

April 23, 2019

Anna Mauss, P.E. Colorado Water Conservation Board (CWCB) 1313 Sherman St. #718 Denver, CO 80203

RE: Request for Feasibility Study Grant for Increasing Water Storage In or Near

Genesee Water Storage Dam and Reservoir No. 2

Dear Ms. Mauss,

We had spoken last August regarding the Genesee Water and Sanitation District (District) efforts for exploring additional raw water storage opportunities and the possibility of CWCB grant fund(s) availability to supplement the costs of a related feasibility analysis.

Since this time the District has decided to move forward with a feasibility analysis to better utilize its' related water rights portfolio through additional raw water storage by enlargement of their existing 101 acre foot reservoir and/or analysis of other nearby storage alternatives. Accordingly, the District has engaged the services of W.W. Wheeler Associates, Inc. to perform the analysis, with a copy of their proposed scope of work and cost estimate attached. Based on W.W. Wheeler's proposal dated March 29, 2019 the estimated cost is a not to exceed \$75,000 amount with all CWCB guidelines and format to be followed.

Accordingly, and in order to proceed with the feasibility study, the District respectfully requests consideration and approval for a grant not to exceed an amount of \$37,500. Should you have any questions regarding the project, the District's primary contact is Scott Jones, District Manager (sjones@geneseewater.com) and a secondary contact is Rita Claar, Director of Administration (rclaar@geneseewater.com). Additionally, both can be reached by telephone at 303-278-9780.

Sincerely,

Scott Jones, District Manager

Attachments:

W.W. Wheeler Associates, Inc. - Scope of Work and Budget CWCB Loan Prequalification Application 2016, 2017 & 2018 Audited Financials for Genesee Water & Sanitation District W9 Form for Genesee Water & Sanitation District Electronic Funds Transfer (EFT) & Voided Check for Genesee W&SD Water Rights Portfolio



Water Project Loan Program

Projects financed by the Water Project Loan Program must align with the goals identified in Colorado's Water Plan and its measurable objectives.

Application Type		
	oan Approval (Attach Loan Feasibility Study)	
Agency/Company Information		
Company / Borrower Name: Genesee Water and San	itation District	
Authorized Agent & Title: Scott Jones, District Manag	ger	
Address: 2310 Bitterroot Lane, Golden, CO 8040	1	
Phone: (303) 278 - 9780	geneseewater.com	
Organization Type:pitch Co,pistrict,Municipalit other:	y Incorporated? YES	
County: Jefferson	Number of Shares/Taps: 1,331 Taps	
Water District: District 1 - Genesee W&SD	Avg. Water Diverted/Yr_411 acre-feet	
Number of Shareholders/Customers Served:	Current Assessment per Share \$ (Ditch Co)	
1,331 Metered Customers - 1,601 SFE's	Average monthly water bill \$ 58.00 (Municipality)	
Contact Information		
Project Representative: Scott Jones		
Phone: (303) 278 - 9780	geneseewater.com	
Engineer: W.W. Wheeler Associates, Inc. c/o Don	Lopez & Steve Jamieson	
Phone: (303) 761 - 4130 Email: don.lopez@wwwheeler.com steve.jamieson@wwwheeler.com		
Attorney: Richard Mehren and/or Carolyn Steffl -	Moses, Witemyer, Harrison & Woodruff P.C.	
Phone: (303) 443 - 8782 Ext. 111 Email: rmehren	@mwhw.com & csteffl@mwhw.com	
Project Information		
Project Name: Feasibility Analysis to Increase Raw Water	er Storage for Genesee Water & Sanitation District	
Brief Description of Project: (Attach separate sheets if nee	eded)	
Initially, the Genesee Water and Sanitation District is planning to d		
Genesee Water and Sanitation District in order to better utilize their protection from years of drought. In 2007 the District completed co	onstruction of a 101 acre foot dam/reservoir to provide for raw water	
storage, however it was always anticipated to pursue additional sto	prage space at some point in the future. (All about funding).	
Project Start Date(s) Design: TBD Con	nstruction: TBD	
General Location: (Attach Map of Area)		
Attached		
Project Costs - Round to the nearest thousand Estimated Engineering Costs: Initially - \$75,000 Estimated Construction Costs:		
Estimated Engineering Costs: Initially - \$75,000		
Other Costs (Describe Above): TBD	Estimated Total Project Costs:	
Requested Loan Amount: TBD	Requested Loan Term(10, 20, or 30 years):Years	
Signature		
Signature (Title	Return to: Finance Section Attn: Anna Mauss 1313 Sherman St #718 Denver, CO 80203 Ph. 303/866.3449 e-mail: anna.mauss@state.co.us	







