation of that plan. Fish cannot pass the existing structure. They are unable to migrate upstream to spawning areas.

This project will construct a low-head diversion structure capable of diverting the entire river, if necessary to implement a call. It will be constructed in the shape of an upstream pointing "V" to reduce stress on both banks and direct high flows toward the channel center. The core of the structure will be constructed of interlocking concrete blocks to reduce seepage and facilitate a call. Boulders will be placed both up and downstream of the diversion to stabilize the structure, direct water toward the channel center, reduce bank erosion, and act as a fish and recreation boat passage. A concrete headwall will be constructed at the diversion point with a low-head rectangular orifice designed to pass 50.1 cfs at a minimum head. A slide gate will be installed at the diversions point to easily and efficiently regulate water into the ditch while increasing instream flows. The existing measuring flume will be moved up the ditch near the headwall to further improve management. The areas of erosion along both banks will be filled and reclaimed as agricultural land. The ditch will also be re-graded for approximately 1,500 feet due to inconsistencies in ditch bed gradient. The resultant structures will promote water conservation and efficiency.

The project will be used as a demonstration project. Tours will be available upon request of the landowner. Information about the project and scheduling a tour will be posted on the IBCC website for the North Platte.

Task 1-Prepare bid documents, send out request for proposals and choose sub-contractors

Deliverable-Selection of Contractor(s)

Project Manager will review existing preliminary plans and meet with contractors in Jackson County to determine appropriate cost-effective methods of construction and screen contractors. Bid documents will be prepared and RFP sent out to appropriate contractors. Manager will also meet with landowners to coordinate in-kind donations and construction timing.

Completion Date: September 8, 2008
Cost: $3,500

Task 2-Mobilize equipment and stage materials

Deliverable-Materials and equipment delivered to site

Project Manager will coordinate with landowners and contractors to stage equipment and materials on site.

Completion Date: September 15, 2008

Cost: $3,000

Task 3-Demolition

Deliverable-Removal of existing structures

Contractors will de-construct the existing diversion structure and separate the broken concrete from the boulders into separate piles for later use. The broken concrete will be used for buried foundation material and the boulders will be re-used for the diversion structure. The existing headgate and culvert will be removed and the site prepared for the new headgate. The old culvert will be re-installed in the ditch at an existing crossing several hundred yards downstream.

Completion Date: September 22, 2008

Cost: $4,500

Task 4-Rock Excavation and Transport

Deliverable-Large boulders staged on site for diversion structure

Contractors will excavate existing rock from on site and stage the material alongside the river at the location of the proposed diversion structure. Project manager will research possible alternatives to excavating the rock on site by investigating rock quarries in the area and determining if a cheaper option exists to haul rock to the site. Excavated sand, gravel and topsoil from on site will be used for fill in the eroded stream banks immediately downstream of the existing diversion structure. The 900 cubic yards of rock used for the project will be donated by the landowner at a rate of $50/cubic yard for a total of $45,000.

Completion Date: September 29, 2008
Cost: $33,000 – This includes an additional $13,000 for unforeseen costs in excavating. Preliminary discussions with contractors in the area indicate a difficulty in accurately determining the cost of this excavation. Preliminary unit costs for this task is $10/cubic yard.

Task 5-Construct new concrete headgate and flume

Deliverable-New headgate structure, slide gate and flume

Concrete contractor will form and pour a new headgate on site and install a slide valve on the face of the structure to control flows and relocate a measuring flume to the back of the structure.

Completion Date: October 6, 2008

Cost: $40,000- The cost of concrete has risen dramatically in the last few months and this item may also experience an unforeseen rise in costs. Unit cost for concrete may be $800/cubic yard.

Task 6-Construct diversion structure

Deliverable-New diversion structure

Contractor will use pre-cast concrete blocks as a foundation and core for the new diversion structure and will line the upstream face of the structure with plastic sheeting and shade it with sand and silt to minimize seepage through the structure. Large boulders will be placed downstream of the structure in a stair-step fashion to dissipate energy and allow for upstream fish migration. The approximate seven foot vertical drop will be spread out over two hundred feet.

