



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources
DENVER, CO 80203

November 29, 2017

Lucky Penny Ranchers, LLC
Attn: Mr. John Harvat, Manager
1096 CR 5
Coalmont, Co 80430

RE: Notice to Proceed – WSRF Grant – POGG1 2018-565 – Aqua Fria Reservoir Rehabilitation Project in the North Platte River Basin

Dear John,

This letter is to inform you that the grant request to assist in the above WSRF grant project has been approved. The attachments in the email serve as your original contracting documents.

With the executed agreement, you are now able to proceed with the project and invoice the State of Colorado for costs incurred through November 29, 2022. Please note that we have modified the original schedule expiration date to a 5-year maximum grant term. This will allow you the additional time to complete the project if needed, but also avoids the amendment process any time during the project. Although it is extremely helpful for both parties, it is encouraged that the grantee follows the original schedule set forth before the Board upon its original approval. You can refer to the WSRF Criteria & Guidelines located on our website for the updated invoice request requirement instructions prior to submitting your request(s).

The WSRF Criteria & Guidelines also provide instructions for the six month progress reports and final deliverable procedures in order to avoid a delay in payment requests.

If you have any questions or concerns regarding the project, please contact Craig Godbout, Project Manager at 303-866-3441 ext. 3250 or at Craig.Godbout@state.co.us. Please send the 6 month progress reports and invoices directly to the Project Manager and cc me at Dori.vigil@state.co.us.

You can contact me at 303-866-3441 ext. 3250 for additional invoicing, payment and contracting inquiries.

Thank you.

Sincerely,

//s//

Doriann Vigil
Program Assistant II
O 303-866-3441 ext. 3250
1313 Sherman Street, Rm. 719, Denver, CO 80203
Dori.vigil@state.co.us / cwcb.state.co.com

Attachments





STATE OF COLORADO
Department of Natural Resources

ORDER		** IMPORTANT **				
Number: POGG1 PDAA 201800000565		The order number and line number must appear on all invoices, packing slips, cartons and correspondence				
Date: 11/29/17						
Description: PDAA 2500 WSRF - Aqua Fria Reser. Rehab in the NP Basin		BILL TO COLORADO WATER BOARD CONSERVATION 1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
Effective Date: 11/29/17 Expiration Date: 11/29/22						
BUYER		SHIP TO				
Buyer:		COLORADO WATER BOARD CONSERVATION				
Email:		1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
VENDOR		SHIPPING INSTRUCTIONS				
LUCKY PENNY RANCHES LLC		Delivery/Install Date:				
1096 CR 5E		F.O.B: FOB Dest, Freight Allowed				
COALMONT, CO 80430		VENDOR INSTRUCTIONS:				
Contact: .						
Phone: .						
Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
1	G1000		0	0.00	\$75,000.00	<input type="checkbox"/>
Description: PDAA 2500 WSRF - Aqua Fria Reser. Rehab in the NP Basin						
Service From: 11/29/17 Service To: 11/29/22						
TERMS AND CONDITIONS						
https://www.colorado.gov/osc/purchase-order-terms-conditions						
DOCUMENT TOTAL = \$75,000.00						

Water Supply Reserve Fund Grant Application

Aqua Fria Dam Repair Project

Coalmont, Jackson County, Colorado

Exhibit A

Introduction & Background

The Aqua Fria dam services a high mountain reservoir which feeds into the Upper Beaver Creek watershed, and is a critical component of the maintenance of downstream water rights. In addition to its role in water delivery, the reservoir provides consistent recreational opportunities to campers, hikers and anglers which frequent the adjacent federal land (USDA Forest Service). The Aqua Fria dam serves a critical role in consistent, gradual water delivery and is therefore strongly linked to downstream aquifer recharge and downstream health of the Upper Beaver Creek watershed. The dam was constructed in 1944, capped in 1975, and is again in need of repair due to erosional issues.

The dam is accessible via an existing 2-track road, as shown in Exhibit C. The dam is a gravity, soil and native rock-filled design with a concrete grouted upstream face and a natural bedrock spillway. The spillway and outlet pipes discharge into the Beaver Creek drainage. The dam is 20' in height and 96' in width and is under the jurisdiction of the State Engineer's Office (SEO). A dam inspection by the SEO on September 28, 2016 identified maintenance and repair needs which are required to maintain current functionality.

