



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources  
1313 Sherman Street, Room 718  
Denver, CO 80203

September 7, 2016

Marcot Park Ditch & Reservoir Company  
Attn: Milan R. Armstrong  
13747 Happy Hollow  
Eckert, CO 81418

RE: Official Notice to Proceed – WSRF Grant – **POGG1 2017-370** –  
**Marcot Dam Outlet Repair in the Gunnison River Basin**

Dear Milan,

This letter is to inform you that the purchase order to assist in the above WSRF grant project has been approved. The emailed documents will serve as the original contracting documents for your records.

With the executed PO (POGG1 2017-370) you are now able to proceed with the project and invoice the State of Colorado for costs incurred through your expiration date. Please provide the project name, CTGG1 number, and basins when corresponding with or invoicing for your project. Upon receipt of your invoice(s), the State of Colorado will provide payment no later than 30 days after review and signed approval of the project manager.

If an extension to the project is necessary, a formal letter of request must be submitted to the project manager along with a proposed completion date **30 days** prior to the current expiration date. There will be no prior notice from the CWCB contract compliance staff informing the grantee that the project is approaching its deadline, therefore the grantee must monitor the completion progress accordingly.

If you have any questions or concerns regarding the project, please contact Craig Godbout, Project Manager at 303-866-3441 x3210 or at [craig.godbout@state.co.us](mailto:craig.godbout@state.co.us). You can contact me at 303-866-3441 ext. 3250 for invoicing and payment disbursement questions.

Thank you.

Sincerely,

**Doriann Vigil**  
**Program Assistant II**  
O 303-866-3441 ext. 3250  
1313 Sherman Street, Rm. 719, Denver, CO 80203  
[Dori.vigil@state.co.us](mailto:Dori.vigil@state.co.us) / [cwcb.state.co.com](http://cwcb.state.co.com)

Attachments





STATE OF COLORADO  
Department of Natural Resources

<b>ORDER</b>		<b>** IMPORTANT **</b>				
Number: POGG1 PDAA 201700000370		The order number and line number must appear on all invoices, packing slips, cartons and correspondence				
Date: 09/07/16						
Description: PDAA WSRA 2500 Marcot Dam Outlet Repair in Gunn Basin		<b>BILL TO</b>				
Effective Date: 09/06/16      Expiration Date: 12/31/16		COLORADO WATER BOARD CONSERVATION 1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
<b>BUYER</b>		<b>SHIP TO</b>				
Buyer:		COLORADO WATER BOARD CONSERVATION				
Email:		1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
<b>VENDOR</b>		<b>SHIPPING INSTRUCTIONS</b>				
MARCOT PARK DITCH & RESERVOIR COMPANY 13747 HAPPY HOLLOW ECKERT, CO 81418		Delivery/Install Date:				
Contact: .		F.O.B: FOB Dest, Freight Allowed				
Phone: .		<b>VENDOR INSTRUCTIONS:</b>				
<b>Line Item</b>	<b>Commodity/Item Code</b>	<b>UOM</b>	<b>QTY</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>MSDS Req.</b>
1	G1000		0	0.00	\$49,649.00	<input type="checkbox"/>
Description: PDAA WSRA 2500 Marcot Dam Outlet Repair in Gunn Bas						
Service From: 09/06/16      Service To: 12/31/16						
<b>TERMS AND CONDITIONS</b>						
<a href="https://www.colorado.gov/osc/purchase-order-terms-conditions">https://www.colorado.gov/osc/purchase-order-terms-conditions</a>						
<b>DOCUMENT TOTAL = \$49,649.00</b>						

**Exhibit A**  
**Statement of Work**  
**Date: May 1<sup>st</sup>, 2015**

**WATER ACTIVITY NAME -Marcot Dam Outlet Repair**

**GRANT RECIPIENT –Marcot Park Ditch and Reservoir Company**

**FUNDING SOURCE -Gunnison Basin**

**INTRODUCTION AND BACKGROUND**

Marcot Park Ditch and Reservoir Company (MPDRC) has embarked on a long-term effort to upgrade the aging earth-compacted Marcot Dam located on the Grand Mesa. In addition to the maintenance requirements indicated by periodic inspection by Colorado Dam Safety, MPDRC is aggressively working to minimize seepage from the reservoir, improve the dam crest, and improve placement of rip-rap. Photo and video examination of the outlet piping during dam inspections revealed however, that the priority should be shifted to rehabilitation of the outlet piping.

The dam's outlet, installed in 1955 is a 20-inch OD steel with ¼-inch wall thickness, bituminous coating within and on the pipe's outer surface. MPDRC, in cooperation with Colorado Dam Safety, has monitored the condition of the pipe via videos and photographic means. Concerns were cited in an inspection report by the Colorado Dam Safety Engineer dated July 16<sup>th</sup>, 2012, after a video inspection of the outlet pipe. In the summer of 2015, MPDRC engaged an engineering firm (DOWL, LLC) to examine the outlet, the historical data, and determine the best course of action for repair.

