AGENDA

REGULAR MEETING

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT BOARD OF DIRECTORS
6425 MAIN STREET, GEORGETOWN, CALIFORNIA 95634

TUESDAY, SEPTEMBER 10, 2019
2:00 P.M.

MISSION STATEMENT

It is the purpose of the Georgetown Divide Public Utility District to:

- Provide reliable water supplies
- Ensure high quality drinking water
- Promote stewardship to protect community resources, public health, and quality of life
- Provide excellent and responsive customer services through dedicated and valued staff
- Ensure fiscal responsibility and accountability are observed by balancing immediate and long-term needs.

Out of respect for the meeting and others in attendance, please turn off all cell phones or put in the silent mode.

Pursuant to the Government Code Section 54954.3 (The Brown Act), members of the public shall be afforded the opportunity to speak on any agenda item, provided they are first recognized by the presiding officer. The Board President will call for public comment on each agenda item. Those wishing to address the Board on a matter that is not on the agenda and within the jurisdictional authority of the District may do so during the Public Forum portion of the agenda. Please be aware of the following procedures for speaking during Public Forum or public comment sessions:

1. When called on to speak by the Board President, please approach and speak from the podium.
2. Comments are to be directed only to the Board.
3. The Board will not entertain outbursts from the audience.
4. There is a three-minute time limit per speaker.
5. The Board is not permitted to take action on items addressed under Public Forum.
6. Disruptive conduct shall not be permitted.
7. Persistence in disruptive conduct shall be grounds for removal of that person's privilege of address.

The Board President is responsible for maintaining an orderly meeting.

1. CALL TO ORDER, ROLL CALL, AND PLEDGE OF ALLEGIANCE

2. ADOPTION OF AGENDA

3. PUBLIC FORUM (ONLY ITEMS THAT ARE NOT ON THE AGENDA)

4. PROCLAMATIONS AND PRESENTATIONS

A. Recognize Diana Michaelson for her Service to the District

B. Overview of Voluntary Settlement Agreements – Andy Fecko, PCWA

5. **CONSENT CALENDAR –** Any member of the public may contact a Board member prior to the meeting to request that an item be pulled from the Consent Calendar.

   A. Approval of Minutes

   1. Special Meeting of August 13, 2019
   2. Regular Meeting of August 13, 2019

   B. Financial Reports

   1. Statement of Cash Balances – July 2019
   2. Month-End Cash Disbursements Report – July 2019

   C. Adopt Resolution Supporting District Legal Counsel Barbara Brenner's Appointment to the Association of California Water Agencies Legal Committee

   Possible Board Action: Adopt Resolution.

   D. Voting for Candidates for the Association of California Water Agencies Board of Directors

   Possible Board Action: Adopt Resolution.

6. **INFORMATIONAL ITEMS**

   A. Board Reports

   B. General Manager's Report

   C. Operation Manager's Report

   D. ALT Treatment Plant Update

   E. Finance Committee Report

7. **NEW BUSINESS**

   A. Approval of Amendment No. 4 to Professional Services Agreement with NEXGEN in the amount of $49,139

   Possible Board Action: Adopt Resolution.

   B. Award Construction Contract with Caggiano General Engineering, Inc. in the Amount of $280,005.00 for 2018 Treated Water Line Replacement Project

   Possible Board Action: Adopt Resolution.

C. **Approve WaterSMART Grant Application in the Amount of $655,500 for the Upcountry Ditch Rehabilitation Project**

Possible Board Action: Adopt Resolution.

D. **Adopt New Board Policy Required for Special District Leadership Foundation Transparency Certificate - 5040 Rules of Order for Conduct of Board and Committee Meetings**

Possible Board Action: Adopt Resolution.

E. **Approve Reimbursement for Director Attendance at ACWA Region 3 and 4 Programs, and Mountain Counties Water Resources Association Water Symposium**

Possible Board Action: Adopt Resolution.

F. **Consider Approving Budget Increase and Professional Services Agreement with Bennett Engineering in the Amount of $61,996 for Evaluation of the Capital Replacement Plan**

Possible Board Action: Adopt Resolution

G. **Provide Direction on Name of the New Auburn Lake Trails Water Treatment Plant**

Possible Board Action: Discuss and provide direction

8. **BOARD MEMBER REQUESTS FOR ADDITIONS TO FUTURE MEETING AGENDAS AND REQUESTS FOR INFORMATION OR RESEARCH TO BE COMPLETED BY STAFF –** Opportunity for Board members to discuss matters of interest to them and provide input for future meetings as well as report on their District-related meeting attendance.

9. **NEXT MEETING DATE AND ADJOURNMENT –** The next Regular Meeting will be on October 8, 2019, at 2:00 P.M. at the Georgetown Divide Public Utility District, 6425 Main Street, Georgetown, California 95634.

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact Steve Palmer by telephone at 530-333-4356 or by fax at 530-333-9442. Requests must be made as early as possible and at least one-full business day before the start of the meeting. In accordance with Government Code Section 54954.2(a), this agenda was posted on the District's bulletin board at the Georgetown Divide Public Utility District office, at 6425 Main Street, Georgetown, California, on September 6, 2019.

Steven Palmer, PE, General Manager

9/6/19
Date

The Board of Directors

of the

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

respectfully presents this

Certificate of Recognition

to

Diana Michaelson

in grateful acknowledgement of the outstanding and dedicated support she provided as Board Assistant to the Board of Directors; and to extend best wishes on her retirement.

Presented by

the Board of Directors of the Georgetown Divide Public Utility District

on the 10th day of September 2019.

_____

Dane Wadle, President, Board of Directors

GDPUD

CONFORMED AGENDA

SPECIAL MEETING

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT BOARD OF DIRECTORS
6425 MAIN STREET, GEORGETOWN, CALIFORNIA 95634

TUESDAY, AUGUST 13, 2019
1:30 P.M.

MISSION STATEMENT

It is the purpose of the Georgetown Divide Public Utility District to:

- Provide reliable water supplies
- Ensure high quality drinking water
- Promote stewardship to protect community resources, public health, and quality of life
- Provide excellent and responsive customer services through dedicated and valued staff
- Ensure fiscal responsibility and accountability are observed by balancing immediate and long-term needs.

1. **CALL TO ORDER, ROLL CALL, AND PLEDGE OF ALLEGIANCE**

   The meeting was called to order at 1:30 P.M.
   Directors Present: Cynthia Garcia, David Halpin, Michael Saunders, David Souza, Dane Wadle.
   Staff Present: General Manager Steven Palmer; Legal Counsel: Barbara Brenner, Churchwell White, LLP.

2. **ADOPTION OF AGENDA**

3. **PUBLIC FORUM –** This is a special meeting under Government Code Section 54956. Public comment is limited to items appearing on the agenda. Under Section 54954.3, the public shall have the right to comment on any items appearing on the agenda prior to or during consideration of this item. Public comment on items not appearing on the agenda should be made at the regular meetings of the District.

   No disruptive conduct shall be permitted at any Board meeting. Persistence in disruptive conduct shall be grounds for summary termination, by the President, of that person's privilege of address.

   There was no public comment.

4. **ADJOURN TO CLOSED SESSION – CONFERENCE WITH LEGAL COUNSEL**

   A. Anticipated Litigation – Significant exposure to litigation pursuant to Paragraph (2) of subdivision (d) of Government Code Section 54956.9: One case.

5. **NEXT MEETING DATE AND ADJOURNMENT** – Next Regular Meeting will be on August 13, 2019, at 2:00 P.M. at the Georgetown Divide Public Utility District, 6425 Main Street, Georgetown, California 95634.

   The Board returned to open session at 1:59 P.M. with no reportable action taken at the special closed session meeting.

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact Steve Palmer by telephone at 530-333-4356 or by fax at 530-333-9442. Requests must be made as early as possible and at least one-full business day before the start of the meeting. In accordance with Government Code Section 54954.2(a), this agenda was posted on the District's bulletin board at the Georgetown Divide Public Utility District office, at 6425 Main Street, Georgetown, California, on August 9, 2019.

_____ _____

Steven Palmer, PE, General Manager Date

CONFORMED AGENDA

REGULAR MEETING

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT BOARD OF DIRECTORS
6425 MAIN STREET, GEORGETOWN, CALIFORNIA 95634

TUESDAY, AUGUST 13, 2019
2:00 P.M.

MISSION STATEMENT

It is the purpose of the Georgetown Divide Public Utility District to:

- Provide reliable water supplies
- Ensure high quality drinking water
- Promote stewardship to protect community resources, public health, and quality of life
- Provide excellent and responsive customer services through dedicated and valued staff
- Ensure fiscal responsibility and accountability are observed by balancing immediate and long-term needs.

Out of respect for the meeting and others in attendance, please turn off all cell phones or put in the silent mode.

Pursuant to the Government Code Section 54954.3 (The Brown Act), members of the public shall be afforded the opportunity to speak on any agenda item, provided they are first recognized by the presiding officer. The Board President will call for public comment on each agenda item. Those wishing to address the Board on a matter that is not on the agenda and within the jurisdictional authority of the District may do so during the Public Forum portion of the agenda. Please be aware of the following procedures for speaking during Public Forum or public comment sessions:

1. When called on to speak by the Board President, please approach and speak from the podium.
2. Comments are to be directed only to the Board.
3. The Board will not entertain outbursts from the audience.
4. There is a three-minute time limit per speaker.
5. The Board is not permitted to take action on items addressed under Public Forum.
6. Disruptive conduct shall not be permitted.
7. Persistence in disruptive conduct shall be grounds for removal of that person's privilege of address.

The Board President is responsible for maintaining an orderly meeting.

1. CALL TO ORDER, ROLL CALL, AND PLEDGE OF ALLEGIANCE

The meeting was called to order at 2:00 P.M

Directors present: Cynthia Garcia, David Halpin, Michael Saunders, David Souza, Dane Wadle.

Staff present: General Manager Steven Palmer, Operations Manager Darrell Creeks, Management Analyst Christina Cross, Human Resource/Information Technology Specialist Stephanie Beck.

Legal Counsell: Barbara Brenner, Churchwell White, LLP.

The Pledge of Allegiance was led by Director Souza.

2. ADOPTION OF AGENDA

General Manager Steven Palmer requested item 5.A.1 be pulled from the Agenda. Board already approved this item at the May 14, 2019 board meeting.

Motion by Director Souza to adopt the agenda. Second by Director Saunders

Roll Call vote was taken, and the vote was as follows:

Garcia:	***Aye***
Halpin:	***Aye***
Saunders:	***Aye***
Souza:	***Aye***
Wadle:	***Aye***

The motion passed unanimously.

3. PUBLIC FORUM (ONLY ITEMS THAT ARE NOT ON THE AGENDA)

Carolyn O'Conner spoke about a prior request for an engineering report.

Phyllis Polito spoke about Director Wadle's Presidents Report in the August 8, 2019 Georgetown Gazette. Her written comments are attached to these minutes.

Cherie Carlyon spoke about an article in the Mountain Democrat regarding EID grant applications. Ms. Carlyon suggested GDPUD form a Grant Committee. The article with her written comments were presented by Ms. Carlyon and they are attached to these minutes.

4. PROCLAMATIONS AND PRESENTATIONS

A. Emergency Preparedness Presentation by Local Fire Agency

Eldorado County CalFire Division Chief Mike Blankenheim and El Dorado County Sheriff OES Representative Todd Crawford presented a slideshow along with discussion on Incident Management, Emergency Operations and the role of GDPUD.

5. CONSENT CALENDAR – Any member of the public may contact a Board member prior to the meeting to request that an item be pulled from the Consent Calendar.

Director Saunders requested item 5.E be pulled.

Motion by Director Halpin to adopt remaining items 5.A, 5.B, 5.C, 5.D on the Consent Calendar. Second by Director Souza.

Public Comment: *There was no public comment.*

Roll Call vote was taken, and the vote was as follows:

Halpin:	***Aye***
Souza:	***Aye***
Saunders:	***Aye***
Garcia:	***Aye***
Wadle:	***Aye***

The motion passed unanimously.

E. Approve Extension to the Agreement with PACE Supply for Supplies and Materials for FY19/20 in the Amount of $65,000

Possible Board Action: Adopt Resolution 2019-48**.**

Director Saunders had questions regarding how much was spent in Fiscal Year 2018/2019.

Public comment: *There was no public comment.*

Motion by Director Halpin to approve the extension with Pace Supply. Second by Director Souza.

Roll call vote was taken, and the vote was as follows:

Halpin:	***Aye***
Souza:	***Aye***
Saunders:	***Aye***
Garcia:	***Aye***
Wadle:	***Aye***

The motion passed unanimously.

6. INFORMATIONAL ITEMS

A. Board Reports

Director Saunders provided pictures from the United Water Conference that Director Saunders, Director Souza, Director Wadle and General Manager Steve Palmer attended. He reported on his tour of the new Auburn Lake Treatment Plant and his role in the Wholesale Water Loss Workgroup that he will be attending on August 20th for the California State Water Conservation Legislation Workgroup. He shared the timelines for Sexual Harassment Training for Board Members and the Districts Risk Management, ACWAJPIA, advice on Sexual Harassment policy review. Director Saunders presented a written informational report which is attached.

Director Garcia reported that she is hosting a town hall style meeting on Saturday, September 21st. Ms. Garcia reported on the Cannabis ADHOC meeting at the County Board of Supervisors Chambers she attended and her plans to attend the El Dorado County Water Agency meeting and the Government Finance Officers Association training.

Director Wadle reported he attended a Media Training event and Financial Management Training. He will also be attending the upcoming GFO Training. Mr. Wadle gave an update on the CSDA board meeting and the concern for AB1486.

B. General Manager's Report

Mr. Palmer provided a slide show presentation and discussion on current and completed capital projects. Mr. Palmer spoke about the project that was out for bid on Kit Fox Court and shared photos of a garage that was flooded due to a line break. He also shared photos of a canal leak below Spanish Dry Diggens and Hwy 193 that is being repaired.

Director Garcia asked for an update on the annual tank recoating, the rebuilt filter at Walton Lake Treatment Plant, the back up generator for office, Tyler Technology Software, and the ALT Zone Permit.

Dane Wadle spoke about the importance of putting money aside for capital investments, which hasn't been done in a long time, he pointed out that approximately sixty percent of Districts infrastructure is over forty years old.

***Public Comment:** Steve Miller, Phyllis Polito and Steve Dowd had comments.*

C. Operation Manager's Report

Operations Manager Darrell Creeks reported that the lake stopped spilling on July 16th which is five days from the record of July 21, 1995. He gave a report on water production, sampling, and completion of work orders.

Director Saunders suggested replanting trees at Stumpy Lake. Mr. Creeks stated they were planted two years ago.

D. ALT Treatment Plant Update

Engineering Consultant George Sanders presented a slide show and discussion on the work completed at the ALT plant. He reported on the status of the budget and the disbursements for the state loan. Mr. Sanders complimented Mr. Creeks for his work getting the ALT operating permits. He reported that the new plant is online and producing water.

Director Halpin thanked Mr. Sanders for doing a good job.

Director Garcia commended everybody on doing a good job and for all their hard work and efforts during this long process.

Director Saunders thanked Mr. Sanders for the tour of the plant.

E. Finance Committee Report

Finance Committee Chair Steve Miller submitted an agenda and requested board approval of research items the Committee would like to work on when the Committee isn't tasked with any specific items from the General Manager.

7. NEW BUSINESS

A. Budget Increase in the Amount of $20,780 to Fund New State of California Water Testing Requirements

Possible Board Action: Adopt Resolution 2019-49.

Mr. Palmer presented the report.

There was some discussion and questions about the sampling process.

Public Comment: *There was no public comment.*

Motion by Director Halpin to accept staff's recommendation. Second by Director Garcia.

Roll call vote was taken, and the vote was as follows:

Halpin:	***Aye***
Garcia:	***Aye***
Saunders:	***Aye***
Souza:	***Aye***
Wadle:	***Aye***

The motion passed unanimously.

B. Approve Project Plans and Specifications and Authorize Bid for 2018 Main Canal Reliability Project

Possible Board Action: Adopt Resolution 2019-50.

Mr. Palmer presented the report.

There was discussion regarding the project.

Public Comment: *Karen Bartholomew had comments.*

Motion by Director Halpin to accept staff's recommendation. Second by Director Garcia.

Roll call vote was taken, and the vote was as follows:

Halpin:	***Aye***
Garcia:	***Aye***
Saunders:	***Aye***
Souza:	***Aye***

Wadle: ***Aye***

The motion passed unanimously.

C. Adopt an Ordinance Certifying Annual Direct Charges, Fees, and Assessments

Possible Board Action: Second reading and adopt Ordinance 2019-01.

Management Analyst Christina Cross presented the report. She noted the Ordinance number had changed.

Ms. Cross reported that the procedure for adopting this Ordinance will change next year and noted the changes.

The board asked questions about the list and lien procedures.

Director Wadle read the second reading.

Public Comment: *There was no public comment.*

Motion by Director Halpin to adopt the Ordinance. Second by Director Saunders.

Roll call vote was taken, and the vote was as follows:

Halpin: ***Aye***
Saunders: ***Aye***
Souza: ***Aye***
Garcia: ***Aye***
Wadle: ***Aye***

The motion passed unanimously.

D. Consider Joining Coalition for Fire Protection

Possible Board Action: Adopt Resolution 2019-51.

Mr. Palmer presented the report.

There was discussion about the benefits of joining the Coalition for Fire Protection.

Public Comment: *There was no public comment.*

Motion by Director Halpin to accept the staff's recommendation. Second by Director Souza.

Roll call vote was taken, and the vote was as follows:

Halpin: ***Aye***
Souza: ***Aye***
Saunders: ***Aye***

Garcia: ***Aye***
Wadle: ***Aye***

The motion passed unanimously

E. Adopt New Board Policies Required for Special District Leadership Foundation Transparency Certificate – Brown Act Compliance, Board Meeting Conduct, and Rules of Order for Conduct of Board and Committee Meetings

Possible Board Action: Adopt Resolution 2019-52.

Ms. Cross presented the report.

Director Saunders requested a change to policy 5040.4.5.

Director Garcia shared concerns about prior board policy and procedure requests on the agenda.

Legal Counsel Barbara Brenner asked for clarification on Policy Number 5040.3.1 and 5040.3.2 and suggested changes.

Public Comment on Policy Number 5040: *Cherie Carlyon had comments*

The Board directed staff to bring back a policy 5040 with the changes suggested by Director Saunders and Legal Counsel.

No Board comments on Policy Number 5030, will keep as written.

Public Comment on Policy Number 5030: *Phyllis Polito asked questions about the policies.*

Motion by Director Saunders to approve Policy 5030 which covers Board Meeting Conduct. Second by Director Garcia.

Roll call vote was taken, and the vote was as follows:

Saunders: ***Aye***
Garcia: ***Aye***
Halpin: ***Aye***
Souza: ***Aye***
Wadle: ***Aye***

The motion passed unanimously

No Board comments on Policy 5000, will keep as written.

Public Comment on Policy Number 5000: *No public comment.*

Motion by Director Saunders to adopt Policy 5000 on Brown Act Compliance. Second by Director Halpin.

Roll call vote was taken, and the vote was as follows:

Saunders: ***Aye***
Halpin: ***Aye***
Garcia: ***Aye***
Souza: ***Aye***
Wadle: ***Aye***

The motion passed unanimously

F. Consider Adopting a Board Policy Regarding Director Reports

Possible Board Action: Review and provide direction

Mr. Palmer presented the report.

There was discussion about the length of Director reports and power point presentations.

Public Comment: *Cherie Carlyon, Steve Miller and Phyllis Polito had public comments.*

The Board directed staff to bring back a draft policy.

G. Review of Planned Finance Committee Items for Fiscal Year 2019-2020

Possible Board Action: Review and provide direction

Finance Committee Chair Steve Miller presented the report.

There was discussion about the report the Finance Committee presented to the board and questions about the role of the Finance Committee.

Public Comment: *Phyllis Polito and Karen Bartholomew had comments.*

Motion by Director Garcia to direct the Finance Committee to work on the items identified in the Staff Report with the addition of Quarterly Reviews, and the items identified by the Finance Committee dated Wednesday, August 1, 2019. Finance Committee priority would be to first address the list included in the Staff Report and Quarterly Reviews, and second priority would be to work on items identified in the list prepared by the Finance Committee. Second by Director Halpin.

Roll call vote was taken, and the vote was as follows:

Garcia: ***Aye***
Halpin: ***Aye***
Saunders: ***Aye***
Souza: ***Aye***
Wadle: ***No***

H. Review of Process for General Manager Annual Performance Evaluation

Possible Board Action: Review and provide direction

Mr. Palmer presented the report along with attachments outlining the current General Manger Annual Performance Evaluation process.

Director Garcia presented handouts from the CDSA Leadership Academy that she attended with Director Saunders. Ms. Garcia showed example forms that she got from Department of Water Resources and discussed how the forms are used.

There was discussion by Board and Legal Counsel regarding the process and procedure of the evaluation process.

The Board directed Staff to keep the evaluation process the same.

8. **BOARD MEMBER COMMENTS, REQUESTS FOR ADDITIONS TO FUTURE MEETING AGENDAS AND REQUESTS FOR INFORMATION OR RESEARCH TO BE COMPLETED BY STAFF –** Opportunity for Board members to discuss matters of interest to them and provide input for future meetings as well as report on their District-related meeting attendance.

   Director Garcia requested a reserve balance budget sheet when the new Tyler Software is implemented. She requested CIP schedules and asked the Board to consider 1.) a Treasurers Report on the agenda 2.) Limiting the budget on legal fees. She mentioned that she will e mail the handouts that were not submitted at the board meeting for record.

   Director Saunders spoke about emergency preparedness, board policy review process, the Harassment Policy and implementing a calendar road map that highlights upcoming events.

9. **NEXT MEETING DATE AND ADJOURNMENT** – The next Regular Meeting will be on September 10, 2019, at 2:00 P.M. at the Georgetown Divide Public Utility District, 6425 Main Street, Georgetown, California 95634.

   The meeting adjourned at 6:51 P.M.

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact Steve Palmer by telephone at 530-333-4356 or by fax at 530-333-9442. Requests must be made as early as possible and at least one-full business day before the start of the meeting. In accordance with Government Code Section 54954.2(a), this agenda was posted on the District's bulletin board at the Georgetown Divide Public Utility District office, at 6425 Main Street, Georgetown, California, on August 9, 2019.

_____ _____

Steven Palmer, PE, General Manager Date

Although Director Wadle's President's Report in the August 8th Georgetown Gazette was well written it lacked honesty. Director Wadle did a good job of clouding the issue and skirting the facts. Claiming that he does his best to balance the interests of the public and fellow board members is an insult to the community. Mr. Wadle, in your article you say that public input is welcome, but your actions speak louder than words. You, along with the general manager not only ignore input of the public and other board members, but you discourage it and actively work to suppress it.

In the last election the voters spoke very clearly and ousted the board members that were not responsive to the community and elected two board members who promised to bring honesty, transparency, and change to the way business had been conducted at the district. What Director Wadle and the general manager are doing is preventing discussions from taking place by refusing to put items that are of deep concern to the public on the agenda.

Directors Garcia and Saunders hold Town Hall Meetings and listen carefully to public concerns. I've attended a few and I've heard rate payers often ask to have items discussed at board meetings. Directors Garcia and Saunders repeatedly tell us that they will submit these items for future board meetings. Yet Director Wadle and the general manager refuse to place them on the agenda. Thus the board cannot work together to govern.

An example of items that have been submitted for board discussion is the revised irrigation ordinance. Despite the fact that there have been four public workshops that have taken place over almost two years, the general manager has failed to complete the report and bring it to the board. Another item that needs to be placed on the agenda for policy direction is the roll of the financial committee and how financial decisions are made.

Another example of great concern to the community is discussion of written policy to get items on the agenda. The board president should not have more power than any of the other four members of the board; they should be equal players. Yet by refusing to put matters of grave importance on the agenda, the board president is single handedly controlling the direction of the board.

By not allowing these items to even be discussed, Director Wadle is either shirking his responsibilities as board president or intentionally sabotaging the efforts of Directors Garcia and Saunders to be able to participate in governing our district. This is going to cause the board to fail because they cannot do their job if they are prevented from discussing items. These are direct consequences of the board president's lack of leadership.

Director Wadle's actions show disregard not only for fellow board members but also for the people that he is entrusted to represent.

Phyllis Polito

GDPUD Board Meeting 8-13-2019 Friday July 26TH MT Demo
Presented Cherie Carlyon

Fire concerns dominate El Dorado Irrigation Distrct meeting

Dawn Hodson
Staff writer

Giving fire all the respect it deserves, the El Dorado Irrigation District Board of Directors took up two issues related to preventing and responding to the threat of wildfires at its July 22 meeting.

Up first was a review of four vegetation management projects that are expected to reduce the threat of wildfire as well as protect EID infrastructure.

Paid for with three Cal Fire grants totaling $1,963,000, an estimated 522 acres at four facilities will be treated at Weber Reservoir, Sly Park Recreation Area, Camp 5 maintenance yard and Flume 46 on the El Dorado Canal.

Treatment will include removal of woody brush and dead and dying trees, pruning up trees to remove ladder fuel and ensuring a 20-foot space between larger trees to prevent crown fires.

The work at Weber Reservoir will be north of the facility and stretch from Weber Ditch up along the North Fork of Weber Creek. Sly Park will be cleared of brush along the perimeter of Jenkinson Lake and 75 feet wide along both banks of the three primary tributaries to the Sly Park Recreation Area.

Vegetation clearance will also take place along the El Dorado Canal near the Camp 5 maintenance yard north of Highway 50, just east of Pollock Pines. The last area to be cleared will be along both sides of a large section of Flume 46, which is south of Highway 50. The flume is particularly vulnerable to wildfire because it's the district's longest wooden flume.

Work at Camp 5 and Flume 46 is scheduled to take place in the fall of 2019. Work at Weber Reservoir and Sly Park will take place in the fall of 2020.

Reviewing the environmental impact report for the vegetative clearing, environmental review analyst Doug Venable assured the board it will have no significant effect on the environment.

Staff said they expect to bid out the projects this month.

With no objections, the board approved the mitigated negative declaration for the project and for staff to proceed with bidding out the contracts on a 4-0 vote.

Those voting included President Alan Day and directors Pat Dwyer, Michael Raffety and Lori Anzini. Director George Osborne was absent.

Power shutdown plans

EID staff also presented detailed preparations for how they plan to keep the entire system operating when and if PG&E finds it necessary

See **FIRE CONCERNS**, page A10

EDPUD Board Meeting
8-13-2019
Presented by Cherie Carlyon

Fire concerns

Continued from A1

to shut down the electric grid due to high fire conditions.

Staff noted that last year PG&E initiated a public safety power shutoff program following two years of disastrous fires, particularly the Camp Fire, which PG&E admitted was probably caused by its equipment.

In 2019 PG&E expanded its power shutoff program, saying that as many as 16 million customers across California could lose power when temperatures, wind and humidity thresholds warrant it.

Those shutdowns could be for as long as five days and have public health and safety implications for PG&E customers. They could also impact EID hydroelectric power generation and Sly Park recreational activities.

In February of this year, PG&E filed a wildfire mitigation plan with the California Public Utilities Commission. That plan defined areas of the state in terms of fire threat. Zone 1 is a high hazard area, Tier 2 is elevated risk and Tier 3 is extreme risk.

According to Dan Corcoran, EID's director of operations, most of the district's service area is in Tier 2 or 3 and the balance of the service area, primarily portions of El Dorado Hills and Cameron Park, are served by water and wastewater services that are located in Tier 2 and Tier 3 areas.

This means that customers not located in an area of high-fire risk could still lose power if the transmission lines send power across a high-risk area.

Currently the district has 168 PG&E electrical service connections but only half have back-up power. Corcoran said that's why EID should be prepared for a situation where all 168 service connections lose power.

To address that possibility, the district is in the process of installing more generators and seeking grants to buy additional ones.

Twenty-two sites where generators are needed have been identified. Staff has completed an application to the state for $1.8 million in FEMA funding to pay for the design, purchase and installation of these generators. If approved, installation of the equipment will begin in 2020.

Staff has also identified standard operating procedures for each treatment facility once they receive notification from PG&E of a planned power outage including doing what's needed to maximize the storage of water and having a vendor list for back-up equipment.

Operating procedures for hydroelectric facilities in the event of a power shutdown have also been devised.

Corcoran said EID's solar facilities will also be affected as those will have to be shut down to avoid feeding electricity into PG&E's grid during a power down.

Recreation may be marginally affected at Sly Park although Parks and Recreation Manager Greg Hawkins said they have a back-up generator to maintain power at the popular reservoir.

Corcoran outlined some of the challenges a possible power shutdown presents to the organization including difficulty in buying generators given the rising demand for them and the fact that the kind of generators needed are not available at the local hardware store.

Other needed electrical equipment is also not readily available nor the contractors to do the work because of demand. The push to accomplish these changes also means putting off some key capital projects and preventative maintenance.

The agency is undertaking additional customer outreach. They are encouraged to visit EID's website and to sign up for alerts.

Corcoran also emphasized how important it is for customers to realize that facilities not directly affected by outages may lose power because of the integrated nature of EID's water and wastewater system.

An information item only on the agenda, board members voiced their appreciation for all the work that staff put into preparing for possible power shutoffs, given all the uncertainties.

As Corcoran said, "We don't know what the impact will be until we get that call (from PG&E)."

Fire Insurance

Continued from A1

better," District 4 Supervisor Lori Parlin noted.

"It seems like they don't understand the severity (of the problem)," Hidahl said of lawmakers down the hill.

District 3 Supervisor Brian Veerkamp lamented that the insurance lobby has deep pockets and a lot of influence in Sacramento. He said El Dorado County and other rural jurisdictions facing this problem need to "look at every angle we can."

Director Saunders

Informational Report 8/13/19

1. American River Watershed

Images of pictures from Mumford Bar Trail (AMERICAN FIRE – 2013)
Images provided in the agenda packet

2. California State's Water Conservation Legislation Workgroups

The California Water Conservation Act - Assembly Bill 1668 and Senate Bill 606 — are designed to overhaul California's approach to managing water.

The bills were signed into law in 2018 and begin taking effect in 2020. The Department of Water Resources (DWR) is tasked with creating the guidelines, rules, and policy for the Bills. DWR has divided these tasks into different workgroups. The workgroups have been divided to include representatives from different areas across the State and various water agencies.

1. *Wholesale Water Loss*
2. *Water Use Studies*
3. *Standards, Methodologies and Performance Measures*
4. *Urban Water Management Plan Guidebook*
5. *Annual Water Supply and Demand Assessment*
6. *Data Streamlining*
7. *Landscape Area Measurement*
8. County Drought Advisory Group
9. Model Water Efficient Landscape Ordinance Advisory Committee

I was added as a stakeholder to the State's water conservation legislation workgroup - **Wholesale Water Loss.**

3. Sexual - Harassment Training

AB 1661 (Chapter 816, Statutes of 2016) requires local agency officials to receive two hours of sexual harassment prevention training and education within the first six months of taking office and every two years thereafter if the agency provides an type of compensation, salary, or stipend to those officials

Our insurer loss risk mitigation agent ACWA/JPIA has advised that as a Board we review our Agencies policy annually.

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF SEPTEMBER 10, 2019
AGENDA ITEM NO. 5.B.1.

AGENDA SECTION: **CONSENT CALENDAR**

SUBJECT: **CASH BALANCES – JULY 2019**

PREPARED BY: Christina Cross, Management Analyst

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

The Cash Balance Report details the District's cash position as of the month end to demonstrate transparency and accountability of relevant financial data from which prudent fiscal decisions and policies are made. The Cash Balance Report is unlike a quarterly budget to actual report; its purpose is to report on ending cash balances and the related sources and uses of cash during the period.

DISCUSSION

The Cash Balance Report as of month ending July 31, 2019 shows the District's cash balances total $9,541,176.35

Cash is held with the following institutions in the amounts of:

El Dorado Savings Bank - Checking	128,704.12
El Dorado Savings Bank - Savings	2,189,818.48
Local Agency Investment Fund (LAIF)	7,222,653.75
	$ 9,541,176.35

Restricted cash balances are monies held in trust for a specific purpose and are not monies available for District use. The Wells Fargo Debt Service Fund is SRF Fiscal Agent cash account that is restricted for payments on the Walton Lake loan with the State Water Resources Control Board (SWRCB) through Wells Fargo Bank. This debt service fund is required by the SWRCB.

Restricted Cash:

Wells Fargo Debt Service Fund	$43,673.31

Cash balances are allocated based on the Fund for which the source of the monies is generated by or used from.

Fund	Beginning Balance	Cash In Cash Receipts	Accounts Payable	Payroll	Journal Entries	Ending Balance
SMUD FUND	308,575.52	0	0	0	1,115.72	309,691.24
CABY GRANT	-576,655.22	460,953.00	-117.6	0	0	-115,819.82
Water Fund	2,576,285.56	533,420.74	-218,755.95	-727,889.75	11,239.96	2,174,300.56
RETIREE FUND	449,483.93	5,418.82	-8,581.62	0	2,010.15	448,331.28
STEWART MINE FD	36,764.49	0	-347.82	0	155.98	36,572.65
WATER DEVE.FUNC	413,550.75	0	0	0	1,824.51	415,375.26
SMERFUND	1,069,391.17	0	0	0	4,717.96	1,074,109.13
ALT Fund	949,086.95	89,726.51	-363,494.83	0	3,508.20	678,826.83
CAPITAL REPLACE	593,552.55	0	-48,038.45	0	2,773.88	548,287.98
BAYNE RD BND FD	34,327.50	0	0	0	0	34,327.50
STATE REV FUND	-30,892.71	0	-4,593.90	0	0	-35,486.61
Hydro Fund	701,185.75	7,353.89	-134.14	0	3,077.22	711,482.72
Restricted P/L	-90,530.11	0	0	0	0	-90,530.11
GARDEN VALLEY	73,622.52	0	0	0	324.8	73,947.32
CAP FAC CHARGE	1,470,950.68	0	-3,128.23	-3,895.81	6,565.21	1,470,491.85
Zone Fund	1,031,903.23	24,035.23	-10,609.21	-26,221.26	5,331.39	1,024,439.38
CDS M & O Fund	40,130.56	0	0	0	177.05	40,307.61
CDS RESRV EXP.	172,999.15	0	0	0	763.24	173,762.39
CAPITAL RESERVE	423,149.38	0	-11,613.76	0	1,972.94	413,508.56
KELSEY NORTH	113,596.23	0	-695.63	0	468.85	113,369.45
KELSEY SOUTH	41,881.18	0	0	0	0	41,881.18
	9,802,359.06	1,120,908.19	-670,111.14	-758,006.82	46,027.06	9,541,176.35

Sources of cash during the month were from recurring utility payments, lease payments, grant reimbursements and retiree health reimbursements in the amount of $1,120,908.19. The details of the uses of cash during the month can be seen on the approved check register in the amount of $670,111.14. Additional uses of cash during the month not in the check register include payroll disbursements, PERS Unfunded Liability payments and bi-weekly retirement contributions in the amount of $758,006.82. The miscellaneous journal entries reflect LAIF interest earned during the 4th quarter of 18/19. Adjustments have been made to beginning balances due to yearend adjustments for NBS assessment district close outs. There may continue to be adjustments made to accounts balances throughout the audit over the next few months.

Fund	Description	Balance	Debits	Credits	Balance
29	SRF FISCAL AGENT ACCOUNTS	$41,316.21	$ 2,357.10	$ -	43,673.31

Restricted cash balances are monies held in trust for a specific purpose and are not monies available for District use. SRF Fiscal Agent restricted cash is for the fiscal administration of the Walton Lake loan with the State Water Resources Control Board (SWRCB) through the Wells Fargo Debt Service Fund. Adjustments have been made to the beginning balance through the monthly bank reconciliation process.

FISCAL IMPACT

No fiscal impact.

CEQA ASSESSMENT

Not a CEQA Project.

RECOMMENDED ACTION

Staff recommends the Board of Directors receive and file for month ending July 31, 2019.

ALTERNATIVES

No alternatives.

ATTACHMENTS

1. Statement of Cash Flows July 2019
2. Month-End Cash Disbursement Report July 2019
3. SRF Cash Balances July 2019

AGENDA ITEM 5.B.1.

Attachment 1

Statement of Cash Flows June 2019

Report ID: CASH

Georgetown Divide Public Utility District
Statement of Cash Flow

For Period July 1, 2019 through July 31, 2019

Fund Description	Beginning Balance	Cash In Cash Receipts	Accounts Payable	Payroll	Journal Entries	Ending Cash Balance
08 - SMUD Fund	308,575.52	0	0	0	1,115.72	309,691.24
09 - CABY Grant	(576,655.22)	460,953.00	(117.60)	0	0	(115,819.82)
10 - Water Fund	2,576,285.56	533,420.74	(218,755.95)	(727,889.75)	11,239.96	2,174,300.56
12 - Retiree Fund	449,483.93	5,418.82	(8,581.62)	0	2,010.15	448,331.28
14 - Stewart Mine Water Project Fund	36,764.49	0	(347.82)	0	155.98	36,572.65
17 - Water Development Fund	413,550.75	0	0	0	1,824.51	415,375.26
19 - STUMPY MDWS Emergency Fund	1,069,391.17	0	0	0	4,717.96	1,074,109.13
20 - ALT Fund	949,086.95	89,726.51	(363,494.83)	0	3,508.20	678,826.83
24 - Capital Replacement Fund	593,552.55	0	(48,038.45)	0	2,773.88	548,287.98
25 - Bayne Rd bond Fund	34,327.50	0	0	0	0	34,327.50
29 - State Revolving Fund	(30,892.71)	0	(4,593.90)	0	0	(35,486.61)
30 - Hydro Fund	701,185.75	7,353.89	(134.14)	0	3,077.22	711,482.72
35 - Restricted Pipeline Fund	(90,530.11)	0	0	0	0	(90,530.11)
37 - Garden Valley Maintenance Fund	73,622.52	0	0	0	324.80	73,947.32
39 - Cap Facility Charges ORD 2007-01	1,470,950.68	0	(3,128.23)	(3,895.81)	6,565.21	1,470,491.85
40 - Zone Fund	1,031,903.23	24,035.23	(10,609.21)	(26,221.26)	5,331.39	1,024,439.38
41 - CDS M&O Fund	40,130.56	0	0	0	177.05	40,307.61
42 - CDS Reserve Expansion Fund	172,999.15	0	0	0	763.24	173,762.39
43 - New Capital Reserve	423,149.38	0	(11,613.76)	0	1,972.94	413,508.56
51 - Kelsey North WAD 1989-1	113,596.23	0	(695.63)	0	468.85	113,369.45
52 - Kelsey South WAD 1989-4	41,881.18	0	0	0	0	41,881.18
Total Distributed Cash ----->	9,802,359.06	1,120,908.19	(670,111.14)	(758,006.82)	46,027.06	9,541,176.35

Cash in Eldorado Savings and LAIF

1000 - El Dorado Savings Bank General Checking	128,704.12
1010 - El Dorado Savings Bank Collections	2,189,818.48
1022 - LAIF	7,222,653.75
Total Cash ---------->	9,541,176.35

AGENDA ITEM 5.B.1.

