



Last Update: August 3, 2017

Colorado Water Conservation Board
Water Supply Reserve Fund Grant Application

Instructions		
<p>All WSRF grant applications shall conform to the current 2016 WSRF Criteria and Guidelines.</p> <p>To receive funding from the WSRF, a proposed water activity must be approved by a Roundtable(s) AND the Colorado Water Conservation Board (CWCB). The process for Roundtable consideration and recommendation is outlined in the 2016 WSRF Criteria and Guidelines. The CWCB meets bimonthly according to the schedule on page 2 of this application.</p> <p>If you have questions, please contact the current CWCB staff Roundtable liaison:</p>		
<p>Arkansas</p> <p>Ben Wade ben.wade@state.co.us 303-866-3441 x3238</p>	<p>Gunnison North Platte South Platte Yampa/White</p> <p>Craig Godbout craig.godbout@state.co.us 303-866-3441 x3210</p>	<p>Colorado Metro Rio Grande Southwest</p> <p>Megan Holcomb megan.holcomb@state.co.us 303-866-3441 x3222</p>

WSRF Submittal Checklist (Required)	
X	I acknowledge this request for funding was recommended for CWCB approval by the sponsoring Basin Roundtable(s).
X	I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines .
X	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract . ⁽¹⁾
Exhibit A	
X	Statement of Work ⁽²⁾ (Word – see Exhibit A Template)
X	Budget & Schedule ⁽²⁾ (Excel Spreadsheet – see Exhibit A Template)
X	Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾
Exhibit C	
X	Map ⁽²⁾
X	Photos/Drawings/Reports
X	Letters of Support
X	Certificate of Insurance ⁽³⁾ (General, Auto, & Workers' Comp.)
Contracting Documents	
X	Certificate of Good Standing ⁽³⁾
X	W-9 ⁽³⁾
	Independent Contractor Form ⁽³⁾ (If applicant is individual, not company/organization)
X	Electronic Funds Transfer (ETF) Form ⁽³⁾

(1) Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting

(2) Required with application if applicable.

(3) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.

To: Rio Grande Basin Round Table
%San Luis Valley WCD
623 Fourth St.
Alamosa, CO 81101

1 March 2018

From: Alamosa-La Jara Water Conservancy District
Dwight Martin, President
17121 County Rd W.5
La Jara, CO 81140



Subject: Terrace Reservoir Outlet Works Inspection and Repair Analysis

The Alamosa-La Jara Water Conservancy District wishes to communicate a letter of support for the Terrace Reservoir Outlet Works Inspection and Repair Analysis project. The board concurs with the necessity of this work and will contribute to the project.

The Alamosa-La Jara Conservancy District supports The Terrace Irrigation Company's grant application to The Rio Grande Basin Roundtable and hereby pledges a contribution to the project in the amount of \$5,000.00 to be used as matching funds.

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Schedule		
CWCB Meeting	Application Submittal Dates	Type of Request
January	December 1	Basin Account; BIP
March	February 1	Basin/Statewide Account; BIP
May	April 1	Basin Account; BIP
July	June 1	Basin Account; BIP
September	August 1	Basin/Statewide Account; BIP
November	October 1	Basin Account/BIP

Desired Timeline	
Desired CWCB Hearing Month:	May
Desired Notice to Proceed Date:	June

Water Activity Summary		
Name of Applicant	Terrace Irrigation Company, Inc.	
Name of Water Activity	Terrace Reservoir, Outlet Works Inspection and Repair Analysis, Phase I	
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾	
Rio Grande Basin Roundtable	\$15000.00	
Basin Account Request Subtotal	\$15,000.00	
Statewide Account Request ⁽¹⁾	\$	
Total WSRF Funds Requested (Basin & Statewide)	\$15,000.00	
Total Project Costs	\$20,000.00	

(1) Please indicate the amount recommended for approval by the Roundtable(s)



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Grantee and Applicant Information	
Name of Grantee(s)	Terrace Irrigation Company, Inc.
Mailing Address	P.O. Box 109
FEIN	84-0412531
Grantee's Organization Contact ⁽¹⁾	Virginia Christensen
Position/Title	Board Member
Email	forage1@gojade.org
Phone	719-852-4694
Grant Management Contact ⁽²⁾	<u>Kay Harmon</u>
Position/Title	Bookkeeper
Email	kaysbooksr4u@gmail.com
Phone	719-852-5638 850-3237
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

(1) Person with signatory authority Kent Reinhardt, President, Casey Caldon, Secretary/Treasurer

(2) Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff. Kay Harmon, Bookkeeper

