

Scope of Work
Colorado Water Conservation Board 2010 – 2011

**Geomorphic Stability and Hydraulic Analysis of Reconfigured Channels,
Lake Fork at Lake City
U.S. Geological Survey**

The *Geomorphic Stability and Hydraulic Analysis of Reconfigured Channels* project will evaluate the existing hydraulic and habitat conditions of the Lake Fork at Lake City before proposed channel modifications are made to stabilize the streambed and banks and enhance fish habitat. Channel rehabilitation, or reconfiguration, to mitigate a variety of riverine problems has become a common practice in the western United States. Until recently, little work has been done in assessing the channel response to and the effectiveness of these modifications over a long period of time and over a range of flood peak discharges. The proposed pre-rehabilitation study will quantify existing Lake Fork conditions and establish a baseline against which post-rehabilitation conditions can be compared.

The Lake Fork and Lake City study is designed to provide information to resource managers, planners, and designers on the effectiveness and durability of channel restoration techniques used for stream rehabilitation and flood protection. The 1-year study compliments and expands an ongoing USGS study of geomorphic stability of restored, or reconfigured, channels at several sites in western Colorado by evaluating the hydraulic characteristics of the Lake Fork over a range of discharges with the USGS multidimensional surface-water models (MD_SWMS and FaSTMECH). Results will be published in a peer-reviewed paper.

Summary of Tasks and Associated Costs

Budget Item, Described by Task	Total Cost	Funding Provided by CWCB	Funding Provided by USGS
<i>Task 1: Pre-project preparation including site assessment and installation of instruments. August 2010.</i>	\$ 8,870	\$ 4,770	\$ 4,100
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<i>Task 3: Data analysis, streamflow model calibration and execution. Model result interpretation and verification with on-site measurements. Fall 2010/Winter, Spring 2011.</i>	\$ 20,330	\$ 10,930	\$ 9,400
<i>Task 4: Report preparation and publication. Spring, Summer 2011.</i>	\$ 44,200	\$ 23,800	\$ 20,400
Total Budget	\$ 92,900	\$ 50,000	\$ 42,900

WATER CONSERVATION BOARD
1313 SHERMAN STREET, ROOM 721
DENVER, CO 80203

Buyer: MAGGIE VAN CLEEF
Phone Number: 303-866-3292
Agency Contact: STEVEN SHULL
Phone Number: 303 866 3441

DATE: 07-21-10

IMPORTANT
The PO# and Line # must
appear on all invoices,
packing slips, cartons
and correspondence

ACC: 07-20-10



**PURCHASE
ORDER**
STATE OF COLORADO

P.O. # OE PDA 11000000007 Page# 01

State Award #

FEIN 530196958 C Phone: 703-648-7642

Vendor Contact:

Purchase Requisition #:

V
E
N
D
O
R
UNITED STATES GEOLOGICAL SURVEY
JOINT FUNDING AGREEMENT
PO BOX 70934
CHARLOTTE NC 28272-0934

INSTRUCTIONS TO VENDOR:

1. If for any reason, delivery of this order is delayed beyond the delivery/installation date shown, please notify the agency contact named at the top left. (Right of cancellation is reserved in instances in which timely delivery is not made.)
2. All chemicals, equipment and materials must conform to the standards required by OSHA.
3. NOTE: Additional terms and conditions on reverse side.

BID #

Invoice in Triplicate

To: DIVISION OF WATER CONSERVATION
1313 SHERMAN STREET, ROOM 721
DENVER, CO 80203

Payment will be made by this agency

Ship
To: DIVISION OF WATER CONSERVATION
1313 SHERMAN STREET, ROOM 721
DENVER, CO 80203

Delivery/Installation Date: 06-30-11
F.O.B. DESTINATION STATE PAYS NO FREIGHT

SPECIAL INSTRUCTIONS:

LINE ITEM	COMMODITY/ITEM CODE	UNIT OF MEASUREMENT	QUANTITY	UNIT COST	TOTAL ITEM COST
001	91843000000				\$50,000.00
SEV TAX GRANT-COMPLETE A GEOMORPHIC STABILITY & HYDRAULIC ANALYSIS OF RECONFIGURED CHANNELS LAKE FORK. PER SOW.CMS#20621					

THIS PO IS ISSUED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS
This PO is effective on the date signed by the authorized individual.

EPSPO PAA

DOCUMENT TOTAL = \$50,000.00

FOR THE STATE OF COLORADO

Authorized Signature

Date

U.S. Department of the Interior
U.S. Geological Survey
Joint Funding Agreement
FOR WATER RESOURCES INVESTIGATIONS

Customer No: CO001
Agreement No: 10C4CO100890000
Project No:
TIN #: 84-0644739
Fixed Cost Agreement ☒ Yes ☐ No

THIS AGREEMENT is entered into as of the **1st day of August, 2010** by the U.S. GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the **Colorado Water Conservation Board**, party of the second part.