Attachment 2

Month-End Cash Disbursement Report June 2019

Georgetown Divide PUD
Month End Cash Disbursements Report
Report for 07-19 BANK ACCOUNT 1000

Period	Check Number	Check Date	Vendor # (Name)	Disc. Terms	Gross Amount	Disc Amount	Net Amount	Check Description
07-19	030042	07/03/19	ACW01 (ACWA/JPIA)		11,598.07	.00	11,598.07	Automatic Generated Check
	030043	07/03/19	AFL01 (AMERICAN FAMILY LIFE INS)		1,495.68	.00	1,495.68	Automatic Generated Check
	030044	07/03/19	ALL01 (ALLEN KRAUSE)		160.80	.00	160.80	Automatic Generated Check
	030045	07/03/19	AME08 (AMERICAN MESSAGING)		12.23	.00	12.23	Automatic Generated Check
	030046	07/03/19	ANS01 (ANSWERING SPECIALISTS INC)		79.95	.00	79.95	Automatic Generated Check
	030047	07/03/19	ARA01 (ARAMARK)		361.77	.00	361.77	Automatic Generated Check
	030048	07/03/19	ATT02 (AT&T)		2,044.69	.00	2,044.69	Automatic Generated Check
	030049	07/03/19	BAC01 (B.A.C.C.S)		9,125.88	.00	9,125.88	Automatic Generated Check
	030050	07/03/19	BEA01 (BUTTE EQUIPMENT RENTALS)		500.00	.00	500.00	Automatic Generated Check
	030051	07/03/19	BEN04 (BENNETT ENGINEERING SERVICES)		1,402.50	.00	1,402.50	Automatic Generated Check
	030052	07/03/19	BJP01 (BJ PEST CONTROL)		220.00	.00	220.00	Automatic Generated Check
	030053	07/03/19	CAL16 (CALTRONICS BUSINESS SYSTEMS CORP.)		818.57	.00	818.57	Automatic Generated Check
	030054	07/03/19	CHU02 (CHURCHWELL WHITE, LLP)		7,959.98	.00	7,959.98	Automatic Generated Check
	030055	07/03/19	CLS01 (CLS LABS)		3,375.12	.00	3,375.12	Automatic Generated Check
	030056	07/03/19	CWS01 (CORBIN WILLITS SYS. INC.)		584.66	.00	584.66	Automatic Generated Check
	030057	07/03/19	DIR01 (DIRECT METALS COMPANY, LLC)		1,173.00	.00	1,173.00	Automatic Generated Check
	030058	07/03/19	DIT01 (DITCH WITCH EQUIPMENT COMPANY, INC)		1,190.53	.00	1,190.53	Automatic Generated Check
	030059	07/03/19	DIV05 (PLACERVILLE AUTO PARTS, INC)		64.31	.00	64.31	Automatic Generated Check
	030060	07/03/19	ELD05 (EDC AUDITOR-CONTROLLER)		3,723.18	.00	3,723.18	Automatic Generated Check
	030061	07/03/19	ELD16 (EL DORADO DISPOSAL SERVICE)		331.41	.00	331.41	Automatic Generated Check
	030062	07/03/19	ELL02 (ALEXIS ELLIOTT)		25.50	.00	25.50	Automatic Generated Check
	030063	07/03/19	ESR01 (ENVIROMENTAL SYSTEMS RESEARCH INSTITUTE)		1,700.00	.00	1,700.00	Automatic Generated Check
	030064	07/03/19	GAR02 (GARDEN VALLEY FEED & HDW.)		110.41	.00	110.41	Automatic Generated Check
	030065	07/03/19	GEM01 (GEMPLER'S, INC.)		331.67	.00	331.67	Automatic Generated Check
	030066	07/03/19	GEO01 (GEORGETOWN ACE HDW)		49.88	.00	49.88	Automatic Generated Check
	030067	07/03/19	GEO04 (DIVIDE SUPPLY ACE HARDWARE)		51.16	.00	51.16	Automatic Generated Check
	030068	07/03/19	GOV01 (GOVERNMENT FINANCE)		160.00	.00	160.00	Automatic Generated Check
	030069	07/03/19	GRA01 (GRAINGER, INC.)		732.00	.00	732.00	Automatic Generated Check
	030070	07/03/19	HAC01 (HACH COMPANY)		5,030.78	.00	5,030.78	Automatic Generated Check
	030071	07/03/19	HAR03 (HARRIS INDUSTRIAL GASES)		85.75	.00	85.75	Automatic Generated Check
	030072	07/03/19	HDS01 (HD SUPPLY WATERWORKS, LTD)		231.65	.00	231.65	Automatic Generated Check
	030073	07/03/19	HOM01 (HOME DEPOT CREDIT SERVICE)		644.88	.00	644.88	Automatic Generated Check
	030074	07/03/19	ICM02 (ICMA-R.T.-457 (ee))		1,611.08	.00	1,611.08	Automatic Generated Check
	030075	07/03/19	IUO01 (IUOE, LOCAL 39)		349.57	.00	349.57	Automatic Generated Check
	030076	07/03/19	IUO02 (PEU LOCAL #1)		262.46	.00	262.46	Automatic Generated Check
	030077	07/03/19	MJT01 (MJT ENTERPRISES, INC.)		3,684.80	.00	3,684.80	Automatic Generated Check
	030078	07/03/19	NAT04 (NATIONAL DOCUMENT)		1,937.12	.00	1,937.12	Automatic Generated Check
	030079	07/03/19	NBS01 (NBS)		1,043.45	.00	1,043.45	Automatic Generated Check
	030080	07/03/19	NTU01 (NTU TECHNOLOGIES, INC.)		7,591.24	.00	7,591.24	Automatic Generated Check
	030081	07/03/19	PAC02 (PACIFIC GAS & ELECTRIC)		24,470.09	.00	24,470.09	Automatic Generated Check
	030082	07/03/19	PAC06 (PACE SUPPLY 23714-00)		1,113.51	.00	1,113.51	Automatic Generated Check
	030083	07/03/19	POL01 (POLLARD WATER)		711.34	.00	711.34	Automatic Generated Check
	030084	07/03/19	POW01 (POWERNET GLOBAL COMM.)		128.77	.00	128.77	Automatic Generated Check
	030085	07/03/19	PRO04 (PAUL FUNK)		265.00	.00	265.00	Automatic Generated Check
	030086	07/03/19	PSO01 (PSOMAS)		14,935.00	.00	14,935.00	Automatic Generated Check
	030087	07/03/19	ROB02 (ROBINSON ENTERPRISES)		2,547.65	.00	2,547.65	Automatic Generated Check
	030088	07/03/19	ROC02 (KENNETH D. WELSH)		187.50	.00	187.50	Automatic Generated Check
	030089	07/03/19	SIE10 (SIERRA SAFETY)		91.74	.00	91.74	Automatic Generated Check
	030090	07/03/19	SIG01 (SIGNAL SERVICE INC)		186.00	.00	186.00	Automatic Generated Check
	030091	07/03/19	TEI01 (A. TEICHERT & SON, INC)		702.91	.00	702.91	Automatic Generated Check
	030092	07/03/19	USA03 (USA BLUE BOOK)		2,902.72	.00	2,902.72	Automatic Generated Check
	030093	07/03/19	USB05 (U.S. BANK CORPORATE PAYMENT SYSTEM)		6,032.81	.00	6,032.81	Automatic Generated Check
	030094	07/03/19	VER01 (VERIZON WIRELESS)		857.81	.00	857.81	Automatic Generated Check
	030095	07/03/19	WAL02 (WALKER'S OFFICE SUPPLY)		251.30	.00	251.30	Automatic Generated Check
	030096	07/03/19	WAL03 (JACOB WALSH)		200.00	.00	200.00	Automatic Generated Check
	030097	07/03/19	WEL02 (WELLS FARGO BANK)		2,296.95	.00	2,296.95	Automatic Generated Check
	030098	07/03/19	\R010 (RAGUSANO, STEPHEN/LAUREN)		10.00	.00	10.00	Automatic Generated Check
	030099	07/12/19	SWR04 (STATE WATER RESOURCES CONTROL BOARD)		270,980.04	.00	270,980.04	Automatic Generated Check
	030100	07/17/19	AAR01 (AARP MEDICARERX SAVER PLUS, PDP)		33.10	.00	33.10	Automatic Generated Check
	030101	07/17/19	ACW01 (ACWA/JPIA)		10,350.35	.00	10,350.35	Automatic Generated Check
	030102	07/17/19	ACW05 (ACWA/JPIA HEALTH)		47,319.64	.00	47,319.64	Automatic Generated Check
	030103	07/17/19	ADT01 (ADT SECURITY SERVICES)		42.08	.00	42.08	Automatic Generated Check
	030104	07/17/19	ADT01 (ADT SECURITY SERVICES)		161.46	.00	161.46	Automatic Generated Check
	030105	07/17/19	ALL01 (ALLEN KRAUSE)		335.69	.00	335.69	Automatic Generated Check
	030106	07/17/19	ARA01 (ARAMARK)		120.59	.00	120.59	Automatic Generated Check
	030107	07/17/19	BLU01 (ANTHEM BLUE CROSS)		1,234.95	.00	1,234.95	Automatic Generated Check
	030108	07/17/19	CAR08 (CSI)		59.00	.00	59.00	Automatic Generated Check
	030109	07/17/19	CHU02 (CHURCHWELL WHITE, LLP)		21,231.32	.00	21,231.32	Automatic Generated Check
	030110	07/17/19	CLS01 (CLS LABS)		167.50	.00	167.50	Automatic Generated Check
	030111	07/17/19	DEL01 (DEL PASO PIPE & STEELE)		245.34	.00	245.34	Automatic Generated Check
	030112	07/17/19	DEL05 (DELAGE LANDEN, INC)		413.85	.00	413.85	Automatic Generated Check
	030113	07/17/19	DIG01 (DIGITAL DEPLOYMENT INC)		300.00	.00	300.00	Automatic Generated Check
	030114	07/17/19	DIV05 (PLACERVILLE AUTO PARTS, INC)		283.59	.00	283.59	Automatic Generated Check
	030115	07/17/19	ECO01 (ECORP CONSULTING, INC.)		2,064.11	.00	2,064.11	Automatic Generated Check
	030116	07/17/19	GAR03 (CINDY GARCIA)		589.13	.00	589.13	Automatic Generated Check
	030117	07/17/19	GEM01 (GEMPLER'S, INC.)		436.39	.00	436.39	Automatic Generated Check
	030118	07/17/19	GEO01 (GEORGETOWN ACE HDW)		14.99	.00	14.99	Automatic Generated Check
	030119	07/17/19	GEO03 (CASH)		184.95	.00	184.95	Automatic Generated Check
	030120	07/17/19	GEO04 (DIVIDE SUPPLY ACE HARDWARE)		121.04	.00	121.04	Automatic Generated Check
	030121	07/17/19	GEO12 (GEORGE SANDERS)		4,638.60	.00	4,638.60	Automatic Generated Check
	030122	07/17/19	GOL01 (BEVERLY HOWARD)		275.63	.00	275.63	Automatic Generated Check
	030123	07/17/19	GRA01 (GRAINGER, INC.)		100.86	.00	100.86	Automatic Generated Check
	030124	07/17/19	HAR03 (HARRIS INDUSTRIAL GASES)		48.00	.00	48.00	Automatic Generated Check
	030125	07/17/19	HAR08 (KEITH HARSTON, DC)		100.00	.00	100.00	Automatic Generated Check
	030126	07/17/19	ICM02 (ICMA-R.T.-457 (ee))		1,611.08	.00	1,611.08	Automatic Generated Check
	030127	07/17/19	IUO01 (IUOE, LOCAL 39)		355.59	.00	355.59	Automatic Generated Check
	030128	07/17/19	IUO02 (PEU LOCAL #1)		267.98	.00	267.98	Automatic Generated Check
	030129	07/17/19	MJT01 (MJT ENTERPRISES, INC.)		705.60	.00	705.60	Automatic Generated Check
	030130	07/17/19	MOB01 (MOBILE MINI, LLC-CA)		211.21	.00	211.21	Automatic Generated Check
	030131	07/17/19	MOU03 (MOUNTAIN COUNTIES WRA)		5,094.00	.00	5,094.00	Automatic Generated Check
	030132	07/17/19	MYE01 (Myers and Sons)		40,693.44	.00	40,693.44	Automatic Generated Check
	030133	07/17/19	PAC02 (PACIFIC GAS & ELECTRIC)		3,476.18	.00	3,476.18	Automatic Generated Check
	030134	07/17/19	RIV02 (RIVER CITY RENTALS)		500.00	.00	500.00	Automatic Generated Check
	030135	07/17/19	ROB01 (DON ROBINSON)		1,796.81	.00	1,796.81	Automatic Generated Check
	030136	07/17/19	ROB02 (ROBINSON ENTERPRISES)		2,784.47	.00	2,784.47	Automatic Generated Check
	030137	07/17/19	RUL01 (RULE, BRIAN)		200.00	.00	200.00	Automatic Generated Check

Georgetown Divide PUD
Month End Cash Disbursements Report
Report for 07-19 BANK ACCOUNT 1000

Period	Check Number	Check Date	Vendor # (Name)	Disc. Terms	Gross Amount	Disc Amount	Net Amount	Check Description
07-19	030138	07/17/19	SAU02 (MICHAEL SAUNDERS)		527.67	.00	527.67	Automatic Generated Check
	030139	07/17/19	TEI01 (A. TEICHERT & SON, INC)		1,022.74	.00	1,022.74	Automatic Generated Check
	030140	07/17/19	THA01 (THATCHER COMPANY OF CALIFORNIA INC)		7,046.38	.00	7,046.38	Automatic Generated Check
	030141	07/17/19	TIR01 (TIREHUB, LLC)		1,230.64	.00	1,230.64	Automatic Generated Check
	030142	07/17/19	UNI06 (UNITEDHEALTHCARE INSURANCE CO)		156.75	.00	156.75	Automatic Generated Check
	030143	07/17/19	USB05 (U.S. BANK CORPORATE PAYMENT SYSTEM)		949.29	.00	949.29	Automatic Generated Check
	030144	07/17/19	VAV01 (VAVRINEK, TRINE, DAY & CO., LLP)		785.00	.00	785.00	Automatic Generated Check
	030145	07/17/19	VER01 (VERIZON WIRELESS)		68.02	.00	68.02	Automatic Generated Check
	030146	07/17/19	WAL02 (WALKER'S OFFICE SUPPLY)		156.21	.00	156.21	Automatic Generated Check
	030147	07/17/19	WEL02 (WELLS FARGO BANK)		2,296.95	.00	2,296.95	Automatic Generated Check
	030148	07/31/19	AFL01 (AMERICAN FAMILY LIFE INS)		1,495.68	.00	1,495.68	Automatic Generated Check
	030149	07/31/19	ANS01 (ANSWERING SPECIALISTS INC)		79.95	.00	79.95	Automatic Generated Check
	030150	07/31/19	ARA01 (ARAMARK)		241.18	.00	241.18	Automatic Generated Check
	030151	07/31/19	ATT02 (AT&T)		2,053.39	.00	2,053.39	Automatic Generated Check
	030152	07/31/19	AWW02 (AWWA)		433.00	.00	433.00	Automatic Generated Check
	030153	07/31/19	BEN04 (BENNETT ENGINEERING SERVICES)		1,507.50	.00	1,507.50	Automatic Generated Check
	030154	07/31/19	BLU07 (BLUE SHIELD OF CALIFORNIA)		1,786.00	.00	1,786.00	Automatic Generated Check
	030155	07/31/19	BRO05 (BROWN, ADAM)		129.09	.00	129.09	Automatic Generated Check
	030156	07/31/19	CAL16 (CALTRONICS BUSINESS SYSTEMS CORP.)		594.04	.00	594.04	Automatic Generated Check
	030157	07/31/19	CIT01 (CITY OF SACRAMENTO)		2,603.41	.00	2,603.41	Automatic Generated Check
	030158	07/31/19	CWS01 (CORBIN WILLITS SYS. INC.)		584.66	.00	584.66	Automatic Generated Check
	030159	07/31/19	VOID (Reversed Check)		.00	.00	.00	Ck# 030159 Reversed
	030160	07/31/19	ENV01 (ENVIRO TECH SERVICES COMPANY, INC.)		148.74	.00	148.74	Automatic Generated Check
	030161	07/31/19	GAR02 (GARDEN VALLEY FEED & HDW.)		34.31	.00	34.31	Automatic Generated Check
	030162	07/31/19	VOID (Reversed Check)		.00	.00	.00	Ck# 030162 Reversed
	030163	07/31/19	ICM02 (ICMA-R.T.-457 (ee))		1,611.08	.00	1,611.08	Automatic Generated Check
	030164	07/31/19	IUO01 (IUOE, LOCAL 39)		355.59	.00	355.59	Automatic Generated Check
	030165	07/31/19	IUO02 (PEU LOCAL #1)		267.98	.00	267.98	Automatic Generated Check
	030166	07/31/19	MED01 (MEDICAL EYE SERVICES)		389.75	.00	389.75	Automatic Generated Check
	030167	07/31/19	MJT01 (MJT ENTERPRISES, INC.)		1,460.20	.00	1,460.20	Automatic Generated Check
	030168	07/31/19	MOU02 (MOUNTAIN DEMOCRAT)		168.23	.00	168.23	Automatic Generated Check
	030169	07/31/19	MYE01 (Myers and Sons)		77,008.22	.00	77,008.22	Automatic Generated Check
	030170	07/31/19	PAC02 (PACIFIC GAS & ELECTRIC)		2,086.71	.00	2,086.71	Automatic Generated Check
	030171	07/31/19	POW01 (POWERNET GLOBAL COMM.)		154.95	.00	154.95	Automatic Generated Check
	030172	07/31/19	PRE01 (PREMIER ACCESS INS CO)		3,221.41	.00	3,221.41	Automatic Generated Check
	030173	07/31/19	PRO04 (PAUL FUNK)		265.00	.00	265.00	Automatic Generated Check
	030174	07/31/19	ROB02 (ROBINSON ENTERPRISES)		2,616.15	.00	2,616.15	Automatic Generated Check
	030175	07/31/19	ROY01 (KENNETH ROYAL)		520.00	.00	520.00	Automatic Generated Check
	030176	07/31/19	SAN02 (Santander Leasing)		1,230.88	.00	1,230.88	Automatic Generated Check
	030177	07/31/19	USA03 (USA BLUE BOOK)		299.62	.00	299.62	Automatic Generated Check
	030178	07/31/19	VER01 (VERIZON WIRELESS)		963.02	.00	963.02	Automatic Generated Check
	030179	07/31/19	WOO03 (WOOD ENVIRONMENT & INFRASTRUCTURE SOL)		1,986.79	.00	1,986.79	Automatic Generated Check
	030180	07/31/19	DIV05 (PLACERVILLE AUTO PARTS, INC)		73.37	.00	73.37	Automatic Generated Check
	030181	07/31/19	GEO01 (GEORGETOWN ACE HDW)		206.20	.00	206.20	Automatic Generated Check
			Total for Bank Account 1000 ----->		670,111.14	.00	670,111.14	
			Grand Total of all Bank Accounts ----->		670,111.14	.00	670,111.14	

AGENDA ITEM 5.B.1.

Attachment 3

SRF Cash Balances June 2019

G/L Account No Ctr	Cal.	Fiscl	Date	Jrnl	Line	Description	Debit	Credit
29	1115					STATE REV FUND SRF FISCAL AGENT ACCOUNTS		
						Balance July 1, 2019 (01-20)	41,316.21	
	Jul 2019	01-2020	07/03/19	04-00	0052	Vendor WEL02 Invoice 07012019 Line 0001 JULY 2019 WALTON LAKE ANNUAL RESERVE WELLS FARGO BANK	2,296.95	
	Jul 2019	01-2020	08/20/19	00-00	0001	July Interest	60.15	
	** Budget not Applicable **					Activity ---->	2,357.10	.00
						Balance July 31, 2019 (01-20)	43,673.31	
						REPORT TOTAL ---->	43,673.31	.00
						REPORT TOTAL for Detail Activity ---->	2,357.10	.00

AGENDA ITEM 5.B.2

Month End Cash Disbursements Report

Check#	Check Date	Vend#	Vendor Name	Description	Check Amount
030182	08/14/19	ACW05	ACWA/JPIA HEALTH	HEALTH INSURANCE PREMIUMS SEPTEMBER 2019	3073.20
030182	08/14/19	ACW05	ACWA/JPIA HEALTH	HEALTH INSURANCE PREMIUMS SEPTEMBER 2019	9063.79
030182	08/14/19	ACW05	ACWA/JPIA HEALTH	HEALTH INSURANCE PREMIUMS SEPTEMBER 2019	5486.61
030182	08/14/19	ACW05	ACWA/JPIA HEALTH	HEALTH INSURANCE PREMIUMS SEPTEMBER 2019	9723.56
030182	08/14/19	ACW05	ACWA/JPIA HEALTH	HEALTH INSURANCE PREMIUMS SEPTEMBER 2019	1801.49
030182	08/14/19	ACW05	ACWA/JPIA HEALTH	HEALTH INSURANCE PREMIUMS SEPTEMBER 2019	11167.76
030182	08/14/19	ACW05	ACWA/JPIA HEALTH	HEALTH INSURANCE PREMIUMS SEPTEMBER 2019	1638.91
030182	08/14/19	ACW05	ACWA/JPIA HEALTH	RETIREE HEALTH INSURANCE PREMIUMS SEPTEMBER 2019	5370.80
Sub-Total:(1)					47326.12
Sub-Count: 8					
030183	08/14/19	ADT01	ADT SECURITY SERVICES	SECURITY SERVICE 08/20/19-09/19/19 8180 BALDERSTON	42.08
Sub-Total:(1)					42.08
Sub-Count: 1					
030184	08/14/19	ADT01	ADT SECURITY SERVICES	SECURITY SERVICE 08/21/19-09/20/19 6425 MAIN ST	161.46
Sub-Total:(1)					161.46
Sub-Count: 1					
030185	08/14/19	ALL01	ALLEN KRAUSE	Misc. Vehicle Maintenance & Repairs	79.71
030185	08/14/19	ALL01	ALLEN KRAUSE	Misc. Vehicle Maintenance & Repairs	328.00
030185	08/14/19	ALL01	ALLEN KRAUSE	Misc. Vehicle Maintenance & Repairs	67.08
030185	08/14/19	ALL01	ALLEN KRAUSE	Misc. Vehicle Maintenance & Repairs	61.81
030185	08/14/19	ALL01	ALLEN KRAUSE	Misc. Vehicle Maintenance & Repairs	61.82
030185	08/14/19	ALL01	ALLEN KRAUSE	Misc. Vehicle Maintenance & Repairs	61.82
030185	08/14/19	ALL01	ALLEN KRAUSE	Misc. Vehicle Maintenance & Repairs	278.62
Sub-Total:(1)					938.86
Sub-Count: 7					
030186	08/14/19	AME08	AMERICAN MESSAGING	PAGECOPY USAGE 07/26/19	10.73
Sub-Total:(1)					10.73
Sub-Count: 1					
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	8.44
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	18.09
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	7.24
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	22.91
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	60.30
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	3.61
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	8.44
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	18.09
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	7.24
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	22.91
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	60.30
030187	08/14/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	3.61
Sub-Total:(1)					241.18
Sub-Count: 12					
030188	08/14/19	CAR08	CSI	MONTHLY SERVICE FEE AUGUST 2019	59.00
Sub-Total:(1)					59.00
Sub-Count: 1					
030189	08/14/19	CLS01	CLS LABS	GARDEN PARK TANK	14.70
030189	08/14/19	CLS01	CLS LABS	ROUTINE DIST. SYST. BACTERIA	44.10
030189	08/14/19	CLS01	CLS LABS	QUARTERLY DBP	395.92
030189	08/14/19	CLS01	CLS LABS	ROUTINE DIST. SYST. BACTERIA	44.10
030189	08/14/19	CLS01	CLS LABS	ROUTINE DIST. SYST. BACTERIA	44.10
Sub-Total:(1)					542.92
Sub-Count: 5					
030190	08/14/19	DIT01	DITCH WITCH EQUIPMENT COMPANY,	PO#018075: 4x30 HOSE	568.16
Sub-Total:(1)					568.16
Sub-Count: 1					
030191	08/14/19	ELD16	EL DORADO DISPOSAL SERVICE	Utilities-GARBAGE 6425 MAIN ST 7/01-07/31/19	120.26
030191	08/14/19	ELD16	EL DORADO DISPOSAL SERVICE	Utilities-GARBAGE 3650 SWEETWATER TR 7/01-07/31/19	120.26
030191	08/14/19	ELD16	EL DORADO DISPOSAL SERVICE	Utilities-GARBAGE 8180 BALDERSTON 7/01-07/31/19	120.26
Sub-Total:(1)					360.78
Sub-Count: 3					
030192	08/14/19	FER01	FERRELLGAS	Utilities-PROPANE EQUIPMENT RENTAL 7/1/19-6/30/20	12.00
Sub-Total:(1)					12.00

Check#	Check Date	Vend#	Vendor Name	Description	Check Amount
Sub-Count: 1					
030193	08/14/19	GAR02	GARDEN VALLEY FEED & HDW.	Misc. materials & supplies for treated & raw water	17.46
030193	08/14/19	GAR02	GARDEN VALLEY FEED & HDW.	Misc. materials & supplies for treated & raw water	36.44
030193	08/14/19	GAR02	GARDEN VALLEY FEED & HDW.	Misc. materials & supplies for treated & raw water	18.21
030193	08/14/19	GAR02	GARDEN VALLEY FEED & HDW.	Misc. materials & supplies for treated & raw water	47.18
030193	08/14/19	GAR02	GARDEN VALLEY FEED & HDW.	Misc. materials & supplies for treated & raw water	2.67
Sub-Total:(1)					121.96
Sub-Count: 5					
030194	08/14/19	GEM01	GEMPLER'S, INC.	PO#018079: HOE TOOLS FOR RAW WATER	197.30
030194	08/14/19	GEM01	GEMPLER'S, INC.	PO#018079: HOE TOOLS FOR RAW WATER	147.97
Sub-Total:(1)					345.27
Sub-Count: 2					
030195	08/14/19	GEO02	GEORGETOWN GAZETTE	SUBSCRIPTION RENEWED FOR 1 YEAR TO SEPTEMBER 2020	22.50
Sub-Total:(1)					22.50
Sub-Count: 1					
030196	08/14/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	20.33
030196	08/14/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	24.22
030196	08/14/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	45.44
030196	08/14/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	29.54
030196	08/14/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	61.06
030196	08/14/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	45.01
030196	08/14/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	59.88
030196	08/14/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	23.85
Sub-Total:(1)					309.33
Sub-Count: 8					
030197	08/14/19	GEO12	GEORGE SANDERS	PROFESSIONAL SERVICES AGREEMENT: GEORGE SANDERS	3431.40
030197	08/14/19	GEO12	GEORGE SANDERS	PROFESSIONAL SERVICES AGREEMENT: GEORGE SANDERS	3248.80
Sub-Total:(1)					6680.20
Sub-Count: 2					
030198	08/14/19	GRA01	GRAINGER, INC.	Misc. pipe and fittings for irrigation, dist. zone	91.98
030198	08/14/19	GRA01	GRAINGER, INC.	Misc. pipe and fittings for irrigation, dist. zone	91.98
030198	08/14/19	GRA01	GRAINGER, INC.	Misc. pipe and fittings for irrigation, dist. zone	91.98
030198	08/14/19	GRA01	GRAINGER, INC.	Misc. pipe and fittings for irrigation, dist. zone	91.98
Sub-Total:(1)					367.92
Sub-Count: 4					
030199	08/14/19	HAR03	HARRIS INDUSTRIAL GASES	Gas, leases, welding, materials and supplies for	270.69
030199	08/14/19	HAR03	HARRIS INDUSTRIAL GASES	Gas, leases, welding, materials and supplies for	57.02
Sub-Total:(1)					327.71
Sub-Count: 2					
030200	08/14/19	HOM01	HOME DEPOT CREDIT SERVICE	PO#018074: TOOL BOX FOR WELDING TRAILER	335.60
Sub-Total:(1)					335.60
Sub-Count: 1					
030201	08/14/19	ICM02	ICMA-R.T.-457 (ee)	Payroll withholding-ICMA	1611.08
Sub-Total:(1)					1611.08
Sub-Count: 1					
030202	08/14/19	IUO01	IUOE, LOCAL 39	Union Dues Payable-LOCAL 39	356.38
Sub-Total:(1)					356.38
Sub-Count: 1					
030203	08/14/19	IUO02	PEU LOCAL #1	UNION DUES-LOCAL 1	267.98
Sub-Total:(1)					267.98
Sub-Count: 1					
030204	08/14/19	MAC04	MACAULEY CONSTRUCTION INC	2017 PAVEMENT REPAIR PROJECT PERIOD TO 6/26/19	17147.40
Sub-Total:(1)					17147.40
Sub-Count: 1					
030205	08/14/19	MJT01	MJT ENTERPRISES, INC.	GLORIA O. ALT 07/22/19-07/28/19	313.60

Check#	Check Date	Vend#	Vendor Name		Description	Check Amount
030205	08/14/19	MJT01	MJT ENTERPRISES, INC.		GLORIA O. CABY 07/22/19-07/28/19	196.00
Sub-Total:(1)						509.60
Sub-Count: 2						
030206	08/14/19	MOU02	MOUNTAIN DEMOCRAT		ORDINANCE 2019-01, PUB DATE 8/5/19	149.70
Sub-Total:(1)						149.70
Sub-Count: 1						
030207	08/14/19	NEX00	NEXGEN		2017 PROFESSIONAL SERVICE AGREEMENT	57945.00
Sub-Total:(1)						57945.00
Sub-Count: 1						
030208	08/14/19	OLY02	OLYMPUS AND ASSOCIATES, INC		PERIOD TO JUNE 2019 GARDEN VALLEY TANK RECOATING	81331.25
Sub-Total:(1)						81331.25
Sub-Count: 1						
030209	08/14/19	PAC02	PACIFIC GAS & ELECTRIC		7727208388-0 WALTON	4165.84
030209	08/14/19	PAC02	PACIFIC GAS & ELECTRIC		0967683154-9 ALT	20747.47
Sub-Total:(1)						24913.31
Sub-Count: 2						
030210	08/14/19	PAC06	PACE SUPPLY	23714-00	Misc. Materials & Supplies for Distribution	877.31
030210	08/14/19	PAC06	PACE SUPPLY	23714-00	Misc. Materials & Supplies for Distribution	1105.82
Sub-Total:(1)						1983.13
Sub-Count: 2						
030211	08/14/19	POL01	POLLARD WATER		PO#018078: DECHLORINATION TABLETS FOR WTP	365.19
Sub-Total:(1)						365.19
Sub-Count: 1						
030212	08/14/19	ROB02	ROBINSON ENTERPRISES		T & D RAW WATER FUEL USAGE ALLOCATION	1235.94
030212	08/14/19	ROB02	ROBINSON ENTERPRISES		WATER TREATMENT FUEL USAGE ALLOCATION	352.00
030212	08/14/19	ROB02	ROBINSON ENTERPRISES		T & D TREATED WTR FUEL USAGE ALLOCATION	886.24
030212	08/14/19	ROB02	ROBINSON ENTERPRISES		ZONE FUEL USAGE ALLOCATION	191.47
030212	08/14/19	ROB02	ROBINSON ENTERPRISES		UPCOUNTRY FUEL USAGE ALLOCATION	373.45
030212	08/14/19	ROB02	ROBINSON ENTERPRISES		ADMIN. FUEL USAGE ALLOCATION	.00
Sub-Total:(1)						3039.10
Sub-Count: 6						
030213	08/14/19	ROO01	ROOKERS COLLISION CENTER, INC		COLLISION REPAIR/ACWA REIMBURSEMENT PORTION	1512.47
030213	08/14/19	ROO01	ROOKERS COLLISION CENTER, INC		COLLISION REPAIR/GDPUD PAYMENT PORTION	1000.00
Sub-Total:(1)						2512.47
Sub-Count: 2						
030214	08/14/19	UNI06	UNITEDHEALTHCARE INSURANCE CO		PREPAID HEALTH INSURANCE [redacted] 9/1/19-9/30/19	156.75
Sub-Total:(1)						156.75
Sub-Count: 1						
030215	08/14/19	WEL02	WELLS FARGO BANK		SEPTEMBER 2019 WALTON LAKE ANNUAL RESERVE	2296.95
Sub-Total:(1)						2296.95
Sub-Count: 1						
030216	08/14/19	\A001	[redacted]		MQ CUSTOMER REFUND FOR [redacted]	341.91
Sub-Total:(1)						341.91
Sub-Count: 1						
030217	08/14/19	\B007	[redacted]		MQ CUSTOMER REFUND FOR [redacted]	150.00
Sub-Total:(1)						150.00
Sub-Count: 1						
030218	08/28/19	AAR01	AARP MEDICARERX SAVER PLUS, PD		AARP MEDICARE [redacted] SEPTEMBER 2019	33.10
Sub-Total:(1)						33.10
Sub-Count: 1						

Check#	Check Date	Vend#	Vendor Name	Description	Check Amount
030219	08/28/19	AFL01	AMERICAN FAMILY LIFE INS	Insurance - H&L	1495.68
Sub-Total:(1)					1495.68
Sub-Count: 1					
030220	08/28/19	ALL01	ALLEN KRAUSE	Misc. Vehicle Maintenance & Repairs	117.00
Sub-Total:(1)					117.00
Sub-Count: 1					
030221	08/28/19	AND01	ANDERSON'S SIERRA PIPE CO	Misc. pipe & tools for up country/ditch/dist/zone	22.16
Sub-Total:(1)					22.16
Sub-Count: 1					
030222	08/28/19	ANS01	ANSWERING SPECIALISTS INC	AUGUST 2019 ANSWERING SERVICE	79.95
Sub-Total:(1)					79.95
Sub-Count: 1					
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	8.44
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	18.09
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	7.24
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	22.91
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	60.30
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	3.61
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	8.44
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	18.09
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	7.24
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	22.91
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	60.30
030223	08/28/19	ARA01	ARAMARK	WEEKLY SERVICE: UNIFORMS/RESTROOM/FIRST AID SUPPLY	3.61
Sub-Total:(1)					241.18
Sub-Count: 12					
030224	08/28/19	BEN04	BENNETT ENGINEERING SERVICES	Professional Services Agreement: November 13, 2018	2803.75
030224	08/28/19	BEN04	BENNETT ENGINEERING SERVICES	Professional Services Agreement: November 13, 2018	3234.27
Sub-Total:(1)					6038.02
Sub-Count: 2					
030225	08/28/19	BLU01	ANTHEM BLUE CROSS	PREPAID HEALTH INSURANCE [redacted] 9/1/19-9/30/19	326.10
030225	08/28/19	BLU01	ANTHEM BLUE CROSS	PREPAID HEALTH INSURANCE [redacted] 9/1/19-9/30/19	326.10
030225	08/28/19	BLU01	ANTHEM BLUE CROSS	PREPAID HEALTH INSURANCE [redacted] 09/01-9/30/19	256.65
030225	08/28/19	BLU01	ANTHEM BLUE CROSS	PREPAID HEALTH INSURANCE [redacted] 9/1/19-9/30/19	326.10
Sub-Total:(1)					1234.95
Sub-Count: 4					
030226	08/28/19	BLU01	ANTHEM BLUE CROSS	PREPAID HEALTH INSURANCE [redacted] 9/1-11/30/19	651.21
Sub-Total:(1)					651.21
Sub-Count: 1					
030227	08/28/19	BLU06	BLUE SHIELD OF CALIFORNIA	PREPAID HEALTH INSURANCE [redacted] 9/1/19-11/30/19	632.00
Sub-Total:(1)					632.00
Sub-Count: 1					
030228	08/28/19	CAL16	CALTRONICS BUSINESS SYSTEMS CO	KONICA COPIER CONTRACT 07/14/19-08/13/19	568.71
Sub-Total:(1)					568.71
Sub-Count: 1					
030229	08/28/19	CHU02	CHURCHWELL WHITE, LLP	[redacted]	5623.72
030229	08/28/19	CHU02	CHURCHWELL WHITE, LLP	[redacted]	583.70
030229	08/28/19	CHU02	CHURCHWELL WHITE, LLP	[redacted]	273.00
030229	08/28/19	CHU02	CHURCHWELL WHITE, LLP	[redacted]	5195.90
030229	08/28/19	CHU02	CHURCHWELL WHITE, LLP	[redacted]	1186.80
Sub-Total:(1)					12863.12
Sub-Count: 5					
030230	08/28/19	CLS01	CLS LABS	SPECIAL SAMPLE ALT	14.70
030230	08/28/19	CLS01	CLS LABS	ROUTINE DIST. SYST. BACTERIA	44.10
030230	08/28/19	CLS01	CLS LABS	RAWB	78.40
030230	08/28/19	CLS01	CLS LABS	ROUTINE DIST. SYST. BACTERIA	44.10
030230	08/28/19	CLS01	CLS LABS	KIT FOX CT	29.40
Sub-Total:(1)					210.70
Sub-Count: 5					