Objectives & Project Eligibility

The project objectives are to repair damages to the Aqua Fria dam and outlet works to prevent further degradation of the dam and reservoir's functions. Completion of the associated repairs would result in preservation of downstream water rights, perpetuation of existing recreational uses, maintenance of the natural environment, continued aquifer recharge within the Beaver Creek water shed, continued sediment trapping, and a general preservation of downstream health.

Scope of Work

Task #1 – Prevent further damage to Aqua Fria dam face

- Description: Preventing erosion of the upstream dam face from impacts by ice and driftwood.
- Procedure:
 - i. Installation of "debris curtain" 100 to 200' upstream of dam face to intercept floating woody debris and ice chunks.
 - ii. Preferred design option - suspension of floating logs connected by cable from bank to bank, which would impede debris from impacting the dam face and would blend with the natural aesthetic of the reservoir.

- iii. Annual maintenance would include low water removal of intercepted debris prior to seasonal re-filling of the reservoir.
- iv. Maintenance may require coordination with the adjacent land manager, the USDA Forest Service.
- Deliverable: Debris curtain.

Task #2 – Replace missing dam face armor

- Description: Armor loose and missing rock on upstream dam face.
- Procedure: Hand place and grout replacement rocks where ice and debris impacts have removed or loosened dam face armor.
- Deliverable: Restored integrity of the dam face armor without holes and gaps.

Task #3 – Repair leaking corrugated metal outlet pipes downstream of dam

- Description: Corrosion holes due to rust in the outlet side of both 24-inch corrugated metal pipes allowing seepage through downstream buttress.
- Procedure:
 - i. Camera inspection of both pipes from corrugated pipe outlets to upstream inlet to determine if corrosion or pipe damage occurs at the pipe joint.
 - ii. Assess replacement need or replacement.
 - iii. Repair by slip lining with cured-in-place plastic liner (if warranted).
- Deliverable: Video inspection of 24-inch corrugated metal pipe and pipe integrity; pipe integrity would subsequently be restored by slip lining.

Task #4 – Assess and prevent pipe leakage internal to the dam

- Description: Unknown condition / integrity of the two existing 20-inch smooth steel outlet pipes internal to the dam.
- Procedure:
 - i. Camera inspection of both pipes from entry slide gates to determine extent of internal corrosion / pipe damage within the dam.
 - ii. Assess replacement need or replacement.
 - iii. Repair by slip lining with cured-in-place plastic liner or replacement (if warranted).
- Deliverable: Video inspection of 20-inch smooth steel pipes; pipe integrity would be restored by slip lining (if warranted).

Task #5 – Restore outlet gate sealing integrity

- Description: Unknown sealing efficiency / integrity around both outlet gates at upstream face of dam.
- Procedure: As part of pipe integrity evaluation, evaluate replacement or provide reseal repairs to each pipe / gate system.
- Deliverable: Sealed gates.

Task #6 – Repair outlet gate and wheel assembly

- Description: Damaged outlet gates and wheel assembly (corrosion, bent angle iron frame).
- Procedure: Reconstruct or replace damaged and bent framework, restore function and smooth operation to wheel assemblies.
- Deliverable: Repaired framework, smooth wheel and gate function.

Task #7 – Prevent wood and debris from interfering with gate system

- Description: Woody debris interference with outlet gate operations.
- Procedure: Clear all existing debris from outlet gate area. Install trash rack at gate inlets to exclude any debris that is not captured by the debris curtain described in Task 1.
- Deliverable: Installed Trash Rack.

Task #8 – Clear pathway of emergency spillway

- Description: Portions of natural rock spillway blocked by fallen trees and boulders.
- Procedure: Remove debris.
- Deliverable: Fully functional spillway.

Task #9 – Install gauging system

- Description: No seepage monitoring and flow gauging system in place.
- Procedure:
 - i. Install manual-read staff gauge on dam face;
 - ii. Inspect for seepage following pipe and outlet gate repairs;
 - iii. Evaluate possible installation of v-notch weir for flow measurement.
- Deliverable: Installed staff gauge.

Reporting and Final Deliverable

The proposed repairs and inspections would be staged over 2017 to 2018 due to seasonal access challenges and late-season draining of impounded water. Work would begin in the summer and fall of 2017, and is expected to conclude in the fall of 2018.