Description of Grantee
Provide a brief description of the grantee's organization (100 words or less).
<p>Terrace Irrigation Company was incorporated in the 1940's. The company is a 501-C-12 nonprofit irrigation corporation with approximately 24 shareholders and about 9,000 acres of farmland under irrigation. Terrace Irrigation Company, Inc. is the owner of Terrace Reservoir which was built in the early 1900's on the main stem of the Alamosa River. At that time it was the largest earthen dam in the U.S.</p> <p>Terrace Irrigation Company delivers surface water to the shareholders from two sources: 1.) direct flow from the Alamosa River with various priorities; and 2.) stored winter flows and peak runoff during the irrigation season. This stored water is appropriated to each shareholder according to their number of shares. Each shareholder can call for their water as needed for each individual farming operation.</p> <p>Terrace Irrigation Company has dedicated 2000 acre feet of storage to CWCB (Alamosa River Foundation) instream flow water. The instream flow water is released after the end of the irrigation season at the direction of the Division Engineer and the Alamosa Riverkeeper and CWCB. The company also stores and delivers augmentation water owned by the town of Jasper for residential well augmentation, and Expo, Inc. for their commercial well augmentation. The company maintains a 1500 acre foot conservation pool for CPW.</p>

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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: are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
	Non-governmental organizations: broadly, any organization that is not part of the government
	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes

Type of Water Activity (check one)	
X	Study
	Implementation

Category of Water Activity (check all that apply)		
X	Nonconsumptive (Environmental)	
X	Nonconsumptive (Recreational)	
X	Agricultural	
X	Municipal/Industrial	
	Needs Assessment	
	Education & Outreach	
X	Other	Explain: Dam Safety

Location of Water Activity	
Please provide the general county and coordinates of the proposed activity below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	Conejos
Latitude	37.3566723
Longitude	-106.2864214

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Water Activity Overview

Please provide a summary of the proposed water activity (200 words or less). Include a description of the activity and what the WSRF funding will be used for specifically (e.g. studies, permitting, construction). Provide a description of the water supply source to be utilized or the water body affected by the activity. 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, area of habitat improvements. 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, and Schedule.

The State Dam Safety Inspector is requiring The Terrace Irrigation Company to retain an Engineering firm that specializes in reservoir tunnel pipelines to perform an inspection of the existing outlet works pipe in the dam at the Terrace Reservoir and prepare an analysis describing alternatives to mitigate the corrosion.

The October 23, 2017 State Engineer's inspection report described that heavy corrosion was observed in the existing 48-inch diameter steel outlet pipe. The report also stated that, based on ultrasonic testing performed by Water Works Irrigation for Terrace Irrigation Company, the pipe has substantially deteriorated since it was installed in 1979.

An engineering firm will be hired to perform an inspection of the existing outlet works pipe and prepare a report describing conceptual alternatives to mitigate the corrosion. Observations of the outlet works pipe will be documented.

An Outlet Works Alternative Analysis of Repairs will be developed. Up to three concept alternatives to repair the pipe corrosion will be provided. Concept construction costs for the three alternatives will be provided for comparison purposes. The concepts will help form a basis for planning and future work. The alternatives will be summarized in a letter report.

Measurable Results

To catalog measurable results achieved with WSRF funds please provide any of the following values.

	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
15,182.3 acre-feet	Existing Storage Preserved or Enhanced (acre-feet)	
	Length of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
	Area of Restored or Preserved Habitat (acres)	
	Length of Pipe/Canal Built or Improved	
	Other	Explain:

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Water Activity Justification

Provide a description of how this water activity supports the goals of [Colorado's Water Plan](#), the most recent [Statewide Water Supply Initiative](#), and the respective [Roundtable Basin Implementation Plan and Education Action Plan](#) ⁽¹⁾. 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).

For applications that include a request for funds from the Statewide Account, the proposed water activity shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan criteria for state support (CWP, Section 9.4, pp. 9-43 to 9-44;) (Also listed pp. 4-5 in [2016 WSRF Criteria and Guidelines](#)).

Because this project is for the purpose of assuring the timely maintenance of the Terrace Reservoir operating structures, one of Colorado's Reservoirs, which is used to store water for agricultural irrigation uses, instream flow water, municipal and commercial augmentation water, and a CPW conservation pool for fish and recreational fishing, the projects meets the following goals and needs.

This water activity supports the goals of the **Colorado Water Plan, the Statewide Water Supply Initiative and WSRF Criteria and Guidelines** especially:

D. Agriculture: Maintain Agricultural Viability: Maintain Colorado's agricultural productivity, support of rural economies, and food security.