Check#	Check Date	Vend#	Vendor Name	Description	Check Amount
030231	08/28/19	DEL05	DELAGE LANDEN, INC	KONICA COPIER CONTRACT 08/01-08/31/19	228.20
030231	08/28/19	DEL05	DELAGE LANDEN, INC	FORMAX FOLDING MACHINE 08/01-08/31/19	185.65
Sub-Total:(1)					413.85
Sub-Count: 2					
030232	08/28/19	DEL05	DELAGE LANDEN, INC	KONICA COPIER CONTRACT 09/01-09/30/19	228.20
030232	08/28/19	DEL05	DELAGE LANDEN, INC	FORMAX FOLDING MACHINE 09/01-09/30/19	185.65
Sub-Total:(1)					413.85
Sub-Count: 2					
030233	08/28/19	DIG01	DIGITAL DEPLOYMENT INC	STREAMLINE MONTHLY MEMBER FEE AUGUST 2019	300.00
Sub-Total:(1)					300.00
Sub-Count: 1					
030234	08/28/19	ECO01	ECORP CONSULTING, INC.	PROJECT 2016-186 PROF SVCS FROM 07/1/19-7/31/19	1909.11
Sub-Total:(1)					1909.11
Sub-Count: 1					
030235	08/28/19	ENV01	ENVIRO TECH SERVICES COMPANY,	PO#018096: GLOVES FOR ZONE	205.68
Sub-Total:(1)					205.68
Sub-Count: 1					
030236	08/28/19	GAR02	GARDEN VALLEY FEED & HDW.	Misc. materials & supplies for treated & raw water	15.00
030236	08/28/19	GAR02	GARDEN VALLEY FEED & HDW.	Misc. materials & supplies for treated & raw water	28.95
030236	08/28/19	GAR02	GARDEN VALLEY FEED & HDW.	Misc. materials & supplies for treated & raw water	77.49
Sub-Total:(1)					121.44
Sub-Count: 3					
030237	08/28/19	GEM01	GEMPLER'S, INC.	PO#018097: HIP BOOTS FOR DITCH & UP COUNTRY	53.61
030237	08/28/19	GEM01	GEMPLER'S, INC.	PO#018097: HIP BOOTS FOR DITCH & UP COUNTRY	53.61
Sub-Total:(1)					107.22
Sub-Count: 2					
030238	08/28/19	GEO01	GEORGETOWN ACE HDW	Misc. materials & supplies for treated & raw water	10.70
030238	08/28/19	GEO01	GEORGETOWN ACE HDW	Misc. materials & supplies for treated & raw water	18.21
030238	08/28/19	GEO01	GEORGETOWN ACE HDW	Misc. materials & supplies for treated & raw water	18.21
030238	08/28/19	GEO01	GEORGETOWN ACE HDW	Misc. materials & supplies for treated & raw water	18.22
030238	08/28/19	GEO01	GEORGETOWN ACE HDW	Misc. materials & supplies for treated & raw water	5.89
Sub-Total:(1)					71.23
Sub-Count: 5					
030239	08/28/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	22.02
030239	08/28/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	11.56
030239	08/28/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	38.69
030239	08/28/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	40.71
030239	08/28/19	GEO04	DIVIDE SUPPLY ACE HARDWARE	Misc. materials & supplies for treated & raw water	43.57
Sub-Total:(1)					156.55
Sub-Count: 5					
030240	08/28/19	GEO14	GEORGETOWN DIVIDE ROTARY CLUB	FOUNDERS DAY BOOTH 09/15/19	45.00
Sub-Total:(1)					45.00
Sub-Count: 1					
030241	08/28/19	GRA01	GRAINGER, INC.	Misc. pipe and fittings for irrigation, dist. zone	24.95
030241	08/28/19	GRA01	GRAINGER, INC.	Misc. pipe and fittings for irrigation, dist. zone	24.96
030241	08/28/19	GRA01	GRAINGER, INC.	Misc. pipe and fittings for irrigation, dist. zone	115.05
Sub-Total:(1)					164.96
Sub-Count: 3					
030242	08/28/19	ICM02	ICMA-R.T.-457 (ee)	Payroll withholding-ICMA	1631.08
Sub-Total:(1)					1631.08
Sub-Count: 1					
030243	08/28/19	INT05	INTERWEST CONSULTING GROUP	PROFESSIONAL SERVICES FOR 07/01-07/31/19	630.00
Sub-Total:(1)					630.00
Sub-Count: 1					

Check#	Check Date	Vend#	Vendor Name		Description	Check Amount
030244	08/28/19	IUO01	IUOE, LOCAL 39		Union Dues Payable-LOCAL 39	356.38
Sub-Total:(1)						356.38
Sub-Count: 1						
030245	08/28/19	IUO02	PEU LOCAL #1		UNION DUES-LOCAL 1	267.98
Sub-Total:(1)						267.98
Sub-Count: 1						
030246	08/28/19	MED01	MEDICAL EYE SERVICES		VISION INSURANCE SEPTEMBER 2019	21.86
030246	08/28/19	MED01	MEDICAL EYE SERVICES		VISION INSURANCE SEPTEMBER 2019	49.97
030246	08/28/19	MED01	MEDICAL EYE SERVICES		VISION INSURANCE SEPTEMBER 2019	18.74
030246	08/28/19	MED01	MEDICAL EYE SERVICES		VISION INSURANCE SEPTEMBER 2019	49.98
030246	08/28/19	MED01	MEDICAL EYE SERVICES		VISION INSURANCE SEPTEMBER 2019	37.48
030246	08/28/19	MED01	MEDICAL EYE SERVICES		VISION INSURANCE SEPTEMBER 2019	192.98
030246	08/28/19	MED01	MEDICAL EYE SERVICES		VISION INSURANCE SEPTEMBER 2019	18.74
Sub-Total:(1)						389.75
Sub-Count: 7						
030247	08/28/19	MJT01	MJT ENTERPRISES, INC.		GLORIA O. 07/29/19-08/04/19	539.00
030247	08/28/19	MJT01	MJT ENTERPRISES, INC.		CATHERINE G. 08/05/19-08/11/19	896.10
030247	08/28/19	MJT01	MJT ENTERPRISES, INC.		GLORIA O. 08/05/19-08/11/19	372.40
030247	08/28/19	MJT01	MJT ENTERPRISES, INC.		GLORIA O. 08/05/19-08/11/19	58.80
Sub-Total:(1)						1866.30
Sub-Count: 4						
030248	08/28/19	MOB01	MOBILE MINI, LLC-CA		STORAGE RENTAL 08/07/19-09/03/19	211.21
Sub-Total:(1)						211.21
Sub-Count: 1						
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		9644745072-5	81.26
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		1383483826-3	19.30
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		8019291332-7	44.46
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		9592050405-7	39.54
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		7269328928-1	21.03
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		9103062795-3	446.03
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		0800178691-5	100.42
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		2102211877-8	24.45
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		7804325001-4	8.50
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		2060545213-3	935.64
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		2060545213-3	311.88
030249	08/28/19	PAC02	PACIFIC GAS & ELECTRIC		6228064022-8	392.81
Sub-Total:(1)						2425.32
Sub-Count: 12						
030250	08/28/19	PAC06	PACE SUPPLY	23714-00	Misc. Materials & Supplies for Distribution	265.00
030250	08/28/19	PAC06	PACE SUPPLY	23714-00	Misc. Materials & Supplies for Distribution	15619.89
030250	08/28/19	PAC06	PACE SUPPLY	23714-00	Misc. Materials & Supplies for Distribution	736.81
Sub-Total:(1)						16621.70
Sub-Count: 3						
030251	08/28/19	PAL01	STEVE PALMER		WELLNESS GRANT REIMBURSEMENT 2019	35.00
Sub-Total:(1)						35.00
Sub-Count: 1						
030252	08/28/19	PRE01	PREMIER ACCESS INS CO		DENTAL INSURANCE SEPTEMBER 2019	136.03
030252	08/28/19	PRE01	PREMIER ACCESS INS CO		DENTAL INSURANCE SEPTEMBER 2019	310.93
030252	08/28/19	PRE01	PREMIER ACCESS INS CO		DENTAL INSURANCE SEPTEMBER 2019	116.60
030252	08/28/19	PRE01	PREMIER ACCESS INS CO		VISION INSURANCE SEPTEMBER 2019	310.94
030252	08/28/19	PRE01	PREMIER ACCESS INS CO		VISION INSURANCE SEPTEMBER 2019	233.20
030252	08/28/19	PRE01	PREMIER ACCESS INS CO		VISION INSURANCE SEPTEMBER 2019	1997.11
030252	08/28/19	PRE01	PREMIER ACCESS INS CO		VISION INSURANCE SEPTEMBER 2019	116.60
Sub-Total:(1)						3221.41
Sub-Count: 7						
030253	08/28/19	PSO01	PSOMAS		PROFESSIONAL SERVICES FROM 05/31/19-07/25/19	9744.00
Sub-Total:(1)						9744.00
Sub-Count: 1						
030254	08/28/19	ROB02	ROBINSON ENTERPRISES		T & D RAW WATER FUEL USAGE ALLOCATION	959.76
030254	08/28/19	ROB02	ROBINSON ENTERPRISES		WATER TREATMENT FUEL USAGE ALLOCATION	269.03
030254	08/28/19	ROB02	ROBINSON ENTERPRISES		T & D TREATED WTR FUEL USAGE ALLOCATION	1130.36
030254	08/28/19	ROB02	ROBINSON ENTERPRISES		ZONE FUEL USAGE ALLOCATION	121.61

Check#	Check Date	Vend#	Vendor Name	Description	Check Amount
030254	08/28/19	ROB02	ROBINSON ENTERPRISES	UPCOUNTRY FUEL USAGE ALLOCATION	359.29
030254	08/28/19	ROB02	ROBINSON ENTERPRISES	ADMIN. FUEL USAGE ALLOCATION	.00
Sub-Total:(1)					2840.05
Sub-Count: 6					
030255	08/28/19	SAN02	Santander Leasing	INTEREST	33.13
030255	08/28/19	SAN02	Santander Leasing	PRINCIPAL	1197.75
Sub-Total:(1)					1230.88
Sub-Count: 2					
030256	08/28/19	SHR01	SHRED CITY	DESTROY FILES PAST RETENTION: PURGE ONSITE 8/9/19	384.00
Sub-Total:(1)					384.00
Sub-Count: 1					
030257	08/28/19	SIE12	MICHAEL S. SALLAC	#17 91 GMC DUMP INSPECTION & MAINTENANCE	80.00
030257	08/28/19	SIE12	MICHAEL S. SALLAC	#17 91 GMC DUMP INSPECTION & MAINTENANCE	80.00
030257	08/28/19	SIE12	MICHAEL S. SALLAC	#17 91 GMC DUMP INSPECTION & MAINTENANCE	80.00
030257	08/28/19	SIE12	MICHAEL S. SALLAC	#17 91 GMC DUMP INSPECTION & MAINTENANCE	106.00
030257	08/28/19	SIE12	MICHAEL S. SALLAC	#17 91 GMC DUMP INSPECTION & MAINTENANCE	107.00
030257	08/28/19	SIE12	MICHAEL S. SALLAC	#17 91 GMC DUMP INSPECTION & MAINTENANCE	107.00
Sub-Total:(1)					560.00
Sub-Count: 6					
030258	08/28/19	SWR04	STATE WATER RESOURCES CONTROL	CONTRACT NO. D16-02021 UNBILLED INTEREST	600.08
Sub-Total:(1)					600.08
Sub-Count: 1					
030259	08/28/19	THA01	THATCHER COMPANY OF CALIFORNIA	PO#018095: SODA ASH & CHLORINE 3650 SWEETWATER TR	3469.12
030259	08/28/19	THA01	THATCHER COMPANY OF CALIFORNIA	PO#018095: SODA ASH & CHLORINE 8180 BALDERSTON RD	2748.87
030259	08/28/19	THA01	THATCHER COMPANY OF CALIFORNIA	DEPOSIT REFUND: 12 DRUMS 3650 SWEETWATER TR	-420.00
030259	08/28/19	THA01	THATCHER COMPANY OF CALIFORNIA	DEPOSIT REFUND: 11 DRUMS 8180 BALDERSTON RD	-385.00
Sub-Total:(1)					5412.99
Sub-Count: 4					
030260	08/28/19	USA03	USA BLUE BOOK	Tools & supplies: up country/treat.plant/dist/zone	480.22
030260	08/28/19	USA03	USA BLUE BOOK	Tools & supplies: up country/treat.plant/dist/zone	456.89
Sub-Total:(1)					937.11
Sub-Count: 2					
030261	08/28/19	USB05	U.S. BANK CORPORATE PAYMENT SY	CA-NV SECTION, AWWA	195.00
030261	08/28/19	USB05	U.S. BANK CORPORATE PAYMENT SY	AMAZON - WELLNESS GRANT	382.98
030261	08/28/19	USB05	U.S. BANK CORPORATE PAYMENT SY	MICROSOFT	16.00
030261	08/28/19	USB05	U.S. BANK CORPORATE PAYMENT SY	MICROSOFT	84.00
030261	08/28/19	USB05	U.S. BANK CORPORATE PAYMENT SY	MICROSOFT	16.00
030261	08/28/19	USB05	U.S. BANK CORPORATE PAYMENT SY	NORTHERN TOOL MEMBERSHIP	39.99
030261	08/28/19	USB05	U.S. BANK CORPORATE PAYMENT SY	AMAZON - WELLNESS GRANT	215.34
030261	08/28/19	USB05	U.S. BANK CORPORATE PAYMENT SY	AMAZON - OFFICE SUPPLIES FOR WTP	57.58
030261	08/28/19	USB05	U.S. BANK CORPORATE PAYMENT SY	DRI CRASHPLAN FOR SB	9.99
030261	08/28/19	USB05	U.S. BANK CORPORATE PAYMENT SY	STAMPS.COM	17.99
Sub-Total:(1)					1034.87
Sub-Count: 10					
030262	08/28/19	VAV01	VAVRINEK, TRINE, DAY & CO., LL	INCREASE Change Order Issued 02/01/19	917.50
Sub-Total:(1)					917.50
Sub-Count: 1					
030263	08/28/19	VER01	VERIZON WIRELESS	Utilities-DATA FOR CDS STATION 16 7/7/19-8/6/19	39.02
Sub-Total:(1)					39.02
Sub-Count: 1					
030264	08/28/19	WOO03	WOOD ENVIRONMENT & INFRASTRUCT	PROFESSIONAL SERVICES THROUGH 08/02/19	842.68
Sub-Total:(1)					842.68
Sub-Count: 1					
Grn-Total:					334146.96
Ttl-Count: 229					

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF SEPTEMBER 10, 2019
AGENDA ITEM NO. 5.C.

AGENDA SECTION: **CONSENT**

SUBJECT: **RECOMMEND DISTRICT LEGAL COUNSEL BARBARA BRENNER TO SERVE ON ASSOCIATION OF CALIFORNIA WATER AGENCIES LEGAL AFFAIRS AND STATE LEGISLATIVE COMMITTEES**

PREPARED BY: Steven Palmer, PE, General Manager

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

The Association of California Water Agencies ("ACWA") recruits member agency representatives to serve on a Legal Affairs Committee and a State Legislative Committee. According to the ACWA website, "the Legal Affairs Committee acts on requests for assistance on legal matters of significance to ACWA member agencies. It also reviews proposed ACWA bylaw revisions and works with staff to produce publications to assist member agencies in complying with state and federal laws. The committee files amicus curiae filing on important cases, comments on proposed regulations and guidelines of state agencies such as the Fair Political Practices Commission and monitors and engages in water rights waters of interest to member agencies."

The State Legislative Committee has 40 members, with four members from each of ACWA's 10 Regions. As stated by ACWA, this Committee "sets official state legislative policy positions on behalf of the association. ACWA State Legislative Relations Department advocates and analysts review relevant introduced and amended legislation and create policy analyses with accompanying recommendations. The committee reviews this information and approves positions on the legislation. The committee also provides recommendations to the [ACWA] Board of Directors on ballot measures and other major statewide policy issues."

DISCUSSION

District Legal Counsel Barbara Brenner has served on these committees in the past, and would like to continue serving. In order for Ms. Brenner to continue on the committees, the District needs to complete and sign the Committee Consideration Form (Attachment 1). The Form needs to be signed by the either the Board President or the General Manager.

FISCAL IMPACT

There is no cost to the District for Ms. Brenner to serve on these committees.

CEQA ASSESSMENT

This is not a CEQA project.

RECOMMENDED ACTION

Staff recommends the Board of Directors of the Georgetown Divide Public Utility District (GDPUD) authorize the General Manager and the Board President to complete and sign the Committee Consideration Form for Legal Counsel Barbara Brenner to serve on the Legal Affairs and State Legislative Committees.

ALTERNATIVES

The Board may decide to not support this recommendation.

ATTACHMENTS

1. Committee Consideration Form

AGENDA ITEM 5.C.

Attachment 1

COMMITTEE CONSIDERATION FORM

ACWA
Association of California Water Agencies

COMMITTEE CONSIDERATION FORM

PLEASE PRINT LEGIBLY

SUBMIT

Agency Name (DO NOT use acronyms or abbreviations)	Phone
Georgetown Divde Public Utility District	(530) 333-4356
Agency Address	**City, State & Zip**
6425 Main Street	Georgetown, CA 95634

BELOW PLEASE LIST ALL THOSE INTERESTED IN BEING ON ACWA COMMITTEES FOR YOUR AGENCY.
FOR ADDITIONAL RECOMMENDATIONS PLEASE FILL OUT ANOTHER FORM.
**If an individual is not an agency employee or director, please indicate company affiliation.*

Name	Title/Company*	Email Address
Barbara A. Brenner	Attorney/Churchwell White LLP	barbara@churchwellwhite.com
Committee 1st Choice: Legislative Committee	Committee 2nd Choice: Legal Committee	Committee 3rd Choice:
Name	Title/Company*	Email Address
Committee 1st Choice	Committee 2nd Choice	Committee 3rd Choice
Name	Title/Company*	Email Address
Committee 1st Choice	Committee 2nd Choice	Committee 3rd Choice
Name	Title/Company*	Email Address
Committee 1st Choice	Committee 2nd Choice	Committee 3rd Choice
Name	Title/Company*	Email Address
Committee 1st Choice	Committee 2nd Choice	Committee 3rd Choice
Name	Title/Company*	Email Address
Committee 1st Choice	Committee 2nd Choice	Committee 3rd Choice

Signature *(Agency/District General Manager or Board President signature required)* Title Date

QUESTIONS?
Contact Business Services Specialist Petra Rice
at **petrar@acwa.com** or **(916) 441-4545**

910 K Street, Suite 100
Sacramento, CA 95814
www.acwa.com

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF SEPTEMBER 10, 2019
AGENDA ITEM NO. 5.D.

AGENDA SECTION: **CONSENT**

SUBJECT: **VOTING FOR ASSOCIATION OF CALIFORNIA WATER AGENCIES REGION 3 BOARD**

PREPARED BY: Steven Palmer, PE, General Manager

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

The Association of California Water Agencies ("ACWA") is governed by a 37-member Board of Directors. ACWA membership is divided into ten (10) hydrologic regions, and each region has a governing board consisting of seven (7) members. The chair and vice-chair from each region board also participate on the statewide board. The Georgetown Divide Public Utility District ("District" or "GDPUD") belongs to ACWA Region 3.

At the June 4, 2019 GDPUD Board meeting, the Board nominated General Manager Steven Palmer to serve on the ACWA Region 3 Board. Mr. Palmer has been serving in that role since his appointment on January 30, 2019 to fill a vacant seat on that Board. He attended the recent ACWA Spring Conference in that capacity where he a presented in a panel discussion regarding the impacts of fire on water agencies, and attended the ACWA Region 3 Board meeting.

DISCUSSION

The required nomination form was submitted to ACWA and the election process begins on Region 3 nominating committeed announced their recommended slate. An official electronic ballot identifying the recommended slate and any additional candidates for consideration has been received by the District. In order for its vote to count, the District must submit the completed election ballot by September 30, and election results will be announced on October 4, 2019.

The official ballot along with the recommended slate is included as Attachment 1. The recommended slate is:

- Chair: Joshua Alpine, Placer County Water Agency
- Vice-Chair: Michael Rafferty, El Dorado Irrigation District
- Board Members: Shannon Cotulla, South Tahoe Public Utility District
  Gene Mancebo, Amador Water Agency
  Michael Minkler, Calaveras County Water District
  Steven Palmer, Georgetown Divide Public Utility District
  Remleh Scherzinger, Nevada Irrigation District

FISCAL IMPACT

ACWA Region Board members commit to attend two meetings a year, which are held at the ACWA conferences. The District's operating budget will need to include the cost for the General Manager to attend these conferences. The cost to attend each conference, including conference fees, meals, lodging, and travel is typically between $1,000 and $1,600 per conference. The cost varies based on the location. This cost is included in the proposed Fiscal Year 2019/2020 budget.

CEQA ASSESSMENT

This is not a CEQA project.

RECOMMENDED ACTION

Staff recommends the Board of Directors of the Georgetown Divide Public Utility District (GDPUD) authorize the Board President to vote for the ACWA Region 3 Board Nominating Committee recommended slate, and submit the ACWA Region 3 Board Ballot.

ALTERNATIVES

The Board may vote differently, as indicated on the official ballot.

ATTACHMENTS

1. ACWA Region3 Board Ballot

AGENDA ITEM 5.D.

Attachment 1

ACWA Region 3 Board Ballot

From: ACWA Region Elections
Subject: Reminder! ACWA Region 3 Voting Underway
Date: Tuesday, August 20, 2019 9:44:39 AM
Attachments: Region 3 2020-2021 Election Ballot.pdf

Reminder that the voting window for the ACWA Region 3 Board closed on September 30. Please reach out to ACWA with any questions you have.

Thank you.

Sent via email August 1, 2019

TO: ACWA REGION 3 MEMBER AGENCY BOARD PRESIDENT AND GENERAL MANAGER

Ballot for Region 3 Board Election for the 2020-2021 Term

It is time to elect the 2020-2021 ACWA Region 3 Chair, Vice Chair and board members who will represent and serve the members of Region 3. Attached, you will find the official ballot which includes the Region 3 Nominating Committee's recommended slate as well as individual candidates running for the Region 3 Board.

Your agency is entitled to cast only one vote. Please review the attached ballot and have your agency's authorized representative cast its vote for the slate as recommended by the Region 3 Nominating Committee **or** cast its vote for an individual Region 3 chair, vice chair and three to five board members.

2020-2021 ACWA Region 3 Ballot is located HERE.
Region 3 Rules and Regulations are located HERE.

Submit the electronic ballot to ACWA by September 30, 2019.
(*Ballots received after September 30 will **not** be accepted.)*

REMEMBER, **YOUR VOTE IS IMPORTANT**. Region 3 Board members are elected to represent the issues, concerns and needs of your region. The Region 3 chair and vice chair will serve on ACWA's board of directors for the next two-year term beginning January 1, 2020. Additionally, the newly elected chair and vice chair will make the Region 3 committee appointment recommendations to the ACWA president for the 2020-2021 term. Also, either the chair or vice chair will hold a seat on the ACWA Finance Committee.

If you have questions, please contact your Regional Affairs Representative, Brian Sanders, at brians@acwa.com or call 916-441-4545.

Thank you for your careful consideration and participation in the Region 3 election process.

OFFICIAL

REGION 3 **Board Ballot**

2020-2021 TERM

CLEAR FORM

ACWA
Association of California Water Agencies

Please return completed ballot by September 30, 2019

E-mail: regionelections@acwa.com
Mail: ACWA
910 K Street, Suite 100
Sacramento, CA 95814

General Voting Instructions:

1. You may either vote for the slate recommended by the Region 3 Nominating Committee or vote for individual region board members. Please mark the appropriate box to indicate your decision.

2. Complete your agency information. The authorized representative is determined by your agency in accordance with your agency's policies and procedures.

SAVE & SUBMIT

1

Nominating Committee's Recommended Slate

○ I concur with the Region 3 Nominating Committee's recommended slate below.

CHAIR:
- **Joshua Alpine**, Director, Placer County Water Agency

VICE CHAIR:
- **Michael Raffety**, Board Member, El Dorado Irrigation District

BOARD MEMBERS:
- **Shannon Cotulla**, Assistant General Manager, South Tahoe Public Utility District
- **Gene Mancebo**, General Manager, Amador Water Agency
- **Michael Minkler**, General Manager, Calaveras County Water District
- **Steven Palmer**, General Manager, Georgetown Divide Public Utility District
- **Remleh Scherzinger**, General Manager, Nevada Irrigation District

OR

Individual Board Candidate Nominations

○ I do not concur with the Region 3 Nominating Committee's recommended slate. I will vote for individual candidates below as indicated.

CANDIDATES FOR CHAIR: (CHOOSE ONE)
- ○ **Joshua Alpine**, Director, Placer County Water Agency
- ○ **Steven Palmer**, General Manager, Georgetown Divide Public Utility District

CANDIDATES FOR VICE CHAIR: (CHOOSE ONE)
- ○ **Shannon Cotulla**, Assistant General Manager, South Tahoe Public Utility District
- ○ **Gene Mancebo**, General Manager, Amador Water Agency
- ○ **Steven Palmer**, General Manager, Georgetown Divide Public Utility District
- ○ **Michael Raffety**, Board Member, El Dorado Irrigation District
- ○ **Remleh Scherzinger**, General Manager, Nevada Irrigation District

CANDIDATES FOR BOARD MEMBERS: (MAX OF 5 CHOICES)
- ○ **Shannon Cotulla**, Assistant General Manager, South Tahoe Public Utility District
- ○ **Gene Mancebo**, General Manager, Amador Water Agency
- ○ **Michael Minkler**, General Manager, Calaveras County Water District
- ○ **Steven Palmer**, General Manager, Georgetown Divide Public Utility District
- ○ **Michael Raffety**, Board Member, El Dorado Irrigation District
- ○ **Remleh Scherzinger**, General Manager, Nevada Irrigation District

2

AGENCY NAME

AUTHORIZED REPRESENTATIVE DATE

AGENDA ITEM 6.A

BOARD REPORTS

PRESIDENT WADLE

LEGISLATION

From: ACWA
To: Steven Palmer
Subject: Outreach Advisory: AB 402 (Quirk) Fails to Advance Out of Senate
Date: Wednesday, September 4, 2019 4:03:15 PM

Click here to view it in your browser.

LEGISLATIVE | FEES

Sept. 4, 2019

AB 402 (Quirk) Fails to Advance Out of Senate

AB 402 (Quirk), which would have required ACWA members to pay higher drinking water fees in order to subsidize counties that regulate small public water systems, failed to advance out of the Senate Appropriations Committee last week.

ACWA led a coalition of more than 70 water agencies and associations opposed to the bill, unless amended to address the coalition's concerns. ACWA also worked alongside the California Municipal Utilities Association and Regional Water Authority in efforts to address concerns with this bill. Several member agencies joined the coalition, attended hearings and contacted local legislators through letters and phone calls to express their concerns with the bill.

Background

AB 402 would have allowed the State Water Resources Control Board to assess fees on all public water systems in order to subsidize the regulatory costs of Local Primacy Agencies (LPAs) that chose to participate in a funding stabilization program. The bill proposed funding the program through the Safe Drinking Water Account, which consists largely of fees collected from all public water systems.

LPAs are county health offices that provide regulatory oversight of small public water systems with more than 14 and less than 200 connections. Several LPAs have returned their oversight responsibilities to the State Water Board because, in some counties, regulatory oversight costs have outpaced fees collected from small public water systems. AB 402 was an attempt to help LPAs retain their oversight authority.

Questions

For questions about AB 402 (Quirk), please contact ACWA Legislative Advocate Kristopher Anderson

at (916) 441-4545.








910 K Street, Suite 100, Sacramento, CA 95814

PROPOSED AMENDMENTS TO ASSEMBLY BILL NO. 402

AMENDED IN SENATE JUNE 18, 2019

AMENDED IN ASSEMBLY MARCH 5, 2019

CALIFORNIA LEGISLATURE—2019–20 REGULAR SESSION

ASSEMBLY BILL No. 402

Introduced by Assembly Member Quirk

February 6, 2019

An act to amend Sections 116330 and 116565 of the Health and Safety Code, relating to drinking water.

LEGISLATIVE COUNSEL'S DIGEST

AB 402, as amended, Quirk. State Water Resources Control Board: local primacy delegation: funding stabilization program.

Existing law, the California Safe Drinking Water Act, requires the State Water Resources Control Board to administer provisions relating to the regulation of drinking water to protect public health, including, but not limited to, conducting research, studies, and demonstration programs relating to the provision of a dependable, safe supply of drinking water, enforcing the federal Safe Drinking Water Act, adopting implementing regulations, and conducting studies and investigations to assess the quality of water in private domestic water supplies. The act authorizes the state board to delegate, through a local primacy delegation agreement, primary responsibility for the act's administration and enforcement within a county to a local health officer, as specified. The act requires that a local primacy delegation remain in effect until specified conditions occur.

This bill would authorize the state board to delegate partial responsibility for the act's administration and enforcement by means

of a local primacy delegation agreement. The bill would authorize the state board, for counties that have not been delegated primary responsibility as of January 1, 2020, to offer an opportunity for the county to apply for partial or primary responsibility if the state board determines that it needs assistance in performing administrative and enforcement activities, as specified. The bill would authorize the state board to approve the application for delegation if the state board determines that the local health officer is able to sufficiently perform the administrative and enforcement activities and would specify that a local primacy agency has all of the authority over designated public water systems as is granted to the state board by the act.

The act requires the state board to provide the local primacy agency, to the extent funds are available from the Safe Drinking Water Account, with an annual drinking water surveillance program grant to cover the costs of conducting inspection, monitoring, surveillance, and water quality evaluation activities specified in the local primacy agreement.

This bill would eliminate the annual drinking water surveillance program grant.

The act requires the state board to evaluate the drinking water program of each local primacy agency at least annually and to prepare a report of the evaluation and list any program improvements needed. The act requires a copy of the report to be provided to the local primacy agency and the county board of supervisors. The act requires a local primacy agency to be granted a reasonable amount of time to make any needed program improvements before the initiation of any local primacy revocation actions.

This bill would instead require the state board to evaluate each local primacy agency's oversight program at least annually and the report prepared by the state board to list any deficiencies of each local primacy agency and to be made available on the state board's internet website. The bill would require the reasonable amount of time granted to a local primacy agency to make any needed program improvements to not exceed 2 years.

The act requires the state board to adopt a schedule of fees and requires a public water system under the jurisdiction of a local primacy agency to pay these fees to the local primacy agency in lieu of the state board. Existing law makes it a crime for any person to knowingly commit certain acts, including making a false statement or representation in any record submitted, maintained, or used for the purposes of compliance with the act, possessing a record required to be maintained

by the act that has been altered or concealed, and destroying, altering, or concealing any record required to be maintained by the act.

This bill would authorize any local primacy agency, with approval of the state board, to elect to participate in a funding stabilization program effective for the 2021–22 fiscal year and fiscal years thereafter, as specified. The bill would require a local primacy agency participating in the funding stabilization program to pay the fees to the state board, and would require the state board to provide funding to the local primacy agency each year for the reasonable costs incurred for the implementation of activities set forth in the work plan submitted by the local primacy agency ~~to~~ *to,* and approved ~~by~~ *by,* the state board. The bill would prohibit a participating local primacy agency from charging a public water system any fee in addition to the fees established and collected by the funding stabilization program for the activities in the local primacy agency and would require all fines, penalties, and reimbursement of costs collected by such a local primacy agency for the local primacy agency's activities to be remitted to the state board for deposit in the Safe Drinking Water Account. *The bill would require a participating local primacy agency to identify small water systems suitable for consolidation and to report the identified systems to the state board, as specified.* The bill would require a participating local primacy agency to establish and maintain accurate accounting records of all costs it incurs and periodically to make these records available to the state board. By requiring new records for the purpose of complying with the act, this bill would expand the scope of a crime and thereby impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

\+ *SECTION 1. It is the intent of the Legislature in enacting this*
\+ *measure to create a funding stabilization program to provide*
\+ *funding for a local primacy agency, as defined by Section 116275*
\+ *of the Health and Safety Code, who do not have sufficient fee base*

Amendment 1

to fully fund their oversight activities. The intent of this program is to replace, not supplement, local oversight fees currently set and collected by a local primacy agency with state oversight fees set and collected by the State Water Resources Control Board. The Legislature intends that funds provided by the funding stabilization program are for the oversight of public water systems that have been delegated to a local primacy agency, which does not include private wells.

Page 4

~~SECTION 1.~~

Amendment 2

SEC. 2. Section 116330 of the Health and Safety Code is amended to read:

116330. (a) The state board may delegate primary or partial responsibility for the administration and enforcement of this chapter within a county to a local health officer authorized by the board of supervisors to assume these duties, by means of a local primacy delegation agreement if the local health officer demonstrates that it has the capability to meet the local primacy program requirements established by the state board pursuant to subdivision (h) of Section 116375. This delegation shall not include the regulation of community water systems serving 200 or more service connections. The local primacy agreement may contain terms and conditions that the state board deems necessary to carry out this chapter. The local primacy agreement shall provide that, although the local primacy agency shall be primarily responsible for administration and enforcement of this chapter for the designated water systems, the state board does not thereby relinquish its authority, but rather shall retain jurisdiction to administer and enforce this chapter for the designated water systems to the extent determined necessary by the state board.

(b) For counties that have not been delegated primary responsibility as of January 1, 2020, the state board may offer the opportunity for the county to have partial or primary responsibility for the administration and enforcement of this chapter within the county if the state board determines that it needs assistance in performing the activities described in subdivision (c). If the state board offers the county the opportunity to apply for partial or primary responsibility, the county may submit an application within six months of the state board providing the opportunity to apply.

Page 5

The application shall be in a format and contain information as required by the state board. The state board may approve an

Page 5

application for delegation if the state board determines that the local health officer is able to sufficiently perform the activities described in subdivision (c). If an application is approved, the state board and the county shall sign a local primacy delegation agreement and the participation in the drinking water oversight program shall begin on the first day of the following fiscal year and continue until terminated in accordance with subdivision (d).

(c) A local primacy agency shall act for the state board as the primary agency responsible for the administration and enforcement of this chapter for the designated public water systems, including permitting, inspections, water quality monitoring and evaluation, database maintenance, data reporting, and program management activities. A local primacy agency shall have all of the authority over designated public water systems as is granted to the state board by this chapter.

(d) A local primacy delegation approved by the state board shall remain in effect until any of the following conditions occur:

(1) The delegation is withdrawn by mutual agreement.

(2) The local primacy agency provides 120-day advance written notice to the state board that it no longer wishes to retain local primacy.

(3) The state board determines that the local primacy agency no longer complies with the state board's local primacy program requirements. The state board shall provide written notice to the local primacy agency and the board of supervisors and shall provide an opportunity for a public hearing prior to initiation of any local primacy revocation action by the state board.

(e) The state board shall evaluate each local primacy agency's oversight program at least annually. The state board shall prepare a report of the evaluation and list any deficiencies or program improvements needed to conform to the state board's local primacy program requirements. A copy of the evaluation report shall be provided to the local primacy agency and the county board of supervisors, and made available on the state board's internet website. The local primacy agency shall be granted a reasonable amount of time, not to exceed two years, to make any needed

Page 6

program improvements prior to the initiation of any local primacy revocation actions.

(f) (1) With approval of the state board, any local primacy agency may elect to participate in the funding stabilization program

Page 6 effective for the 2021–22 fiscal year and thereafter set forth in this subdivision.

Page 7 (2) (A) Any local primacy agency electing to participate in the funding stabilization program shall submit an application to the state board either initially not less than one year after the effective date of the funding stabilization program or, if a local primacy agency elects to participate in the funding stabilization program after the initial period for submission, not less than six months after the beginning of a fiscal year.

(B) An application submitted by a local primacy agency to participate in the funding stabilization program shall be in a format and contain information as required by the state board, including a resolution of intention to ~~participate,~~ *participate* approved by the county board of supervisors. **Amendment 3**

(C) The state board may approve an application for the funding stabilization program if the state board determines that the local primacy agency oversight program is in good ~~standing.~~ *standing and the board of supervisors of the local primacy agency applicant has made a determination that the local primacy agency has a need for state fund augmentation. The determination of need shall be based on a finding that the local health officer does not have a sufficient fee base to fully fund the oversight activities described in the local primacy agency delegation agreement.* If an application for the funding stabilization program is approved by the state board, the local primacy agency's participation in the funding stabilization program shall continue *annually* until either the local primacy agency *terminates participation in the funding stabilization program* or the state board terminates participation in the funding stabilization program ~~by serving notice to the other party~~ *because the state board determines that the local primacy agency is no longer in compliance with the delegation requirements pursuant to paragraph (3) of subdivision (d) or the board of supervisors of the local primacy agency determines that the local primacy agency does not have a need for state fund augmentation. The board of supervisors shall provide the state board with a determination of need for state fund augmentation within a reasonable timeframe after receiving a copy of the annual evaluation report pursuant to subdivision (e). The state board or the local primacy agency shall serve notice to the other party of the termination* by January 1 of any year and that termination shall become effective July 1. **Amendment 4** **Amendment 5** **Amendment 6** **Amendment 7**

(3) All fines, penalties, and reimbursement of costs for activities set forth in this section shall be payable to the state board and deposited in the Safe Drinking Water Account.

(4) *(A)* The state board shall provide funding to the local primacy agency each year for the reasonable costs incurred for the implementation of activities set forth in the work plan submitted by the local primacy agency and approved by the state board. The work plan shall set forth the activities to be performed by the local primacy agency each fiscal year, including inspections, monitoring, surveillance, water quality evaluations, enforcement, and any other activities described in the delegation agreement.

Amendment 8

(B) It is the intent of the Legislature that funding for local primacy agencies participating in the fund stabilization program be from the General Fund, the Safe Drinking Water Account, including fees on public water systems in accordance with Section 116565, another appropriate funding source, or any combination of these funding sources.

Amendment 9

(5) The state board shall adopt regulations in accordance with the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code) to establish policies, guidelines, and procedures for the preparation of the work plan of the local primacy agency and the terms of payment by the board for work performed by the local primacy agency that shall include, but not be limited to, all of the following:

(A) Guidelines for the work plan submitted to the state board by the local primacy agency.

(B) Approval of reimbursable direct and indirect costs.

(C) Quantifiable measures to evaluate the performance of the local primacy agency under this subdivision.

(6) A local primacy agency shall establish and maintain accurate accounting records of all costs it incurs pursuant to this subdivision and periodically shall make these records available to the state board.

(7) A participating local primacy agency shall identify small water systems under the jurisdiction of the local primacy agency that may be the most suitable for consolidation based upon the size of the small water system, its compliance history, its location, and its technical, management, and financial resources. A local primacy agency shall report an identified small water system to

Amendment 10

the state board at least annually and shall work in cooperation with the state board to consolidate identified small water systems as appropriate.