March 29, 2019

Scott Jones, District Manager Genesee Water & Sanitation District (District) 2310 Bitterroot Lane Golden, CO 80401

Re: Proposal to Prepare CWCB Feasibility Report to Increase Raw Water Storage in or near Genesee Reservoir No. 2

Dear Scott:

Per your request, W. W. Wheeler and Associates, Inc. (Wheeler) is pleased to submit this proposal to prepare a feasibility evaluation for increasing raw water storage for the District in order to better utilize their full water rights portfolios and entitlement, and to further solidify protection from years of drought. Wheeler was involved in the initial storage feasibility studies in 2003 through 2005 and the resulting final design and construction administration of Genesee Dam No. 2. We understand that the District would like to increase raw water supply storage in or near Genesee Dam No. 2. We also understand that the District will be seeking a feasibility study Grant from the Colorado Water Conservation Board (CWCB) to prepare a loan feasibility report in the CWCB loan feasibility report format. Preparing a loan feasibility report does not obligate the District to obtain a CWCB construction loan and the Grant will pay for 50 percent of the feasibility study up to a match of \$50,000.

Our proposed scope of work, budget, and schedule to complete this evaluation is based on the work tasks listed below and documented in more detail in the following pages:

- Data Review
- Kick-off Meeting
- Hydrology and Spillway Update
- Develop Primary Water Storage Concepts
- Board Workshop No. 1
- Primary Alternative Analysis
- Draft Report
- Board Workshop No. 2
- Finalize Report

SCOPE OF WORK

Data Review: Wheeler will initiate our feasibility study by briefly reviewing the previous feasibility studies completed to determine if there may be other appropriate smaller reservoir sites in the vicinity of Genesee Dam No. 2. We will also refamiliarize ourselves with some of the key design and construction documents for Genesee Dam No. 2.

Kick-off Meeting: After we complete our initial data review, we propose to have a brief discussion with the District's Board of Directors to review our proposed scope of work, the Feasibility Study objective, and some of our initial thoughts on potential additional storage alternatives. These alternatives could include raising the existing dam, blasting out additional rock in the reservoir rim of the Genesee Reservoir No. 2, or constructing smaller dams and reservoirs in the vicinity of or near the District's water treatment plant.

Hydrology and Spillway Capacity Update:

The Colorado Dam Safety Branch has published a new Regional Extreme Precipitation Study (REPS) and it is our understanding that they will be requiring all dam owners in the State to re-evaluate their spillway design floods with this new tool. Any dam enlargement option will be required to use this REPS tool to evaluate modifications to spillways. Wheeler will use the new REPS tool to do a preliminary evaluation of existing and enlarged dam spillway capacity to safely pass the new Inflow Design Flood. An updated inflow hydrograph will be used to evaluate modified spillway concepts associated with modifications to Genesee Dam No. 2.

Develop Primary Increased Water Storage Concepts:

Wheeler will use the updated inflow hydrology to develop conceptual sketches of potential, viable enlargement alternatives. If appropriate, the REPS tool will also be used to perform preliminary designs for smaller reservoirs in the vicinity of Genesee Dam No. 2.

Board Workshop No. 1:

Wheeler will discuss the initial increased storage alternatives along with potential pros and cons of each alternative in a workshop with the District Board. The goal of this workshop would be to agree on up to four increased storage alternatives that could be developed in more detail. Although other nearby water storage sites may be initially considered, it is anticipated that the most efficient, cost effective, and easiest to permit approach would be to increase the storage in the existing Genesee Reservoir No. 2.