Completion Date: October 13, 2008

Cost: $16,000- The cost of the pre-cast blocks has nearly doubled in the last few months to approximately $250 per block. This also is an unforeseen cost.

Task 7-Fill eroded streambanks

Deliverable-Morphologically balanced stream dimensions and new agricultural land

Contractor will use on native material to fill eroded areas downstream of the existing structure.

Completion Date: October 20, 2008

Cost: $6,500

Task 8-Re-grade ditch

Deliverable-Cleaned and graded ditch

Landowners will re-grade and clean the ditch as part of their in-kind match.

Completion Date: October 27, 2008

Cost: $3,000

Task 9-Repair staging and excavation areas

Deliverable-Reclaimed land

Contractor will clean up and re-seed staging areas

Completion Date: October 31, 2008

Cost: $2,000

Task 10-Project Management

Deliverable-Project coordination, contractor supervision and grant management with final report

Project manager will be on site to set survey grades, supervise construction, process invoices and write reports.

Completion Date: November 14, 2008

Cost: $7,500

Name of Project: New Pioneer Ditch

5/2/2008

Objective or Task	Description of Work to be Done	Direct Costs	WSRA Funds	Match by others	Planned Task Cost
Task 1.	Prepare bid documents, send out request for proposals and choose sub-contractors	$3,500	$3,500		**$3,500**
Task 2.	Mobilize equipment and stage materials	$3,000	$3,000		**$3,000**
Task 3.	Demolition	$4,500	$4,500		**$4,500**
Task 4.	Rock Excavation and Transport	$33,000	$33,000	$45,000	**$78,000**
Task 5.	Construct new concrete headgate and flume	$40,000	$40,000		**$40,000**
Task 6.	Construct diversion structure	$16,000	$16,000		**$16,000**
Task 7.	Fill eroded streambanks	$6,500	$6,500		**$6,500**
Task 8.	Re-grade ditch	$3,000		$3,000	**$3,000**
Task 9.	Repair staging and excavation areas	$2,000	$2,000		**$2,000**
Task 10.	Project Management	$7,500	$7,500		**$7,500**
Total		**$119,000**	**$116,000**	**$48,000**	**$164,000**

Issues/Additional Needs:

- Two of the three landowners have committed specific support as well as a unanimous decision by the Roundtable. Letters of support can be obtained if still needed.
- Detailed narrative is described in each task
- The probability of unforeseen issues encountered during construction is high in 3 of the tasks described. Reasons why and unit costs have been supplied.
- Project promotion described on page 1.

Milestone Table for New Pioneer Ditch

Task	Description of Work to be Done	Sept '08-Nov '08		
		S	O	N
Task 1.	Prepare bid documents, send out request for proposals and choose sub-contractors			
Task 2.	Mobilize equipment and stage materials			
Task 3.	Demolition			
Task 4.	Rock Excavation and Transport			
Task 5.	Construct new concrete headgate and flume			
Task 6.	Construct diversion structure			
Task 7.	Fill eroded streambanks			
Task 8.	Re-grade ditch			
Task 9.	Repair staging and excavation areas			
Task 10.	Project Management			

Personnel

Project management, including preparation of detailed plans and specifications will be done by Crane Associates; this firm has extensive experience in engineering similar projects on the North Fork of the Gunnison and elsewhere. Jeff Crane, President of Crane Associates in Hotchkiss, Colorado, is a hydrologist specializing in stream restoration, irrigation diversion and habitat enhancement projects with twenty years experience with a major emphasis in water resource engineering and hydrology.

Payment

Invoicing for this project will done based on the completion of the major project tasks. The request for payment shall include: a description of the work accomplished; an estimate of the percent completion for individual tasks and for the entire project in relation to the percentage of budget spent. Costs incurred prior to the effective date of the purchase order are not reimbursable.

The last 5 percent of the project budget will be withheld until final project documentation is complete. All products, data and information developed as a result of this contract must be provided to CWCB in hard copy and electronic format as part of the project documentation.