More information about the condition of outlet pipes is needed to determine whether repair or replacement is warranted, which would be collected via the camera inspection, as described above. For all tasks, “before” and “after” photographs would be collected and a project completion report would be prepared of the Office of the State Engineer and the Colorado Water Conservation Board (CWCB).

Budget – USE EXISTING BUDGET



Colorado Water Conservation Board

**Water Supply Reserve Fund
Exhibit B - BUDGET AND SCHEDULE**

7/25/2017 - Updated 11/29/17

Water Activity Name: Aqua Fria Reservoir Rehab

Grantee Name: Lucky Penny Ranches LLC

	<u>Description</u>	<u>Start Date</u> ⁽¹⁾	<u>End Date</u>	<u>Matching Funds</u> (cash & in-kind) ⁽²⁾	<u>WSRF Funds</u> (Basin & Statewide combined) ⁽²⁾	<u>Total</u>
1	<u>Prevent further damage to dam face</u>					
1a	Design debris curtain	11/2017	7/1/18	\$250	\$250	\$500
1b	Coordinate with Forest service	11/2017	7/1/18		\$3,000	\$3,000
1c	Construct debris curtain	7/1/18	10/31/18	\$2,500	\$1,500	\$4,000
2	<u>Replace dam face armor</u>					
2a	Replace/grout missing rocks	7/1/19	10/31/19	\$4,000	\$7,000	\$11,000
3	<u>Repair leaking outlet pipes</u>					
3a	Camera existing pipes	7/1/18	9/30/18	\$1,500	\$1,500	\$3,000
3b	Assess damage	9/1/18	10/31/18	\$1,000	\$1,000	\$2,000
4	<u>Repair outlet pipes</u>					
4a	Slip line outlet pipes	7/1/19	10/31/19		\$10,000	\$10,000
4b	Mobilization	7/1/19	10/31/19		\$8,000	\$8,000
4c	Construction oversight	7/1/19	10/31/19		\$5,000	\$5,000
5	<u>Seal slipline to outlet pipes</u>					
		7/1/19	10/31/19		\$4,500	\$4,500
6	<u>Repair outlet gate/wheel assembly</u>					
6a	Design replacement frameworks	10/1/17	5/1/18		\$3,000	\$3,000
6b	Fabricate frameworks	5/1/18	7/31/18		\$7,750	\$7,750
6c	Install frameworks	8/1/18	10/31/18	\$2,000	\$1,500	\$3,500
6d	Replace 20" headgates	8/1/18	10/31/18	\$2,000	\$8,000	\$10,000
6e	Construction oversight	8/1/18	10/31/18	\$1,000	\$4,000	\$5,000
7	<u>Prevent debris from headgates</u>					
7a	Fabricate trash rack	5/1/18	7/31/18	\$2,000		\$2,000
7b	Install trash rack	8/1/18	10/31/18		\$1,500	\$1,500
8	<u>Clear dam face and spillway debris</u>					
	Mobilization	7/1/18	10/31/18		\$5,000	\$5,000
	Labor	7/1/18	10/31/18	\$4,100		\$4,100
9	<u>Install guaging system</u>					
9a	Evaluate remaining seepage/measurement	8/1/19	8/31/19	\$2,000		\$2,000
9b	Install staff guage	8/1/19	10/31/19	\$2,650		\$2,650
9c	As-built drawings	10/31/19	12/31/19		\$2,500	\$2,500
	-Final Deliverable Report		11/29/2022			
Total				\$25,000	\$75,000	\$100,000

(1) Start Date for funding under \$100K - 45 Days from Board Approval; Start Date for funding over \$100K - 90 Days from Board Approval.

(2) Round values up to the nearest hundred dollars.

NOTES: Reimbursement eligibility commences upon the grantee's receipt of a Notice to Proceed (NTP)

NTP will not be accepted as a start date. Project activities may commence as soon as the grantee enters contract and receives formal NTP if prior to the listed "Start

CWCB will keep 10% of the entire grant budget until a Final Report (Deliverable) is completed and accepted (2016 WSRF Criteria & Guidelines).

Additionally, the applicant shall provide a progress report every 6 months, beginning from the date of contract execution