Page 9

~~SEC. 2.~~

SEC. 3. Section 116565 of the Health and Safety Code is amended to read:

116565. (a) Each public water system shall submit an annual fee according to a fee schedule established by the state board pursuant to subdivision (c) for the purpose of reimbursing the state board for the costs incurred by the state board for conducting activities mandated by this chapter. The amount of reimbursement shall be sufficient to pay, but in no event shall exceed, the state board's costs in conducting these activities, including a prudent reserve in the Safe Drinking Water Account.

(b) Payment of the annual fee shall be due 90 calendar days following the due date established in the schedule. Failure to pay the annual fee within 90 calendar days shall result in a 10-percent late penalty that shall be paid in addition to the fee.

(c) The state board shall adopt, by regulation, a schedule of fees, as authorized by this section. The regulations may include provisions concerning the administration and collection of the fees.

(d) The state board shall set the amount of total revenue collected each year through the fee schedule at an amount equal to the amount appropriated by the Legislature in the annual Budget Act from the Safe Drinking Water Account for expenditure for the administration of this chapter, taking into account the reserves in the Safe Drinking Water Account. The state board shall review and revise the fees each fiscal year as necessary to conform with the amounts appropriated by the Legislature. If the state board determines that the revenue collected during the preceding year was greater than, or less than, the amounts appropriated by the Legislature, the state board may further adjust the fees to compensate for the over or under collection of revenue.

(e) (1) Except as provided in subparagraph (A) of paragraph (2), the regulations adopted pursuant to this section, any amendment thereto, or subsequent adjustments to the annual fees, shall be adopted by the state board as emergency regulations in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code. The

Page 10

adoption of these regulations is an emergency and shall be

Amendment 11

considered by the Office of Administrative Law as necessary for the immediate preservation of the public peace, health, safety, and general welfare.

(2) Notwithstanding Section 116377, both of the following shall apply:

(A) The initial regulations adopted by the state board to implement this section shall be adopted in accordance with Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, and may not rely on the statutory declaration of emergency in paragraph (1) or Section 116377.

(B) Any emergency regulations adopted by the state board, or adjustments to the annual fees made by the state board pursuant to this section, shall not be subject to review by the Office of Administrative Law and shall remain in effect until revised by the state board.

(f) (1) A public water system under the jurisdiction of a local primacy agency shall pay the fees specified in this section to the local primacy agency in lieu of the state board unless the local primacy agency with jurisdiction is participating in the funding stabilization program established by subdivision (f) of Section 116330. This paragraph does not preclude a local health officer from imposing additional fees pursuant to Section 101325.

(2) A public water system under the jurisdiction of a local primacy agency that is participating in the funding stabilization program established by subdivision (f) of Section 116330 shall pay the fees specified in this section to the state board. Notwithstanding Section 101325, a local primacy agency shall not charge a designated public water system regulated by a local primacy agency any fee in addition to the fees established and collected pursuant to this section.

~~SEC. 3.~~

Amendment 12

SEC. 4. No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within

Page 11 the meaning of Section 6 of Article XIII B of the California Constitution.

O

AB 402: State Water Resources Control Board: local primacy delegation: funding stabilization program.

Author: Quirk

Introduced: 02-06-19

Amended: As proposed to be amended

Sponsors: California Association of Environmental Health Administrators

Supporters: Contra Costa County, San Luis Obispo County, Yolo County, Siskiyou County Environmental Health Department, Amador County Board of Supervisors, Rural County Representatives of California (RCRC), Plumas County, Calaveras County Environmental Management Agency, City of Berkeley Environmental Health Division, Yuba County Environmental Health Department, California Environmental Health Association, California State Association of Counties, County of Nevada, County of Sacramento, County of Santa Cruz, Emigrant Gap Mutual Water, Imperial County Board of Supervisors, Mono County, Peters Drilling and Pump Service, San Joaquin County

Opposition: Association of California Water Agencies, Amador Water Agency, Bella Vista Water District, Byron-Bethany Irrigation District, CalDesal, California Special Districts Association, California Water Association, Calleguas Municipal Water District, Camrosa Water District, City of Compton, City of Oceanside, City of Pasadena, City of Shasta Lake, Coachella Valley Water District, Crestline-Lake Arrowhead Water Agency, Cucamonga Valley Water District, Desert Water Agency, East Orange County Water District, El Dorado Irrigation District, Elk Grove Water District, Foothill Municipal Water District, Hidden Valley Lake Community Services District, Humboldt Bay Municipal Water District, Indian Wells Valley Water District, Irvine Ranch Water District, Kern County Water Agency, Kinneloa Irrigation District, Lakeside Water District, Las Virgenes Municipal Water District, Long Beach Water Department, Mesa Water District, Mid-Peninsula Water District, Mojave Water Agency, Monte Vista Water District, Monterey Peninsula Water Management District, Municipal Water District of Orange County, Olivenhain Municipal Water District, Orange County Water District, Palmdale Water District, Puente Basin Water Agency, Rainbow Municipal Water District, Rancho California Water District, Regional Water Authority, Rincon del Diablo Municipal Water District, Rio Alto Water District, Rowland Water District, San Bernardino Valley Municipal Water District, San Diego County Water Authority, San Francisco Public Utilities Commission, San Gabriel County Water District, San Juan Water District, Santa Clarita Valley Water District, Santa Margarita Water District, South Tahoe Public Utility District, Stockton East Water District, Tahoe City Public Utility District, Three

Valleys Municipal Water District, Trabuco Canyon Water District, Tuolumne Utilities District, Vallecitos Water District, Valley Center Municipal Water District, Valley County Water District, Vista Irrigation District, Walnut Valley Water District, Westborough Water District, Western Municipal Water District, Yorba Linda Water District, Yuima Municipal Water District

Current Position: Oppose Unless Amended

Assigned to: Kristopher Anderson/Richard Filgas

Recommended Position: Watch

Summary: Existing law, the California Safe Drinking Water Act (CA-SDWA), requires the State Water Resources Control Board (State Water Board) to administer provisions relating to the regulation of drinking water to protect public health, including, but not limited to, conducting research, studies, and demonstration programs relating to the provision of a dependable, safe supply of drinking water, enforcing the federal Safe Drinking Water Act, adopting implementing regulations, and conducting studies and investigations to assess the quality of water in private domestic water supplies. The CA-SDWA authorizes the State Water Board to delegate, through a local primacy delegation agreement, primary responsibility for the CA-SDWA's administration and enforcement within a county to a local health officer. The CA-SDWA requires that a local primacy delegation remain in effect until specified conditions occur.

The CA-SDWA requires the State Water Board to provide the local primacy agency (LPA), to the extent funds are available from the Safe Drinking Water Account, with an annual drinking water surveillance program grant to cover the costs of conducting inspection, monitoring, surveillance, and water quality evaluation activities specified in the local primacy agreement. The CA-SDWA requires the State Water Board to adopt a schedule of fees and requires a public water system (PWS) under the jurisdiction of an LPA to pay these fees to the LPA instead of to the State Water Board.

As introduced on February 6, 2019, this bill would include enforcement costs as costs covered by an annual drinking water surveillance program grant. The bill would authorize any LPA, with approval of the State Water Board, to elect to participate in a funding stabilization program (Program) effective for the 2020–21 fiscal year and each fiscal year after that. The bill would require an LPA submit a resolution of intention to participate, approved by the county board of supervisors, to the State Water Board by January 1 of the fiscal year immediately before the fiscal year for which participation in the Program is sought. If approved by the State Water Board, the LPA's participation in the Program shall continue until terminated by either the LPA or the State Water Board. The bill would specify that termination of the LPA's participation in the Program would be initiated by serving notice on the other party by January 1 of any year, and become effective July 1 of the following fiscal year.

This bill would require that during any fiscal year for which an LPA participates in the Program, the State Water Board must establish and collect all fees payable by PWS's for the LPA's activities. The bill would require that the fees established and collected shall not be higher than the fees charged by the State Water Board for its regulatory oversight of small PWS's. The bill would also specify that an LPA cannot charge a PWS any fee in addition to the fees established and collected for the activities outlined in the provisions of this measure. The bill would require that the State Water Board provide funding to an LPA each year in accordance with a detailed annual workscope submitted by the LPA and approved by the State Water Board. The workscope would include a list of the reasonable costs incurred by the LPA in inspection, monitoring, surveillance, water quality evaluation, and enforcement activities described in the delegation agreement. The bill would specify that an LPA is to establish and maintain accurate accounting records of all costs it incurs pursuant to this measure and periodically make these records available to the State Water Board. The bill would also require that an LPA remit all fines and penalties collected by the LPA for its activities to the State Water Board for deposit in the Safe Drinking Water Account.

This bill would require the State Water Board to adopt regulations in accordance with the Administrative Procedure Act (APA) to establish policies, guidelines, and procedures for the preparation of the workscope of the LPA and the terms of payment by the State Water Board for work performed by the LPA. The bill would require that the regulation includes: 1) guidelines for the workscope submitted to the State Water Board by the LPA; 2) approval of reimbursable direct and indirect costs; and 3) quantifiable measures to evaluate the performance of the LPA pursuant to this measure.

This bill would provide that no reimbursement is required by this act for a specified reason.

As amended on March 5, 2019, the bill would clarify that fees established and collected pursuant to the bill's provisions would not be higher than the fees charged by the State Water Board for regulatory oversight of equivalent small public water systems.

As amended June 18, 2019, this bill would delay implementation of the funding stabilization program until the 2021-22 fiscal year. This bill would also extend the window LPAs have to opt in to the program. This bill would require LPAs to submit an application to the funding stabilization program within one year of the program's effective date. Further, the state board may invite counties that have not been delegated primary or partial responsibility as of January 1, 2020, to apply for responsibility, giving counties the option to respond within six months of the start of the fiscal year.

This bill would add the state board may partially delegate administration and enforcement of the CA-SDWA to LPAs. If an LPA elects for delegation, it would act for the state board as the primary body responsible for all aspects of administration and enforcement of the CA-SDWA. In turn, the state board would perform an annual evaluation of each LPAs oversight program. The reports would identify any improvements needed and would allow each county reasonable time to correct those deficiencies.

Further, this bill would eliminate the drinking water surveillance grant as a funding source to cover costs incurred by the LPAs. Instead this bill would require PWSs within the jurisdiction of a participating LPA to pay fees to the state board, and the state board would, in turn, provide the LPA with funding to cover the reasonable costs incurred in implementation.

These amendments would delete an ambiguous provision that could have allowed the State Water Board to charge funding stabilization fees to all PWSs.

Summary of Proposed Amendments: On August 19, the Assembly Environmental Safety and Toxic Materials Committee provided ACWA with proposed amendments to AB 402. These amendments would state that it is the intent of the Legislature to create a funding stabilization program to provide funding for a local primacy agency that does not have a sufficient fee base to fully fund their oversight activities. Amendments would also state the program is intended to replace, not supplement, local oversight fees currently collected by a LPA with oversight fees set and collected by the State Water Board. Funds for the program would also be intended for oversight of public water systems that have been delegated to a LPA, which does not include private wells.

Amendments would allow the State Water Board to approve an application from an LPA to participate in the program if (1) the LPA oversight program is in good standing, and (2) the board of supervisors of the LPA applicant has made a determination that the local primacy agency has a need for state fund augmentation. This determination would require the board of supervisors to find that the local health officer does not have a sufficient fee base to fully fund the oversight activities described in the LPA delegation agreement.

Amendments would create three ways for participation in the program to be terminated:

1. The LPA would decide to terminate for their own reasons;
2. The State Water Board would terminate based on a determination that the LPA is no longer in good standing; or
3. The State Water Board would terminate based on the board of supervisor's determination that the LPA no longer has financial need

Amendments would add that the Legislature intends that funding for the program would come from General Fund, the Safe Drinking Water Account, another appropriate funding source, or any combination of these funding sources.

Amendments would require LPAs to identify small water systems under the jurisdiction of the LPA that may be most suitable for consolidation based on the size of the small water system, its compliance history, its location, and its technical, management, and financial resources. A LPA would be required to report an identified small water system to the State Water Board at least annually and would be required to work in cooperation with the State Water Board to consolidate identified small water systems as appropriate.

Staff Comments: The federal Safe Drinking Water Act was enacted by the United States Congress in 1974 to protect the public health of the nation by regulating the public drinking water supply. It was then amended and reauthorized in 1986 and 1996 to require additional monitoring actions to protect drinking water and its sources. Prior to July 2014, California Department of Public Health (CDPH) administered the Drinking Water Program. As of July 1, 2014, the administration of the Drinking Water Program (DWP) has transitioned from CDPH to the State Water Board. The Division of Drinking Water (DDW) within the State Water Board is currently responsible for the enforcement of the federal and the CA-SDWA and the water quality oversight of all public water systems (PWSs) in California. DDW cooperates with the State Water Board's Division of Financial Assistance (DFA) to develop and provide funding for PWSs.

On the local level, county's LPAs, through delegation of the State Water Board's authority, regulate all the PWS that have less than 200 service connections to ensure these small water systems (SWSs) are delivering safe drinking water. LPAs are each county's environmental health departments and they are the SWSs' main point of contact to the State Water Board in California. Not all 58 counties in California have LPAs. Only 30 of the 58 counties have an LPA to regulate their SWSs. The DDW field operation branches offices have worked with LPAs by assisting with regulatory oversight, technical assistance, and training. However, in November 2017, the State Water Board's *Human Right to Water* portal showed that more than 90 percent of non-compliant community systems are small, serving fewer than 3,300 people each. SWSs are more likely to lack the technical, financial, and managerial capacity to resolve issues because the customer fee base is too small to provide the revenues needed to stay in compliance with state standards. As a result, these SWSs have become responsible for the bulk of the state's drinking water quality violations.

AB 402 has been introduced in response to concerns from LPAs that oversight costs of SWSs have increasingly outpaced the fee base. The sponsor of the bill, the California Association of Environmental Health Administrators (CAEHAs), asserts that SWSs often serve communities that are too small or disadvantaged to afford increased fees. As a result, five of the 30 LPA counties have surrendered their oversight authority back to the State Water Board, and, the sponsor claims many more are considering doing the same. The goal of the bill is to incentivize LPAs to maintain oversight responsibilities of SWSs. By establishing a common fee structure, securing adequate funding, and shifting fee authority to the State Water Board, proponents of the measure hope to secure the state's commitment to providing safe drinking water.

Reason for ACWA's Opposition

In June, ACWA adopted a position of "Oppose Unless Amended" once it became apparent that the author intended to allow the State Water Board to increase drinking water fees on ***all*** public water systems to subsidize this program. This raised several concerns.

First, the costs of this Program would be substantial. According to the Assembly Appropriations Committee, this new Program would cost the State Water Board $6.9 million per year if all 30 LPAs decide to participate. The State Water Board would likely pay for this Program by utilizing funds in the Safe Drinking Water Account. The State Water Board's forecast for fiscal year 2018-2019 was $24.885 million in drinking water fees collected from public water systems. This means, to adequately fund this program, the State Water Board would need to increase the revenue collected and deposited in the Safe Drinking Water Account by potentially 28 percent.

Additionally, recent amendments would have allowed the State Water Board to offer every county currently not a LPA the opportunity to become one and to participate in this Program. This Program would cost the state roughly $14 million if every county opted in and would require the State Water Board to raise 50 to 60 percent in additional revenue from the Safe Drinking Water Fund to adequately finance this Program. This would mean substantial fee increases on ***all*** public water systems.

Second, ACWA argued that AB 402 would authorize the State Water Board to establish a tax on all public water systems in order to subsidize the program. While the bill characterizes the assessment as a "fee," public water systems would be compelled to pay substantially more in drinking water fees and would receive no benefit from the resulting revenue. While the State Water Board has a degree of flexibility in determining how it assesses fees, these fees must still bear a "fair and reasonable relationship to the fee payers' burdens on or benefits from the regulatory activity" (*California Bldg. Indus. Ass'n v. State Water Res. Control Bd.* (2018) 4 Cal. 5th 1032, 1052). The revenue necessary from public water systems to fund this program would certainly exceed a "fair and reasonable relationship" to the burden public water systems place on the State Water Board. Therefore, ACWA questioned how the State Water Board could adequately fund this Program while remaining in compliance with Article XIII A of the California Constitution.

ACWA organized a coalition of close to 70 agencies and organizations to vigorously oppose this bill and seek amendments. In recent weeks, ACWA's coalition, the ESTM committee, and the sponsor have actively negotiated amendments. On August 19, the ESTM committee presented ACWA with amendments intended to address ACWA's concerns.

August 19 Proposed Amendments

Recent proposed amendments would address a primary reason for ACWA's opposition—the cost of this Program. Amendments would limit the class of LPAs eligible to participate to LPAs that require financial assistance because their fee base is insufficient to meet regulatory oversight costs. At this point, does not know what the estimated total cost of the Program would be if only counties that can demonstrate a financial need were to participate. However, we can do some rough math. Staff is aware of one county that expects its LPA program to lose $150,000 over the next fiscal year. So, if 10 counties participate in this Program, the State Water Board would need to subsidize the Program with $1.5 million annually. This could result in the State Water Board increasing rates on all public water systems in order to generate that

additional $1.5 million in revenue. This would likely result in a rather modest rate increase on all public water systems. Therefore, this amendment would be likely to greatly reduce the overall cost of the program.

Another factor for the State Legislative Committee to consider is without this program, several LPAs may return their oversight to the State Water Board, leading the State Water Board to increase rates on all public water systems. So, with or without this bill, public water systems are facing the prospect of paying increased drinking water fees.

These amendments also place the onus on county board of supervisors to determine whether the LPA has at the time of submitting an application, or at any time no longer has, a financial need. Agreeing to this provision requires that public water agencies trust counties to responsibly and appropriately evaluate the financial health of their LPA oversight program. Counties would likely face pressure from public water agencies within the county to participate in this Program only if a financial need actually existed. Additionally, given that ACWA represents local agencies, it seems appropriate to place this responsibility with counties, rather than the State Water board.

Finally, the ACWA-led coalition has supported the addition of language that requires the participation of LPAs in the effort of identifying public water systems ripe for consolidation. The type of systems often failing to provide safe drinking water are commonly regulated by LPAs and are largely responsible for increasing LPA oversight costs. Therefore, it is appropriate to mandate LPAs identify systems for consolidation.

Recommended Position: Watch

The amendments proposed above represent a substantial improvement from the previous text of the bill. They substantially reduce the overall cost of the program by limiting the LPAs eligible to participate. They clarify that the intent of the program is to assist LPAs where oversight costs have outpaced the revenue collected from fees on public water systems within a LPAs jurisdiction. And they mandate LPA participation in consolidation efforts. While this program will likely lead to fee increases for all public water systems, it is important to acknowledge rates will still increase if LPAs are to return their authority to the State Water Board—a likely prospect without this program. Therefore, staff recommends a “Watch” position.

Potential Inverse Condemnation Legislation

Author:	**Introduced:**	**Amended:**
Sponsors: California Water Service Company	**Supporters:**	**Opposition:**
		Current Position: NYC
Assigned to: Kristopher Anderson/Soren Nelson		**Recommended Position:** Watch

Summary: Under existing law, all public water systems with 10,000 or more service connections are required to review and revise their disaster preparedness plans in conjunction with specified related agencies and the Office of Emergency Services (OES) to ensure that the plans are sufficient to address possible disaster scenarios. These plans must examine and review pumping station and distribution facility operations during an emergency, water pressure at both pumping stations and hydrants, and whether there is sufficient water reserve levels and alternative emergency power, including, but not limited to, onsite backup generators and portable generators.

This bill would require public water agencies serving a population of 3,300 or greater to include in the system's Risk and Resilience Assessment the following:

- The proximity of the public water system, in whole or in part, to Very High Fire Hazard Severity Zones, as determined by the Department of Forestry and Fire Protection.
- The risk to utility infrastructure after a potential fire event and the resilience of that infrastructure.

This bill would also require public water agencies serving a population of 3,300 or greater to include the following protocols in the system's Emergency Response Plan:

- Responding to wildfires that affect the system
- Responding to the deenergization of the electrical distribution system.

When preparing or revising an Emergency Response Plan, each public water system serving a population of greater than 3,300 persons would be required to coordinate the preparation or revision of the Emergency Response Plan with related agencies, including, but not limited to, local fire departments and OES.

Under existing law, public water systems with 10,000 or more service connections, following a declared state of emergency, must furnish an assessment of their emergency response and recommendations to the Legislature within six months after each disaster and implement the recommendations in a timely manner.

This bill would require each public water system serving a population of greater than 3,300 persons, following a declared state of emergency that directly affects the system, to do the following:

- Prepare an "after action report" that identifies any improvements needed to the system's Emergency Response Plan and a capital needs assessment that identifies infrastructure that must be replaced.
- Furnish a copy of the "after action report" and capital needs assessment to OES within six months of the conclusion of the declared state of emergency.
- Implement any improvements to the public water system's Emergency Response Plan identified in the "after action report" in a timely manner.

Existing law requires OES to establish appropriate and insofar as practical, emergency response and recovery plans, including mutual aid plans, in coordination with public water systems with 10,000 or more service connections.

This bill would require OES to establish emergency response and recovery plans, including mutual aid plans, in coordination with public water systems serving a population of greater than 3,300 persons.

This bill would establish that the intended purpose of public water systems is the provision of drinking water for human consumption.

Summary of Amendments: N/A

Staff Comments:

Inverse Condemnation

Inverse condemnation applies to government agencies that damage private property while providing a public service. California courts have ruled that this doctrine also can be used against utilities, since they are authorized by the state to provide a vital public service. Public water agencies have been targeted by the victims of catastrophic wildfire events, who claim that these agencies are liable, in part, when they fail to deliver the water necessary to fight the fires.

This proposal is seeking to limit water agencies' liability under inverse condemnation by establishing that the intended purpose of public water systems is the provision of drinking water for human consumption. The bill would declare that although they may provide water and facilities that serve other functions, such as fire protection, public water systems are deliberately designed and constructed for the purpose of providing drinking water for human consumption.

The bill's sponsor believes that this declaration and clarification about agencies' intended purpose would enable water suppliers to argue that damage to private property resulting from

a purported inability to stop a fire is not an inherent risk associated with the deliberate design, construction, or maintenance of the public water system, as it was never intended to operate in such a manner. Their hope is that this would allow water suppliers to demonstrate that one of the "substantial cause" elements of a prima facie case for inverse condemnation liability is absent (i.e., a public water system's inability to stop a fire is not a "substantial cause" of damages to private property from that fire).

The Role of Water Systems and the Recent California Supreme Court Ruling

The California Supreme Court has held that to recover damages from a public entity under inverse condemnation requires a property owner to show physical injury to private property substantially caused by the inherent risk of a public improvement as deliberately designed, constructed, or maintained. A public water agency intending to use this proposed language to avoid liability arising from a claim under inverse condemnation would need to convince a court that its public improvements are intended to serve no function other that providing drinking water. This would require a court to ignore a myriad of examples in existing law that mandate public water systems design, construct, and maintain existing infrastructure to provide water for purposes other than human consumption—such as fire suppression. A court would also have to overlook the fact that public water systems impose fees on customers to fund infrastructure improvements strictly for fire suppression purposes. For example, in 2018, California Water Service, which is proposing this language, imposed a company-wide tariff to fund infrastructure upgrades to meet flow requirements for fire protection services. It seems unlikely that a court would ignore these facts, regardless of a stated legislative intent.

The proponents of this measure may point to the definition of "public water systems" in section 116275 of the California Health and Safety Code to identify the intended function of infrastructure owned, operated, and maintained by public water systems. That section defines a "public water system" as a "system for the provision of water for ***human consumption*** through pipes or other constructed conveyances . . . " For the reasons stated above, providing water for human consumption is not the sole purpose of a public water system. Even if a water provider argued that the ***primary*** role of its infrastructure is to provide drinking water, staff is not aware of any case law that has explored the dominant function of infrastructure when assessing liability under inverse condemnation. Since inverse condemnation is intended to spread the cost of damage to private property resulting from a public improvement throughout the community, it seems unlikely that a court would take into account the primary role of the public improvement. For example, if a public water system damaged a water main during a repair process, and that damage resulted in injury to private property, a court is unlikely to assess liability if the main provided drinking water but not if the main provided water for irrigation purposes. Public water systems serve the purpose of providing water—the ultimate use of that water is irrelevant for purposes of inverse condemnation liability. In *City of Oroville v. Superior Court* (*Oroville*), the California Supreme Court stated that an inverse condemnation action can be triggered by a "deliberate action" undertaken by a public entity "in furtherance of public purposes." The California Supreme Court has never qualified that the public improvement must be in furtherance of the serving public entity's ***primary*** purpose. And as the

California Water Service example demonstrates, public water systems impose fees on customers to upgrade infrastructure deliberately for fire suppression purposes.

Public entities worried about potential liability from inverse condemnation claims related to wildfires should find some comfort in the California Supreme Court's August 15 ruling. According to *Oroville*, liability under inverse condemnation turns on (1) whether the public entity was a "substantial cause" of the injury to private property, and (2) whether the injury was an inherent risk of the public improvement. "Substantial cause" requires a plaintiff to demonstrate that the damage to private property was an "inescapable or unavoidable consequence" of the inherent risks of the public improvement as designed and constructed. Secondly, the decision prevents open-ended liability by limiting potential liability to damage resulting from ***inherent*** risks.

According to *Oroville*, requiring a plaintiff to establish both of these elements prevents the application of strict liability to a public entity in inverse condemnation claims. The Court acknowledged that such a standard would dissuade public entities from undertaking valuable public improvement projects. This policy concern is similar to the reasoning in the California Supreme Court's line of flood liability cases involving inverse condemnation, in which the Court ultimately applied a reasonableness standard to injury resulting from some unique circumstances. Public water agencies would certainly prefer courts to apply such a standard to inverse condemnation claims arising from devastating wildfires. Ultimately, the best course of action may be for agencies to try to codify that reasonableness standard, rather than the method being proposed here. But the series of flood liability cases, and the recent *Oroville* decision, appear to demonstrate that liability under inverse condemnation is continuing to evolve and the California Supreme Court is willing to consider unique fact patterns and policy considerations.

Reporting Requirements

This measure also seeks to harmonize state and federal law by eliminating duplicative state planning requirements and provide some bookends for the types of wildfire-related events water systems in California should be planning for under existing federal requirements.

As written, the proposed language would create new standards and regulatory burdens for public water systems that are specifically related to fire suppression, in addition to existing state and federal requirements related to disasters. This has traditionally been the purview of fire-fighting agencies, and would represent a new responsibility for public water systems, which have historically been charged with providing water to fight a fire and the equipment necessary to convey that water. Municipal water systems are not, generally speaking, designed to fight wildfires of the scale that create inverse condemnation liability concerns.

This proposal would declare that the primary intended purpose for public water systems is the provision of drinking water for human consumption. As noted above, this declaration is unlikely to survive a legal challenge. In the event that the liability protection is struck down by the

courts, water agencies could be faced with adhering to demanding new standards, which, if not followed, could result in increased liability above what public water systems are currently facing today.

Additionally, staff have concerns with ambiguity in the proposed language. For example, Section 8607.2(d) would require each public water system serving a population of greater than 3,300 persons, following a declared state of emergency that directly affects the system, to do the following:

- Prepare an "after action report" that identifies any improvements needed to the system's Emergency Response Plan and a capital needs assessment that identifies infrastructure that must be replaced.
- Furnish a copy of the "after action report" and capital needs assessment to OES within six months of the conclusion of the declared state of emergency.
- Implement any improvements to the public water system's Emergency Response Plan identified in the "after action report" in a timely manner.

Implementing proposed improvements based on a system's Emergency Response plan could be prohibitively expensive. This proposal does not identify a funding source for these improvements. The proposed language also calls for these improvements to be implemented in a "timely manner", which is not defined.

Recommended Position: Watch

Agencies and organizations have spent much time this year exploring potential legislative solutions to address potential liability under inverse condemnation that public water agencies may face following a devastating wildfire. In selecting which legislative solution to pursue, the State Legislative Committee should consider the additional reporting and planning burdens a measure could place on public water systems, the likelihood of a court using the proposed language to shield a system from inverse condemnation liability, and the political capital necessary to expend for the proposal to become law. ACWA staff have reviewed various proposals this year and do not believe this is the best course of action. For the reasons stated above, this proposal seems unlikely to provide protection from inverse condemnation liability. It is not worth spending significant political capital in pursuit of a measure unlikely to provide the desired relief. And if a court determined this language did not provide liability relief, all that would be left are new reporting requirements that have the potential of increasing a public water system's liability after a wildfire. Staff recommends a "Watch" position. Following the legislative session, ACWA should convene its inverse condemnation workgroup and continue working on a solution to this issue.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

Section 1. This act shall be known and may be cited as the Water System Reliability & Fire Protection Act of 2019.

SEC. 2. It is the intent of the Legislature to do both of the following:

(a) Harmonize the state's requirements for public water systems to prepare disaster response plans with the federal Safe Drinking Water Act's requirements for community water systems to prepare Risk and Resilience Assessments and Emergency Response Plans.

(b) Maximize the applicability of these assessments and plans to the unique challenges and risks faced by the state's public water systems.

Sec. 3. Section 8607.2 of the Government Code is amended to read:

~~8607.2 (a) All public water systems, as defined in subdivision (f) of Section 116275 of the Health and Safety Code, with 10,000 or more service connections shall review and revise their disaster preparedness plans in conjunction with related agencies, including, but not limited to, local fire departments and the Office of Emergency Services to ensure that the plans are sufficient to address possible disaster scenarios. These plans should examine and review pumping station and distribution facility operations during an emergency, water pressure at both pumping stations and hydrants, and whether there is sufficient water reserve levels and alternative emergency power, including, but not limited to, onsite backup generators and portable generators.~~

8607.2. (a) Each public water system serving a population greater than 3,300 persons shall also include in the system's Risk and Resilience Assessment required by Section 1433 (a) of the federal Safe Drinking Water Act (42 U.S.C. Sec. 300i-2 et seq.) both of the following assessments:

(1) The proximity of the public water system, in whole or in part, to Very High Fire Hazard Severity Zones, as determined by the Department of Forestry and Fire Protection.

(2) The risk to utility infrastructure after a potential fire event and the resilience of that infrastructure.

(b) Each public water system serving a population greater than 3,300 persons shall also include in the system's the Emergency Response Plan required by Section 1433 (b) of the federal Safe Drinking Water Act (42 U.S.C. Sec. 300i-2 et seq.) all of the following protocols:

(1) Responding to wildfires that affect the system.

(2) Responding to the deenergization of the electrical distribution system.

(c) When preparing or revising an Emergency Response Plan, as required by Section 1433 (b) of the federal Safe Drinking Water Act (42 U.S.C. 300i-2 et seq.), each public water system serving a population of greater than 3,300 persons shall, to the extent possible, coordinate the preparation or revision of the Emergency Response Plan with related agencies, including, but not limited to, local fire departments and the Office of Emergency Services.

~~(b) All~~

(d) Each public water ~~systems as defined in subdivision (f) of Section 116275 of the Health and Safety Code, with 10,000 or more service connections~~ system serving a population of greater than 3,300 persons following a declared state of emergency ~~shall furnish an assessment of their emergency response and recommendations to the Legislature within six months after each disaster, as well as implementing the recommendations in a timely manner.~~ that directly affects the system shall do all of the following:

(1) Prepare an after action report that identifies any improvements needed to the system's Emergency Response Plan and a capital needs assessment that identifies infrastructure that must be replaced.

(2) Furnish a copy of the after action report and capital needs assessment to the Office of Emergency Services within six months of the conclusion of the declared state of emergency.

(3) Implement any improvements to the public water system's Emergency Response Plan identified in paragraph (1) in a timely manner.

~~(c)~~

(e) The Office of Emergency Services shall establish appropriate and insofar as practical, emergency response and recovery plans, including mutual aid plans, in coordination with public water systems, as defined in ~~subdivision (f) of~~ Section 116275 of the Health and Safety ~~Code, with 10,000 or more service connections.~~ Code, serving a population of greater than 3,300 persons.

(f) (1) The requirements in this section shall not affect, alter, or supersede Sections 850 through 850.8 of this code or Section 774 of the Public Utilities Code.

(2) The intended purpose of public water systems is the provision of drinking water for human consumption. Although public water systems and the water they provide may be used in connection with other functions, including outdoor irrigation and fire protection, public water systems are deliberately designed, constructed, and maintained for their intended purpose, not other functions, and nothing in this section confers a different purpose upon them.

(g) For purposes of this section, "public water systems" means a public water system as defined in Section 116275 of the Health and Safety Code.

Sec. 4. If the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF SEPTEMBER 10, 2019
AGENDA ITEM NO. 6.B.

AGENDA SECTION: **INFORMATIONAL ITEMS**

SUBJECT: **GENERAL MANAGER'S REPORT**

PREPARED BY: Steven Palmer, PE, General Manager

PROJECTS

- Automated Meter Reading and Meter Replacement Project
  - Reviewing finance application with State
- Irrigation Ordinance Update
  - First Workshop on September 20
  - Second Workshop on October 16
  - Staff working to update based on direction from Second Workshop
- Professional Services Agreement for Review of Capital Replacement Program
  - Advertised twice
  - Received one proposal.
  - Board action on September 10, 2019
- Reservoir and Stream Gaging
  - Preliminary engineering complete
  - Final engineering design proposals due August 30, 2019
- Office and Corporation Building Roof Repairs
  - Not started
- Annual Tank Recoating
  - Will start in Spring 2020
- Repair Safety Walkways
  - Ongoing - under construction by staff
- Treated Water Line Replacement
  - Construction start pending Board approval of contract
- 2018 Main Canal Reliability
  - Bid opening on September 17, 2019
- Rebuild Filter at Walton Lake Treatment Plant
  - Not started.
- Install Backup Generator
  - Design/Procurement not started

- Manhole Sealing
  - Ongoing work by staff

The following items cannot be started without a dedicated project manager, contract or staff:

- *Upcountry Ditch Rehabilitation*
  - *Engineering design not started*
- *Old ALT Water Treatment Plant Demolition*
  - *Engineering design not started*
- *Replace Pump Stations*
  - *Engineering design not started*
- *Rehabilitate District Parking Lots*
  - *Design not started*
- *Engineering Evaluation of Community Disposal System Disposal Field*
  - *Not started*

UPCOMING BOARD ITEMS

September

- Award Construction Contract for Treated Water Line Replacement Project
- Professional Services Agreement for Review of Capital Replacement Program

October

- Award Construction Contract for Main Canal Reliability Project
- Contract for Roof Repair
- Late Fee Policy Update (Finance Committee)
- Leakage Consideration Policy Update (Finance Committee)
- Personnel Manual Update
- Professional Services Agreement for Groundwater Monitoring and Reporting
- RFP for Public Outreach
- Social Media Policy

November

- El Dorado County Water Agency Water Plan Presentation
- Investment Policy Update (Finance Committee)
- Notice of Completion for Auburn Lake Trails Water Treatment Plant
- Professional Services Agreement for Stream Gaging
- Professional Services Agreement with VTD
- Professional Services Agreement for Engineering Project Manager

Future

- Agreement for Asset Management Plan
- Board Policy Updates
- Capital Facility Charge Update
- District Fee Update
- Professional Services Agreement for Engineering Design of Upcountry Ditch Rehabilitation
- Professional Services Agreement for Engineering Evaluation of Community Disposal System Disposal Field

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

Operations **Manager's** Report for September 2019

Presented to the GDPUD Board of Directors by Darrell Creeks, Operations Manager — September 10, 2019, AGENDA ITEM #6.C.

Water Production for the Month of

August

Auburn Lake Trails Water Treatment Plant

35.467 million gallons
1,144,096 gallons/day average

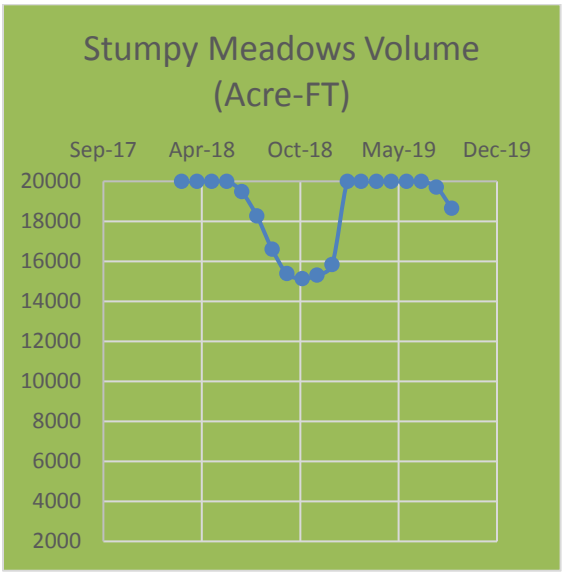
Walton Lake Water Treatment Plant

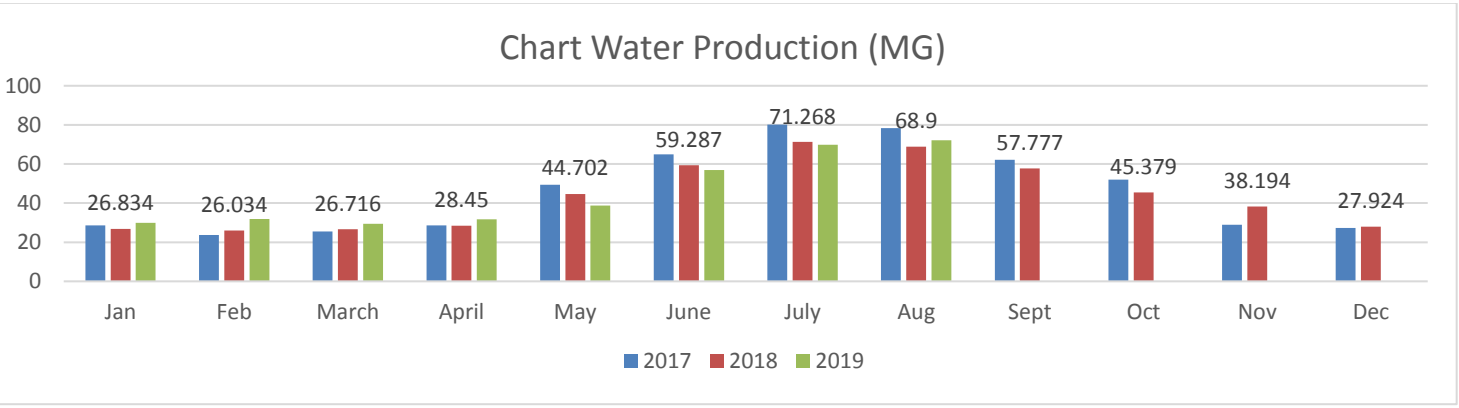
36.699 million gallons
1,183,838 gallons/day average

Water Quality Monitoring

Monitoring has been completed and reports have been submitted to the State Water Resources Control Board.