1. The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation **monitoring and modeling the channel response to high streamflows on the Lake Fork**, hereinafter called the program. The USGS legal authority is 43 USC 36C; 43 USC 50; and 43 USC 50b.

2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) includes In-Kind Services in the amount of **\$0.00**.

(a) **\$42,900.00** the party of the first part during the period
August 1, 2010 to June 30, 2011

(b) **\$50,000.00 *** by the party of the second part during the period
August 1, 2010 to June 30, 2011

*** \$7,100.00 Unmatched**

(c) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.

(d) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.

3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.

4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.

5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to ensure the required standards of accuracy subject to modification by mutual agreement.

6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.


7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.

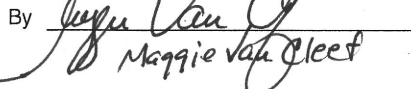
8. The maps, records or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program and, if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at cost, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records or reports published by either party shall contain a statement of the cooperative relations between the parties.

9. USGS will issue billings utilizing Department of the Interior Bill for Collection (Form DI-1040). Billing documents are to be rendered **quarterly**. Payments of bills are due within 60 days after the billing date. If not paid by the due date, interest will be charged at the current Treasury rate for each 30 day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983.).

USGS Point of Contact
Name: John Elliott
Address: USGS/Colorado Water Science Center
Denver Federal Center PO Box 25046 MS 415
Denver, CO 80225
Telephone: 303-236-4882 x296
Email: jelliott@usgs.gov

Customer Point of Contact
Name: Chris Sturm
Address: Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, CO 80203
Telephone: 303-866-3441 X 3236
Email:

By  Date 7/8/2010
Suzanne Paschke, Associate Director
USGS - CWSC

By  Date 7/20/2010
Maggie Van Gleet



IN REPLY REFER TO:

United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Box 25046 M.S. _____
Denver Federal Center
Denver, Colorado 80225

RECEIVED

JUL 09 2010

Colorado Water Conservation Board

Mr. Chris Sturm
Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, Colorado 80203

July 8, 2010

Dear Mr. Sturm:

Enclosed are two originals of the Joint Funding Agreement between the Colorado Water Conservation Board and the U.S. Geological Survey for the period of August 1, 2010 to June 30, 2011. The agreement, which covers the Lake Fork channel response, is in the amount of \$92,900 -- \$50,000 to be provided by CWCB and \$42,900 provided in Federal Matching Funds by the U.S. Geological Survey.

If the agreement is satisfactory, please sign both originals; keep one for your records and return one to the Colorado Water Science Center Director at the address shown below. USGS policy requires us to get approval from our Regional Director to conduct work without a signed agreement. To assist us in complying with this policy, we request that you return the signed agreement within two weeks. If this presents a hardship, please contact us. Work performed with funds from this agreement will be conducted on a fixed-price basis. The results of all work under this agreement will be available for publication by the U.S. Geological Survey (DUNS number 176138964).

USGS, Colorado Water Science Center
Jim Kircher, Director
P.O. Box 25046, Denver Federal Center
Mail Stop 415
Lakewood, CO 80225

If you have questions, please call John Elliott at 303-236-4882 x296.

Sincerely,

Suzanne Paschke, Associate Director
USGS/Colorado Water Science Center

Enclosures

530196458 C
United States Geological Survey

Scope of Work
Colorado Water Conservation Board 2010 – 2011

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Please be advised - Down Payment Request issued by USGS will be disrupted during the implementation of a new financial system from October 1 through mid November 2010. For further information, please refer to the notice sent by the USGS servicing office in July 2010.

DI-1040DPR

CO001

Request No: 0-8582-DPR281

RECEIVED

SEP 07 2010

United States
Department of the Interior
Geological Survey

Request Date: 09/01/2010

Due Date: 10/31/2010

Colorado Water Conservation Board

DOWN PAYMENT (BILL) REQUEST

Customer Address:

COLORADO WATER CONSERVATION BD CO001

Attention:

721 STATE CENTENNIAL BLDG.
1313 SHERMAN STREET
DENVER, CO 80203

Mail Check To:

DOI - USGS
BOX 70934
CHARLOTTE NC 28272-0934
Send Overnight/Express Mail To:
QLP Wholesale Lockbox - NC 0810
Lockbox # 70934
1525 West WT Harris Blvd
Charlotte, NC 28262

Checks must be made payable to: DOI-USGS and must include a copy of this request or reference the Request No above.

Notice: Payments to USGS may be made by all major credit cards, either by email to USGS address: gdatta@usgs.gov OR by phone (703.648.7605).

