



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 718  
Denver, CO 80203

P (303) 866-3441  
F (303) 866-4474

Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Rebecca Mitchell, CWCB Director

**TO:** Colorado Water Conservation Board Members

**FROM:** Anna Mauss, Chief Operating Officer

**DATE:** November 20-21, 2019

**CONSENT AGENDA ITEM:** 3b. Change to Water Plan Grants  
Change in Budget - North Fork Water Conservation  
District - Paonia Reservoir Sediment Removal

---

#### Introduction

At the May 2019 Board meeting, the Board approved \$150,000 Water Plan Grant (\$75,000 from the Storage and Supply funds and \$75,000 from the Engagement and Innovation Funds) to the North Fork Water Conservancy District (District) for the Paonia Reservoir Sediment Removal Project. The District is the fiscal agent for the project run by Delta Brick & Climate Company (Delta Brick). The proposed project targets the removal of sediment from Paonia Reservoir. (See attached data sheet from May 2019 for additional project details.)

The original scope of work and budget were built upon a plan to removed sediment from Paonia Reservoir and use the material to create ceramics such as brick and tile. Delta Brick was intending to use coal mine methane in the close proximity to Paonia Reservoir as the fuel. This added an additional project benefit of capturing methane (a greenhouse gas) to address coal mine methane pollution. The original grant approval was to fund \$150,000 (22%) of an overall project of \$689,658. Tasks to be funded included road improvements for site access; sediment excavation and transportation to the Delta Brick factory; sediment processing; and production of brick, tile, pavers, and other ceramics.

The CWCB has not yet executed a grant contract for the project. While contracting was in progress, the overall budget changed due to some complications with purchasing a kiln for processing and moving the production of the materials to Montrose where a turnkey building was available for lease. As a result, the total project cost is now estimated at \$301,968 with a cash match of \$128,852 and in-kind match of \$23,116 bring the grant funding to nearly 50% of the total project cost. See attached revised Budget & Schedule - Exhibit B. The scope of work and tasks related to the Water Plan Grant remain as proposed in the original application. Changes in the budget are all associated with tasks outside the items funded by the Water Plan Grant, therefore only affecting the overall match.

#### Staff Recommendation

Staff recommends the board approve the budget change in the budget (Exhibit B) for the North Fork Water Conservation District - Paonia Reservoir Sediment Removal Project. Water Plan grant funds will pay for up to 50% of the project.





COLORADO

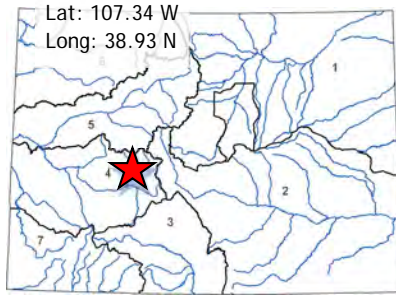
Colorado Water Conservation Board

Department of Natural Resources

# Water Plan Grant Application

## Paonia Reservoir Sediment Removal North Fork Water Conservation District

May 2019 Board Meeting



L O C A T I O N	
County/Countries:	Gunnison
Drainage Basin:	Gunnison

D E T A I L S	
Total Project Cost:	\$689,658
Water Plan Grant Request:	\$337,758
Recommended Amount:	\$150,000
Other CWCB Funding:	\$0
Other Funding Amount:	\$350,900
Applicant Match:	\$1,000
Project Type(s):	Study & Construction
Project Category(Categories):	Storage & Supply
Measurable Result:	4 acre-feet created

The North Fork Water Conservancy District is located in the North Fork of the Gunnison River in Western Colorado. It was created to manage the Paonia Project, which is located in west-central Colorado and provides full and supplemental irrigation water supplies for 15,300 acres of land in the vicinity of Paonia and Hotchkiss. The District is the fiscal agent for this project.

Paonia Reservoir is located in northwest Gunnison County on Muddy Creek just above its junction with Anthracite Creek. This junction forms the North Fork of the Gunnison River. Paonia Reservoir operates as storage for Fire Mountain Canal, which irrigates 15,300 acres in Delta County.