- ✓ The treatment plants are in compliance with all drinking water standards, with the exception of the ALTWTP which is currently under a SWRCB Compliance Order. To comply with this Order, a new plant is under construction.
- ✓ Distribution system monitoring results showed all samples absent/negative of any bacterio-logical contamination and adequate levels of disinfection through the system.





Summary of Field Work Activities

Distribution Crew

- ✓ Repaired leaks: 13 service leaks and 1 Main leak
- ✓ Repair/replace meters: 0
- ✓ Installed new service: 1 treated
- ✓ Repaired Hydrant on Secret Lake Trail
- ✓ Pulled Two new service lines
- ✓ Repaired Telemetry on Garden Park Kelsey Tanks
- ✓ Continued flushing fire hydrants

Maintenance Crew

- ✓ Brush clearing on canals and fixing leaks.

Georgetown Divide Public Utility District
6425 Main Street P.O. Box 4240, Georgetown, CA 95634 • (530) 333-4356 • www.gd-pud.org
Steven Palmer, PE, General Manager • Darrell Creeks, Operations Manager

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

Auburn Lake Trails Wastewater Management Zone Report for August 2019

Presented to the GDPUD Board of Directors — September 10,2019

Zone activities are completed in accordance with California Regional Water Quality Control Board Central Valley Region, *Waste Discharge Requirements for Georgetown Divide Public Utility District Auburn Lake Trails On-Site Wastewater Disposal Zone* Order No. R5-2002-0031.

- **Community Disposal System (CDS) Lots - 137**
- **Individual Wastewater Disposal System Lots - 885**

Field Activities

✓ Routine Inspections:	92
✓ Property Transfer Processing:	3
✓ New Inspection	0
o Homeowner	0
o Construction	2
o Plan Review	3
o Watertight Test	0
o Construction:	
✓ Weekly CDS Operational	3
o New Wastewater System	0
o New CDS Tank	0
o New Pump Tank	0

Reporting

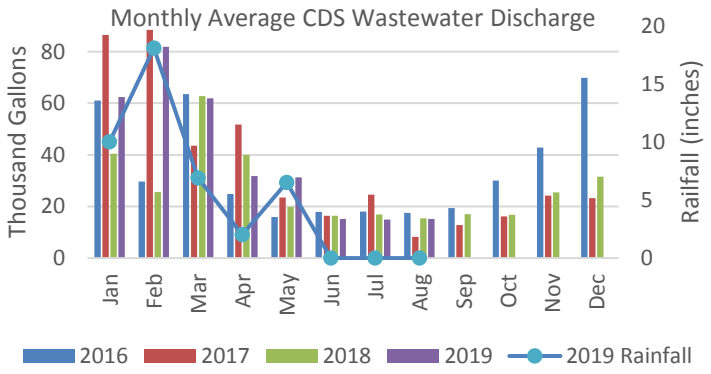
The monthly Sanitary Sewer Overflow (SSO) – *No Spill Certification* was submitted electronically to California Integrated Water Quality System (CIWQS) on July 1, 2019.

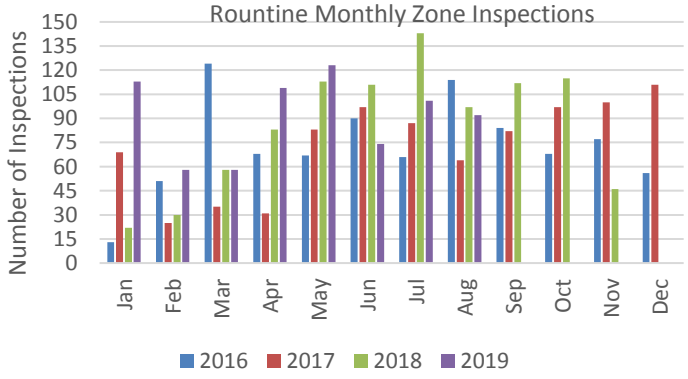
CDS – Wastewater Discharge

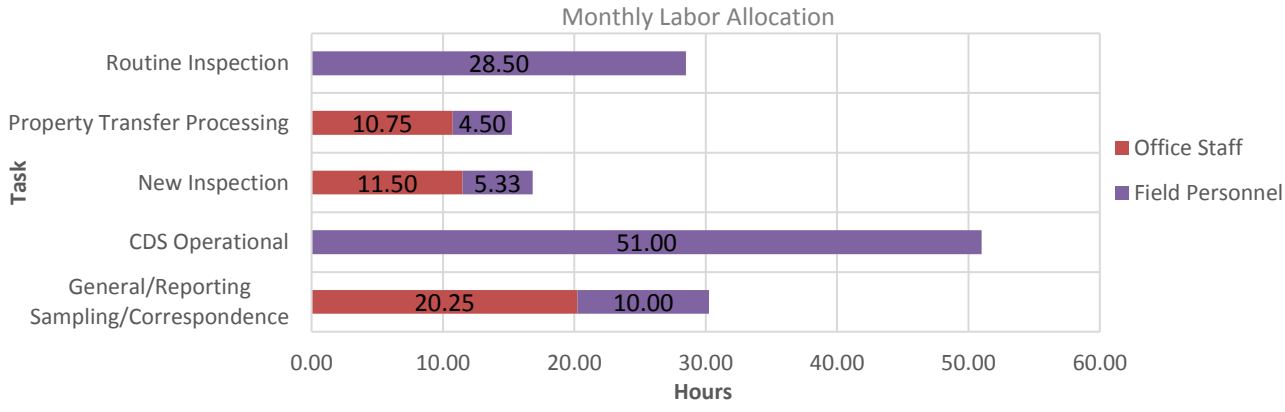
468,500 gallons / 15,112 gallon/day average

Rainfall

0 inches







Georgetown Divide Public Utility District
6425 Main Street P.O. Box 4240, Georgetown, CA 95634 ● (530) 333-4356 ● www.gd-pud.org
Steven Palmer, PE, General Manager ● Darrell Creeks, Operations Manager

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF SEPTEMBER 10, 2019
AGENDA ITEM NO. 6.D.

AGENDA SECTION: **INFORMATIONAL ITEMS**

SUBJECT: **ALT WATER TREATMENT PLANT PROJECT UPDATE**

PREPARED BY: George Sanders, Engineering Consultant

APPROVED BY: Steven Palmer, PE, General Manager

Introduction

This is a summary of the various work activities at the ALT Water Treatment Plant for the month of August. The Project Update flyer, to be posted on the District's website and Facebook, identifies a project percentage completion of 99% and is included as Attachment 1 within this report.

In addition to the construction work performed by Myers & Sons, the District is also under contract with NEXGEN for Construction Management, PSOMAS for Engineering Support, Youngdahl Consulting Group for Material Testing, and Foothill Associates for CEQA compliance. There were no work activities during this reporting period associated with Youngdahl Consulting Group and Foothill Associates.

Construction Activities

Construction activities at the site, during this reporting period are summarized below:

Filter to Waste Tank

The filters require backwashing every 12-18 hours. The frequency of backwashing varies depending on the time of year and quality of the raw water supply. At the conclusion of the backwash cycle the filters are rinsed with filtered water prior to initiating a new filter cycle. Water used in the rinse is directed to the filter to waste tank and from there is recycled back into the raw water supply. Work on this activity has consisted of miscellaneous piping, cutting and fabricating an access door and vent, together with sandblasting and applying coats of primer and finish paint to the exterior.

Landscaping

Nothing additional to report on this work activity for the month of August. Soil preparation for the planting has resumed at the time of this report, first week or September. This work is scheduled for completion by mid-September.

Painting

Painting of the floor within the chemical storage room is now complete allowing for the storage of chlorine and soda ash. This is the second time the painters have applied this special coating to the floor.

Alternate Backwash

The plant has one high lift pump dedicated to the backwash of the filters. Per design, an alternate plan to backwash the filters utilizes treated system water brought back into the plant through the distribution system. This alternate plan is necessary should the high lift pump need servicing or repairs. This alternate backwash system was tested and found to function per design.

Performance Testing of Filters

The filters at the site, three in number, are provided by WesTech. The selection of these filters together with their overall efficiency in filtering water is based on a Pilot Study, conducted prior to the initial design, testing raw water supplied by the District. Key elements of the performance test include a record of the removal of particulate matter, a record of chemical usage together with a comparison of water produced vs water wasted in the overall treatment process. It is anticipated the results exceeded the design parameters. Final evaluation is pending a report to be provided by the filter supplier.

Schedule

Scheduled work activities for the month of September include completion of the landscaping, painting and finalizing the work on the filter to waste tank. The contractor will continue to work on items identified on the punch list.

Budget

Project expenses since the beginning of construction are compared to budget and summarized in the table below. Projected expenditures remain within the approved project budget.

PHASE	EXPENDED TO DATE	BUDGET
Construction	$10,322,062	$ 11,249,000
Construction Engineering, Construction Management, and Environmental	$ 1,344,690	$ 1,076,226
Misc. Vendors, Support, and District Staff Costs	41,125	
TOTALS	**$11,707.877**	**$ 12,325,226**

* Expenditures under the Construction Engineering, Construction Management and Environmental have exceeded this budget category due to the extended duration of the project. Adequate funding remains available in the overall project budget.

State SRF Payment Requests

The State Water Resources Control Board (SWRCB) Loan Agreement provides for $9,350,000 for Construction and $650,000 for Construction Management/Administration for a total loan amount of $10,000,000. Below is a log of disbursement claims submitted by the District to SWRCB for State Revolving Fund (SRF) disbursements, the payments that have been received to date, and the claims that are pending.

LOG OF SWRCB SRF PAYMENTS RECEIVED									
Claim #	**Date of Payment**	**Const**	**CM/Adm**	**Amount**	**Claim #**	**Date of Payment**	**Const**	**CM/Adm**	**Amount**
1	6/26/17	1,101,614	55,527	1,157,141	15	9/24/18	192,102	144,824	336,926
2	8/17/17	439,850	0	439,850	16	10/17/18	240,040	9,416	249,456
3	9/22/17	0	68,457	68,457	17	12/7/18	210,349	30,680	241,029
4	10/6/17	540,675	0	540,675	18	12/7/18	94,094	0	94,094
5	11/8/17	403,060	94,065	497,125	19	1/8/19	206,317	0	206,317
6	12/15/17	550,310	0	550,310	20	12/12/18	230,335	0	230,335
7	1/26/18	952,916	94,404	1,047,320	21	6/3/19	18,158	0	18,158
8	2/21/18	218,722	0	218,722	22	6/3/19	134,470	0	134,470
9	2/23/18	350,605	0	350,605	23	6/3/19	43,605	0	43,605
10	3/30/18	830,366	60,890	891,256	24	8/7/19	106,924	0	106,924
11	4/18/18	744,230	21,877	766,107	25	8/16/19	25,350	0	25,350
12	5/22/18	329,492	65,515	395,007	26	8/16/19	40,693	0	40,693
13	6/14/18	255,916	0	255,916	27	8/16/19	51,821	0	51,821
14	8/16/18	509,295	4,345	513,640					
Total Disbursements Received to Date							**$ 8,821,309**	**$650,000**	**$9,471,309**

PENDING SRF PAYMENT REQUESTS SUBMITTED					
Claim #	**Date Submitted**	**Const**	**CM/Adm**	**Amount**	**Comments**
28	8/13/2019	83,757	0	83,757	
Total Claims Pending		**$83,757**	**0**	**$83,757**	

Contract Change Orders

One contract change order was processed during the month of August. The Contract Change Orders are summarized as follows:

Approved and Pending Change Orders to Date			
Change Order #	**Date Approved**	**Description**	**Amount**
1	8/24/17	Misc. changes due to unforeseen site conditions and clarifications to Plans & Specifications.	$39,772
2	3/13/17	Misc. changes due to unforeseen site conditions and clarifications to Plans & Specifications resulting in a credit.	(970)
3	11/2/17	Corrects original project completion date due to weather-related impacts.	0
4	1/10/18	Additional work required to provide stable subgrade for sludge drying beds.	12,184
5	6/04/18	Additional work related to pipe supports and drywall.	20,922

(Table is continued on following page.)

Change Order #	Date Approved	Description	Amount
6	12/13/18	Additional work related to painting and paving.	56,146
7	***Not Executed***	SCADA equipment/communication changes, and programming.	13,018
8	4/3/19	Modifications to the HVAC control panels together with changes to the control panel for the motor drive system in the backwash water tank.	8,761
9	4/3/19	Installation of heat trace systems and insulation on the soda ash solution feed piping and storage tank as described in Work Change Directive 14.	23,283
10	7/17/19	Installation of additional fencing around the perimeter of the facility.	26,796
		TOTAL	**$199,912**
		TOTAL EXECUTED CHANGE ORDERS	**$186,894**

Plant Operations

The plant went into service on August 1, 2019 and continues to serve the community.

Power Point Presentation

Information contained in this report will be supplemented with project-related photos. This concludes the ALT update for work activities during the month of August. Staff remains available to answer questions.

ATTACHMENTS

1. Project Update Flyer #27
2. Photographs

AGENDA ITEM 6.D.

Attachment 1

Project Update Flyer #28

Georgetown Divide Public Utility District

AUBURN LAKE TRAILS WATER TREATMENT PLANT

Update No. 28 ♦ Sept. 10, 2019

Agenda Item 6.D.

6425 Main Street, P.O. Box 4240, Georgetown, CA 95634
www.gd-pud.org ♦ **(530) 333-4356 ♦ Steven Palmer, PE, General Manager**

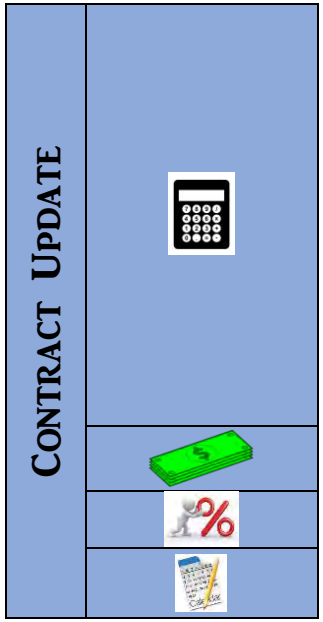
PROJECT UPDATE

UPCOMING ACTIVITIES:

- Landscaping
- Filter to Waste Tank

COMPLETED ACTIVITIES:

- Filter Building
- Chlorine Contact Basin with Baffles
- Raw Water Pump Station
- Backwash Water Recovery Tank



Original Contract Amount	**10,249,000**
Change Order #1	**39,772**
Change Order #2	**[970]**
Change Order #3	**No Cost**
Change Order #4	**12,184**
Change Order #5	**20,922**
Change Order #6	**56,146**
Change Order #7 (Pending)	**TBD**
Change Order #8	**8,761**
Change Order #9	**23,283**
Change Order #10	**26,796**

Contract Amount:

$10,435,894

Expended thru July 2019	**$10,332,062**
Percent Complete	**99%**
Anticipated Completion Date	**Fall 2019**

PROJECT CONSTRUCTION SCHEDULE:

. Issue Notice to Proceed	M
. Mobilization & Demolition	A
. Complete Raw Water Siphon	M
. First Concrete Pour - Filter Building	J
. Complete Earthwork	J
. Complete Chlorine Contact Basin	A
. Erect Raw Water Pump Station Bldg.	S
. Complete Concrete Filter Building	O
. Filters Placed in Building	N
. Erect Filter Building	D
. Filters and Outside Electrical	J
. Filters Installed and Site Work	F
. Electrical Inside and Outside	M
. Electrical Inside and Outside	A
. Electrical Outside and Filters	M
. Electrical Raw Water Pump Station	J
. Electrical Filter Building	J
. Complete Filter Installation & Sludge Beds	A
. Complete Site Work & Raw Water Pump Station	S
. Complete Filter Building & Backwash Basin	O
. Site Improvements	N
. SCADA System	D
. Finish Electrical Systems	J
. SCADA Training	F
. Operator Training	M
. Performance Training	A
PROJECT 100% COMPLETE	Fall 2019

For additional information, contact: **George Sanders, Project Manager** at gsanders@gd-pud.org or Call (530) 333-4356

AGENDA ITEM 6.D.

Attachment 2

Photographs

A Presentation for the
GDPUD Board of Directors
September 10, 2019

Summary of Work Activities at ALT Plant August 2019

ALT Water Treatment Plant Project Partners

MYERS & SONS CONSTRUCTION
MYERS
Sterling Construction Affiliate

Construction

PSOMAS

Engineering Support

YOUNGDAHL CONSULTING GROUP, INC. 30 YEARS
Building Innovative Solutions

Materials Testing

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

CEQA Compliance and SWPPP

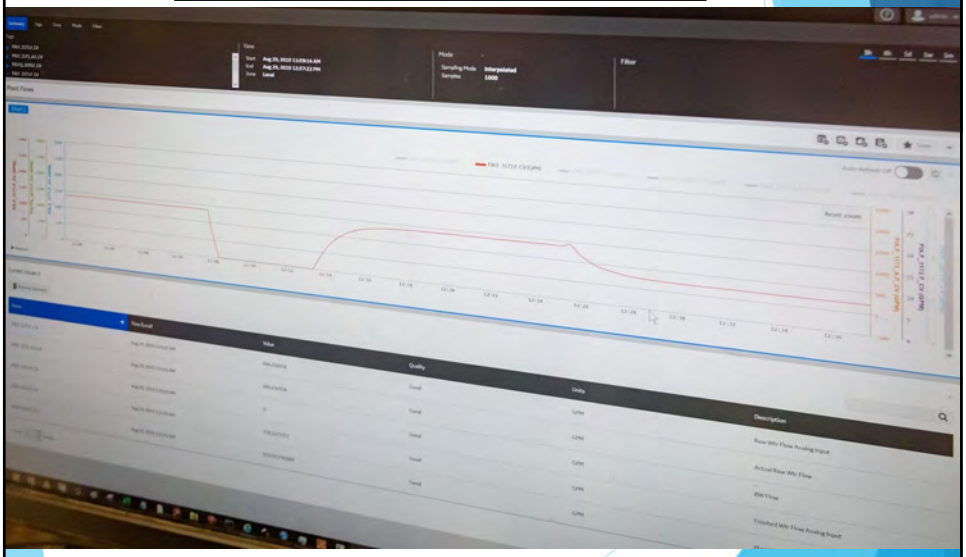
NEXGEN

Construction Management

Repainted Floor of Chemical Storage Room

Filter to Waste Tank

High Lift Pump Flow



WesTech Performance Testing

PROJECT BUDGET		
Phase	Expended to Date	Budget
Construction	10,322,062	11,249,000
Construction Engineering, Construction Management, Environmental	1,344,690	1,076,226
Misc. Vendors & Staff Support	41,125	
TOTALS	**11,707,877**	**$12,325,226**

SRF DISBURSEMENTS	
Total Disbursements Received to Date	9,471,309
Total Claims Pending	83,757
TOTAL CLAIMS SUBMITTED	**$9,555,066**

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF September 10, 2019
AGENDA ITEM NO. 7.A.

AGENDA SECTION: **NEW BUSINESS**

SUBJECT: **AMENDMENT FOUR TO PROFESSIONAL SERVICE AGREEMENT WITH NEXGEN UTILITY MANAGEMENT, INC., TO INCREASE CONSTRUCTION MANAGEMENT AND INSPECTION BUDGET**

PREPARED BY: George Sanders, Engineering Consultant

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

On March 14, 2017, the Georgetown Divide Public Utility District Board of Directors authorized the General Manager to execute a Professional Services Agreement with NEXGEN Utility Management ("NEXGEN") to provide Construction Management and Inspection Services for the Auburn Lake Trails Water Treatment Plant Project, for an amount not to exceed $650,000.

The project construction activities commenced on March 13, 2017. On May 1, 2017 the District executed a contract with NEXGEN (Attachment 1), for construction and management services in an amount not to exceed $650,000. During the period from March 13 to May 1, 2017, the construction management and inspection services were performed by District Staff under the supervision of George Sanders, Engineering Consultant.

The contract with NEXGEN is billed on a time and materials basis and assumed the Project would be complete by the end of December 2018. Contract Amendments 1, 2 and 3 increased the budget to $819,060 to allow for the extension of services beyond the completion date in the original contract.

The following is a summary of contract amendments that have been executed to date. All amendments are included in Attachment 2 of this report.

Amendment	Board Approved	Amount of Increase	New Contract Total
1	2/12/2019	77,780	727,780
2	5/14/2019	66,800	794,580
3	7/11/2019	24,480	819,060

DISCUSSION

As of the end of August NEXGEN had exceeded the current approved budget by $23,159. District Staff discussed with NEXGEN the parameters of services required to complete the project and developed Amendment 4 to the agreement. District Staff negotiated an amendment amount of $49,139 which will provide for 176 hours of NEXGEN staff for

September and Octobers (approximately 9 weeks), and two months of NEXGEN's Virtual Project Management tracking system. The reduction of NEXGEN time will be absorbed by the District's contract Project Manager, George Sanders. The proposed amendment amount, not to exceed $49,139, is summarized as follows:

Service	Amount
Expended through August	$23,159
VPM: Sept - Oct @ $750/month	$ 1,500
Construction Management: 22 8-hour working days @170/hour	$29,920
Total Amendment 4 Amount	**$49,139**

Amendment 4 would result in total contract amount not to exceed $868,199. Payment for the additional services would be on a time and materials basis with invoices submitted monthly.

NEXGEN has provided continuous construction management and inspection services for this project over the past 28 months. The benefits of retaining the services of NEXGEN through the end of construction are significant from the standpoint of general project knowledge and overall continuity in inspection services.

FISCAL IMPACT

This action would result in an additional expenditure for Construction Management and Inspection Services in an amount not to exceed $49,139 (See Attachment 3). Funding for this expenditure exists within the overall construction budget.

CEQA ASSESSMENT

A Mitigated Negative Declaration was adopted by the Board on April 12, 2016.

RECOMMENDED ACTION

Staff recommends that the Board of Directors of the Georgetown Divide Public Utility District adopt a Resolution (Attachment 4) authorizing the General Manager to execute Contract Amendment Four to the Professional Services Agreement with NEXGEN Utility Management in the amount of $49,139.

ALTERNATIVES

(a) Request substantive changes to the Resolution for staff to implement; (b) Reject the Resolution.

ATTACHMENTS

1. Professional Services Agreement with NEXGEN Utility Management, Inc.
2. NEXGEN Contract Amendment One, Two, and Three
3. NEXGEN Contract Amendment Four (Proposed)
4. Resolution

AGENDA ITEM 7. A.

Approve NEXGEN Amendment

Attachment 1

PSA with NEXEN Utility Management Inc.

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT
PROFESSIONAL SERVICES AGREEMENT
WITH NEXGEN UTILITY MANAGEMENT, INC.
FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES,
AUBURN LAKE TRAILS WATER TREATMENT PLANT PROJECT

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is made and entered into this 1st day of May 2017, (the "Effective Date") by and between the Georgetown Divide Public Utilities District, a California Public Utilities District ("District"), and NEXGEN Utility Management, Inc., a California Corporation ("Consultant"). District and Consultant may herein be referred to individually as a "Party" and collectively as the "Parties". There are no other parties to this Agreement.

RECITALS

A. District has determined that consultant services are required associated with the construction management, together with portions of construction inspection, for the Auburn Lake Trails Water Treatment Plant Project (the "Project").

B. Consultant has submitted a proposal to District that includes a scope of proposed consultant services, attached hereto and described more fully in **Exhibit A** ("Services").

C. Consultant represents that it is qualified, willing, and able to provide the Services to District, and that it will perform Services related to the Project per the rate schedule included in the scope of proposed consultant services attached hereto as **Exhibit B** (the "Rates").

D. A copy of District's request for proposal entitled "Construction Management and Inspection Services Auburn Lake Trails Water Treatment Plant Project" is incorporated into this agreement and attached hereto as **Exhibit C** (the "RFP").

NOW, THEREFORE, in consideration of the promises and covenants set forth below, the Parties agree as follows:

AGREEMENT

1. Recitals. The recitals set forth above ("Recitals") are true and correct and are hereby incorporated into and made part of this Agreement by this reference. In the event of any inconsistency between the Recitals and Sections 1 through 21 of this Agreement, Section 1 through 21 shall prevail.

2. Consulting Services. Consultant agrees, during the term of this Agreement, to perform the Services for the District in connection with the Project. Any request for services in addition to the Services described in **Exhibit A** will be considered a request for additional consulting services and not compensated unless the Parties otherwise agree in writing. No subcontract shall be awarded or an outside consultant engaged by Consultant unless prior written approval is obtained from District.

3. Compensation. District shall pay Consultant according to the fee schedule set forth in **Exhibit B**, as full remuneration for the performance of the Services. Consultant agrees to maintain a

log of time spent in connection with performing the Services. On a monthly basis, Consultant shall provide District, in reasonable and understandable detail, a description of the services rendered pursuant to the Services and in accordance with the Rates. If the work is satisfactorily completed, District shall pay such invoice within thirty (30) days of its receipt. If District disputes any portion of any invoice, District shall pay the undisputed portion within the time stated above, and at the same time advise Consultant in writing of the disputed portion.

4. Term. This Agreement shall become effective once all of the Parties have executed the Agreement (the "Effective Date") and will continue in effect until the Services provided herein have been completed, unless terminated earlier as provided in Section 6 or 7 below (the "Term").

5. Termination. District may terminate this Agreement prior to the expiration of the Term ("Termination"), without cause or reason, by notifying Consultant in writing of District's desire to terminate this Agreement (the "Termination Notice"). Upon receipt of a Termination Notice, Consultant shall immediately cease performing the Services. Consultant will be entitled to compensation, as of the date Consultant receives the Termination Notice, only for Services actually performed.

6. Termination for Cause. Notwithstanding Section 6 above, this Agreement may be terminated by the District for cause based on the loss or suspension of any licenses, permits or registrations required for the continued provision of the Services, or Consultant's malfeasance. Termination of the Agreement for cause as set forth in this Section shall relieve District from compensating Consultant.

7. Assurance of Performance. If, at any time, District believes Consultant may not be adequately performing its obligations under this Agreement or may fail to complete the Services as required by this Agreement, District may submit a written request to Consultant for written assurances of performance and a plan to correct observed deficiencies in Consultant's performance. Failure to provide written assurances subsequent to such written request, constitutes grounds to declare a breach under this Agreement.

8. Cancellation for Breach by Either Party. Should either Party fail to substantially perform its obligations in accordance with the provisions of this Agreement, the other Party shall thereupon have the right to cancel the Agreement by giving written notice and specifying the effective date of such cancellation. Recipient shall have at least fourteen (14) days to cure the breach. If District cancels this Agreement for breach and it is subsequently determined that Contractor did not fail to substantially perform its obligations in accordance with this Agreement, then cancellation for breach by District shall be deemed, and treated, as termination for convenience.

Neither Party waives the right to recover damages against the other for breach of this Agreement including any amount necessary to compensate District for all detriment proximately caused by Contractor's failure to perform its obligations hereunder or which in the ordinary course of things would be likely to result therefrom. District reserves the right to offset such damages against any payments owed to Contractor.

District shall not in any manner be liable for Contractor's actual or projected lost profits had Contractor completed the Services required by this Agreement.

In the event of cancellation by either Party, copies of all finished or unfinished work shall become the property of District.

9. Confidential Information. Consultant understands and agrees that, in the performance of Services under this Agreement or in the contemplation thereof, Consultant may have access to private or confidential information that may be owned or controlled by District and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to District ("Confidential Information").

Consultant shall not, either during or after the Term, disclose to any third party any Confidential Information without the prior written consent of District. If District gives Consultant written authorization to make any such disclosure, Consultant shall do so only within the limits and to the extent of that authorization. Such authorization does not guarantee that the District will grant any further disclosure of Confidential Information. Consultant may be directed or advised by the District's General Counsel on various matters relating to the performance of the Services on the Project or on other matters pertaining to the Project, and in such event, Consultant agrees that it will treat all communications between itself, its employees and its subcontractors as being communications which are within the attorney-client privilege.

10. Performance by Key Employee. Consultant has represented to District that Dan Rich will be the person primarily responsible for the performance of the Services and all communications related to the Services. District has entered into this Agreement in reliance on that representation by Consultant.

11. Property of District. The following will be considered and will remain the property of District:

A. Documents. All reports, drawings, graphics, working papers and Confidential Information furnished by District in connection with the Services ("Documents"). Nothing herein shall be interpreted as prohibiting or limiting District's right to assign all or some of District's interests in the Documents.

B. Data. All data collected by Consultant and produced in connection with the Services including, but not limited to, drawings, plans, specifications, models, flow diagrams, visual aids, calculations, and other materials ("Data"). Nothing herein shall be interpreted as prohibiting or limiting District's right to assign all or some of District's interests in the Data.

C. Delivery of Documents and Data. Consultant agrees, at its expense and in a timely manner, to return to District all Documents and Data upon the conclusion of the Term or in the event of Termination.

12. Duties of District. In order to permit Consultant to render the services required hereunder, District shall, at its expense and in a timely manner:

A. Provide such information as Consultant may reasonably require to undertake or perform the Services;

B. Promptly review any and all documents and materials submitted to District by Consultant in order to avoid unreasonable delays in Consultant's performance of the Services; and

C. Promptly notify Consultant of any fault or defect in the performance of Consultant's services hereunder.

13. Representations of Consultant. District relies upon the following representations by Consultant in entering into this Agreement:

A. Qualifications. Consultant represents that it is qualified to perform the Services and that it possesses the necessary licenses, permits and registrations required to perform the Services or will obtain such licenses or permits prior to the time such licenses or permits are required. Consultant represents and warrants to District that Consultant shall, at Consultant's sole cost and expense, keep in effect or obtain at all times during the Term of this Agreement, any licenses, permits, and registrations that are legally required for Consultant to practice Consultant's profession at the time the Services are rendered.

B. Consultant Performance. Consultant represents and warrants that all Services under this Agreement shall be performed in a professional manner and shall conform to the customs and standards of practice observed on similar, successfully completed projects by specialists in the Services to be provided. Consultant shall adhere to accepted professional standards as set forth by relevant professional associations and shall perform all Services required under this Agreement in a manner consistent with generally accepted professional customs, procedures, and standards for such Services. All work or products completed by Consultant shall be completed using the best practices available for the profession and shall be free from any defects. Consultant agrees that, if a Service is not so performed, in addition to all of its obligations under this Agreement and at law, Consultant shall re-perform or replace unsatisfactory Service at no additional expense to District.

14. Compliance with Laws and Standards. Consultant shall insure compliance with all applicable federal, state, and local laws, ordinances, regulations, and permits, including but not limited to federal, state, and county safety and health regulations. Consultant shall perform all work according to generally accepted standards within the industry. Consultant shall comply with all ordinances, laws, orders, rules, and regulations, including the administrative policies and guidelines of District pertaining to the work.

15. Independent Contractor; Subcontracting. Consultant will employ, at its own expense, all personnel reasonably necessary to perform the Services. All acts of Consultant, its agents, officers, employees, and all others acting on behalf of Consultant relating to this Agreement will be performed as independent contractors. Consultant, its agents, and employees will represent and conduct themselves as independent contractors and not as employees of District. Consultant has no authority to bind or incur any obligation on behalf of District. Except as District may specify in writing, Consultant shall have no authority, express or implied, to act on behalf of District in any capacity whatsoever as an agent. Consultant shall have no authority, express or implied, pursuant to this Agreement to bind District to any obligation whatsoever. Consultant is prohibited from subcontracting this Agreement or any part of it unless such subcontracting is expressly approved by District in writing.

16. Insurance. Consultant and all of Consultant's contractors and subcontractors shall obtain and maintain insurance of the types and in the amounts described in this paragraph and its subparagraphs with carriers reasonably satisfactory to District.

A. General Liability Insurance. Consultant shall maintain occurrence version commercial general liability insurance or an equivalent form with a limit of not less than Two Million Dollars ($2,000,000) per claim and Two Million Dollars ($2,000,000) for each occurrence.

B. Workers' Compensation Insurance. Consultant shall carry workers' compensation insurance as required by the State of California under the Labor Code. Consultant shall also carry employer's liability insurance in the amount of One Million Dollars ($1,000,000.00) per accident, with a

One Million Dollar ($1,000,000.00) policy limit for bodily injury by disease, and a One Million Dollar ($1,000,000.00) limit for each employee's bodily injury by disease.

C. Automobile Insurance. Consultant shall carry automobile insurance for the vehicle(s) Consultant uses in connection with the performance of this Agreement in the amount of One Million Dollars ($1,000,000.00) per occurance for bodily injury and property damage.

D. Errors and Omissions Liability. Consultant shall carry errors and omissions liability insurance in the amount of no less than One Million Dollars ($1,000,000.00) per occurrence or greater if appropriate for the Consultant's profession. Architects and Engineers coverage is to be endorsed to include contractual liability. Any deductibles or self-insured retentions must be declared to and approved by the District. At the option of the District, either the insurer shall reduce or eliminate such deductibles or self-insured retentions with respect to the District, elected and appointed councils, commissions, directors, officers, employees, agents, and representatives ("District's Agents"); or the Consultant shall provide a financial guarantee satisfactory to the District guaranteeing payment of losses and related investigations, claims administration and defense expenses.

E. Other Insurance Requirements. Within five (5) days of the Effective Date, Consultant shall provide District with certificates of insurance for all of the policies required under this Agreement ("Certificates"), excluding the required worker's compensation insurance. Such Certificates shall be kept current for the Term of the Agreement and Consultant shall be responsible for providing updated copies and notifying District if a policy is cancelled, suspended, reduced, or voided. With the exception of the worker's compensation insurance, all of the insurance policies required in this Agreement shall: (a) provide that the policy will not be cancelled, allowed to expire, or materially reduced in coverage without at least thirty (30) days' prior written notice to District of such cancellation, expiration, or reduction and each policy shall be endorsed to state such; (b) name District, and District's Agents as additional insureds with respect to liability arising out of Services, work or operations performed by or on behalf of the Consultant; products and completed operations of the Consultant; premises owned, occupied, or used by the Consultant, or automobiles owned, leased, or hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the District; (c) be primary with respect to any insurance or self-insurance programs covering District or District's Agents and any insurance or self-insurance maintained by District or District's Agents shall be in excess of Consultant's insurance and shall not contribute to it; (d) contain standard separation of insured provisions; and (e) state that any failure to comply with reporting or other provisions of the policy including breaches of warranties shall not affect the coverage provided to the District.

17. Indemnification. Consultant hereby agrees to indemnify and hold harmless District, its agents, officers, employees and volunteers, against all liability, obligations, claims, loss, and expense (a) caused or created by Consultant, its subcontractors, or the agents or employees of either, whether negligent or not, pertaining to or related to acts or omissions of Consultant in connection with the Services, or (b) arising out of injuries suffered or allegedly suffered by employees of Consultant or its subcontractors (i) in the course of their employment, (ii) in the performance of work hereunder, or (iii) upon premises owned or controlled by District. Consultant's obligation to defend, indemnify and hold District and its agents, officers, employees and volunteers harmless is not terminated by any requirement in this Agreement for Consultant to procure and maintain a policy of insurance.

18. Consequential Damages. Notwithstanding any other provision of this Agreement, in no event shall District be liable, regardless of whether any claim is based on contract or tort, for any special,

consequential, indirect or incidental damages, including, but not limited to, lost profits or revenue, arising out of or in connection with this Agreement or the Services performed in connection with this Agreement.

19. Litigation. In the event that either Party brings an action under this Agreement for the breach or enforcement hereof, or must incur any collection expenses for any amounts due hereunder the prevailing Party in such action shall be entitled to its costs including reasonable attorney's fees, whether or not such action is prosecuted to judgment.

20. Notices. Any notice or communication required hereunder between District or Consultant must be in writing, and may be given either personally, by registered or certified mail (return receipt requested), or by Federal Express, UPS or other similar couriers providing overnight delivery. If personally delivered, a notice shall be deemed to have been given when delivered to the Party to whom it is addressed. Notices given by registered or certified mail shall be deemed to have been given and received on the first to occur of (a) actual receipt by any of the addressees designated below as the party to whom notices are to be sent, (b) on the date delivered as shown on a receipt issued by the courier, or (c) five (5) days after a registered or certified letter containing such notice, properly addressed, with postage prepaid, is deposited in the United States mail. If given by Federal Express or similar courier, a notice or communication shall be deemed to have been given and received on the date delivered as shown on a receipt issued by the courier. Any Party hereto may at any time, by giving ten (10) days written notice to the other Party hereto, designate any other address in substitution of the address to which such notice or communication shall be given. Such notices or communications shall be given to the Parties at the addresses in this paragraph set forth below:

If to District:	Georgetown Divide Public Utility District P.O. Box 4240 6425 Main Street Georgetown, CA 95634 Attention: General Manager
With courtesy copies to:	Churchwell White LLP 1414 K Street, 3rd Floor Sacramento, California 95814 Attention: Barbara A. Brenner, Esq.
If to Consultant:	NEXGEN Utility Management, Inc. 4010 Lennane Drive Sacramento, CA 95834 Attention: Dan Rich, PE, Principal-In-Charge

21. General Provisions.

A. Modification. No alteration, modification, or termination of this Agreement shall be valid unless made in writing and executed by all Parties.

B. Waiver. The waiver by any Party of a breach of any provision hereof shall be in writing and shall not operate or be construed as a waiver of any other or subsequent breach hereof unless specifically stated in writing.

C. Assignment. No Party shall assign, transfer, or otherwise dispose of this Agreement in whole or in part to any individual, firm, or corporation without the prior written consent of the other Party. Subject to the forgoing provisions, this Agreement shall be binding upon, and inure to the benefit of, the respective successors and assigns of the Parties.

D. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state of California.

E. Venue. Venue for all legal proceedings shall be in the Superior Court of California for the County of El Dorado.

F. Partial Invalidity. If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any way.

G. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall constitute an original and all of which shall be deemed a single agreement.

H. Severability. If any term, covenant, or condition of this Agreement is held by a court of competent jurisdiction to be invalid, the remainder of this Agreement shall remain in effect.

I. Audit. District shall have access at all reasonable times to all reports, contract records, contract documents, contract files, and personnel necessary to audit and verify Consultant's charges to District under this Agreement.

J. Entire Agreement. This Agreement sets forth the entire understanding between the Parties as to the subject matter of this Agreement and supersedes and merges all prior discussions, negotiations, proposal letters or other promises, whether oral or in writing.

