DOCID: PV PDA 12000000419 02/13/12 12:52:54 PM

FUNCTION: STATUS: PEND3 BATID: ORG:

PAYMENT VOUCHER INPUT FORM

PV DATE: 01 11 12 ACCOUNTING PRD: 08 12 BUDGET FY: 12

PV TYPE: 1 SCH PAY DATE: ACTION: E

OFF LIAB ACCT: FA IND: DOCUMENT TOTAL: 9,485.00 CALC DOC TOTAL: 9,485.00

VENDOR CODE: 481298144 CHECK CATEGORY: P D SINGLE CHECK FLAG: Y

VENDOR NAME: LOWER ARKANSAS VALLEY WATR CNSRVNCY

DBA:

ADDRESS: 801 SWINK AVENUE

CITY: ROCKY FORD ST: CO ZIP: 81067

ACCOUNT NUMBER:

H-

02-

AGENCY: ORG: SELLER: FUND: AGENCY: APPR CODE: PROGRAM:

SUB-ORG: FUNCTION: OBJECT: SUB-OBJ: BS ACCT: REV SRC: SUB-REV: RPTG CAT: JOB NO: GBL:

OFF REC ACCT:

H--\*S403-READY FOR APPROVAL 3

FUNCTION: 001-001 OF 001 STATUS: PEND3

DOCID: PV PDA 12000000419 02/13/12 12:53:01 PM
PUS: PEND3 BATID: ORG: 001-001 OF 001
LN REFERENCE COM VENDOR INV SUB APPR
NO CD AGY NUMBER LN LN INVOICE LN FND AGY ORG ORG CODE PGM 

FUNC OBJ/SUB REV SRC SUB-REV BS ACCT GBL RPTG JOB/PROJ DISC / RET TYP

\_\_\_\_ \_\_\_\_\_\_ QUANTITY I/D AMOUNT I/D P/F FEE CD DESCRIPTION 

RET AMOUNT EFT IND APPL TYPE

\_\_\_\_\_\_ 01- 01 PO PDA C150490 01 01/11/12 424 PDA ARKA H2O WTRC

WSRA 5180

9,485.00 SUPER DITCH DELIVERY ENG 0.000

N

D. Dig 1 2/13/12

# Colorado Water Conservation Board Project Expenditure Schedule

Project Name: Super Ditch Delivery Engineering

Applicant: Lower Arkansas Valley Water Conservancy District
Address: 801 Swink Avenue
Rocky Ford, CO 81067
Contact: Jay Winner
Phone: (719) 254-5115
E-mail: jwinner@centurytel.net

Authorization: \$ 225,837.00 Grant Contract/PO No.: C150490

Tax ID No.:

Project Expiration: 12/31/2012

oice Invoice Date Description of Work				Amount	Total Billed to	Percent	Funds
	Invoice Da	Des	Amount Invoiced	Approved	Date	Complete	Remaining
1 1/11/12 Tasks1.2 & 1.3	1/11/12	Tasks1.2 & 1.3	\$9,485.00	\$94,858.00	\$9,485.00	4.20%	\$ 216,352.00

### RECEIVED

JAN 13 2012

Colorado Water Conservation Board

January 11, 2012

Todd Doherty Colorado Water Conservation Board Department of Natural Resources 1313 Sherman Street Denver, CO 80203

RE: CWCB Contract # 150490

Dear Mr. Doherty,

Enclosed please find a Project Expenditure Schedule for the above-mentioned grant. Copies of the related invoices are enclosed. The total of the amount requested on the grant is \$9,485.00.

If you have any questions or need any additional information, please call me at 719/254-5155. Thank you for your assistance.

Sincerely,

Brenda Fillmore

Finance / Water, LAVWCD

Approved 485 2012

				Funds
				Percent
	C150490	\$225,837.00 48-1298144 No	12/31/2012	Total Billed to
Soard ering Project	Grant Contract/PO No.:	Authorization: Conditions: Tax I.D. No.: EFT	Substantial Completion Date:	Amount Invoiced Amount Annoved
ado Water Conservation E Project Expenditure Schedule	0			Amount Invoiced
Colorado Water Conservation Board Project Expenditure Schedule Project Name - Suner Ditch Deliver Engineering Project	Lower Arkansas Valley Water Conservancy District	801 Swink Avenue Rocky Ford CO 81067 Jay Winner, General Manager 719/254-5115 719/254-5150	jwinner@centurytel.net	Description of Work
	Applicant	Address: Contact: Telephone: Fax:	E-mail:	Invoise Date

			,				
Invoice	Invoice Invoice Date	Description of Work	Amount Invoiced	Amount Invoiced Amount Approved	Total Billed to Date	Percent Complete	Funds Remaining
Payment Request No. 1	1/11/12	Tasks 1.2 & 1.3 - Investigation of system demands and operations and river administration	\$9,485.00	\$9,485.00	\$9,485.00	4.20%	\$216,352.00
The second of th							

## Adaptive Resources, Inc. Adaptive Resources, Inc.



Adaptive Resources, Inc. 615 AURORA ST FORT MORGAN, CO 80701-2813

(970)590-0464 heath@adaptiveresourcesinc.com

#### Invoice

Date	Invoice #
12/25/2011	1037
Terms	Due Date
Net 60	02/23/2012

#### Bill To

Super Ditch Delivery Engineering Grant 810 Swink Avenue Rocky Ford, CO 81067

Amount Due	Enclosed
\$9,485.00	

Please detach top portion and return with your payment.