CRITICAL AGRICULTURE ACTIONS

3. Provide grants, loans, and technical support to update and improve Colorado's aging agricultural infrastructure, especially where improvements provide multiple benefits. 6.5, 6.3.4 CWCB, BRTs, agricultural partners, other stakeholders

The water activity support the goals of the **Rio Grande Basin Round Table** especially:

4. Operate, maintain, rehabilitate, and create necessary infrastructure to meet the Basin's long-term water needs, including storage. The Reservoir meets the needs of the following water users: Ag, M&I, WADM, Env & Rec

5. Manage water use to sustain optimal agricultural economy throughout the Basin's communities meeting the following needs: Ag, M&I, WADM, Env & Rec

6. Support the development of projects and methods that have multiple benefits for agricultural, municipal and industrial, and environmental and recreational water needs.

The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.

Terrace Irrigation Company is an eligible entity, being a 501 (c) (12); the Project requests funding for eligible water activities, which include "structural and/or nonstructural water project or activity.

The Project helps the Rio Grande Basin to sustainably meet its consumptive and non-consumptive needs by addressing irrigation needs and providing storage space for instream flow water on the Alamosa River.

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(1) Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.

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Matching Requirements: Basin Account Requests	
Basin (only) Account grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3 rd party and shall be accompanied by a letter of commitment as described in the 2016 WSRF Criteria and Guidelines (submitted on the contributing entity's letterhead). Attach additional sheet if necessary.	
Contributing Entity	Amount and Form of Match (note cash or in-kind)
Alamosa La Jara Water Conservancy District	\$5000.00
Total Match	\$5000.00
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	

Matching Requirements: Statewide Account Requests	
Statewide Account grant requests require a 50% match as described in the 2016 WSRF Criteria and Guidelines. A minimum of 10% match shall be from Basin Account funds (cash only). A minimum of 10% match shall be provided by the applicant or 3 rd party (cash, in-kind, or combination). The remaining 30% of the required match may be provided from any other source (Basin, applicant, or 3 rd party) and shall be accompanied by a letter of commitment . Attach additional sheet if necessary.	
Contributing Entity	Amount and Form of Match (note cash or in-kind):
n/a	n/a
Total Match	\$
If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).	

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Related Studies

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

Under contract to the Colorado Water Conservation Board, the Alamosa River Watershed Restoration Master Plan Environmental Assessment Final Report was produced. The incentive for the Master Plan was provided by a legal settlement over impacts of the Summitville Mine Superfund Site. That settlement also provided funding for the study and mitigation measures to be developed by the Master Plan. The scope of the Master Plan includes the entire watershed and covers a broad array of natural resources and watershed functions and values. The result is a multi-disciplinary approach to watershed assessment that has produced a prioritized plan for watershed restoration and enhancement. Specific projects are identified, along with potential financing sources, including funds from the Summitville legal settlement. The Master Plan is available at:
<http://mountainprairie.fws.gov/nrda/summitvilleColo/Summitville.htm>.

Previous CWCB Grants

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

Name	Project	Basin	App. Date	Contract #	
Terrace Irrigation Company	Spillway Replacement Project	RGBRT	3/20/2012	C150332	Current
Terrace Irrigation Company	Repair Gate & Replace Trash Rack	RGBRT	3/17/2004	C150171	Refinanced
Terrace Irrigation Company	Ditch Lining Project	RGBRT	2/14/1992	C153606	Refinanced

Tax Payer Bill of Rights

The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.

N/A

**Water Supply Reserve Fund
Water Activity Summary Sheet
March 27, 2018
Agenda Item 29(d)**

Applicant & Grantee: Terrace Irrigation Company, Inc.
Water Activity Name: Terrace Reservoir, Outlet Works Inspection and Repair Analysis, Phase I
Water Activity Purpose: Agricultural & Environmental Implementation
County: Conejos
Drainage Basin: Alamosa
Water Source: Alamosa River
Amount Requested: \$15,000 Rio Grande Basin Account
Matching Funds: Applicant Match (cash & in-kind) = \$5,000

- 33% of the statewide request (meets 25% min)
- 25% of the total project cost of \$20,000

Staff Recommendation:

Staff recommends approval of up to \$15,000 from the Rio Grande Basin Account to fund the project titled: Terrace Reservoir, Outlet Works Inspection and Repair Analysis, Phase I.
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Water Activity Summary: WSRF grant funds, if approved, will assist Terrace Irrigation Company in hiring an Engineering firm that specializes in reservoir tunnel pipelines to perform an inspection of the existing outlet works pipe in the dam at the Terrace Reservoir and prepare an analysis describing alternatives to mitigate corrosion. The October 23, 2017 State Engineer's inspection report described that heavy corrosion was observed in the existing 48-inch diameter steel outlet pipe. The report also stated that, based on ultrasonic testing performed by Water Works Irrigation for Terrace Irrigation Company, the pipe has substantially deteriorated since it was installed in 1979.