K. Headings Not Controlling. Headings used in this Agreement are for reference purposes only and shall not be considered in construing this Agreement.

L. Time is of the Essence. Time is of the essence in this Agreement for each covenant and term of a condition herein.

M. Drafting and Ambiguities. Any rule of construction that ambiguities are to be resolved against the drafting party does not apply in interpreting this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the last day and date below written.

DISTRICT:

GEORGETOWN DIVIDE PUBLIC UTILITIES DISTRICT, a California Public Utilities District

By: _____
Steven Palmer, General Manager

Date: 4/20/17

CONSULTANT:

NEXGEN Utility Management, Inc., a California Corporation

By: Dan Rich

Name: Dan Rich

Date: 4-18-17

Approved as to Form:

_____
Barbara A. Brenner, General Counsel

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the last day and date below written.

DISTRICT:

GEORGETOWN DIVIDE PUBLIC UTILITIES DISTRICT, a California Public Utilities District

By: _____
Steven Palmer, General Manager

Date: 4/20/17

CONSULTANT:

NEXGEN Utility Management, Inc.,
a California Corporation

By: _____

Name: Dan Rich, P.E

Date: 4-18-17

Approved as to Form:

_____
Barbara A. Brenner, General Counsel

EXHIBIT A – Services

NEXGEN will provide construction management and inspection services through the course of the Auburn Lake Trails Water Treatment Plant Construction Project ("Project"). Scope of work includes:

- ***Project Management and Coordination.*** Coordinate activities of the District, Design Engineer, and Contractor through the course of the Project. Oversee Contractor progress and enforce the Contract Documents.

- ***Recommendations with Respect to Defective Work.*** Provide recommendations to the District that the Contractor's work be disapproved and rejected while it is in progress if, on the basis of such observations, such work will not produce a completed Project that conforms generally to the Contract Documents.

- ***Clarifications and Interpretations.*** Respond to reasonable and appropriate Contractor requests for information and issue necessary clarifications and interpretations of the Contract Documents to District as appropriate to the orderly completion of Contractor's work. Any orders authorizing variations from the Contract Documents will be made by the District.

- ***Change Orders.*** Provide recommendations on Change Orders to the District, and will review and make recommendations related to Change Orders submitted or proposed by the Contractor.

- ***Submittal Database***. Establish a database to track submittals and the status of each. The submittals will be logged and reviewed by the Construction Manager for completeness, then immediately forwarded to the Design Engineer for review.

- ***Shop Drawings and Samples.*** Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs.

- ***Substitutes and "or-equal."*** Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor in accordance with the Contract Documents, but subject to the provisions of applicable standards of state or local government entities.

- ***Disagreements between District and Contractor.*** At the request of the District, render written decision on all claims of District and Contractor relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the progress of Contractor's work. In rendering such decisions, we shall be fair and not show partiality to District or Contractor and shall not be liable in connection with any decision rendered in good faith.

- ***Contractor Billing.*** Request monthly progress payment estimates from the Contractor, detailed in terms of the schedule of values and tied to a cost loaded schedule as required by the Contract Documents. Once reviewed and accepted, the payment request will be forwarded to the District.

- ***Construction Site Safety.*** Review construction site safety and relay information to District staff. Meetings will be held, as necessary, at the project site with the Contractor and with selected District personnel to review the Contractor's safety procedures and discuss any safety issues. Prepare agendas for the progress meetings.

- ***Onsite Inspection.*** Photo-document existing conditions, monitor and inspect the progress of the work, and review Contractor's documentation of as-built conditions. Include structural and electrical inspections.

- ***Coordinate Surveying, Materials Testing, and Specialty Materials Testing.*** Determine the need for and coordinate the surveyors, materials testing for earthwork, and concrete testing. The actual surveying and testing will be by others, contracted directly to the District. Work with the Youngdahl Group to schedule and determine the need for earthwork inspections, including soil compaction testing, testing of stockpiled soil, concrete break strength and batch confirmation, specialty weld inspections, and special coating inspections.

- ***Inspection Logs.*** Complete daily inspection logs of all work on the Project. We will review labor compliance and maintain project records.

- ***CEQA Compliance.*** Work with the District and Foothill Associates to coordinate required surveys, BMPs, SWPPP development and other mitigation measures identified in the Project's CEQA document.

- ***Compile Record Drawings.*** Compile and submit to the Design Engineer all confirmed changes documented by the Contractor during construction needed for the preparation of record drawings.

- ***Oversee Facilities Acceptance Testing and Start-up.*** Provide final testing and inspection of staged improvements and attend all operations and maintenance demonstrations.

- ***Prepare Quarterly and Final Construction Reports.*** Prepare quarterly Status Reports required by the SRF Loan. Following the filing of the Notice of Completion, prepare a Final Construction Report which will include all database summary logs of the construction, and a summary of the construction activities.

EXHIBIT B – Fee Schedule

Construction Management & Inspection Budget

Name, Role	D Rich, PE Electrical	Joe D, PE C M	RI TBD (if needed)	J Pollett, PE Electrical	B Friederichs, PE Structural	M Lee, PE SRF Adm	Admin	TOTAL HOURS
Billing Rate	$190	$170	$140	$150	$150	$120	$70	
Task 1 - Project Management	236					172	100	508
Task 2 - Construction Management & Inspection(a)		2880						2880
Task 3 - Materials & Special Inspection					96			96
Task 4 - Electrical Testing and Inspection				400				400
Total Hours	236	2880		400	96	172	100	3,884
Total Labor Cost	$44,840	$489,600		$60,000	$14,400	$20,640	$7,000	$636,480
VPM CM Software Monthly Fee ($750/month)								$13,500
Total Project Budget								**$649,980**

(a) Budget is based on a 360-working day project duration. The level of effort will be adjusted based on project schedule and diligence of contractor.

AGENDA ITEM 7. A.

Approve NEXGEN Amendment

Attachment 2

Amendment No. 1, 2 and 3

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CONTRACT AMENDMENT ONE

TO PROFESSIONAL SERVICES AGREEMENT
WITH NEXGEN UTILITY MANAGEMENT, INC.
FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES
AUBURN LAKE TRAILS WATER TREATMENT PLANT PROJECT

The Professional Services Agreement previously entered into between the Georgetown Divide Public Utility District ("District) and NEXGEN Utility Management, Inc., (Consultant) on May 1, 2017, is hereby amended as follows:

Period of Performance

The project completion date has been moved from January 2019 to the end of March 2019. This Contract Amendment is based on a 53 working day period between mid-February to the end of April 2019.

Compensation and Method of Payment

The original contract agreement provides for billing on a time and materials basis for inspection and support services over a 360-work day project period.

The proposed additional services listed in the correspondence dated January 22, 2019, from the Consultant to the District, herein after referred to as Attachment 1. The table below provides the expected level of effort and budget negotiated by the District for this Contract Amendment:

Classification	Principal	Construction Management	Administrative	Expenses (b)	Total Budget
Billing Rate	190	170	70		
Hours (a)	15	424	10		
Labor Costs	$2,850	$72,080	$700	$2,250	$77,800

(a) Budget based on 53 working days between mid-February to end of April 2019.
(b) Allowance for project-related expenses to be approved by district prior to use.

Payment for the additional services rendered shall be made on a time and materials basis with invoices submitted monthly. Invoicing must identify the specific tasks, personnel classification, number of hours, and receipts for required outside expenses (if applicable).

Remainder of Contract Provisions

Except as specified above, all other provisions as contained in the original contract agreement shall remain in force.

Board Approval

The Georgetown Divide Public Utility District Board of Directors approved Contract Amendment One at a regular meeting held on February 12, 2019, with the adoption of Resolution 2019-xx.

IN WITNESS THEREOF, this Contract Amendment One is executed as of the date(s) shown below:

DISTRICT:

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT,
A California Public Utilities District

By: _____
Steven Palmer, PE, General Manager

Date: 2/27/19

CONSULTANT:

NEXGEN Utility Management, Inc.,
A California Corporation

By: _____
Dan Rich, P.E., Vice-President

Date: 2-5-19

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CONTRACT AMENDMENT TWO

TO PROFESSIONAL SERVICES AGREEMENT
WITH NEXGEN UTILITY MANAGEMENT, INC.
FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES
AUBURN LAKE TRAILS WATER TREATMENT PLANT PROJECT

The Professional Services Agreement previously entered into between the Georgetown Divide Public Utility District ("District) and NEXGEN Utility Management, Inc., (Consultant) on May 1, 2017, together with Contract Amendment One, executed on February 27, 2019, is hereby amended as follows:

Period of Performance

The original contract agreement estimated a project period of 360 work days. The project completion date, as identified within Contract Amendment One, added 53 work days with an estimated end date of March 2019. Multiple on-going construction activities make it difficult to accurately identify the final project completion date at this time. For the purposes of this Contract Amendment the project completion date has been identified as mid-July 2019. This Contract Amendment is based on a 48 working day period occurring in May, June, and a portion of July 2019.

Compensation and Method of Payment

The proposed additional services under Contract Amendment Two are listed in that correspondence dated April 16, 2019, from the Consultant to the District, hereinafter referred to as Attachment 1 to this document. The table below provides the expected level of effort and budget negotiated by the District for this Contract Amendment:

Classification	Principal	Construction Management	PE	Expenses (b)	Total Budget
Billing Rate	190	170	150		
Hours (a)	20	220	164		
Labor Costs	$3,800	$37,400	$24,600	$1,000	$66,800

(a) Budget based on 45 working days occurring in May, June, and part of July 2019.
(b) Allowance for project-related expenses to be approved by district prior to use.

Payment for the additional services rendered shall be made on a time and materials basis with invoices submitted monthly. Invoicing must identify the specific tasks, personnel classification, number of hours, and receipts for required outside expenses (if applicable).

Remainder of Contract Provisions
Except as specified above, all other provisions as contained in the original contract agreement shall remain in force.

Board Approval
The Georgetown Divide Public Utility District Board of Directors approved Contract Amendment One at a regular meeting held on May 14, 2019, with the adoption of Resolution 2019-33.

IN WITNESS THEREOF, this Contract Amendment TWO is executed as of the date(s) shown below:

DISTRICT:

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT,
A California Public Utilities District

By: _____
Steven Palmer, PE, General Manager

Date: 5/15/19

CONSULTANT:

NEXGEN Utility Management, Inc.,
A California Corporation

By: _____
Dan Rich, P.E., Vice-President

Date: 5-7-19

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CONTRACT AMENDMENT THREE

TO PROFESSIONAL SERVICES AGREEMENT
WITH NEXGEN UTILITY MANAGEMENT, INC.
FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES
AUBURN LAKE TRAILS WATER TREATMENT PLANT PROJECT

The Professional Services Agreement previously entered into between the Georgetown Divide Public Utility District ("District) and NEXGEN Utility Management, Inc., (Consultant) on May 1, 2017, together with Contract Amendment One executed February 27, 2019 and Contract Amendment Two executed May 14, 2019, is hereby amended as follows:

Period of Performance

The original contract agreement provided for billing on a time and materials basis for inspection and support services over a 360 working day period. The work identified under Contract Amendment One added another 53 working days of construction oversight. Contract Amendment Two added an additional 48 working days of construction oversight. This Contract Amendment Three add another 18 working days (144 hours) of construction oversight.

Compensation and Method of Payment

The proposed additional services listed in the correspondence dated June 30, 2019, from the Consultant to the District, herein after referred to as Attachment 1. The table below provides the expected level of effort and budget negotiated by the District for this Contract Amendment:

Classification	Principal	Construction Manager	Engineer	Total Budget
Billing Rate	190	170	150	
Hours (a)		144		
Labor Costs		$24,480		$24,480

(a) Budget based on 18 working days

Payment for the additional services rendered shall be made on a time and materials basis with invoices submitted monthly. Invoicing must identify the specific tasks, personnel classification, number of hours, and receipts for required outside expenses (if applicable).

Remainder of Contract Provisions

Except as specified above, all other provisions as contained in the original contract agreement shall remain in force.

Board Approval

The Georgetown Divide Public Utility District Board of Directors approved Contract Amendment Three at a regular meeting held on July 11, 2019, with the adoption of Resolution 2019-46.

IN WITNESS THEREOF, this Contract Amendment Three is executed as of the date(s) shown below:

DISTRICT:

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT,
A California Public Utilities District

By: _____
Steven Palmer, PE, General Manager

Date: 7/11/19

CONSULTANT:

NEXGEN Utility Management, Inc.,
A California Corporation

By: Dan Rich
Dan Rich, P.E., Vice-President

Date: 6-30-19

AGENDA ITEM 7. A.

Approve NEXGEN Amendment

Attachment 3

Amendment No. 4 (Proposed)

September 4, 2019

Mr. George Sanders, P.E.
Georgetown Divide Public Utility District
P.O. Box 4240,
Georgetown CA 95634

Dear Mr. Sanders:

Subject Proposed Contract Amendment Four the Construction Management and Inspection Services at the Auburn Lakes Trails Water Treatment Plant

NEXGEN has an existing contract with the District for Construction Management and Inspection Services at the Auburn Lakes Trails Water Treatment Plant Upgrade Project (Project). That agreement was amended on January 22, 2019 (CA 1), May 14, 2019 (CA 2), and July 9th, (CA3) for a not to exceed time and materials based budget of $819,060.

Current schedule from Meyers & Sons assumes project completion in October. An extension of our contract will be needed to provide additional CM and inspection for that period. Contract Amendment No. 4 is described below.

At the District's direction, our role in the project will change from full time and on site project oversight to part-time oversight. While we understand that the District is evaluating all options to reduce project costs due to the Contractor's extended schedule, our reduced level of effort will have consequences to you and poses some additional risk to the District that we need describe in this letter:

The Project's CM team has been largely comprised of Nexgen's Joe DiGiorgio, P.E. as the onsite resident engineer / CM/ inspector on the project and yourself as District's representative. We appreciate the working relationship we have with you and your staff and are especially proud that together we were able to extend the original CM budget by many months. This has been a very challenging project. It has been a full- time job for one person to manage the hundreds of requests for information, submittals, change order requests, and daily interactions with the Contractor on design clarifications and how to minimize impacts to plant operations. We have not seen our work commitments decrease yet and, as a result, are concerned about a reduced level of effort.

We understand that on days Joe is not onsite, you will be checking in on the contractor's progress. In the past this project needed full time oversight. Going forward we hope the project will see an improved degree of diligence from the Contractor.

There also remain a significant number of ongoing and outstanding RFIs, T&M proposals, change order and QA/QC documentation that Joe will work with you on prioritizing which are essential, and which will be tabled for a later date, or possibly not at all.

Our CA 4 budget (below) represents full time oversight through the end of August and Joe's level of effort reduced to not exceed 20 hours per week in September and the first week of October, with 1-2 days onsite and any remaining work within the 20 hours completed at our Sacramento Office.

	Principal	CM	PE		Total
Billing Rate	**190**	**170**	**150**	**Expenses (a)**	**Budget**
Hours (a)	0	275	0		
Labor Cost	$ -	$ 46,750	$ -	$ 2,389	$ 49,139
(a) VPM Subscription, 3 months					

Please contact me if I can answer any questions regarding this letter. Thank you for the opportunity to continue to serve the District on this important project.

NEXGEN Utility Management

Daniel Rich

Dan Rich, P.E.
Vice-President
T 916-779-7301 | drich@nexgenum.com |
Main Office Address: 4010 Lennane Drive, Sacramento, CA, 95834

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CONTRACT AMENDMENT FOUR

TO PROFESSIONAL SERVICES AGREEMENT
WITH NEXGEN UTILITY MANAGEMENT, INC.
FOR CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES
AUBURN LAKE TRAILS WATER TREATMENT PLANT PROJECT

The Professional Services Agreement previously entered into between the Georgetown Divide Public Utility District ("District) and NEXGEN Utility Management, Inc., (Consultant) on May 1, 2017, is hereby amended as follows:

Period of Performance

The original contract amendment provided for billing on a time and materials basis for inspection and support services over a 360-working day period. The work identified under Contract Amendment One added another 53 working days of construction oversight. Contract Amendment Two added an additional 48 working days of construction oversight. Contract Amendment Three added another 18 working days of construction oversight. This Contract Amendment Four will add 22 working days (176 hours) of construction oversight.

Compensation and Method of Payment

The proposed additional services listed in the correspondence dated January 22, 2019, from the Consultant to the District, herein after referred to as Attachment 1. The table below provides the expected level of effort and budget negotiated by the District for this Contract Amendment:

Service	Amount
Expended through August	23,159
VPM: Sept - Oct @ $750/month	1,500
Construction Management: 22 8-hour working days @170/hour	29,920
Total Amendment 4 Amount	**49,139**

Payment for the additional services rendered shall be made on a time and materials basis with invoices submitted monthly. Invoicing must identify the specific tasks, personnel classification, number of hours, and receipts for required outside expenses (if applicable).

Remainder of Contract Provisions

Except as specified above, all other provisions as contained in the original contract agreement shall remain in force.

Board Approval

The Georgetown Divide Public Utility District Board of Directors approved Contract Amendment One at a regular meeting held on September 10, 2019, with the adoption of Resolution 2019-54.

IN WITNESS THEREOF, this Contract Amendment One is executed as of the date(s) shown below:

DISTRICT:	**CONSULTANT:**
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT, A California Public Utilities District	NEXGEN Utility Management, Inc., A California Corporation
By: _____ Steven Palmer, PE, General Manager	By: Dan Rich Dan Rich, P.E., Vice-President
Date: _____	Date: 9-6-19

AGENDA ITEM 7. A.

Approve NEXGEN Amendment

Attachment 4

Resolution

RESOLUTION NO. 2019-XX

OF THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT AUTHORIZING AN AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH NEXGEN UTILITY MANAGEMENT, INC.

WHEREAS, the Georgetown Public Utility District ("District") Board of Directors ("Board") authorized the General Manager to execute a Professional Services Agreement with NEXGEN Utility Management, Inc. ("NEXGEN") on March 14, 2017; and

WHEREAS, the Professional Services Agreement was entered between the District and NEXGEN on May 1, 2017 to provide construction management and inspection services for the Auburn Lake Trails Water Treatment Plant Project for an amount not to exceed $650,000; and

WHEREAS, Amendment 1 to the Professional Services Agreement was executed between the District and NEXGEN on February 12, 2019 increasing that amount by $77,780; and

WHEREAS, Amendment 2 to the Professional Services Agreement was executed between the District and NEXGEN on May 14, 2019 increasing that amount by $66,800; and

WHEREAS, Amendment 3 to the Professional Services Agreement was executed between the District and NEXGEN on July 11, 2019 increasing the contract amount by 24,480; and

WHEREAS, the project completion date has been moved from January 2019 to late October due to the required extended construction management and inspection services; and

WHEREAS, NEXGEN has provided continuous construction management and inspection services for this project over the past twenty-eight (28) months and offers the benefits of their general project knowledge and overall continuity of inspection services; and

WHEREAS, the District has evaluated NEXGEN's proposal and both parties have agreed to amend the Professional Services Agreement to increase the construction management and inspection budget by the amount of $49,139.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT THAT the General Manager is authorized to execute Contract Amendment Four to the Professional Services Agreement with NEXGEN Utility Management, Inc., increasing the contract amount by $49,139 to a total contract amount of $868,199 is approved.

PASSED AND ADOPTED by the Board of Directors of the Georgetown Divide Public Utility District at a meeting of said Board held on the tenth day of September 2019, by the following vote:

AYES:

NOES:

ABSENT/ABSTAIN:

_____
Dane Wadle, President, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT
Attest:

_____
Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CERTIFICATION

I hereby certify that the foregoing is a full, true and correct copy of Resolution 2019-XX duly and regularly adopted by the Board of Directors of the Georgetown Divide Public Utility District, County of El Dorado, State of California, on this tenth day of September 2019.

_____
Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF September 10, 2019
AGENDA ITEM NO. 7.B

AGENDA SECTION: **NEW BUSINESS**

SUBJECT: **AWARD A CONTRACT WITH CAGGIANO GENERAL ENGINEEING, INC. IN THE AMOUNT OF $280,005.00 FOR 2018 TREATED WATER LINE REPLACEMENT PROJECT**

PREPARED BY: Steven Palmer, PE, General Manager

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

The 2018 Treated Water Line Replacement is planned for in Fiscal Year 2019/2020 in the Board adopted Five Year Capital Improvement Plan. Completion of this Project supports Fiscal Year 2019/2020 Board of Directors Goal B – "Address Immediate Infrastructure Needs and Begin Long Term Planning," Objective B-1 – "Repair/Replace a few key facilities that are prone to failure."

The 2018 Treated Water Line Replacement Project will replace approximately 1,350 linear feet of 4-inch treated water line in Kit Fox Court and Angel Camp Court. These two segments have experienced multiple water line and service failures in recent years, and District Staff has found that portions of the existing pipe and installation do not meet current standards.

The project information sheet from the Capital Improvement Plan, including a site location map, is included as Attachment 1.

On November 13, 2018, the Board approved a professional services agreement with Bennett Engineering Services, Inc. (Bennett) for engineering services for this Project. The design work was complete and the board authorized the project for bid on July 11, 2019.

DISCUSSION

On July 15, 2019 the District released a request for bids for the project. On August 14, 2019 the District received six (6) completed bid proposals ranging from a high bid of $560,869.90 to a low bid of $279,950.20. The bids were opened publicly at the appointed time and location. The bid summary sheet as recorded at the public bid opening is attached as **Attachment 2.**

The California Public Contract Code requires that the District award the contract to the lowest responsive and responsible bidder.

Caggiano General Engineering, Inc. was the apparent low bidder with a bid of $279,950.20. Staff reviewed the bid proposal and identified a mathematical error by Caggiano when

calculating the price for Item 11. The unit price for Item 11 was listed as $114.05 along with an incorrect extended price of $124,994.00. The correct extension of this unit price for Item 11 is $124,998.80. According to the contract specifications, the unit price shall govern, and therefore the corrected total bid price is $280,005.00. This change is not material since it does not result in a different Contractor becoming the low bidder. The corrected bid is included as **Attachment 3.** Staff reviewed and accepted the bid proposal with this correction. Caggiano's bid proposal included all the required forms, and Staff verified that they have a valid Contractor's license as required by the Project specifications.

The construction project is planned to be completed by June 1, 2019. Staff recommends that the General Manager have "change order" authority in an amount not to exceed 10% of the contract amount. This will eliminate the need to return to the Board of Directors for minor changes to the project allowing for a timely completion of the project.

Once the Board takes action to award the contract, Staff will send the Contractor a Notice of Award, and the Contractor will execute the agreement and supply the required performance bond.

FISCAL IMPACT

The Adopted Capital Improvement Plan budget for this Project is $379,500 from Fund 39 – Capital Facility Charge. Current and projected costs are summarized in the table below.

Phase	Expended to Date	Total Projected	Budget
Engineering/Environmental	$ 29,062	$ 37,155	$ 60,000
Construction and Management	--	$ 31,700	$ 79,500
Construction & Contingency	--	$308,006	$240,000
Total	*$ 29,062*	*$376,861*	*$379,500*

The projected cost is less than the project budget, so a budget adjustment is not needed at this time.

CEQA ASSESSMENT

Categorically Exempt, CEQA Guidelines Section 15300, Existing Facilities. A Notice of Exemption was filed with the County of El Dorado and the State of California. The Project is limited to maintenance of existing facilities and does not involve an expansion of use.

RECOMMENDED ACTION

Staff recommends the Board of Directors of the Georgetown Divide Public Utility District (GDPUD) adopt the attached Resolution awarding the construction contract, authorizing the General Manager to execute a contract with Caggiano General Engineering, Inc. in the amount of $280,005.00 and authorizing the General Manager to approve change orders not to exceed 10% of the contract amount.

ALTERNATIVES

Alternatively the Board may (a) Request substantive changes to the Resolution for staff to implement; (b) Reject the Resolution.

ATTACHMENTS

1. Project Information Sheet
2. Bid Summary Sheet
3. Caggiano General Engineering, Inc. Bid
4. Resolution

AGENDA ITEM 7.B.

Attachment 1

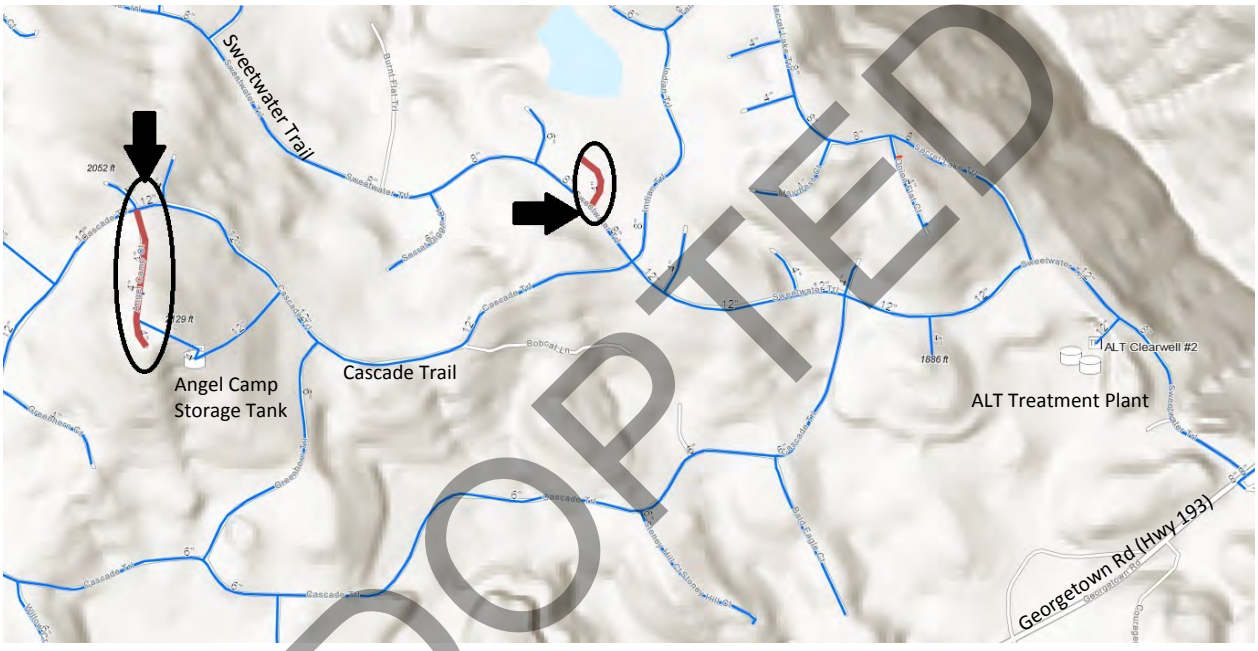
Project Information

PROJECT NAME: 2018 Treated Water Line Replacement/Rehab

PROJECT NUMBER: 922

PROJECT DESCRIPTION:
This Project will replace and rehabilitate treated water lines in Kit Fox Court and Angel Camp Court (approximately 1,350 linear feet). Theses water lines have experienced a higher than expected rate of breakage. Staff has also determined that much of these water lines materials and bedding do not meet current engineering and construction standards.

LOCATION MAP



PHOTOS

AGENDA ITEM 7.B.

Attachment 2

Bid Summary Sheet

BID SUMMARY SHEET

Project:	2018 Treated Water Main Replacement Project	**Due Date and Time:**	08/14/2019 at 2 p.m. Local time
Facilitator:	Steven Palmer	**Location:**	GDPUD Main Office

Contractor	Bid Amount
Swierstok Enterprises Inc., dba Pro Builders	448,000.00
Rapid Construction	426,624.00
Wunschel & Sons	372,900.00
Bayne Construction	560,786.90
Caggiano ~~Construction~~ General Engineering	279,950.20
SuHon Enterprises	498,497.26

Note: This is only a summary sheet that provides a listing of those Contractors that summited Bids and their corresponding Bid Amounts.

Prepared by: _____
(Signature)

Print Name: Adam Brown

Witness: _____
(Signature)

Print Name: STEVEN PALMER

AGENDA ITEM 7.B.

Attachment 3

Caggiano General Engineering, Inc. Bid

BID PROPOSAL

2018 Treated Water Line Replacement Project

NAME OF BIDDER: Caggiano General Engineering, Inc.

STREET ADDRESS: 3941 Park Drive, Suite 20-347

CITY, STATE, ZIP: El Dorado Hills, CA 95762

PHONE NO. 916-501-0611 **FAX NO.** 916-244-0244

CONTRACTOR LICENSE TYPE & NO.:
Class A License number 951282

The work for which this proposal is submitted is for construction in conformance with the Special Provisions (including the payment of not less than the prevailing wage rates), the Specifications, the project plans, if any, described below, including any addenda thereto, the contract annexed hereto, and also in conformance with the Georgetown Divide Public Utility District specifications.

The **Special Provisions** for the Work to be done are dated **July 11, 2019** and are entitled:

2018 Treated Water Line Replacement Project

Bids are to be submitted for the entire work. The amount of the bid for comparison will be the total of all items.

The Bidder shall set forth, for each unit basis item of work, a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item.

In the case of a discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

(a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;

(b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc. or one-tenth, one-hundredth, etc. from the entered total, the discrepancy will be resolved by mutual resolution between the two parties.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise, if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid is provided.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the item total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the Georgetown Divide Public Utility District, and that discretion will be exercised in the manner deemed by the Georgetown Divide Public Utility District to best protect the public interest in the prompt and economical completion of the work. The decision of the Georgetown Divide Public Utility District respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

If this proposal shall be accepted and the undersigned shall fail to enter into the contract and furnish the bond(s) in the sums required by the State Contract Act, with surety satisfactory to the Georgetown Divide Public Utility District, and the insurance certificates within ten (10) days, not including Saturdays, Sundays, and legal holidays, after the Bidder has received notice from the Georgetown Divide Public Utility District that the contract has been awarded, the Georgetown Divide Public Utility District may, at its option, determine that the Bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of the security accompanying this proposal shall operate and the same shall be the property of the Georgetown Divide Public Utility District.

When submitting its bid, the Bidder shall include security in the form of cash; cashier's check made payable to the District; a certified check made payable to the District or a bidder's bond executed by an admitted surety insurer, made payable to the District. The amount of security shall be 10 percent of the amount bid. Should the Bidder be awarded the contract, but fail to execute the contract, its security shall be forfeited to the District.

The Bidder has familiarized itself with the nature and extents of the Contract Documents, the Work, the site, the locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules, and regulations), and the conditions affecting cost, progress or performance of the Work, and has made such independent investigations as Bidder deems necessary.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he has carefully examined the plans therein referred to; and the contractor proposes, and agrees if this proposal is accepted, that they will contract with the Georgetown Divide Public Utility District, in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do

all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the District as therein set forth, and that the contractor will take in full payment therefor the following prices, to wit:

BID SCHEDULE

Georgetown Divide Public Utility District
2018 Treated Water Line Replacement Project

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	Mobilization/Demobilization	LS	1	20,000	20,000
2	Water Pollution Control Plan and Implementation	LS	1	5,000	5,000
3	Kit Fox Court- Section 1 **Hydrant Assembly**	EA	1	16,000	16,000
4	Kit Fox Court- Section 1 **6" PVC Pipe**	LF	340	105.90	36,006
5	Kit Fox Court- Section 1 **8" PVC Pipe**	LF	58	206.90	12,000.20
6	Kit Fox Court- Section 1 **Gate Valve**	EA	3	3,000	9,000
7	Kit Fox Court- Section 1 **Remove and Replace Hydrant Assembly**	EA	1	6,000	6,000
8	Kit Fox Court- Section 1 **Single Service Connection Assembly**	EA	1	4,000	4,000
8a	Kit Fox Court- Section 1 **Double Service Connection Assembly**	EA	4	2,000	8,000
9	Kit Fox Court- Section 1 **Air Vacuum Release Valve**	EA	1	5,000	5,000
10	Angel Camp Court- Section 2 **Blowoff Assembly**	EA	2	1,500	3,000
11	Angel Camp Court- Section 2 **6" PVC Pipe**	LF	1096	114.05	124,998.80 ~~124,044~~
12	Angel Camp Court- Section 2 **Air Vacuum Release Valve**	EA	1	5,000	5,000
13	Angel Camp Court- Section 2 **Gate Valve**	EA	3	2,000	6,000
14	Angel Camp Court- Section 2 **Single Service Connection Assembly**	EA	2	2,000	4,000
14a	Angel Camp Court- Section 2 **Double Service Connection Assembly**	EA	4	1,500	6,000
15	Angel Camp Court- Section 2 **1/2" Chip Sealed Access Road**	SQ YD	400	25	10,000

Total Bid Price ~~279,950.20~~ 280,005.00

TWO HUNDRED SEVENTY NINE THOUSAND NINE HUNDRED AND FIFTY DOLLARS AND ~~Total Amount in Words~~ TWENTY CENTS

BID ITEM DESCRIPTIONS

Bid Item 1 - Mobilization/Demobilization: The lump sum bid for Mobilization/Demobilization shall not exceed six percent (6%) of the total bid price.

Mobilization shall include: the obtaining of insurance and bonds; moving onto the site of all equipment; submittals and project schedules; obtaining and paying for all permits by other agencies as applicable and not delineated in other bid items; furnishing temporary construction utilities (temporary power, toilets, water, fences, etc.); installing construction signs; temporary buildings and field office trailer(s); establishment of temporary site access and staging area; and other construction all as required for the proper performance and completion of work, as needed.

Demobilization shall include: site cleaning and restoration of surfaces within the job site; post-construction meeting; removal of all temporary facilities and equipment from the work area; disconnection of the temporary construction utilities; and turnover of a project to the Owner.

Contractor may apply for payment of Mobilization/Demobilization on a percent complete basis as the items covered in Mobilization are completed.

The final payment for Mobilization/Demobilization will not be issued until project completion.

The lump sum price shall be full compensation for the preparation and installation or submittal of these materials, and for all labor, equipment, tools and incidentals to complete this item.

Bid Item 2 - Water Pollution Control Plan and Implementation: The lump sum bid for Water Pollution Control Plan and Implementation includes, but is not limited to, preparation and implementation of the water pollution control plan and best management practices in accordance with the construction documents. The lump sum price shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Section 1: Kit Fox Court

Bit Item 3 - Hydrant Assembly: The per each price shall include all work and materials necessary to install hydrant assemblies as specified and shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for hydrant assemblies, gate valves, valve boxes, concrete, risers, piping, trenching, installation of bedding, connections, backfill and compaction, cleaning, temporary plating, temporary and final pavement, utility crossing protection, landscaping and irrigation system protection, restoration, and all incidentals required by these Specifications and Plans. The price per each shall be full compensation for the preparation and installation or submittal of these materials, and for all labor, equipment, tools and incidentals to complete this item.

Bid Item 4 - 6" PVC Pipe: The price per linear foot for 6-inch PVC pipe shall include all work and materials necessary to install new 6-inch PVC pipe in accordance with the construction documents. Measurement and payment shall be made per linear foot. The unit price shall be full compensation for trenching, joint bonding, joint restrain, installation of bedding, backfill and compaction, compaction testing, slurry, trench dams, temporary plating, utility crossing protection, landscaping and irrigation system protection, furnishing of pipe, all associated fittings, and all piping accessories not otherwise specified in this Provision. The price per linear foot shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 5 – 8" PVC Pipe: The price per linear foot for 8-inch PVC pipe shall include all work and materials necessary to install new 8-inch PVC pipe in accordance with the construction documents. Measurement and payment shall be made per linear foot. The unit price shall be full compensation for trenching, joint bonding, joint restrain, installation of bedding, backfill and compaction, compaction testing, slurry, trench dams, temporary plating, utility crossing protection, landscaping and irrigation system protection, furnishing of pipe, all associated fittings, and all piping accessories not otherwise specified in this Provision. The price per linear foot shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 6 - Gate Valve: The per each price shall include all work and materials necessary to install gate valves as shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for gate valves, valve boxes, risers, cleaning, and all incidentals required by these Specifications and Plans. The price per each shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 7 - Remove and Replace Hydrant Assembly: The per each price shall include all work and materials necessary to remove and replace hydrant assembly as specified and shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for removal of hydrant assembly, replacement of hydrant assembly, risers, bury, lateral piping, valve, fittings, connections to main, cleaning, restoration, disinfection and testing, and all incidentals required by these Specifications and Plans. The unit price per each shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 8 and 8a- Service Connection: The per each price shall include all work and materials necessary to remove and replace service connections as shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for pipe removal and disposal, new pipe for single and double service connections, installation of new pipe, trenching, backfilling, compacting, compaction testing, aggregate base, asphalt concrete, service connection(s) and testing, meter setter(s), meter box(s), remove and reinstall meter(s), landscape restoration, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 9 - Air Vacuum Release Valve: The per each price shall include all work and materials necessary to install air vacuum release valve assemblies as specified and shown in the construction documents. Measurement and payment shall be made on per each basis. The price shall be full compensation for air vacuum release assemblies, valve boxes, risers, connections, cleaning, restoration, and all incidentals required by these Specifications and Plans. The unit price

per each shall be full compensation for the preparation and installation or submittal of these materials, and for all labor, equipment, tools and incidentals to complete this item.

Section 2: Angel Camp Court

Bid Item 10 - Blowoff Assembly: The per each price shall include all work and materials necessary to install blowoff assemblies as specified and shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for blowoff assemblies, valves, valve boxes, risers, piping, trenching, installation of bedding, connections, backfill and compaction, cleaning, temporary plating, temporary and final pavement, utility crossing protection, landscaping and irrigation system protection, restoration, and all incidentals required by these Specifications and Plans. The price per each shall be full compensation for the preparation and installation or submittal of these materials, and for all labor, equipment, tools and incidentals to complete this item.

Bid Item 11 - 6" PVC Pipe: The price per linear foot for 6-inch PVC pipe shall include all work and materials necessary to install new 6-inch PVC pipe in accordance with the construction documents. Measurement and payment shall be made per linear foot. The unit price shall be full compensation for trenching, joint bonding, joint restrain, installation of bedding, backfill and compaction, compaction testing, slurry, temporary plating, utility crossing protection, landscaping and irrigation system protection, furnishing of pipe, all associated fittings, and all piping accessories not otherwise specified in this Provision. The price per linear foot shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 12 - Air Vacuum Release Valve: The per each price shall include all work and materials necessary to install air vacuum release valve assemblies as specified and shown in the construction documents. Measurement and payment shall be made on per each basis. The price shall be full compensation for air vacuum release assemblies, valve boxes, risers, connections, cleaning, restoration, and all incidentals required by these Specifications and Plans. The unit price per each shall be full compensation for the preparation and installation or submittal of these materials, and for all labor, equipment, tools and incidentals to complete this item.