The project is being run by Delta Brick & Climate Company (Delta Brick). Delta Brick's mission is to utilize nuisance sediment in Paonia Reservoir in the manufacturing of brick and tile. The proposed project targets the removal of modest amounts of sediment from Paonia Reservoir. It follows on a planning project by Delta Brick that was funded by an Engagement & Innovation Water Plan Grant (\$19,000) in the fall 2018 cycle. The previous funding is being used for planning, permitting, options analysis, and stakeholder outreach related to Paonia Reservoir sediment utilization. Delta Brick has a basin only WSRF grant (\$18,000) that was approved by the Gunnison basin roundtable in January 2019 and is pending CWCB approval for work related to chemical water production via methane mitigation.

The proposed project is part of a larger, for-profit sediment utilization effort wherein Delta Brick converts the removed sediment into revenue-generating ceramics such as brick and tile. Conversion is accomplished using coal mine methane (CMM) as a fuel. CMM is natural gas venting from active and abandoned coal mines in close proximity to Paonia Reservoir. The overall project has multiple purposes: to address CMM pollution, restore reservoir storage, improve watershed health, and create rural economic activity.

This grant will fund road improvements for site access; sediment excavation and transportation to the Delta Brick factory; sediment processing; and production of brick, tile, pavers, and other ceramics. This demonstration project is expected to occur over a five-year period and will remove around 4 acre-feet of sediment from the reservoir.

Funding Recommendation: There was more demand than funds available in the Storage and Supply category of Water Plan Grants, so staff looked to additional categories when the benefits of the project met multiple objectives. This project also aligned with the goals in the Engagement & Innovation category, so staff is recommending \$75,000 from the Engagement & Innovation category and \$75,000 from the Storage and Supply category for a total grant of \$150,000.



**Colorado Water Conservation Board**

**Water Plan Grant - Exhibit A**

**Statement Of Work**

<b>Prepared Date:</b>	June 6, 2019
<b>Name of Grantee:</b>	North Fork Water Conservation District
<b>Name of Water Project:</b>	Paonia Reservoir Sediment Removal
<b>Funding Source:</b>	Water Plan Grant (\$75,000 Storage + \$75,000 Education)

**Water Project Overview:**

The proposed project targets the removal of sediment from Paonia Reservoir. It follows on a planning project by Delta Brick & Climate Company that was funded by the Innovation and Outreach portion of Colorado's Water Plan in the fall 2018. The previous funding is being used for planning, permitting, options analysis, and stakeholder outreach related to Paonia Reservoir sediment utilization.

**Project Objectives:**

Remove up to 4 acre feet of sediment from Paonia Reservoir. Deliver this sediment to Delta Brick & Climate Company's factory.

<b>Tasks</b>	
<b>Task 1 – Project Management and Administration</b>	
Description of Task:	The North Fork Water Conservancy District (District) is the fiscal agent for this grant. The District will contract with Delta Brick & Climate Company to oversee the grant and perform all work related to sediment removal including project reporting.
Method/Procedure:	Project reporting will be handled by Delta Brick & Climate and approved by the North Fork Water Conservancy District.
Deliverable:	Final report to the CWCB describing the results of the project including reporting on volume of sediment removed, details on products produced (i.e. bricks, pavers, and other ceramics), and details on the economic viability of future sediment removal.

<b>Tasks</b>	
<b>Task 2 – Access, Sediment Removal, and Processing</b>	
Description of Task:	This task involves improvements to the access to the sediment in Paonia Reservoir, sediment excavation, transportation of sediment to Delta Brick & Climate Company's factory, and processing of sediment into ceramic products.
Method/Procedure:	Improvements will be made on an old road grade connecting highway 133 to the reservoir bottom. Sediment will be excavated by contractors during low water and stockpiled. Sediment will be hauled to Delta Brick & Climate Company's factory where it will be processed. The processing involves blending, mixing, and shaping material. Then the final ceramic products will be dried and fired in a kiln.
Deliverable:	Final report to the CWCB describing the results of the project including reporting on volume of sediment removed, details on products produced (i.e. bricks, pavers, and other ceramics), and details on the economic viability of future sediment removal.

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work.

### Reporting Requirements

**Progress Reports:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

**Final Report:** At completion of the project, the grantee shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

### Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Project costs not covered by this or other grants are the responsibility of the grantee. Project costs that are eligible for CWCB funds will be disbursed at a maximum of 50% Water Plan Grant funds to matching funds.

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. 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.

### Performance Measures

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.



COLORADO

Colorado Water  
Conservation Board

Department of Natural Resources

## Performance Measures

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.