An engineering firm will be hired to perform an inspection of the existing outlet works pipe and prepare a report describing conceptual alternatives to mitigate the corrosion. Observations of the outlet works pipe will be documented and up to three concept alternatives to repair the pipe corrosion will be provided. Concept construction costs for the three alternatives will be provided for comparison purposes which will help form a basis for planning and future work.

Terrace Irrigation Company, Inc. is the owner of Terrace Reservoir which was built in the early 1900's on the main stem of the Alamosa River. At that time it was the largest earthen dam in the U.S at 15,182 acre-feet. The company is a 501-C-12 nonprofit irrigation corporation with approximately 24 shareholders and about 9,000 acres of farmland under irrigation.

Discussion: As described in the Rio Grande Roundtable chair's recommendation letter, this project was supported and recommended for approval on March 13, 2018. This project assists in satisfying Colorado's Water Plan Critical Goals and Actions as identified in Chapter 10.3, *D. Agriculture*, by improving Colorado's aging agricultural infrastructure, particularly where improvements provide multiple benefits. Terrace Reservoir is used to store water for agricultural irrigation uses, instream flow water, municipal and commercial augmentation water, and a Colorado Parks and Wildlife conservation pool for fish and recreational fishing.

Issues/Additional Needs: No additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components.

Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria.

Funding Summary / Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-Kind</u>	<u>Total</u>
Alamosa La Jara Water Conservancy District	\$5,000	\$0	\$5,000
WSRF Rio Grande Basin Account	\$15,000	n/a	\$15,000
Totals	\$20,000	\$0	\$20,000

CWCB Project Manager: Megan Holcomb

March 19, 2018

Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, Colorado 80203

RE: **Roundtable Recommendation Letter** for Terrace Irrigation Company, Inc., Grant Application

Dear

The Rio Grande Basin Roundtable unanimously approved the grant application for the Terrace Irrigation Company, Inc., at its meeting on March 13, 2018. The Name of the Water Activity is: **Terrace Reservoir Outlet Works Inspection and Repair Analysis, Phase 1.**

The total cost of the project is \$20,000.00. Matching funds in the amount of \$5,000.00 are being provided by the Alamosa La Jara Water Conservancy District, meeting the 25% match requirement for the RGBRT. A letter of commitment for matching funds is attached to the application.

The Rio Grande Basin Roundtable Request is for \$15,000.00.

No funds are requested from the Statewide Account.

The Terrace Irrigation Company's Water Activity satisfies statutory eligibility requirements because: This project is for the purpose of assuring the timely maintenance of the operating structures of the Terrace Reservoir, a Colorado reservoir which is used to store water for agricultural irrigation uses, instream flow water, municipal and commercial augmentation water, and a CPW conservation pool for fish and recreational fishing.

The project meets the following goals and needs.

This water activity supports the goals of the Colorado Water Plan, the Statewide Water Supply Initiative and WSRF Criteria and Guidelines especially:

D. Agriculture: Maintain Agricultural Viability: Maintain Colorado's agricultural productivity, support of rural economies, and food security.

CRITICAL AGRICULTURE ACTIONS

3. Provide grants, loans, and technical support to update and improve Colorado's aging agricultural infrastructure, especially where improvements provide multiple benefits. 6.5, 6.3.4 CWCB, BRTs, agricultural partners, other stakeholders.

The water activity supports the goals of the Rio Grande Basin Round Table especially:

4. Operate, maintain, rehabilitate, and create necessary infrastructure to meet the Basin's long-term water needs, including storage. The Reservoir meets the needs of the following water users: Ag, M&I, WADM, Env & Rec

5. Manage water use to sustain optimal agricultural economy throughout the Basin's communities meeting the following needs: Ag, M&I, WADM, Env & Rec

6. Support the development of projects and methods that have multiple benefits for agricultural, municipal and industrial, and environmental and recreational water needs.

The water activity is consistent with Section 37-75-102 Colorado Revised Statutes. Terrace Irrigation Company is an eligible entity, being a 501 (c) (12); the Project requests funding for eligible water activities, which include "structural and/or nonstructural water project or activity.

The Project helps the Rio Grande Basin to sustainably meet its consumptive and non-consumptive needs by addressing irrigation needs and providing storage space for instream flow water on the Alamosa River.