Bid Item 13 - Gate Valve: The per each price shall include all work and materials necessary to install gate valves as shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for gate valves, valve boxes, risers, cleaning, and all incidentals required by these Specifications and Plans. The price per each shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 14 and 14a - Service Connection: The per each price shall include all work and materials necessary to remove and replace service connections as shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for pipe removal and disposal, new pipe for single and double service connections, installation of new pipe, trenching, backfilling, compacting, compaction testing, aggregate base, asphalt concrete, service connection(s) and testing, meter setter(s), meter box(s), remove and reinstall meter(s), landscape restoration, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 15 Chip Sealed Access Road: The per square yard price shall include all work and materials necessary to remove and replace the existing access road with a new 1/2" chip sealed road over native material, scarify 6" of native and compact to 95% relative compaction. Measurement and payment shall be made per square yard. The unit price shall be full compensation for road removal and disposal, new chip seal materials for the access road, installation of chip seal, and for all labor, equipment, tools, and incidentals to complete this item, per CalTrans 2018 Standard Specifications for Seal Coats, Section 37-2.

Experience and Qualifications

Number of years Bidder has been in the contracting business, under the present business name: 9 Years

Experience in work, of a nature similar to that covered in the bid extends, over a period of 25 years.

Has the Bidder ever failed to satisfactorily complete a contract awarded to it. Yes ____ No X

If yes, please explain:

_____

_____

_____

_____

_____

_____

_____

_____

List of Previous Contracts Completed by Contractor

	DATE	NAME OF PROJECT	CONTRACT AMOUNT	OWNER	PHONE #
1.	6/11/19	2017/2018 Water Mains & Services Replacement Project	1,631,317	San Juan Water District	916-791-6912
2.	07-2018	Baird Way Drainage Project	374,469	City of Citrus Heights	916-727-4770
3.	05-2018	Rainbow Bridge Waterline Rehabilitation Project	604,954	City of Folsom	916-461-6165
4.	01-2018	Sunrise Ave Pipe Repair	157,341	City of Roseville	916-774-5535
5.	07/2017	Water System Saddles Replacement	674,782	City of Davis	530-757-5686

Please attach separate sheet, if needed.

LIST OF SUBCONTRACTORS

The bidder shall list below the name and business address of each subcontractor who will perform work under this Contract in excess of one-half of one percent of the Contractor's total bid price, and shall also list the portion of the work which will be done by such subcontractor. After the opening of bids, no changes or substitutions will be allowed except as otherwise provided by law. The listing of more than one subcontractor for each item of work to be performed with the words "and/or" will not be permitted. All information must be provided for each subcontractor. Failure to comply with this requirement shall render the proposal (bid) non-responsive and shall cause its rejection. (Attach additional sheets if required.)

Work to be Performed	Subcontractor License #	Percent of Total Contract	Subcontractor's Name and Address
Trucking	CA0317131	10%	GR Trucking LLC 12584 White Rock Rd Rancho Cordova, CA 95742
Sawcutting	568673	3%	Penhall Company 9416 Specialty Circle Sacramento, CA 95828

THIS PAGE LEFT INTENTIONALLY BLANK.

ADDENDUM ACKNOWLEDGMENT

Bidder acknowledges receipt of the following addenda, which are attached to the proposal:

Addenda No. 1	Date: 8/8/19
Addenda No. 2	Date: 8/8/19
Addenda No.	Date:
Addenda No.	Date:

ADDENDA

This proposal is submitted with respect to the changes to the contract included in the Addenda Acknowledgment above.

To all the foregoing, and including all Bid Schedule(s), List of Subcontractor's, Worker's Compensation Certificate, and Non-Collusion Affidavit, said Bidder further agrees to complete the Work required under the Contract Documents within the Contract Time stipulated in said Contract Documents and to accept full payment therefore the Contract Price based on Lump Sum(s) and/or Unit Bid Price(s) named in the aforementioned Bid Schedule(s).

By my signature on this proposal I certify, under penalty of perjury under laws of the State of California and the United States of America, that the above is true and correct.

Date: 8/14

Bidder: Caggiano General Engineering, Inc.

By: _____
(Signature)

Title: Salvatore Caggiano, President

THIS PAGE LEFT INTENTIONALLY BLANK.

WORKERS' COMPENSATION CERTIFICATE

Owner and Description of Contract:

Georgetown Divide Public Utility District

2018 Treated Water Line Replacement Project

Labor Code Section 3700: *Every employer, except the State and all political subdivisions or institutions thereof, shall secure the payment of compensation in one or more of the following ways:*

(a) By being insured against liability to pay compensation in one or more insurer duly authorized to write compensation insurance in this State.

(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

Dated: 08-14-2019, 2017

Caggiano General Engineering, Inc.
(Contractor)

By: _____
(Signature)

President
(Official Title)

(SEAL)

(Labor Code Section 1861 provides that the above certificate must be signed and filed by the Contractor with the Owner prior to performing any work.)

THIS PAGE LEFT INTENTIONALLY BLANK.

NON-COLLUSION AFFIDAVIT

This Affidavit to be fully executed.

The undersigned declares:

I am the President of Caggiano General Engineering, Inc., the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on 08-14-2019 [date], at El Dorado Hills [city], California [state]."

Signature: _____

President, Secretary, Manager, Owner, or Representative

(Attach Notary Acknowledgment)

Print Name and Title below:

Salvatore Caggiano

President

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of El Dorado)

On August 14, 2019 before me, Cheri Charles, A Notary Public
(insert name and title of the officer)

personally appeared Salvatore Caggiano,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

CHERI CHARLES
COMM. # 2198209
NOTARY PUBLIC - CALIFORNIA
EL DORADO COUNTY
MY COMM. EXP. MAY 20, 2021

Signature Cheri Charles (Seal)

THIS PAGE LEFT INTENTIONALLY BLANK.

SIGNATURE SHEET

SIGNATURE NOTICE

If bidder or other person of legal interest is a corporation; state legal name of corporation, also names of the president, secretary, treasurer, and manager authorized to sign contracts; if a co-partnership, state true name of firm, also names of all individual copartners composing firm authorized to sign contracts; if Bidder or other interested person is an individual, state first and last names in full.

Provide the names of all persons of legal interest in the foregoing proposal as principals below:

Caggiano General Engineering, Inc.

President - Salvatore Caggiano

Secretary - Kristen Caggiano

Licensed in conformance with an act providing for the registration of contractors,

Contractor's License No.: 951282 Classification(s): Class A

Georgetown Divide Public Utility District

6425 Main Street
P.O.4240
Georgetown, CA 95634

2018 TREATED WATER LINE REPLACEMENT PROJECT

ADDENDUM NO. 1

August 7, 2019

This addendum forms a part of the Contract Documents and modifies the original Contract Documents as noted below. Acknowledge receipt of this addendum by including a signed copy of this addendum with bidder's proposal. Failure to do so may subject Bidder to disqualification.

Item #1: Response to Questions

A response to all bidders' questions is attached. Please see Attachment A of this addendum.

Item #2: Changes to Specifications

Page 1 and 4 of specifications:	Bid date was changed from August 13, 2019 to August 14, 2019.
Page 11 of the specifications:	Bid Schedule was updated to reflect two (2) blow off assemblies in Angel Camp Court for Item #10.
Page 11-15 of the specifications:	Service connection assembly's quantities were divided between single service and double service. See bid items #8, 8a, 14, and 14a.
Page 60 and 61 of specifications:	Street section specifications were changed to match the section as shown in the plan set.

Please see Attachment B of this addendum.

Item #3: Changes to Plans

Sheet C-1:	The ARV has been moved to the field verified location. "Typical Trench Detail" (Detail 1) was changed to reflect 24" minimum of service line cover. Construction Note 1 was revised for clarity, as well as General Notes 2 and 5.
Sheet C-2:	The access road is now to be 1/2" chip sealed over native. "Typical Trench Detail" (Detail 1) was changed to reflect 24" minimum of service line cover. Construction Note 1 was revised for clarity, as well as General Notes 2 and 5.

Please see Attachment C of this addendum.

Item #4: Change to Bid Due Date

The bid due date has been changed from August 13, 2019 at 2 PM to **August 14, 2019 at 2 PM**.

Item #5: Soils Report

At request of a potential bidder, please see Attachment D for a soils report near the project site.

Thank you in advance for your bids.

Dave Harden, PE (Engineer of Record, BEN|EN)

Steven Palmer, General Manager
Georgetown Divide Public Utility District

I acknowledge receipt of this addendum and all attachments by including a signed copy of this addendum with bidder's proposal. Failure to do so may subject Bidder to disqualification.

Bidders Signature **Date**

ATTACHMENT A

GDPUD 2018 TREATED WATER LINE REPLACEMENT
ADDENDUM NO. 1

Attachment A: Response to Questions

Question No.	Question	Response
1	Is there any specific place a temporary yard can be set up?	The District does not have any suitable yard space for the contractor. The contractor will be responsible to coordinate with land owner's or the Property Owners Association.
2	What are the rules for stockpiling and backfilling materials on the side of the road?	The contractor will be responsible to coordinate with land owner's or the Property Owners Association.
3	The access road to the water tank at Angel Camp Court is paved but in poor condition. Are we to saw cut the trench line and repave or demo and repave the entire access road?	The tank access road is to be 1/2" chip sealed over native. See updated specifications on page 15 for the bid item description.
4	Because we need to keep the existing water services live during the construction of the new services, are the meters and boxes installed next to the existing boxes? Who is responsible for hooking up the new services to the homes?	As stated on Page 4 of the Specifications, water service may be suspended for 8 hours to complete service and connection work. Since the Contractor is installing a new meter assembly and resetting the existing meter, then the Contractor is responsible for hooking up the new services to existing at the meter.
5	On page 11, "Bid Schedule" Item 10 states that there are 3 Blow off Assemblies for Angel Camp Court but he plans show 2. Can you please clarify?	There are two blow offs on Angel Camp Court. This has been updated in the Specifications.
6	On sheet C-1, Kit Fox Court at the end of the court station 4+42.68 it shows the ARV and one service being run off the same pipe. Is this is correct and if so what type of pipe is to be used, copper or poly?	No. The ARV has been field verified at a different location. The service of concern has been called out as a single service. Please see Sheet C-1 for changes.
7	It looks like we are supplying the new service meters is this correct?	No. The Contractor is responsible for resetting the existing water service meters. Construction Note 1 on Sheets C-1 and C-2 have been revised for clarity.
8	On the plans, sheet C-3 detail 1 "Pipe Trench and Road Restoration Detail" it shows the replacement AC being 6" thick or match existing whichever is greater, and over cut the edges of the trench by 6 inches. But the specs on page 60 state that all replacement AC is 4" thick or match existing whichever is greater and to over cut the edges of the trench by 9 inches on page 59 and 1 foot on page 60. Can you please clarify?	Detail 1 "Pipe Trench and Road Restoration Detail" on Sheet C-3 will take precedence. The AC is to be 6" thick or match existing, whichever is greater, and to over cut the edges of the trench by 6". The Specifications have been updated to reflect changes.
9	On sheet C-2 detail 1 "Typical Trench Detail" it shows the proposed services minimum coverage being 18" and on sheet C-3 detail 1 "Pipe Trench and Road Restoration Detail" it states service line minimum cover 24." Can you please clarify?	Minimum service line cover is 24" for cold climate protection. Detail 1 (Sheets C-1 and C-2) has been updated.
10	On page 11 of 68 "Bid Schedule" Items #8 and #14 for service assemblies on Kit Fox Court show 9 services and Angel Camp Court show 10 services. Shouldn't these be broken up by double service and single service?	Bid Schedule on Page 11 of the specifications has been updated to reflect quantities of single and double services.
11	Is there a Geological/Soils report that the bidders can review pertaining to both Kit Fox Court and Angel Camp Court?	There is a geologic/soils report from a nearby project. Please see Attachment D.
12	What protection do we have when we're trenching and run into something unforeseen (rock or hardpan) that would cause a loss of production and cost of equipment rental or hiring of a sub contractor?	It is not anticipated that rock or hardpan will be encountered. Please see the soils report in Attachment D.
13	What is the approximate depth of the existing and new water lines?	Valve operator to final grade was field measured to be about 48". This is assumed to be consistent across the project as as-builts do not show the depth of pipe.
14	Is GDPUD providing the field quality control testing for compaction?	See Section 7 of the Specifications.
15	Is the existing line and appurtenances required to be removed or abandoned in place?	See the Execution section of the Specifications beginning on Page 55.
16	Is there a bid bond required to bid on this project?	See Page 5 under the Request for Bids section.

ATTACHMENT B

Georgetown Divide Public Utility District

REQUEST FOR BIDS

2018 Treated Water Line Replacement Project

Bid Release Date:
July 15, 2019

Bids Due Date:
August 14, 2019

Bids shall be submitted by mail or delivered to:

Georgetown Divide Public Utility District
Attn: Steven Palmer
6425 Main Street
P.O. Box 4240
Georgetown, CA 95634

NOTICE TO CONTRACTORS

REQUEST FOR BIDS

2018 Treated Water Line Replacement Project

NOTICE IS HEREBY GIVEN that the Georgetown Divide Public Utility District ("District") will be accepting bids to replace aging and leaking pipelines servicing Kit Fox Court and Angel Camp Court in Auburn Lake Trails.

Bids are due no later than **August 14, 2019, at 2:00 PM** (Local Time), and may be mailed to the District Office or hand delivered at 6425 Main Street, Georgetown, CA 95634. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED." When using the mail or other delivery system, the Bidder is totally responsible for the mail or other delivery system delivering the Bid at the place and prior to the time indicated in the Advertisement for Bid.

This is a formal bid; therefore, bids will be opened and read aloud publicly on the bidding deadline.

General Work Description:

The project will generally consist of, but not limited to, the replacement of the existing 4-inch main with a 6-inch PVC pipeline and 8-inch PVC pipeline, installation of valves, appurtenances and replacement of service lines. The project consists of approximately 1500 linear feet of pipe, installation of blow off valve assembly's, installation of gate valves, removal and replacement of a fire hydrant, installation of air vacuum release valves and replacement of 19 service connections. In addition to the aforementioned work, it will also require trenching and repaving of sections of road. The project is located in northwestern El Dorado County, within the community of Auburn Lake Trails.

All work activities, including equipment and manpower access, are limited to the right of way of the road and easement to the tank site. All work activities relating to pipe replacement shall only occur when the main pipeline is out of service and/or not flowing water. Water service may only be suspended for 8 hours. Other work limitations are described in the project Specifications.

The Engineer's Estimate of Project Cost: $291,000.

Bids are required for the entire work described herein. Prospective bidders shall be licensed in the State of California and shall be skilled in the general class or type of work called for under the Contract. Each Bidder shall possess a "Class A" Contractors License, issued by the State of California, at the time of award.

The Contract Documents, including the Project Specifications, may be examined and acquired online at the District website, www.gd-pud.org/Bids-Proposals.

Each bid must be submitted on the prescribed forms. A bid security shall be provided with each bid. Bid security shall be in the amount of ten percent (10%) of the bid amount. The bid security

BID SCHEDULE

Georgetown Divide Public Utility District
2018 Treated Water Line Replacement Project

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	Mobilization/Demobilization	LS	1		
2	Water Pollution Control Plan and Implementation	LS	1		
3	Kit Fox Court- Section 1 **Hydrant Assembly**	EA	1		
4	Kit Fox Court- Section 1 **6" PVC Pipe**	LF	340		
5	Kit Fox Court- Section 1 **8" PVC Pipe**	LF	58		
6	Kit Fox Court- Section 1 **Gate Valve**	EA	3		
7	Kit Fox Court- Section 1 **Remove and Replace Hydrant Assembly**	EA	1		
8	Kit Fox Court- Section 1 **Single Service Connection Assembly**	EA	1		
8a	Kit Fox Court- Section 1 **Double Service Connection Assembly**	EA	4		
9	Kit Fox Court- Section 1 **Air Vacuum Release Valve**	EA	1		
10	Angel Camp Court- Section 2 **Blowoff Assembly**	EA	2		
11	Angel Camp Court- Section 2 **6" PVC Pipe**	LF	1096		
12	Angel Camp Court- Section 2 **Air Vacuum Release Valve**	EA	1		
13	Angel Camp Court- Section 2 **Gate Valve**	EA	3		
14	Angel Camp Court- Section 2 **Single Service Connection Assembly**	EA	2		
14a	Angel Camp Court- Section 2 **Double Service Connection Assembly**	EA	4		
15	Angel Camp Court- Section 2 **1/2" Chip Sealed Access Road**	SQ YD	400		

Total Bid Price _____

Total Amount in Words

BID ITEM DESCRIPTIONS

Bid Item 1 - Mobilization/Demobilization: The lump sum bid for Mobilization/Demobilization shall not exceed six percent (6%) of the total bid price.

Mobilization shall include: the obtaining of insurance and bonds; moving onto the site of all equipment; submittals and project schedules; obtaining and paying for all permits by other agencies as applicable and not delineated in other bid items; furnishing temporary construction utilities (temporary power, toilets, water, fences, etc.); installing construction signs; temporary buildings and field office trailer(s); establishment of temporary site access and staging area; and other construction all as required for the proper performance and completion of work, as needed.

Demobilization shall include: site cleaning and restoration of surfaces within the job site; post-construction meeting; removal of all temporary facilities and equipment from the work area; disconnection of the temporary construction utilities; and turnover of a project to the Owner.

Contractor may apply for payment of Mobilization/Demobilization on a percent complete basis as the items covered in Mobilization are completed.

The final payment for Mobilization/Demobilization will not be issued until project completion.

The lump sum price shall be full compensation for the preparation and installation or submittal of these materials, and for all labor, equipment, tools and incidentals to complete this item.

Bid Item 2 - Water Pollution Control Plan and Implementation: The lump sum bid for Water Pollution Control Plan and Implementation includes, but is not limited to, preparation and implementation of the water pollution control plan and best management practices in accordance with the construction documents. The lump sum price shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Section 1: Kit Fox Court

Bit Item 3 - Hydrant Assembly: The per each price shall include all work and materials necessary to install hydrant assemblies as specified and shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for hydrant assemblies, gate valves, valve boxes, concrete, risers, piping, trenching, installation of bedding, connections, backfill and compaction, cleaning, temporary plating, temporary and final pavement, utility crossing protection, landscaping and irrigation system protection, restoration, and all incidentals required by these Specifications and Plans. The price per each shall be full compensation for the preparation and installation or submittal of these materials, and for all labor, equipment, tools and incidentals to complete this item.

Bid Item 4 - 6" PVC Pipe: The price per linear foot for 6-inch PVC pipe shall include all work and materials necessary to install new 6-inch PVC pipe in accordance with the construction documents. Measurement and payment shall be made per linear foot. The unit price shall be full compensation for trenching, joint bonding, joint restrain, installation of bedding, backfill and compaction, compaction testing, slurry, trench dams, temporary plating, utility crossing protection, landscaping and irrigation system protection, furnishing of pipe, all associated fittings, and all piping accessories not otherwise specified in this Provision. The price per linear foot shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 5 – 8" PVC Pipe: The price per linear foot for 8-inch PVC pipe shall include all work and materials necessary to install new 8-inch PVC pipe in accordance with the construction documents. Measurement and payment shall be made per linear foot. The unit price shall be full compensation for trenching, joint bonding, joint restrain, installation of bedding, backfill and compaction, compaction testing, slurry, trench dams, temporary plating, utility crossing protection, landscaping and irrigation system protection, furnishing of pipe, all associated fittings, and all piping accessories not otherwise specified in this Provision. The price per linear foot shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 6 - Gate Valve: The per each price shall include all work and materials necessary to install gate valves as shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for gate valves, valve boxes, risers, cleaning, and all incidentals required by these Specifications and Plans. The price per each shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 7 - Remove and Replace Hydrant Assembly: The per each price shall include all work and materials necessary to remove and replace hydrant assembly as specified and shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for removal of hydrant assembly, replacement of hydrant assembly, risers, bury, lateral piping, valve, fittings, connections to main, cleaning, restoration, disinfection and testing, and all incidentals required by these Specifications and Plans. The unit price per each shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 8 and 8a- Service Connection: The per each price shall include all work and materials necessary to remove and replace service connections as shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for pipe removal and disposal, new pipe for single and double service connections, installation of new pipe, trenching, backfilling, compacting, compaction testing, aggregate base, asphalt concrete, service connection(s) and testing, meter setter(s), meter box(s), remove and reinstall meter(s), landscape restoration, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 9 - Air Vacuum Release Valve: The per each price shall include all work and materials necessary to install air vacuum release valve assemblies as specified and shown in the construction documents. Measurement and payment shall be made on per each basis. The price shall be full compensation for air vacuum release assemblies, valve boxes, risers, connections, cleaning, restoration, and all incidentals required by these Specifications and Plans. The unit price

per each shall be full compensation for the preparation and installation or submittal of these materials, and for all labor, equipment, tools and incidentals to complete this item.

Section 2: Angel Camp Court

Bid Item 10 - Blowoff Assembly: The per each price shall include all work and materials necessary to install blowoff assemblies as specified and shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for blowoff assemblies, valves, valve boxes, risers, piping, trenching, installation of bedding, connections, backfill and compaction, cleaning, temporary plating, temporary and final pavement, utility crossing protection, landscaping and irrigation system protection, restoration, and all incidentals required by these Specifications and Plans. The price per each shall be full compensation for the preparation and installation or submittal of these materials, and for all labor, equipment, tools and incidentals to complete this item.

Bid Item 11 - 6" PVC Pipe: The price per linear foot for 6-inch PVC pipe shall include all work and materials necessary to install new 6-inch PVC pipe in accordance with the construction documents. Measurement and payment shall be made per linear foot. The unit price shall be full compensation for trenching, joint bonding, joint restrain, installation of bedding, backfill and compaction, compaction testing, slurry, temporary plating, utility crossing protection, landscaping and irrigation system protection, furnishing of pipe, all associated fittings, and all piping accessories not otherwise specified in this Provision. The price per linear foot shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 12 - Air Vacuum Release Valve: The per each price shall include all work and materials necessary to install air vacuum release valve assemblies as specified and shown in the construction documents. Measurement and payment shall be made on per each basis. The price shall be full compensation for air vacuum release assemblies, valve boxes, risers, connections, cleaning, restoration, and all incidentals required by these Specifications and Plans. The unit price per each shall be full compensation for the preparation and installation or submittal of these materials, and for all labor, equipment, tools and incidentals to complete this item.

Bid Item 13 - Gate Valve: The per each price shall include all work and materials necessary to install gate valves as shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for gate valves, valve boxes, risers, cleaning, and all incidentals required by these Specifications and Plans. The price per each shall be full compensation for the preparation and installation of these materials, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 14 and 14a - Service Connection: The per each price shall include all work and materials necessary to remove and replace service connections as shown in the construction documents. Measurement and payment shall be made on a per each basis. The unit price shall be full compensation for pipe removal and disposal, new pipe for single and double service connections, installation of new pipe, trenching, backfilling, compacting, compaction testing, aggregate base, asphalt concrete, service connection(s) and testing, meter setter(s), meter box(s), remove and reinstall meter(s), landscape restoration, and for all labor, equipment, tools, and incidentals to complete this item.

Bid Item 15 Chip Sealed Access Road: The per square yard price shall include all work and materials necessary to remove and replace the existing access road with a new 1/2" chip sealed road over native material, scarify 6" of native and compact to 95% relative compaction. Measurement and payment shall be made per square yard. The unit price shall be full compensation for road removal and disposal, new chip seal materials for the access road, installation of chip seal, and for all labor, equipment, tools, and incidentals to complete this item, per CalTrans 2018 Standard Specifications for Seal Coats, Section 37-2.

K. Compact each lift to the relative compaction specified herein.

L. Push the backfill material carefully onto the backfill previously placed in the pipe zone. Do not permit free fall of the material until at least 2 feet of cover is provided over the top of the pipe. Do not drop sharp, heavy pieces of material directly onto the pipe or the tamped material around the pie. Do not operate heavy equipment over the pipe until at least 3 feet of backfill has been placed and compacted over the pipe.

M. When pipelaying is not in progress, including the noon hours, close the open ends of pipe. Do not allow trench water, animals, or foreign material to enter the pipe.

N. Remove and dispose of all water entering the trench during the process of pipelaying. Keep the trench dry until the pipelaying and jointing are completed.

Backfill Compaction:

Compact per the detailed piping specification for the particular type of pipe and per the following:

A. Compact trench backfill to the specified relative compaction. Compact by using mechanical compaction or hand tamping. Do not use high impact hammer-type equipment except where the pipe manufacturer warrants in writing that such use will not damage the pipe. Ponding or jetting is not allowed.

B. Compact material placed within 12-inches of the outer surface of the pipe by hand tamping only.

C. Do not use any axle-driven or tractor-drawn compaction equipment within 5 feet of building walls, foundations, or other structures

Cement Slurry Backfill:

When cement slurry backfill is utilized, pipe shall be supported by mounding imported backfill material or sandbags filled with imported backfill material. Pipe shall not be supported on wooden or concrete blocks.

Asphalt Concrete Paving:

Removal of Pavement:

A. Initially cut asphalt concrete pavement with pneumatic pavement cutter or other equipment at the limits of the excavation and remove the pavement. After backfilling the excavation, saw cut asphalt concrete pavement to the full depth of pavement at a point not less than 6 inches outside the limits of the excavation or the previous pavement cut, whichever is greater, and remove the additional pavement.

B. Saw cut concrete pavement, including cross gutters, curbs and gutters, sidewalks, and driveways, to the full depth of pavement at a point 6 inches beyond the edge of the excavation and remove the pavement.

The concrete pavement may initially be cut at the limits of the excavation by other methods prior to removal and the saw cut made after backfilling the excavation. If the saw cut falls within 3 feet of a concrete joint or pavement edge, remove the concrete to the joint or edge.

C. Make arrangements for and dispose of the removed pavement.

D. Final pavement saw cuts shall be straight along both sides of trenches, parallel to the pipeline alignment, and provide clean, solid, vertical faces free from loose material. Saw cut and remove damaged or disturbed adjoining pavement. Saw cuts shall be parallel to the pipeline alignment or the roadway centerline or perpendicular to same.

Pavement Replacement:

The pavement replacement shall be as follows:

Existing Pavement Sections		
Name of Streets	**A.C. Pave (inches)**	**Aggregate Base (inches)**
All Streets	6 inches or match existing, whichever is greater	16

Producing, hauling, placing, compacting, and finishing of asphalt concrete shall conform to Section 39 of the State Specifications. Apply seal coat to all paving except open asphalt concrete.

Where new paving joins existing paving, saw cut the existing surfaces 12 inches back from the joint line full depth. Dispose of waste material offsite. Tack prior to placing the asphalt concrete. Meet lines shall be straight and the edges vertical. Paint the edges of meet line cuts with liquid asphalt or emulsified asphalt prior to placing asphalt concrete. After placing the asphalt concrete, seal the meet line by painting with a liquid asphalt or emulsified asphalt and then immediately cover with clean, dry sand.

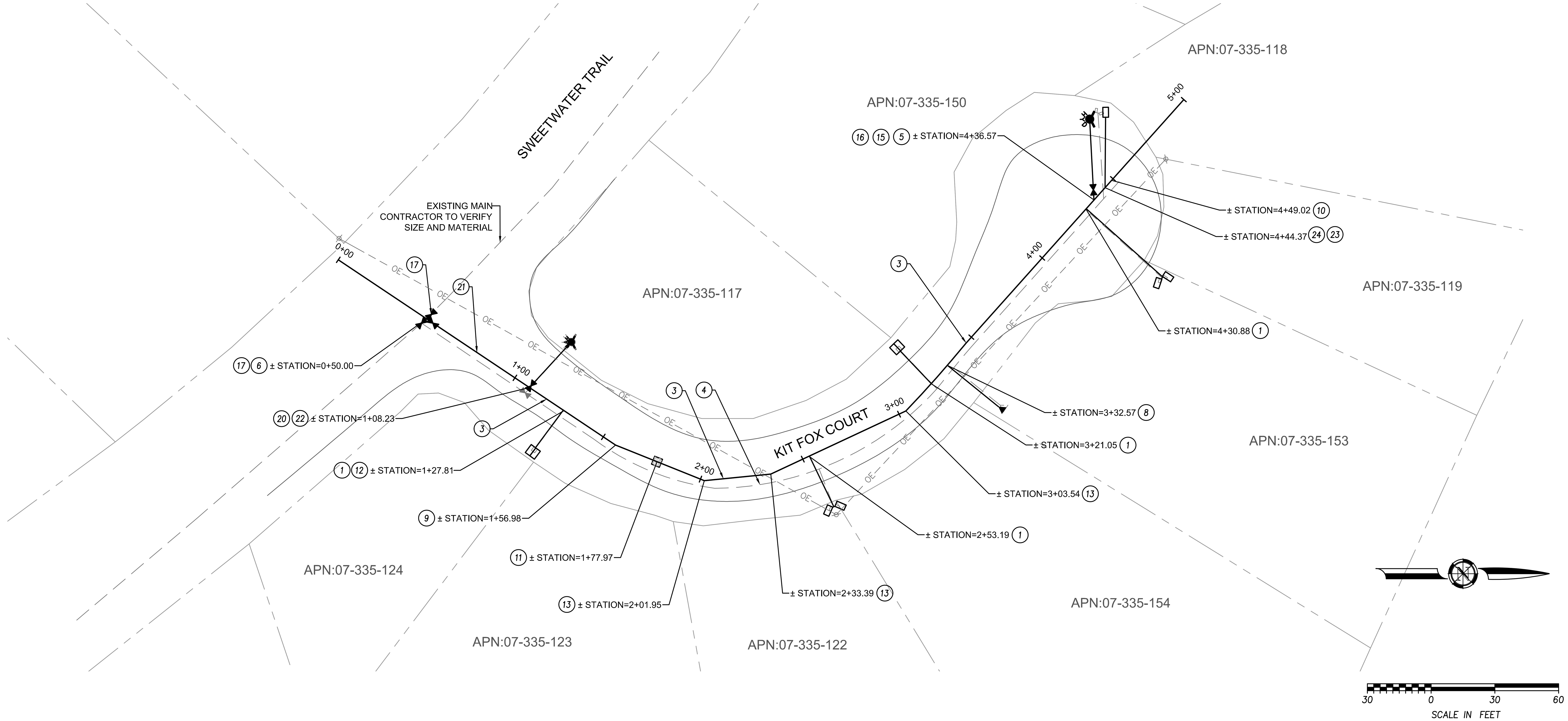
Preparing Subgrade:

A. Scarify subgrade to a depth of 12-inches below finished subgrade elevation and compact to 95% minimum relative compaction. Shape subgrade to line, grade, and cross section shown in the drawings. The subgrade shall be considered to extend over the full width of the base course.

B. The finished subgrade shall be within a tolerance of 0.05 of a foot of the grade and cross section shown and shall be smooth and free from irregularities and at the specified relative compaction.

Placing and Compacting AB:

ATTACHMENT C



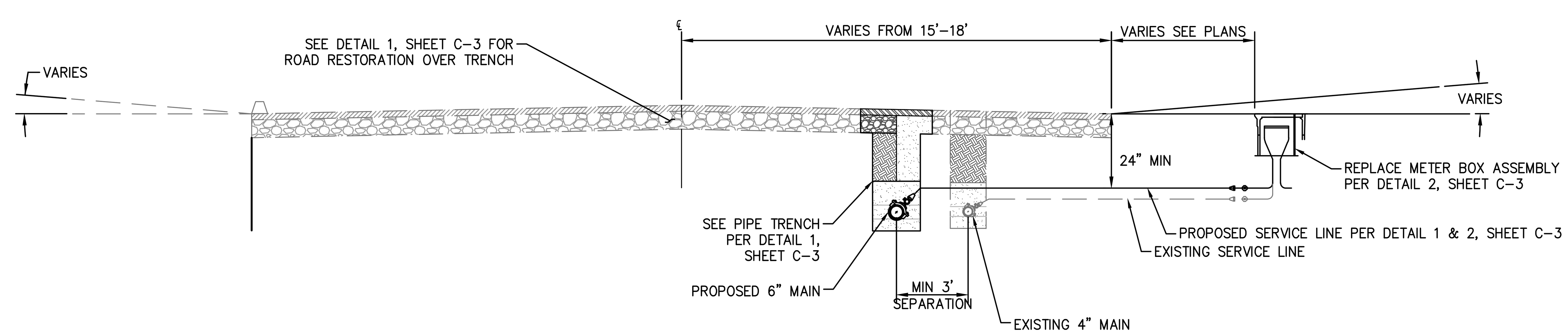
CONSTRUCTION NOTES

*NOTES MAY NOT APPLY TO ALL SHEETS

1. INSTALL NEW DOUBLE SERVICE ASSEMBLY, AND REPLACE METER WITH EXISTING METER PER DETAIL 2, SHEET C-3 AFTER INSTALLATION OF NEW WATER SERVICE LINE
2. INSTALL 2" COLD CLIMATE BLOW OFF ASSEMBLY PER DETAIL 10, SHEET C-4
3. INSTALL 6" PVC C-900 (DR-18) PIPE PER DETAIL 1, SHEET C-3
4. EXISTING 4" PVC PIPE TO BE REMOVED OR PLUGGED AND ABANDONED IN PLACE AFTER FINAL TIE IN OF NEW WATER MAIN
5. INSTALL NEW HYDRANT, HYDRANT RUN AND VALVE PER DETAIL 7, SHEET C-3 CONTRACTOR TO COORDINATE LOCATION WITH DISTRICT AND PROPERTY OWNER
6. CUT IN TEE TO EXISTING MAIN ALONG SWEETWATER TRAIL PER DETAIL 6, SHEET C-3
7. TIE-IN TO EXISTING PUMP STATION PIPING
8. INSTALL 1" AVRV PER DETAIL 9, SHEET C-4 CONTRACTOR TO IDENTIFY AND INSTALL AT HIGH POINT OF WATER LINE
9. INSTALL 6" X 11.25° RESTRAINED DI ELBOW
10. END 6" WATER MAIN
11. INSTALL MINIMUM 4' LONG X 4' WIDE X 5' DEEP 2 SACK SLURRY TRENCH DAM, TRENCH DAM SHALL KEY 12" INTO THE TRENCH WALLS AND BOTTOM
12. INSTALL 2' SCH 40 NIPPLE WITH CAP ON PRIVATE SIDE OF METER SETTER FOR FUTURE DEVELOPMENT
13. INSTALL 6" X 22.5° RESTRAINED DI ELBOW
14. PROTECT IN PLACE EXISTING HYDRANT, LATERAL AND FEED MAIN
15. INSTALL 6" X 45° RESTRAINED DI ELBOW
16. INSTALL 6" FLANGED DI TEE
17. INSTALL FLANGED GATE VALVE PER DETAIL 5 ON SHEET C-3
18. INSTALL 6" X 22.5° RESTRAINED DI ELBOW
19. INSTALL 6" X 90° RESTRAINED DI ELBOW
20. INSTALL 8" X 6" X 6" REDUCING DI TEE (OR 8" DI TEE WITH REDUCERS)
21. INSTALL 8" PVC C-900 (DR-18) PIPE PER DETAIL 1, SHEET C-3
22. EXISTING HYDRANT AND LATERAL TO BE REMOVED, INSTALL NEW HYDRANT, HYDRANT RUN AND VALVE PER DETAIL 7, SHEET C-3
23. REMOVE AND SALVAGE EXISTING AVRV
24. INSTALL NEW SINGLE SERVICE ASSEMBLY, AND REPLACE METER WITH EXISTING METER PER DETAIL 2, SHEET C-3 AFTER INSTALLATION OF NEW WATER SERVICE LINE

GENERAL NOTES

1. MINIMUM HORIZONTAL SEPARATION BETWEEN THE EXISTING MAIN AND PROPOSED MAIN SHALL BE 3' CENTER LINE OF PIPE TO CENTER LINE OF PIPE
2. THE CONTRACTOR SHALL CONTACT GDPUD A MINIMUM OF 2 DAYS IN ADVANCE OF RESETTING METERS
3. END OF LINE BLOW OFFS (INCLUDING TEMPORARY BLOW OFFS) AND HYDRANT BURYS SHALL HAVE A THRUST BLOCK AS WELL AS FULL RESTRAINED LENGTH
4. THE MINIMUM RESTRAINED LENGTH FROM ANY FITTING SHALL BE 18' IN ALL DIRECTIONS AND 54' FROM BLOW OFFS (INCLUDING TEMPORARY BLOWOFFS)
5. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL WATER METERS IN NEW METER BOX ASSEMBLY
6. EXISTING WATER SERVICE LINE TO BE REMOVED OR ABANDONED IN PLACE AFTER CONNECTION OF NEW WATER SERVICE
7. CONTRACTOR SHALL IDENTIFY SIZE, TYPE AND EXACT LOCATIONS OF ALL EXISTING UTILITIES



1 / - **TYPICAL TRENCH SECTION**
NTS

LEGEND:

————	PROPOSED WATER LINE
— OE — OE —	OVERHEAD POWER
————	EDGE OF PAVEMENT
— — —	PARCEL LINE
— — —	EXISTING MAIN

NO.	REVISIONS	BY	DATE
1			
2			
3			
4			
5			
6			

BENCH MARK ELEV: XX DATUM: XX
DESCRIPTION:
X
X
X
X
X

DESIGN BY:	D. HARDEN
DRAWN BY:	A. DUNAWAY
CHECKED BY:	G. RODELL
SCALE:	SEE PLANS
DATE:	7/3/2019
PROJ NO.:	18112

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER DAVID P. HARDEN No. C84216 CIVIL STATE OF CALIFORNIA