Description:	Quantity	Unit Price	Unit Issue	Amount
Monitoring and modeling the channel response to high streamflows on the Lake Fork, in accordance to JFACO10089. Billing period Jul 1, 2010 through Sept 30, 2010. OE PDA 11000000007 Commodity 91843000000	1	\$12,500.00	EA	\$12,500.00

OK to pay

Chris Sankey (Chris Sankey) 9/1/2010

I certify that this Down Payment Request is correct, in accordance with the terms of the order/signed agreement, and payment has not been received.
Christy A Sankey

Prepared by: Christy A Sankey 303-236-6909

Amount Due This Bill: \$12,500.00

USGS ACCOUNTING CLASSIFICATION SECTION:

Agreement #	BFY	EFY	Cust#	Amount	Fund	Rev Src	Cost Center
10C4CO100890000	2010	2011	CO001	\$12,500.00	SIRTR	ARJF	8582

\$12,500.00 *Total

Routing Slip:
Created By:
Supervisor:

Christy A Sankey

OFM Contact:

Denis J Sheehan/APS/USGS/DOI 703-648-7642

CC:

TIN:84-0644739

Date Invoice Rec'd

FEIN # 530196958

Invoice # 0-8582-DPR281

RC #

VI # VI PDA 11-

Approved

Date

Comments OE PDA 11-2

09/01/2010

<https://gscodena01.cr.usgs.gov/Webforms/1040DPR.nsf/3e7487a4f5f93b2585256f18006ba...> 9/1/2010

UNITED STATES DEPARTMENT OF THE INTERIOR
DOWN PAYMENT (BILL) REQUEST

Make Remittance Payable To: United States Geological Survey
Billing Contact: Administrative Office/Financia Phone: 303-236-6903

Bill #: 90020329
Date: 02/03/2011
Due Date: 04/04/2011

Remit Payment To: United States Geological Survey
BOX 70934
Charlotte, NC 28272-0934

Send Overnight Lockbox Mail To:
QLP Wholsale Lockbox - NC #0810
Lockbox # 70934
1525 West WT Harris Blvd
Charlotte NC 28262

Payer: COLORADO WATER CONSERVATION BD
1313 SHERMAN STREET
721 STATE CENTENNIAL BLDG.
DENVER CO 80203

Additional forms of payment may be accepted. Please email gdata@usgs.gov or call 703-648-7605 for additional information.

Checks must be made payable to U.S. Geological Survey. Please detach the top portion or include bill number on all remittances.

Amount of Payment: \$ _____

Date	Description	Qty	Unit Price		Amount
			Cost	Per	
02/03/2011	For monitoring and modeling the channel response to high streamflows on Lake Fork. Billing is quarterly per agreement. 10C4CO100890000 OE PDA 11-07 Invoice Rec'd FEIN # 530196958 C Invoice # 96020329 RC # V# VI PDA 11- Approved 11 142 Date Comments OE PDA 11-7	1	6,887.50	1	6,887.50
Amount Due this Bill:					6,887.50

Accounting Classification:
Sales Order: 3146
Sales Office: GCRE
Customer Number: 6000001029

TIN: 840644739

OK to pay

Chris Storm

3/9/11

RECEIVED

FEB 07 2011

Colorado Water Conservation Board

3/9/11

UNITED STATES DEPARTMENT OF THE INTERIOR
DOWN PAYMENT (BILL) REQUEST

Make Remittance Payable To: United States Geological Survey
Billing Contact: Administrative Office/Financia Phone: 303-236-6903

Bill #: 90025623
Date: 04/06/2011
Due Date: 06/05/2011

Remit Payment To: United States Geological Survey
P.O. Box 71362
Philadelphia, PA 19176-1362

RECEIVED

APR 08 2011

Payer: COLORADO WATER CONSERVATION BD
Attn: Chris Sturm
1313 SHERMAN STREET
721 STATE CENTENNIAL BLDG.
DENVER CO 80203

Colorado Water Conservation Board

Additional forms of payment may be accepted. Please
email gdata@usgs.gov or call 703-648-7605 for
additional information.

Checks must be made payable to
U.S. Geological Survey. Please detach the top portion
or include bill number on all remittances.

Amount of Payment: \$ _____

Date	Description	Qty	Unit Price		Amount
			Cost	Per	
04/06/2011	For monitoring and modeling the channel response to high streamflows on Lake Fork. PO# OE PDA11-7 Billing is quarterly per agreement. 10C4CO100890000	1	10,204.50	1	10,204.50
Amount Due this Bill:					10,204.50

OK to pay 4/18/11
Chris Sturm
(Chris Sturm)

B (Gou B)
4/18/11

Accounting Classification:

Sales Order: 3146

Sales Office: GCRE

Customer Number: 6000001029

TIN: 840644739