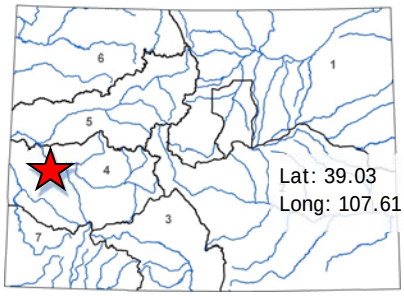
COLORADO
Colorado Water Conservation Board

Water Plan Grant Application

Overland Ditch Cal Poly ITRC Flap Gates
Overland Ditch & Reservoir Company

May 2019 Board Meeting



LOCATION	
County/Counties:	Delta
Drainage Basin:	Gunnison

DETAILS	
Total Project Cost:	$23,012
Water Plan Grant Request:	$11,506
Recommended Amount:	$0
Other CWCB Funding:	$0
Other Funding Amount:	$0
Applicant Match:	$11,506
Project Type(s): Construction	
Project Category(Categories): Agricultural	
Measurable Result:	

The Overland Ditch and Reservoir Company (ODRC) operates Overland Reservoir and Overland Ditch; servicing about 4,400 acres of irrigated agricultural land. The ODRC has also maintains recreational access and facilities at the reservoir. ODRC is requesting $11,506 through Colorado's Water Plan (CWP) Grant Program. Grant funds will be used to remove existing flood control structures which utilize culverts and wood with new concrete structures to accommodate automated Flap Gates that would divert excess amounts of water during significant rain events. Unlike the existing culvert system, the flap gates are designed for automatic water level control. These features would reduce damage to the ditch in the event of a flood. The proposed flap gates would be designed by and approved by the Cal-Poly ITRC program.

Staff is not recommending funding for this project at this time. The CWP Agricultural Projects Review Committee scored the grant application using current CWP Grant Guidelines and specific criteria for the agriculture projects which include a focus on collaboration, multiple benefits, promoting conservation and efficiency, and utilizing innovative approaches to solve complex water resource challenges. Furthermore, since the CWP Grant Program supports projects statewide, an effort was made to ensure geographical diversity in projects recommended for Board approval. The review committee encourages to the applicant to continue refining their proposal to conform to the Framework for State of Colorado Support for a Water Project set forth in Colorado's Water Plan (Section 9.4, pp. 9-43 to 9-44) and the specific criteria for Agricultural Projects.

COLORADO
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Department of Natural Resources

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Water Plan Grant Application

Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as "project") funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

Water Storage Projects	Anna.Mauss@state.co.us
Conservation, Land Use Planning	Kevin.Reidy@state.co.us
Engagement & Innovation Activities	Ben.Wade@state.co.us
Agricultural Projects	Alexander.Funk@state.co.us
Environmental & Recreation Projects	Chris.Sturm@state.co.us

FINAL SUBMISSION: Submit all application materials in one email to *waterplan.grants@state.co.us* in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents. In the subject line, please include the funding category and name of the project.

Water Project Summary

Name of Applicant	**Overland Ditch & Reservoir Company**
Name of Water Project	**Overland Ditch Cal Poly ITRC Flap Gates**

CWP Grant Request Amount	$**11,506.00**
Other Funding Sources _____	$
Other Funding Sources _____	$
Other Funding Sources _____	$
Applicant Funding Contribution	$**11,506.00**
Total Project Cost	$**23,012.00**

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Applicant & Grantee Information
Name of Grantee(s) **Overland Ditch & Reservoir Company**
Mailing Address **30095 Redlands Mesa Rd Hotchkiss, CO 81419**
FEIN **84-0434803**
Organization Contact **Shellie Gies**
Position/Title **Secretary/Treasure**
Email **overlandditch@gmail.com**
Phone **(970)210-1247**
Grant Management Contact **Shellie Gies**
Position/Title **Secretary/Treasure**
Email **overlandditch@gmail.com**
Phone **(970)210-1247**
Name of Applicant (if different than grantee)
Mailing Address
Position/Title
Email
Phone