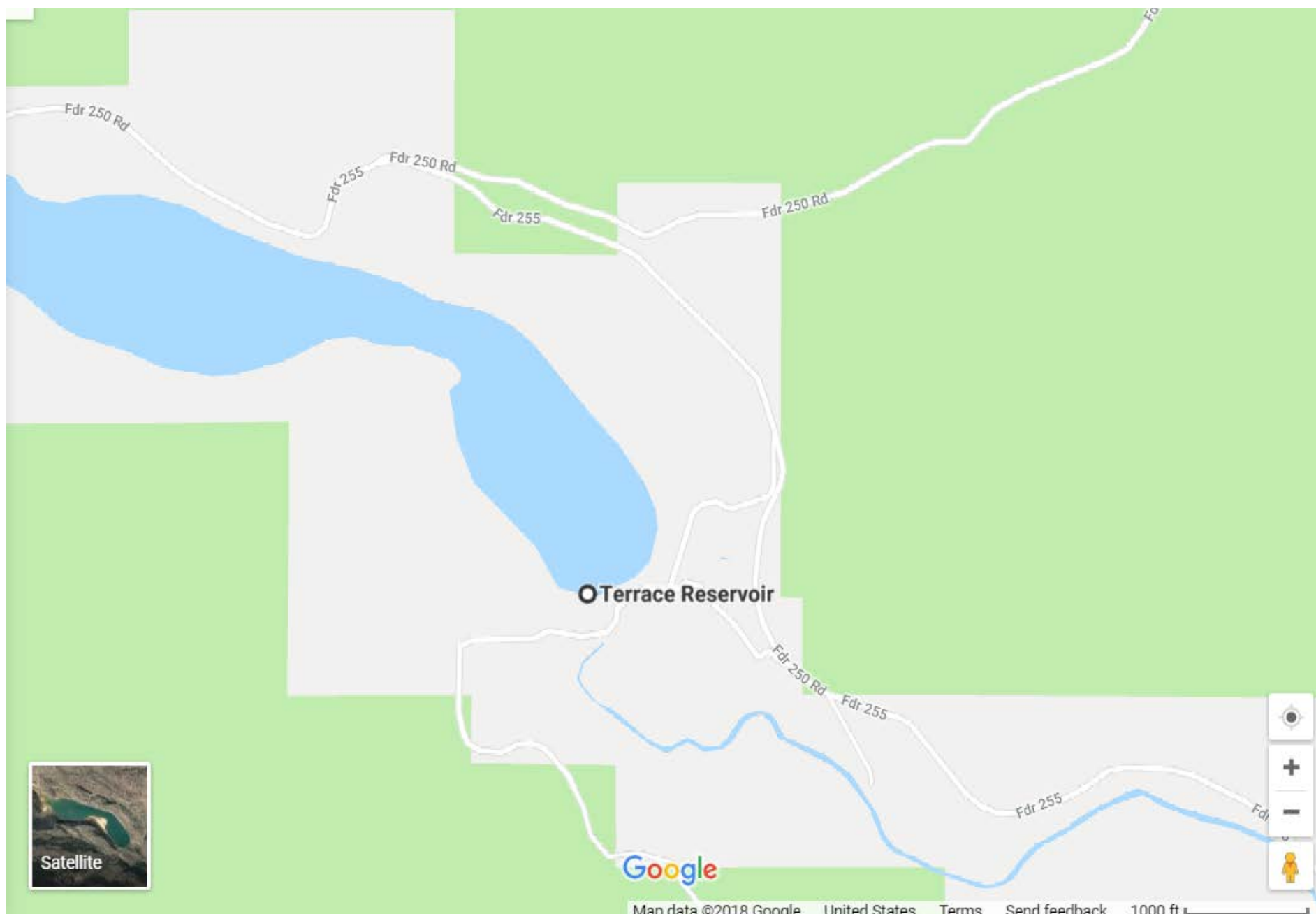
All members of the Roundtable voted in favor of the application. The conversation and questions revolved around the particulars of how the pipeline would be accessed and inspected. There were no negative comments or questions. The Alamosa Riverkeeper is in support of the project and provided a letter of support which is attached to the application.

The Rio Grande Basin Roundtable hereby recommends this grant for approval.

Sincerely,

A handwritten signature in dark ink, appearing to read "Nathan Coombs", written in a cursive style.

Nathan Coombs
Rio Grande Basin Roundtable, Chair



Google



Heavily corroded/pitted section of outlet conduit.

Source: Dam Safety Engineer's Inspection Report 2016