Primary Alternative Analysis:

During this phase of the study, Wheeler will perform an initial engineering analysis of key issues such as stability analysis; seepage analysis; outlet works capacities; filling facilities; spillway hydraulics; potential permitting challenges; operation and maintenance issues; and access and land acquisition issues. A matrix of key pros and cons will also be developed for each primary alternative along with preliminary opinions of probable cost to construct each primary alternative. The cost opinions will be based on initial construction quantities and developed in a construction bid tab format along with key direct and indirect contingencies.

Draft Feasibility Report:

The results of the work will be summarized in a draft feasibility report format that would meet the requirements of a CWCB loan feasibility study. The draft report would be provided to the District Staff, Board, and the CWCB for review and comment.

Board Workshop No. 2:

After the draft feasibility report is available, Wheeler would hold a second Board Workshop to review the results of the study as documented in the draft report, clarify key issues and questions, and discuss key inputs and comments that the District Board may have.

Finalize Feasibility Report: The final feasibility report will address the District's comments received during the Board Workshop No. 2. We will prepare seven printed copies and one electronic copy of the final report.

Scott Jones March 29, 2019 Page 4

BUDGET & SCHEDULE

Our proposed budget to complete the feasibility report as previously described will be completed on a time and materials basis for a not-to-exceed budget of \$75,000. The budget will not be exceeded without prior written authorization from the District. Wheeler is prepared to immediately begin work on this study. Pending authorization from the District by May 1, 2019, Wheeler can complete the final feasibility report by October 31, 2019.

Project Staff

Don Lopez, P.E. will be Wheeler's Project Manager who will be responsible for the technical and administrative aspects of the study. Don was Wheeler's on-site resident engineer responsible for observing and documenting the original construction of Genesee Dam No. 2. Steve Jamieson, P.E, will provide technical review and quality control oversight reviews during the study and can be available for Board workshops and meetings as needed. Other outside subject-matter experts that we routinely work with may be involved in the Study only with other Wheeler staff, as needed.

Professional Services Agreement

Wheeler's professional engineering services will be performed in accordance with the scope of services described in this proposal and the terms and conditions of the Engineering Services Agreement provided in Attachment A. We will invoice for our services each month based on the Standard Rate Schedule provided in Attachment B. If the terms and conditions of our proposal are acceptable to the District, please indicate your agreement to these terms and conditions by signing and returning a copy of the Consultant Agreement to us. Our receipt of a signed copy of the Agreement will be considered as our Notice-to-Proceed.

Please call if you have any questions or need any additional information.

Sincerely,

W. W. Wheeler & Associates, Inc.

Donald B. Lopez, P.E.

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ATTACHMENT A Engineering Services Agreement

WWW.WWWHEELER.COM

3700 S. INCA STREET | ENGLEWOOD, CO 80110-3405 303-761-4130 | FAX 303-761-2802

ENGINEERING SERVICES AGREEMENT

THIS IS AN AGREEMENT made as of the 29th day of March in the year 2019, by and between <u>Genesee Water and Sanitation District</u> (hereinafter called OWNER) and W. W. Wheeler & Associates, Inc. (hereinafter called ENGINEER).

OWNER and ENGINEER in consideration of their mutual covenants herein agree in respect to the performance of professional engineering services by ENGINEER and the payment for those services by OWNER, as set forth below.

ENGINEER shall perform the engineering services as set forth in Exhibit A, a letter proposal dated March 5, 2019 (hereinafter referred to as the PROJECT).

ENGINEER shall perform professional services in accordance with generally accepted engineering practices in this area for the use of OWNER.

OWNER shall pay ENGINEER for services rendered in accordance with the rate schedule, Exhibit B, attached hereto. In the event the PROJECT extends beyond February 29, 2020, a revised schedule with reasonable fee adjustments shall be submitted to the OWNER, and OWNER agrees to pay for services rendered after that date in accordance with the revised schedule.