Description of Grantee/Applicant
Provide a brief description of the grantee's organization (100 words or less).
The Overland Ditch and Reservoir Company (ODRC) was incorporated in 1895 as a non-profit irrigation company. Its principle assets are Overland Reservoir which contains an active volume of 6,163 acre-feet, the water rights for the reservoir, the Overland Ditch, and direct flow rights for 214.7 cubic feet per second from 5 tributaries to the Overland Ditch. The reservoir and ditch were built between 1895 and 1905. Overland Reservoir was enlarged several times through 1954. The company delivers an average of approximately 17,000 acre-feet of water annually to the service area. There are 10,000 shares of stock outstanding, all of which are applied to agricultural usage. The service area includes about 4,400 acres of irrigatable land 3,707 acres of which are currently irrigated. Current irrigated land use includes 182 parcels with a crop distribution of about 74.9 percent grass-pasture, 20.3 percent alfalfa, 0.3 percent grapes, 0.7 percent small grains, 0.3 percent spring wheat and 3.5 percent orchards. The ODRC has developed and sustains recreational access and facilities for the citizens of the State of Colorado at the Overland Reservoir. The reservoir is very popular for camping, fishing, boating and other recreation. The reservoir is also the only Colorado Division of Wildlife fishery in the watershed.

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Type of Eligible Entity (check one)	
	Public (Government): Municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
	Public (Districts): Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.
X	**Private Incorporated:** Mutual ditch companies, homeowners associations, corporations.
	Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for funding.
	Non-governmental organizations (NGO): Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes.

Type of Water Project (check all that apply)	
	Study
X	Construction
	Identified Projects and Processes (IPP)
	Other

Category of Water Project (check the primary category that applies and include relevant tasks)		
	Water Storage - Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap.. *Applicable Exhibit A Task(s):*	
	Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. *Applicable Exhibit A Task(s):*	
	Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website. *Applicable Exhibit A Task(s):*	
X	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. *Applicable Exhibit A Task(s):*	
	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. *Applicable Exhibit A Task(s):*	
	Other	Explain:

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Location of Water Project	
Please provide the general county and coordinates of the proposed project below in **decimal degrees**. The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	**Delta**
Latitude	**39.03 & 38.99**
Longitude	**107.61 & 107.61**

Water Project Overview
Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, and area of habitat improvements, where applicable. If this project addresses multiple purposes or spans multiple basins, please explain. The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.
The Overland currently has flood control releases built out of culverts and wood and are not sufficient for the use of flood control gates. We will need to build concrete structures at the two location to accommodate the new Flap Gates. The Flap Gates are an automatic system that would divert excessive amounts of water, during and after a torrential rain storm, out of the Overland Ditch into a natural drainage area. This would stop any damages, that may result from the excessive water, to the ditch and surrounding areas of the Overland Ditch. The locations for the new proposed structures are on National Forest land, where the current Overland Ditch runs. The purposed flap gates would be designed by and approved by The Cal-Poly ITRC program. The current non-efficient flood control structures would be removed. An adequate concrete structure would be built at the two locations and the approved Flap-Gate structures would be built and placed in the concrete structures. The Fire Mountain Canal has placed a few of these Flap-Gate structures and they have been working well for them. The Overland Board will apply for additional funding to cover the remaining balance, through other grant opportunities.