~

	<u> </u>			
Date	Activity	Quantity	Rate	Amount
	Week starting 12/05/2011			
12/09/2011	Meeting with Rick about Project start	2:00	140.00	280.00
	Week starting 12/12/2011			
	Work with Rick Parsons on Analysis background and model outline	1:00	140.00	140.00
	Check in with Rick about Project Status and updates	1:00	140.00	140.00
	Work with Rick Parsons on Analysis background and model outline	1:30	140.00	210.00
12/16/2011	Check in with Rick about Project Status and updates	0:30	140.00	70.00
	Week starting 12/19/2011			
12/21/2011	Check with Rick about Project status and review model components	0:30	140.00	70.00
12/23/2011	Services from December 5, 2011 through December 22, 2011		8	8,575.00
			:	
			,	
	MCSON .			
eally appreci	ate your business.		Total	\$9,485.



December 23, 2011

Adaptive Resources, Inc. Heath Kuntz (via e-mail <a href="mailto:heath@adaptiveresourcesinc.com">heath@adaptiveresourcesinc.com</a>) 615 Aurora Street Fort Morgan, CO 80701

#### RE: Super Ditch Delivery Engineering - Invoice No. 1

Below is an invoice for professional services of ParsonsWater Consulting LLC related to the investigation of system demands and operations, river administration, ad opportunities for future system operations in the Lower Arkansas Valley. The time period covered by this invoice is December 5, 2011 through December 22, 2011. Primary activities follow the invoice.

INVOICE 1
Super Ditch Delivery Engineering

Person	Hours	Rate	Tot	tal
R. Parsons	61.25	140	\$	8,575.00
TOTAL AMOUNT NOW	DUE		\$_	8,575.00

Budget Status

Monthly Billing	Total Billing
\$ 8,575	\$ 8,575

#### **Primary Activities**

- Ongoing communication with Heath Kuntz.
- Research ditches and reservoirs within Lower Arkansas Valley, including information from Colorado Division of Water Resources (DWR) imaged documents (e.g., Consent Maps, Diversion Records, Map and Filing Statements, Straight Line Diagrams, Division 2 Water Court applications, decrees, and associated documents, including Case No. 10CW04 application, expert engineering report, and rebuttal report), Colorado Water Conservation Board (CWCB) imaged documents (e.g., Arkansas DSS Feasibility Study Draft Report, CWCB Water Project Loan Contract Documents, including Feasibility Studies and Project Completion Letters), USGS documents and data (e.g., Water Resources Investigation Reports and historical streamflow data), DWR HydroBase database (e.g., Structures Summaries, Water Rights direct flow, storage, exchange, and instream flows, Irrigated acreage and crop mixes under ditch systems over time, Historical diversions, Historical storage contents, and Historical river calls), and U.S. Supreme Court (Fifth and Final Report Volume II Appendix C.1 H-I Model Documentation).
- Retrieve, download, print out, and review various documents and data from aforementioned sources.
- Develop preliminary input files for StateMod model based on information gathered and reviewed above. These efforts fall primarily under the following sub-tasks in the Super Ditch Delivery Engineering Statement of Work although the review and analysis also benefits other tasks identified in the Statement of Work:
  - o Task 1.2 Reservoir Operations: Model Construction

- o Task 1.3 Reservoir Operations: Data
- The input files worked on include:
  - o River network (\*.net) representing water uses within the Lower Arkansas Valley, generally between Pueblo Reservoir and John Martin Reservoir, including model nodes representing stream gages (main stem and tributary), diversion structures, reservoir structures, instream flow structures, and augmentation stations.
  - o Historical streamflows (\*.rih) for 11 stream gage nodes included in the model network.
  - o Diversion structures (\*.dds), water rights (\*.ddr), and historical diversions (\*.ddh) for 14 diversion nodes included in the model network.
  - o Reservoir structures (\*.res), water rights (\*.rer), and historical end-of-month storage contents (\*.eom) for 11 reservoir nodes included in the model network.
  - o Instream flow structure (\*.ifs), water rights (\*.ifr), and demands (\*.ifa) for one instream flow node included in the model network (i.e., Pueblo RICD).

#### Comments/Concerns/Schedules

Review of various documents and data has resulted in a number of questions related to which nodes should be included in the model, if and how these nodes should be represented, what data are missing, and other questions related to historical, current, and future ditch/reservoir system operations and river administration. The list of questions will be added to and subtracted from continuously during the project.

The various issues form a portion of the basis of the discussions that will occur between Parsons Water Consulting LLC, Adaptive Resources, Inc., the Lower Arkansas Valley Water Conservancy District, and various water users related to the Super Ditch Delivery Engineering work, the water court application in Case No. 10CW04, and the development of a vetted planning model capable of providing reasonable estimates of current and future demands, supplies, and operations subject to river administration practices.

I anticipate meetings among basin participants will begin this coming January. My January schedule is pretty open at this time but contact me as you start putting meetings together to ensure we are both able to attend, as needed.

If you have any questions on the services provided in this invoice, please do not hesitate to call.

Sincerely,

Rick Parsons

Puhara Parsons