**ENGINEERING**

The conclusion of the DOWL investigation was that the Marcot outlet is a very good candidate for Cured-in-Place-Pipe (CIPP), a composite liner permanently em placed by a therm o-curing process inside the host pipe. The report was accompanied by engineering calculations intended for submission to the Colorado Dam Safety Dept. In addition, DOWL submitted an Engineer's Estimate of Probable Cost. All these were delivered to MPDRC on September 15<sup>th</sup>, 2015 for a cost of \$5240.00. This amount was paid from a previous WSRA study grant in the amount of \$10,000.00.

All deliverables described above, along with a copy of the application to State of Colorado Dam Safety are included in the appendix to the application.

**ACTION TAKEN**

Following receipt of the engineering findings, MPDRC met with personnel from Colorado Dam Safety on September 18<sup>th</sup>, 2015 and submitted plans, calculations, the Engineering report and an application to apply a CIPP repair to the Marcot Reservoir outlet. MPDRC then contacted qualified contractors for bids to perform the CIPP repair, a copy of which is included in the appendix.

## GRANT FOR CIPP INSTALLATION

The following table denotes the elements of the proposed installation, the costs, and the time line:

### SCHEDULE OF WORK AND COSTS

<u>TASK</u>	<u>COST</u>	<u>COMPLETED BY</u>	<u>WSRA</u>	<u>MPDRC</u>
1. Gather data, prepare Grant application, evaluate bids	\$0	September, 2016		\$0
2. *Site preparations: equipment rental, earth movers in for pad at work site, water pumps for continuous 24hr pumping for duration, on-site assistance and transportation.	\$12,000	September, 2016		\$12,000
3. Contractor mobilization	\$12,000	September, 2016	\$7,999	\$4001
4. Liaison with agencies, contractors, volunteers	\$1800	September, 2016		\$1800
5. CIPP installation	\$41,650	September, 2016	\$41,650	
6. Engineering oversight	\$4760	September, 2016		\$4760
7. Schedule inspections	\$400	September, 2016		\$400
8. Clean-up, site restoration	\$4000	September, 2016		\$4000
9. Contingency	\$10,000	September, 2016		\$10,000
10. Insurance	\$500	September, 2016		\$500
<b>Totals</b>	<b>\$87,110</b>		<b>\$49,649</b>	<b>\$37,461</b>
	WSRA funds	\$49,649	57%	
	MPDRC funds	\$37,461	43%	
<b>Totals</b>		<b>\$87,110</b>	<b>100%</b>	

MPDRC received bids from two contractors aware of site conditions and limitations.

All appropriate insurance coverage will be in force before project work begins, expenses incurred by MPDRC.

\*Requires coordination with Grand Mesa Water Users Association to ensure reservoir is drained and ready for pumping and water mitigation at outlet gate valve.



## FINANCIAL ANALYSIS

In 1955, the shareholders of Greenback Grave and Marcot Park Reservoirs executed an Agreement whereby Greenback Grave conveyed its water rights and easements to Marcot Park Reservoir for consideration of Marcot Park Reservoir storing and providing 48 acre-feet of water to the Greenback shareholders on a first charge basis and made available at all times during the irrigation season. Further, Marcot Park shareholders agreed to maintain the reservoir at their own expense and with “no assessment charges or costs of any kind to [Greenback] and further to provide all necessary labor for storage and distribution of said water at the outlet of said reservoir.” Marcot agreed that “there shall be no charge incurred or liability upon [Greenback] for any enlargement or any construction to said reservoir, repair, replacement or rebuilding”.

As a result of the Colorado Water Court ruling, Marcot Park Reservoir is allowed to store 460.35 acre-feet of water. The first 48 acre-feet are reserved for the shareholders of Greenback Grave and MPDRC shareholders are entitled to the remaining 412.35 acre-feet.

Over the past eight years, shareholders of MPDRC have through assessments, financed the ongoing rehabilitation efforts at Marcot Dam and Reservoir. These activities include:

A. Add rip-rap on Dam slope	(2008)	\$1400
B. Grade crest of dam	(2010)	\$600
C. Rework/repair gauge rod, gate valve	(2011)	\$850
D. Identify, correct area of seepage in Southwest flank of reservoir.	(2014)	\$19,300
E. Continue with upper seepage repairs	(2015)	\$1438
<b>Total</b>		<b>\$23,588</b>

Yearly assessments to MPDRC shareholders have raised over the years depending upon the nature and severity of repairs. For the past eight years the financial load to shareholders for special assessments has averaged \$23,588 divided by 8 years, or \$2950 per year. For the 100 shares outstanding this is about \$30 per share, or \$2950 divided by 412a/f, = \$7.00 per a/f. Regular assessments amounted to \$11.00 a/f for a total shareholder cost of \$18 a/f.

If the outlet pipe repair is borne entirely by MPDRC the cost would jump to approximately \$72.00a/f, a four-fold increase which would necessitate a special assessment of \$296 per share as a consequence.

MPDRC requests WSRA funding to offset the financial burden and to assure the continuity of valuable water storage.



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