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Measurable Results		
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:		
	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
	Existing Storage Preserved or Enhanced (acre-feet)	
X	Length of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
	Area of Restored or Preserved Habitat (acres)	
	Quantity of Water Shared through Alternative Transfer Mechanisms	
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning	
	Number of Coloradans Impacted by Engagement Activity	
	Other	Explain:

Water Project Justification
Provide a description of how this water project supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, and the applicable Roundtable Basin Implementation Plan and Education Action Plan. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers). The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)
The proposed Cal Poly ITRC Flap-Gate projects will be a benefit for several reasons. They are designed for automatic water level control. The flap-gates will automatically open when the water level exceeds safe levels in the ditch. The flap-gate will automatically divert the excess water into a natural drainage along the proposed site placement. There is roughly 23 miles of ditch below the proposed flap-gate sites. The flap-gates would replace outdated flood control structures that are in place now. The two sites are located on natural drainage areas, Terror Creek and Hubbard Creek drainage. In the event of a heavy rain, the Flap-Gate would automatically, through its design of counter weights and pivot points, open a gate that would allow the excess water out though the bottom of the Flap-Gate structure into the natural drainage area. This would stop flood water from damaging numerous Overland Ditch structures, including the actual ditch itself. The Shareholders would not be damaged, from water loss and large repair costs. The cost of the Flap-Gates far out way the cost of damage, flood waters would cause. This would stop the flood waters from damaging natural

recourses on The Grand Mesa National Forest. We have no way of knowing how many or when there may be a heavy rain event, but they have happened in the past and will continue to happen in the future. The Overland Ditch & Reservoir Company's goal for this project is to be prepared for such an event and maintain consistent flow in the ditch. The Flap Gates have potential to save maintenance cost and man hour costs. The Fire Mountain Canal has installed several of these Cal-Ply ITRC Flap-Gates, in the last couple years. So far, they have had great success.

Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs.

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Previous CWCB Grants, Loans or Other Funding
List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order; 6) Percentage of other CWCB funding for your overall project.
Applicant Name: Overland Ditch and Reservoir Company **Water Activity Name: Overland Reservoir, Update Hydrologic Yield Information** **Approving RT: Gunnison Basin** **CWCB board meeting date: March 2008** **Purchase Order Number: 08 PDA 08000000038** **Applicant Name: Overland Ditch and Reservoir Company** **Water Activity Name: Overland Reservoir, Construct Reservoir Level Gauge** **Approving RT: Gunnison Basin** **CWCB board meeting date: January 2019**
Taxpayer Bill of Rights
The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect your application.
NOT APPLICABLE

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Submittal Checklist	
X	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.
Exhibit A	
X	Statement of Work(1)
X	Budget & Schedule(1)
	Engineer's statement of probable cost (projects over $100,000)
	Letters of Matching and/or Pending 3rd Party Commitments(1)
Exhibit C	
X	Map (if applicable)(1)
	Photos/Drawings/Reports
X	Letters of Support (Optional)
	Certificate of Insurance (General, Auto, & Workers' Comp.) (2)
	Certificate of Good Standing with Colorado Secretary of State(2)
	W-9(2)
	Independent Contractor Form(2) (If applicant is individual, not company/organization)
Engagement & Innovation Grant Applicants ONLY	
	Engagement & Innovation Supplemental Application(1)

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Water Plan Grant - Exhibit B
Budget and Schedule

Date: 1/30/2019

Name of Applicant: Overland Ditch and Reservoir Company

Name of Water Project: Overland Ditch Cal Poly ITRC Flap Gates

Project Start Date: 8/1/2019

Project End Date: 11/1/2019

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request	Match Funding	Total
1	Design & Approval	8/1/2019	8/31/19	0	0	$0
2	Construction	9/1/2019	10/15/2019	$11,506	$11,506	$23,012.00
3	Complete Documentation	10/16/2019	11/1/2019	0	0	$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
			Total	$38,238	$9,560	$23,012