Daily time sheets will be kept in the office of the ENGINEER, showing the time each person engaged directly on the PROJECT devotes to the work. Records of reimbursable expenses will also be kept by the ENGINEER. These records of time and expenses will be available to audit by OWNER at any time during regular business hours.

ENGINEER shall prepare monthly statements of charges for services rendered and for reimbursable expenses incurred. Such statements shall be submitted to OWNER within fifteen (15) days of the end of each calendar month. Payments of amounts due shall be made by OWNER within thirty (30) days after receipt of each statement.

If OWNER fails to make any payment due ENGINEER for services and expenses within sixty (60) days after receipt of ENGINEER's bill therefore, the amounts due ENGINEER shall include a charge at a rate of 1.5% per month from said sixtieth day plus attorney's fees for collection and in addition, ENGINEER may, after giving seven (7) days written notice to OWNER, suspend services under this Agreement until he has been paid in full all amounts due him for services and expenses.

The work of the ENGINEER may be terminated and this Agreement canceled by the OWNER at any time upon giving ENGINEER ten (10) days prior written notice, in which event OWNER will reimburse ENGINEER for costs incurred or paid and time spent for services on the PROJECT up to the effective termination date.

OWNER and ENGINEER have discussed their risks, rewards and benefits of the PROJECT and the ENGINEER's total fee for services. The risks have been allocated such that OWNER agrees that to the fullest extent permitted by law, ENGINEER's total liability to OWNER for any and all injuries, claims, losses, expenses, damages, or claim expenses arising out of this agreement from any cause or causes, shall not shall not exceed ENGINEER's total fee for this PROJECT. Such causes include but are not limited to ENGINEER's negligence, errors, omissions, strict liability, breach of contract or breach of warranty. ENGINEER shall not be responsible for the acts or omissions of any other persons except his own employees and agents performing any of the work on the PROJECT.

IN WITNESS WHEREOF the parties hereto have made and executed this Agreement as of the day and year first above written.

OWNER:

General Water & Sanitation District

by Doubland District Manager

(NAME & TITLE)

ENGINEER:

W. W. Wheeler & Associates, Inc.

by South Reproject Manager

Donald Lopez, P.E. Project Manager

ATTACHMENT B Standard Rate Schedule



STANDARD RATE SCHEDULE EFFECTIVE APRIL 1, 2019

CLASSIFICATION	RATE/HOUR
Chief Engineer	\$190.00
Senior Water Resource Engineer	\$176.00
Senior Geotechnical Engineer	\$176.00
Senior Project Engineer	\$163.00
Senior Engineer	\$151.00
Project Engineer	\$139.00
Associate Engineer	\$127.00
Staff Engineer	\$115.00
Assistant Engineer	\$104.00
Junior Engineer	\$94.00
CADD Drafter	\$81.00
Administrative Assistant	\$76.00
Technician III	\$80.00
Technician II	\$66.00
Technician I	\$53.00

In addition the above Rate Schedule, the following expense items will be reimbursed to W. W. Wheeler & Associates, Inc. at cost or as indicated:

- Fees by subconsultants, surveyors, laboratories, etc. will include a five percent mark-up
- Prints, photos, and reproductions by others at cost
- Special supplies and equipment at cost
- Out-of-town living expense at cost or per-diem
- In-house reproductions:

Black & White \$0.15/page Color Letter \$0.50/page

Color Ledger \$1.00/page

Two-wheel-drive vehicle
 Four-wheel-drive vehicle
 \$0.65/mile
 \$0.80/mile

3700 S. INCA STREET | ENGLEWOOD, CO 80110-3405 303-761-4130 | FAX 303-761-2802

Project: Genesee Dam No.2 Enlargement Feasibility

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	Expense
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	(Alan) or Engineer (Alan)
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	Ohristine Mugele
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	Task

Data Review Kick-off Meeting Hydrology & Spillway Update Develop Primary Concepts Board Workshop #1	Alternative Analysis Alternative Cost Analysis Draft Report Board Workshop #2 Finalize Report
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Total Budget \$74,774