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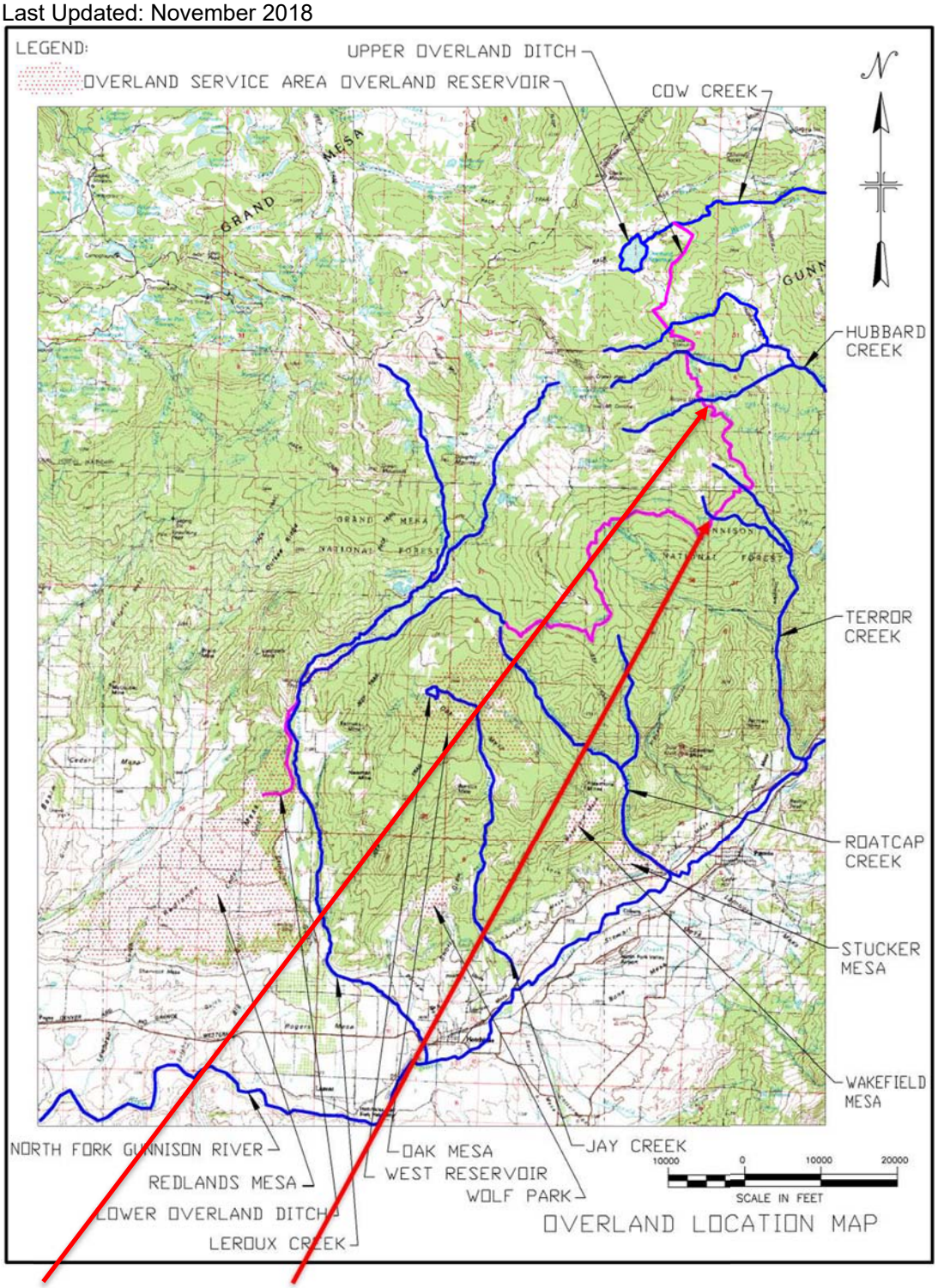

The two proposed Cal Poly ITRC Flap Gates sites

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Colorado Water Conservation Board
Water Plan Grant - Exhibit A

Statement Of Work	
Date:	**January 30, 2019**
Name of Grantee:	**Overland Ditch & Reservoir Company**
Name of Water Project:	**Overland Ditch/Cal Poly ITRC Flap Gates**
Funding Source:	
Water Project Overview:	
The proposed project will consist of, removing the current flood control structure. The current structure in place is culverts and boards. The Cal-Poly ITRC Flap Gates will be designed and approved by Cal-Poly. This will require about 30 days to complete design and approval, there is no cost associated with the design and approval. The approved design will be built to design specifications. The concrete will be installed at the proposed sites after the proper site preparations. The new Flap-Gates will be tested for maximum efficiency.	
Project Objectives:	

The main objectives for this project are to maintain consistent flow in the Overland Ditch and to protect our Shareholders, Ditch and National Forrest from any damages, caused by heavy rain events. These automated flap gates will save the Overland Ditch & Reservoir Company in maintenance costs.

Tasks
Task 1 –
Description of Task:
Method/Procedure:
Deliverable:

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Tasks

Tasks
Task 2 – [Name]
Description of Task:
Method/Procedure:

Last Updated: November 2018

Tasks
Deliverable:

Repeat for Task 3, Task 4, Task 5, etc.

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

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.

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Reporting Requirements

Final Report: At completion of the project, the applicant 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.

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.
(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.

Overland Ditch Cal Poly ITRC Flap Gates Estimate

Total for 2 Units	$23,012.00
Amount Per Unit	$11,506.00

Item	Description	Cost	Qty	Amount	Notes
1/4" Steel Plate	For Flap Gate	$5.00	20	$100.00	
1/4"x2"x2"	Tubing	$3.00	24	$72.00	
1/4"x2"x4"	Tubing	$5.00	40	$200.00	
1/4"x4"x4"	Tubing	$7.00	10	$70.00	
3/16"x2"x8"	Tubing	$8.00	12	$96.00	
1/2"x2"x2"	Angle	$2.00	8	$16.00	
1.5"	Shaft	$11.00	10	$110.00	
3/8"x18"	Pipe	$47.50	8	$380.00	
#4	Rebar	$0.30	280	$84.00	
Quickrete	Counterweight	$6.00	16	$96.00	
Bearings		$22.00	4	$88.00	
Stabilizers		$40.00	4	$160.00	
Quickrete	For Structure	$6.00	540	$3,240.00	
Fabrication	Welding unit together	$2,500.00	2	$5,000.00	
Equipment/Backhoe	Time	$2,500.00	2	$5,000.00	

Item	Description	Cost	Qty	Amount	Notes
Labor	Building/pouring	$2,500.00	2	$5,000.00	
Equipment Rental	Cement Mixer/Vibrator/Forms	$800.00	2	$1,600.00	
Timbers	For top of structure	$300.00	2	$600.00	
5%	Contingency	$550.00	2	$1,100.00	
Project Total 2 Units				**$23,012.00**	

COLORADO
Division of Water Resources
Department of Natural Resources
Water Division 4 - Main Office

January 30, 2019

Subject: Flap Gates for the Overland Ditch

To Whom it May Concern,

I am writing this letter to lend my support to the Overland Ditch Company in their attempt to gain grant funds for installation of flap gates. Flap gates are a relatively in-expensive way of adding automation to the ditch, for the purposes of reducing maintenance and repair costs, and for improving safety.

The Overland Ditch is susceptible to the many difficulties that arise when a sudden and/or large amount of water is unintentionally diverted by the ditch, such as happens during large rain events or warm spring run-off conditions. These conditions can lead to over-topping of the ditch, which can result in significant damage to the ditch itself, as well as properties below the ditch. It is not always possible for ditch personal to fore-see these events and respond in time to prevent them. Installation of flap gates at strategic locations along the Overland Ditch would likely greatly reduce the occurrences of these situations, thus improving safety and reducing the amount of time and labor spent in maintenance and repairs.

In short, I fully support any efforts by the Overland Ditch Company to purchase and install these structures.

Sincerely,

Luke M. Reschke
Lead Water Commissioner, District 40
(970) 234-4922
luke.reschke@state.co.us