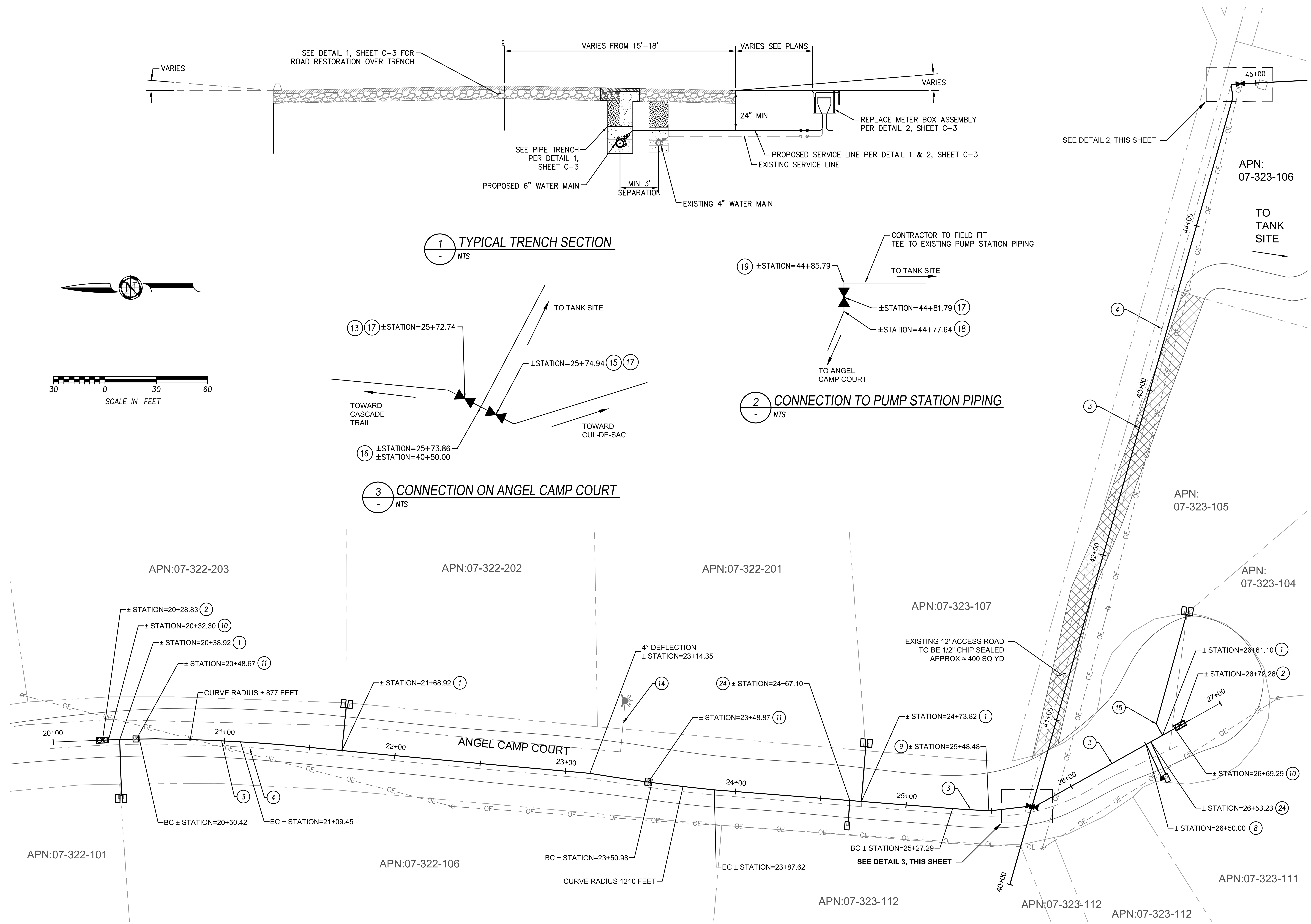
BEN|EN
TRUSTED ENGINEERING ADVISORS

Bennett Engineering Services
1082 Sunrise Avenue, Suite 100
Roseville, California 95661
T 916.783.4100
F 916.783.4110

2018 TREATED WATER LINE REPLACEMENT PROJECT
GDPUD
SECTION 1 KIT FOX COURT
GEORGETOWN DIVIDE PUBLIC UTILITIES DISTRICT CALIFORNIA

C-1
3 OF 6

Login Name: adunaway Plot Date: August 07, 2019 - 9:26 am; Plot Style: ####
File Name: P:\Pro\18112-GDPUD-2018 Pipeline and Const\03-PLANS\MASTERS\SHEETS\2018 Pipeline\7 C-.dwg
XREFS: BDR-18112_H_22x34 | XR-BASEMAP-BRANDON | DR-UTIL



CONSTRUCTION NOTES *NOTES MAY NOT APPLY TO ALL SHEETS

1. INSTALL NEW DOUBLE SERVICE ASSEMBLY, AND REPLACE METER WITH EXISTING METER PER DETAIL 2, SHEET C-3 AFTER INSTALLATION OF NEW WATER SERVICE LINE
2. INSTALL 2" COLD CLIMATE BLOW OFF ASSEMBLY PER DETAIL 10, SHEET C-4
3. INSTALL 6" PVC C-900 (DR-18) PIPE PER DETAIL 1, SHEET C-3
4. EXISTING 4" PVC PIPE TO BE REMOVED OR PLUGGED AND ABANDONED IN PLACE AFTER FINAL TIE IN OF NEW WATER MAIN
5. INSTALL NEW HYDRANT, HYDRANT RUN AND VALVE PER DETAIL 7, SHEET C-3 CONTRACTOR TO COORDINATE LOCATION WITH DISTRICT AND PROPERTY OWNER
6. CUT IN TEE TO EXISTING MAIN ALONG SWEETWATER TRAIL PER DETAIL 6, SHEET C-3
7. TIE-IN TO EXISTING PUMP STATION PIPING
8. INSTALL 1" AVRV PER DETAIL 9, SHEET C-4 CONTRACTOR TO IDENTIFY AND INSTALL AT HIGH POINT OF WATER LINE
9. INSTALL 6" X 11.25° RESTRAINED DI ELBOW
10. END 6" WATER MAIN
11. INSTALL MINIMUM 4' LONG X 4' WIDE X 5' DEEP 2 SACK SLURRY TRENCH DAM, TRENCH DAM SHALL KEY 12" INTO THE TRENCH WALLS AND BOTTOM
12. INSTALL 2' SCH 40 NIPPLE WITH CAP ON PRIVATE SIDE OF METER SETTER FOR FUTURE DEVELOPMENT
13. INSTALL 6" X 22.5° RESTRAINED DI ELBOW
14. PROTECT IN PLACE EXISTING HYDRANT, LATERAL AND FEED MAIN
15. INSTALL 6" X 45° RESTRAINED DI ELBOW
16. INSTALL 6" FLANGED DI TEE
17. INSTALL FLANGED GATE VALVE PER DETAIL 5 ON SHEET C-3
18. INSTALL 6" X 22.5° RESTRAINED DI ELBOW
19. INSTALL 6" X 90° RESTRAINED DI ELBOW
20. INSTALL 8" X 6" X 6" REDUCING DI TEE (OR 8" DI TEE WITH REDUCERS)
21. INSTALL 8" PVC C-900 (DR-18) PIPE PER DETAIL 1, SHEET C-3
22. EXISTING HYDRANT AND LATERAL TO BE REMOVED, INSTALL NEW HYDRANT, HYDRANT RUN AND VALVE PER DETAIL 7, SHEET C-3
23. REMOVE AND SALVAGE EXISTING AVRV
24. INSTALL NEW SINGLE SERVICE ASSEMBLY, AND REPLACE METER WITH EXISTING METER PER DETAIL 2, SHEET C-3 AFTER INSTALLATION OF NEW WATER SERVICE LINE

GENERAL NOTES

1. MINIMUM HORIZONTAL SEPARATION BETWEEN THE EXISTING MAIN AND PROPOSED MAIN SHALL BE 3' CENTER LINE OF PIPE TO CENTER LINE OF PIPE
2. THE CONTRACTOR SHALL CONTACT GDPUD A MINIMUM OF 2 DAYS IN ADVANCE OF RESETTING METERS
3. END OF LINE BLOW OFFS (INCLUDING TEMPORARY BLOW OFFS) AND HYDRANT BURYS SHALL HAVE A THRUST BLOCK AS WELL AS FULL RESTRAINED LENGTH
4. THE MINIMUM RESTRAINED LENGTH FROM ANY FITTING SHALL BE 18' IN ALL DIRECTIONS AND 54' FROM BLOW OFFS (INCLUDING TEMPORARY BLOWOFFS)
5. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL WATER METERS IN NEW METER BOX ASSEMBLY
6. EXISTING WATER SERVICE LINE TO BE REMOVED OR ABANDONED IN PLACE AFTER CONNECTION OF NEW WATER SERVICE
7. CONTRACTOR SHALL IDENTIFY SIZE, TYPE AND EXACT LOCATIONS OF ALL EXISTING UTILITIES

LEGEND:

- PROPOSED WATER LINE
- OVERHEAD POWER
- EDGE OF PAVEMENT
- PARCEL LINE
- EXISTING WATER MAIN

Login Name: adunaway Plot Date: August 07, 2019 - 9:26 am; Plot Style: ### File Name: P:\Pro\18112-GDPUD-2018 Pipeline and Const\03-PLANS\MASTERS\SHEETS\2018 Pipeline\7 C-dwg XREFS: BDR-18112_H_22x34 | XR-BASEMAP-BRANDON | DR-UTIL

NO.	REVISIONS	BY	DATE
1			
2			
3			
4			
5			
6			

BENCH MARK ELEV: XX DATUM: XX
DESCRIPTION:
X
X
X
X
X

DESIGN BY:	D. HARDEN
DRAWN BY:	A. DUNAWAY
CHECKED BY:	G. RODELL
SCALE:	SEE PLANS
DATE:	8/7/2019
PROJ NO.:	18112

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

REGISTERED PROFESSIONAL ENGINEER DAVID P. HARDEN No. C84216 CIVIL STATE OF CALIFORNIA

BEN|EN TRUSTED ENGINEERING ADVISORS

Bennett Engineering Services
1082 Sunrise Avenue, Suite 100
Roseville, California 95661
T 916.783.4100
F 916.783.4110

2018 TREATED WATER LINE REPLACEMENT PROJECT

GDPUD

SECTION 2 ANGEL CAMP COURT

GEORGETOWN DIVIDE PUBLIC UTILITIES DISTRICT CALIFORNIA

C-2
4 OF 6

ATTACHMENT D

GEOTECHNICAL ENGINEERING STUDY
for
AUBURN LAKE TRAILS
WATER TREATMENT PLANT
Greenwood, California

Project No. E10208.000
January 2011

YOUNGDAHL
CONSULTING GROUP, INC.
GEOTECHNICAL • ENVIRONMENTAL • MATERIALS TESTING

YOUNGDAHL CONSULTING GROUP, INC
Building Innovative Solutions

1234 Glenhaven Court, El Dorado Hills, Ca 95762
5750 Arabian Lane, Loomis, Ca 95650
ph 916.933.0633 fx 916.933.6482
www.youngdahl.net

Psomas
1075 Creekside Ridge Drive, Suite #200
Roseville, California 95678

Project No. E10208.000
19 January 2011

Attention: Mr. Roger Kohne

Subject: **AUBURN LAKE TRAILS WATER TREATMENT PLANT**
Sweetwater Trail, Greenwood, El Dorado County, California
GEOTECHNICAL ENGINEERING STUDY

Reference:
1. Draft Auburn Lake Trails WTP Proposed Site Plan, prepared by Psomas.
2. Agreement between Psomas and Subconsultant, prepared by Psomas, executed, 8 November 2010.
3. Proposal for Auburn Lake Trails Water Treatment Plan GES, prepared by Youngdahl Consulting Group, Inc.

Dear Mr. Kohne:

In accordance with your authorization, Youngdahl Consulting Group, Inc. has performed a geotechnical engineering study for the project site located on the west side of Sweetwater Trail in Greenwood, El Dorado County, California. The purpose of this study was to explore and evaluate the surface and subsurface soil conditions at the site and to develop geotechnical information and design criteria for the proposed project. Our scope was limited to a subsurface investigation, laboratory testing, and preparation of this report per our proposal dated 7 December 2011.

Based upon our field study, subsurface exploration program, laboratory testing and engineering analysis, we believe the primary geotechnical issues to be addressed consist of shallow bedrock, processing of loose surface soils, and drainage/groundwater conditions associated with shallow bedrock. Other geotechnical issues may become more apparent during grading operations which are not listed above. The descriptions, findings, conclusions and recommendations provided in this report are formulated as a whole, and specific conclusions or recommendations should not be derived or used out of context. Please review the limitations and uniformity of conditions section of this report.

This report has been prepared for the exclusive use of Psomas Engineering and their consultants, for specific application to this project, in accordance with generally accepted geotechnical engineering practice. Should you have any questions or require additional information, please contact our office at your convenience.

Very truly yours,
Youngdahl Consulting Group, Inc.

Matthew J. Gross, P.E.
Staff Engineer

Reviewed by:

Martha A. McDonnell, P.E.
Associate Engineer

REGISTERED PROFESSIONAL ENGINEER
MARTHA A. McDONNELL
NO. 042560
Exp. 3/12
CIVIL
STATE OF CALIFORNIA

Distribution: (4) to Client

TABLE OF CONTENTS

GEOTECHNICAL ENGINEERING STUDY
for
AUBURN LAKE TRAILS WATER TREATMENT PLANT

1.0 INTRODUCTION

This report presents the results of our Geotechnical Engineering Study performed for the proposed replacement of the Auburn Lake Trails Water Treatment Plant planned to be constructed on the open hill side between the existing treatment plant and Sweetwater Trail. The water treatment facility is location west of Sweetwater Trail, immediately south of the Gate 3 entrance to the Auburn Lake Trails residential district in Greenwood, El Dorado County, California. Refer to Figure A-1 for a vicinity map for the project site.

Purpose and Scope

The purpose of this study was to explore and evaluate the surface and subsurface conditions at the site and to develop geotechnical information and design criteria for the proposed project. The scope of this study includes the following:

- A review of geotechnical and geologic data available to us at the time of our study;
- A field study consisting of a visual site reconnaissance and an exploratory test pit program to characterize the subsurface conditions;
- A laboratory testing program performed on representative samples collected during our field study;
- Engineering analysis of the data and information obtained from our field study, laboratory testing, and literature review.
- Development of recommendations for site preparation and grading, and geotechnical design criteria for foundations, slabs on grade, retaining structures, and underground facilities.
- Preparation of this report summarizing our findings, conclusions, and recommendations regarding the geotechnical aspects for the project.

2.0 PROJECT UNDERSTANDING

Based on the proposed layout plans (Reference 1), we understand that the proposed improvements are expected to include an upgrade to the existing water treatment plant. New will include new filter building and raw water pumps station, a 300,000 gallon storage tank, a dewatering basin, and appurtenant construction for facility operations. The new buildings are anticipated to be one-story and of masonry block construction with concrete slab-on-grade floors. All of the proposed buildings and structures are anticipated to be construction on conventional shallow foundations.

Background

The Auburn Lake Trails subdivision began development in the early 1970s and included the construction of the existing water treatment plant and adjacent storage reservoir. Since that time, minor upgrades have been performed at the plant, including construction of new tanks and filters. With the exception of the minor upgrades, the facility has remained generally unchanged. We understand that the proposed changes included construction of a new facility and closing of the existing facility to construct water treatment operations in accordance with the current standards.

If studies or plans exist that pertain to the site which are not cited as a reference in this report, we should be afforded the opportunity to review and modify our conclusions and recommendations as necessary.

3.0 FINDINGS

Surface Observations

The project site is roughly triangular in shape and is bordered on the northwest by an existing storage reservoir and dam, to the northeast by Sweetwater Trail, and to the south by rural residential construction. The residential area is above the water treatment plant and is separated by steep, tree covered hillsides. The existing facility is located on the west half of the site and consists of four general parts; one general facility building with three filter tanks at the southeast, two clarifying tanks at the northeast, one small lab building to the northwest, and two unlined detention ponds at the southwest. The area of the existing facility is generally graded to slope toward the detention ponds with flat pads constructed for the existing facility structures. The general facility building is raised above the other structures by approximately 4 to 6 feet with short fill-slopes and a two-foot wall completing the grade differential.

The proposed construction areas located on the each half of the project site are generally undeveloped. The terrain slopes downward from the southeast to the northwest at a gradient of about 5H:1V or 6H:1V (Horizontal:Vertical). Riser/ventilation pipes for an existing septic system were located on the south side of the site (near test pit TP-1) which is immediately adjacent to the proposed construction.

Subsurface Conditions

Our subsurface study consisted of an exploratory test pit excavation program on 7 December 2010 under the direction of a Psomas Engineering representative. Our field representative observed and documented the subsurface conditions at the test pit locations and collected bulk samples of the subsurface soils for laboratory review. The approximate locations of the test pits are shown on Figure A-2, Appendix A. A description of the field exploration is also provided in Appendix A.

Test pits TP-1, TP-2, and TP-5 were excavated on the hillside area to observe the subsurface conditions at the proposed new filter building and tank areas. The soil conditions in these test pits generally consisted of silty SAND or SAND (FILL) in a loose and moist to very moist condition to a depth of about 3 to 5 feet. The loose soil materials in test pit TP-1 and TP-5 graded to a medium dense condition at 4 and 3 feet, respectively with a 1 foot thick clay layer in a stiff and slightly moist condition below the sand at test pit TP-1. Below the soils in test pits TP-1, TP-2, and TP-5, our representative observed approximately 2 to 3 feet of completely to highly weathered metasedimentary bedrock which transitioned to moderately weathered bedrock to the maximum depth of exploration.

Explorations performed at test pits TP-3 and TP-4 encountered near surface soil conditions differing from the hillside exploration. The excavation at test pit TP-3 (ponds) exposed approximately 3 feet of loose and wet fill materials consisting of silty SAND and SAND with gravel and rock fragments. Bedrock was encountered below the fill soils and consisted of metasedimentary bedrock in a moderately weathered, closely fractured, and moderately friable condition to the maximum depth of exploration of 6 feet. Seepage was observed during the excavation starting at a depth of 1 foot below grade and caving of the test pit sidewall (including the bedrock) occurred following the excavation.

At test pit TP-4, our representative observed approximately 1 foot of gravel roadbase in a loose and slightly moist condition overlying silty SAND in a loose to moderately dense and very moist condition. It appeared that the upper 1 foot of the soils underlying the gravel roadbase were

generally more dense than the rest of the sand layer. Underlying the sands, our representative observed metasedimentary BEDROCK in a moderately weathered, closely fractures, and moderate to slightly friable condition to the maximum depth of exploration.

Effective refusal was encountered at depth of 6 to 10 feet with the equipment used for our study. If desired, a detailed seismic refraction study can provide more information regarding subsurface rock conditions and rippability.

A more detailed description of the subsurface conditions encountered is presented graphically on the "Exploratory Test Pit Logs", Figures A-3 through A-7, presented in Appendix A. These logs show a graphic interpretation of the subsurface profile, the location and depths at which samples were collected.

Groundwater Conditions
With the exception of test pit TP-3, groundwater was generally not encountered during our explorations. Subsurface water conditions typically vary in the foothill region. Our experience in the area shows that water may be perched on less weathered rock and present in the fractures, and seams of the weathered rock found beneath the site at varying times of the year. Since test pit TP-3 was excavated adjacent to the existing ponds, it is likely that the seepage observed during our exploration was a result of the hydrologic effects associated with the ponds.

Soil Expansion Potential
The materials encountered in our explorations were generally non-plastic materials which are considered to be relatively non-expansive. A thin clay layer, generally considered highly expansive, was encountered at the soil/bedrock contact in test pit TP-1. We do not anticipate that special design considerations for expansive soils will need to be addressed for the design or construction of the proposed improvements provided that the clay rined is removed from the site or adequately blended with the non-expansive silts, sands and rock materials. Recommendations can be made during construction operations or at your request if additional expansive soils are encountered or reported which were not disclosed during our study.

Geologic Conditions
The geologic portion of this report included a review of geologic data pertinent to the site, and an interpretation of our observations and the exploratory test pits excavated during the field study. The site is located within the western foothills region of the Sierra Nevada Mountain Range. According to the General Geologic Map of the Georgetown 15-Minute Quadrangle (Wagner, et. al., 1983 – DMG Open File 83-35) this portion of the foothills and the project area are underlain by undifferentiated metasedimentary and metavolcanic rocks of the Mesozoic age.

Naturally Occurring Asbestos
Naturally occurring asbestos (NOA) has been identified as a potential health hazard. In 2000 the California Geological Survey published a map (Open File Report 2000-02) that qualitatively indicates the likelihood for NOA in western El Dorado County.

El Dorado County has adapted the map from Open File Report 2000-02 into an asbestos review map. All projects with zones identified in the map, plus ¼-mile buffers around the asbestos management areas, or are in proximity to the new discoveries periodically added to the map, are subject to special dust control and asbestos mitigation requirements. This project is in an asbestos review area. Care should be taken during excavation to mitigate for the potential of

asbestos exposure such as adherence to the Asbestos Dust Mitigation Plan of El Dorado County.

Seismicity
According to the Fault Activity Map of California and Adjacent Areas (Jennings, 1994) and the Peak Acceleration from Maximum Credible Earthquakes in California (CDMG, 1992), no active faults or Earthquake Fault Zones (Special Studies Zones) are located on the project site. No evidence of recent or active faulting was observed at the project site during our field study. The nearest mapped potentially active and active faults related to the site are listed in the following table.

Proximity to Faults and Fault Zones

Status	Fault Name	Distance, Direction
Active	North Tahoe Fault	75 km E
	Dunnigan Hills Fault	85 km E
Potentially Active	Melones Fault Zone – W Splay	< 1km E
	Melones Fault Zone – E Splay	2 km E
	Bear Mountains Fault	15 km W

Based on our literature review of shear-wave velocity characteristics of geologic units in California (Wills and Silva; August 1998: Earthquake Spectra, Volume 14, No. 3) and subsurface interpretations, we recommend that the project be designed in accordance with the 2010 California Building Code (CBC), Chapter 16. This site is classified as Site Class C in accordance with Table 1613.5.2.

Liquefaction, Slope Instability and Surface Rupture Potential
Liquefaction is the sudden loss of soil shear strength and sudden increase in porewater pressure caused by shear strains, as could result from an earthquake. Research has shown that saturated, loose to medium-dense sands with a silt content less than about 25 percent located within the top 40 feet are most susceptible to liquefaction and surface rupture/lateral spreading. Slope instability can occur as a result of seismic ground motions and/or in combination with weak soils and saturated conditions.

Due to the absence of a permanent elevated groundwater table, the relatively low seismicity of the area, and the relatively shallow depth to bedrock, the potential damage due to site liquefaction, slope instability and surface rupture are considered negligible. The existing slopes on the project site were observed to have adequate vegetation on the slope face, appropriate drainage away from the slope face, and no apparent tension cracks or slump blocks in the slope face or at the head of the slope. No other indications of slope instability such as seeps or springs were observed. For the above-mentioned reasons, mitigation for these potential hazards is not considered necessary.

4.0 RECOMMENDATIONS

General
Based upon the results of our field explorations and analysis, it is our opinion that construction of the proposed improvements is feasible from a geotechnical standpoint, provided the recommendations contained in this report are incorporated into the design plans and implemented during construction. The native soils, rock, and/or engineered fills composed of

like materials and processed and compacted as recommended below are considered suitable for support of the planned improvements. The existing surface soils and fills are relatively loose and are not considered suitable for support of the proposed improvements in their current condition. Based on the proposed grading plans, we anticipate that a significant amount of the loose soils will be removed during grading and construction operations. Recommendations are presented below for the overexcavation and recompaction of the loose soil materials on the site remaining after the initial cut operations area performed.

4.1 SITE GRADING AND IMPROVEMENTS

Site Preparation

Preparation of the project site should involve considerations for demolition, site drainage controls, dust control, clearing, stripping, removal of existing fills, and exposed grade compaction. The following paragraphs state our geotechnical comments and recommendations concerning site preparation.

Demolition: As part of the demolition operation, any unwanted foundation or structural improvement elements should be exhumed and removed from the site. In addition, any underground storage tanks, abandoned wells or other utilities not intended for reuse should be removed or backfilled in accordance with the appropriate regulations.

Concrete and asphalt separated from the other debris, and adequately broken down in particle size, may be mixed thoroughly with native soils and placed as engineered fill as described below. If this option is exercised, a representative from our firm should be contacted to observe the adequacy of grading operations associated with the breaking and mixing of these elements.

Site Drainage Controls: We recommend that initial site preparation involve intercepting and diverting any potential sources of surface or near-surface water within the construction zones. Because the selection of an appropriate drainage system will depend on the water quantity, season, weather conditions, construction sequence, and contractor's methods, final decisions regarding drainage systems are best made in the field at the time of construction. All drainage and/or water diversion performed for the site should be in accordance with the Clean Water Act and applicable Storm Water Pollution Prevention Plan.

Dust Control: Dust control provisions should be provided for as required by the local jurisdiction's grading ordinance (i.e. water truck or other adequate water supply during grading). Special attention to dust control may be necessary due to the anticipated cuts into naturally occurring asbestos materials. Refer to the fugitive dust mitigation plan or asbestos dust mitigation plan for details on grading within potential naturally occurring asbestos areas.

Clearing and Stripping: Clearing and stripping operations should remove all organic laden materials including trees, bushes, root balls, root systems, and any soft or loose material generated from removal operations. Surface grass stripping operations are necessary based upon our observations during our site visit. Short or mowed dry grasses may be pulverized and lost within fill materials provided no concentrated pockets of organics result. It is the responsibility of the grading contractor to remove excess organics from the fill materials. No more than 2 percent of organic material, by weight, should be allowed within the fill materials at any given location.

General site clearing should also include removal of any loose or saturated materials from the proposed structural improvement and pavement areas. A representative of our firm should be present during site clearing operations to identify the location and depth of potential fills not disclosed by this report, to observe removal of deleterious materials, and to identify any existing site conditions which may require mitigation prior to site development.

Addressing Existing Fills: Following general site clearing, all existing fills and loose soils should be over-excavated down to firm native materials. Reference should be made to the site description and exploratory test pit logs for anticipated fill locations. Any depressions extending below final grade resulting from the removal of fill materials or other deleterious materials should be properly prepared as discussed below and backfilled with engineered fill. Prior to placement of engineered fill, the exposed soil surfaces receiving fills should be scarified to a minimum depth of 8 inches, moisture conditioned as necessary, and compacted to at least 95 percent of the maximum dry density based on the ASTM D1557 test method. Additionally, test pits should be re-excavated and backfilled with engineered fill.

Exposed Grade Compaction: Exposed soil grades following initial site preparation activities should be scarified to a minimum depth of 8 inches and compacted to the requirements for engineered fill. Prior to placing fill, the exposed subgrades should be in a firm, unyielding state. Any localized zones of soft or pumping soils observed within a subgrade should either be scarified and recompacted or be overexcavated and replaced with engineered fill as detailed in the engineered fill section below.

Soil Moisture Considerations

The near-surface fine grained soils may become partially or completely saturated during the rainy season. Grading operations during this time period may be difficult since compaction efforts may be hampered by saturated materials. It is, therefore, suggested that consideration be given to the seasonal limitations and costs of winter grading operations on the site. Special attention should be given regarding the drainage of the project site. If the project is expected to work through the wet season, the contractor should install appropriate temporary drainage systems at the construction site and should minimize traffic over exposed subgrades due to the moisture-sensitive nature of the on-site soils. During wet weather operations, the soil should be graded to drain and should be sealed by rubber tire rolling to minimize water infiltration.

Excavation Characteristics

The test pits were excavated using a CAT 430D backhoe equipped with an 18-inch wide bucket. The degree of difficulty encountered in excavating our test pits is an indication of the effort that will be required for excavation during construction. Based on our test pits, we expect that the site soils can be excavated using conventional earthmoving equipment such as a Caterpillar D6 to D8 for grading and rubber tired backhoe for trench excavations.

The underlying rock materials can likely be excavated to depths of several feet using dozers equipped with rippers. We expect that the upper, weathered portion of the rock, indicated to extend 3 to 4 feet below the rock surface at most locations, will require use of a Caterpillar D8 equipped with a single or multiple shank rippers, or similar equipment. We anticipate that a ripper equipped D8 can penetrate at least as deep as our test pits at most locations with moderate effort. Deeper excavation into the less weathered rock may require heavier equipment, such as a D9, or a D10. Blasting cannot be ruled out in areas of resistant rock.

Where hard rock cuts in fractured rock are proposed, the orientation and direction of ripping will likely play a large role in the rippability of the material. When hard rock is encountered, we should be contacted to provide additional recommendations prior to performing an alternative such as blasting.

Utility trenches will likely encounter hard rock excavation conditions especially in deeper cut areas. Utility contractors should be prepared to use special rock trenching equipment such as large excavators (Komatsu PC400 or CAT 345 or equivalent). Blasting to achieve utility line grades, especially in planned cut areas, cannot be precluded. Water inflow into any excavation approaching hard rock surface is likely to be experienced in all but the driest summer and fall months.

Engineered Fills

All materials placed as fills on the site should be placed as "Engineered fill" observed and compacted as described in the following paragraphs.

Suitability of Onsite Materials: We anticipate that a large amount of onsite soils will be generated during grading operations. We expect that soil generated from excavations on the site, excluding deleterious material, may be used as engineered fill provided the material does not exceed the maximum size specifications listed below. Soil anticipated to be off-hauled from the site should be reviewed for NOA prior to export.

Rock fragments or boulders exceeding 24 inches in maximum dimension should not be placed within the upper five feet of site grade. The upper two feet of grades should consist of predominantly rocks and rock fragments less than 8 inches in maximum dimension. The rock fragments should be thoroughly mixed with soil so that a uniform mixture of rocks and compacted soil is obtained without voids. Boulders over 24 inches in maximum dimension should be disposed of to an offsite location or mechanically reduce the rocks to less than 8 inches in maximum dimension. The contractor should avoid placing rocks or rock fragments larger than 8 inches in maximum dimension within zones of proposed underground facilities.

Fill Placement and Compaction: All areas proposed to receive fill should be scarified to a minimum depth of 8 inches, moisture conditioned as necessary, and compacted to at least 95 percent of the maximum dry density based on the ASTM D1557 test method. The fill should be placed in thin horizontal lifts not to exceed 8 inches in uncompacted thickness. The fill should be moisture conditioned as necessary and compacted to a relative compaction of not less than 95 percent based on the ASTM D1557 test method. The upper 8 inches of fills placed under proposed pavement areas should be compacted to a relative compaction of not less than 95 percent based on the ASTM D1557 test method. Clays, if remaining after initial grading operations, should be blended with non-expansive site soils to generate a soil with no or low expansive potential. Proper disposition of clays on site should be verified by a representative of Youngdahl Consulting Group, Inc.

Fill soil compaction should be verified by means of in-place density tests performed during fill placement so that adequacy of soil compaction efforts may be evaluated as earthwork progresses, or by method specification if the quantity of rock fragments in the fills preclude traditional compaction testing. This will likely include the excavation of test pits within the fill materials to observe and document that a uniform over-optimum moisture condition, and absence of large and/or concentrated voids has been achieved prior to additional fill placement.

Compaction Equipment: In areas to receive structural fill, a Caterpillar 825 steel-wheel compactor, large vibratory padded drum compactor, or approved equivalent should be employed as a minimum to facilitate breakdown of oversize bedrock materials and generation of soil fines during the fill placement process. If the quantity of rock fragments in the fills preclude traditional compaction testing, then the proposed fills should be compacted using method specifications as indicated below.

Import Materials: If imported fill material is needed for this project, import material should be approved by the Geotechnical Engineer prior to transporting it to the project. It is preferable that import material meet the following requirements:

1. Plasticity index not to exceed 12.
2. Should not contain rocks larger than 6 inches in diameter.
3. Not more than 15% passing through the No. 200 sieve.

If these requirements are not met, additional testing and evaluation may be necessary to determine the appropriate design parameters for foundations, pavement and other improvements.

Slope Configuration and Grading

The existing slopes on the project site were observed to have adequate vegetation on the slope face, appropriate drainage away from the slope face, and no apparent tension cracks or slump blocks in the slope face or at the head of the slope.

The project site is proposed to have cuts and fill with a maximum slope orientation of 2H:1V. Generally a cut slope orientation of 2H:1V is considered stable with the material types encountered on the site. A fill slope constructed at the same orientation is considered stable if compacted to the engineered fill recommendations as stated in the recommendations section of this report. All slopes should have appropriate drainage and vegetation measures to minimize erosion of slope soils.

Steeper fill slope gradients may be achievable through the use of geotextile materials to strengthen and/or provide erosion protection. Surficial stability of steeper cut slopes may be achievable due to the geology of the cut materials. Steepening of slopes greater than 2H:1V will require design and observation during the proposed cut and/or fill. Any slope excavations proposed to be greater than 10 feet in maximum height should be evaluated during and prior to completion of site grading.

Placement of Fills on Slopes: Placement of fill material on natural slopes should be stabilized by means of keyways and benches. Where the slope of the original ground equals or exceeds 5H:1V, a keyway should be constructed at the base of the fill. The keyway should consist of a trench excavated to a depth of at least two feet into firm, competent materials. The keyway trench should be at least eight feet wide or as designated by the Geotechnical Engineer. Benches should be cut into the original slope as the filling operation proceeds. Each bench should consist of a level surface excavated at least six feet horizontally into firm soils or four feet horizontally into rock. The rise between successive benches should not exceed 36 inches. The need for subdrainage should be evaluated at the time of construction.

Slope Face Compaction: All slope fills should be laterally overbuilt and cut back such that the required compaction is achieved at the proposed finish slope face. As a less preferable

alternative, the slope face could be track walked or compacted with a wheel. If this second alternative is used, additional slope maintenance may be necessary.

Slope Drainage: Surface drainage should not be allowed to flow uncontrolled over any slope face. Adequate surface drainage control should be designed by the project civil engineer in accordance with the latest applicable edition of the CBC. All slopes should have appropriate drainage and vegetation measures to minimize erosion of slope soils.

Differential Support Conditions

Differential support conditions may be a concern where fills are placed and compacted for construction of a structural pad and the proposed structure will span from a native to deep fill or soil to bedrock condition. In order to mitigate the potential for differential settlement, overexcavation of the cut portion of the building pad, deepening of the foundations or adjustment of compaction requirements may be recommended. We should be afforded the opportunity to review the construction plans in order to develop site specific recommendations regarding differential conditions.

Based on an interpolation of the soil/bedrock contact at the exploratory test pits, we anticipate that the proposed storage tank location will span a soil/bedrock contact and may be susceptible to differential settlement. To mitigate for this condition, we recommend that the storage tank be supported entirely within bedrock by either lowering the grade or deepening the footings.

Underground Improvements

Trench Excavation: Trenches or excavations in soil should be shored or sloped back in accordance with current OSHA regulations prior to persons entering them. Where clay rind in combination with moist conditions is encountered in fractured bedrock, the project engineering geologist should be consulted for appropriate mitigation measures. The potential use of a shield to protect workers cannot be precluded. Refer to the Excavation Characteristics section of Site Grading and Improvements of this report for anticipated excavation conditions.

Backfill Materials: Backfill materials for utilities should conform to the local jurisdiction's requirements. It should be realized that permeable backfill materials will likely carry water at some time in the future.

When backfilling within structural footprints, compacted low permeability materials are recommended to be used a minimum of 5 feet beyond the structural footprint to minimize moisture intrusion. If the materials are too rocky, they may need to be screened prior to backfill in order to limit pipe damage. If a permeable material is used as backfill within this zone, subdrainage mitigation may be required. In addition, if structures are oriented downhill of the roadway or utilities, grout cutoffs or plug and drains around all utility penetrations at the foundation are useful to keep moisture out from underneath the structure.

Backfill Compaction: All backfill, placed after the underground facilities have been installed, including lot wet/dry utilities and lateral connections, should be compacted a minimum of 95 percent relative compaction. Compaction should be accomplished using lifts which do not exceed 8 inches. However, thickness of the lifts should be determined by the contractor. If the contractor can achieve the required compaction using thicker lifts, the method may be judged acceptable based on field verification by a representative of our firm using standard density testing procedures. Light weight compaction equipment may require thinner lifts to achieve the required densities.

Drainage Considerations: In areas with the potential for a perched groundwater condition (i.e. shallow bedrock), underground utilities can become collections points for subsurface water. When these conditions are present, we recommend permanent subdrainage mitigation measures be installed. Such measures may include plug and drains within the utility trenches to collect and convey water to the storm drain system or other approved outlet. Temporary dewatering measures may be necessary and could include the installation of submersible pumps and/or point wells.

4.2 DESIGN RECOMMENDATIONS

Foundations

In our opinion, continuous footings will provide adequate support for the proposed buildings and structures if the subgrades are properly prepared as described in the Site Grading and Improvement Section of this report. We offer the following comments and recommendations for purposes of footing design and construction. The provided minimums do not constitute a structural design of foundations which should be performed by the structural engineer. Our firm should be afforded the opportunity to review the project grading and foundation plans to confirm the applicability of the recommendations provided below. Modifications to these recommendations may be made at the time of our review. In addition to the provided recommendations, foundation design and construction should conform to applicable sections of the 2010 California Building Code.

Bearing Capacities: An allowable dead plus live load bearing pressure of 2,500 psf may be used for design of footings based on firm native soils or engineered fills. An allowable dead plus live load bearing pressure of 4,000 psf may be used for design of footings based on weathered bedrock. These capacities are based upon minimum foundations depths of 12 inches below lowest adjacent grade. The above allowable pressures are for support of dead plus live loads and may be increased by 1/3 for short term wind and seismic loads.

A total settlement of less than 1 inch is anticipated; a differential settlement of ½ of the total is anticipated where foundations are bearing on like materials. Greater differential settlements should be anticipated where cut to fill or soil to bedrock contacts occur.

Lateral Pressures: Lateral forces on structures may be resisted by passive pressure acting against the sides of shallow footings and/or friction between the soil and the bottom of the footing. For resistance to lateral loads, a friction factor of 0.30 may be utilized for sliding resistance at the base of footings in firm native materials or engineered fill and 0.45 for foundations on bedrock. A passive resistance of 300 pcf equivalent fluid weight may be used against the side of shallow footings in firm native soil or engineered fill and 450 for footing founded in bedrock. If friction and passive pressures are combined, the lesser value should be reduced by 50 percent.

Footing Configuration: Foundation reinforcement should be provided by the structural engineer. The reinforcement schedule should account for typical construction issues such as load consideration, concrete cracking, and the presence of isolated irregularities. At a minimum, we recommend that continuous spread footing foundations be reinforced with two No. 4 reinforcing bars, one located near the bottom of the footing and one near the top of the stem wall.

Where foundations are constructed within a cut-fill transition, soil-bedrock interface, or over minor surface irregularities (i.e. point load conditions within resistant bedrock), as a

consideration to span these localized differential irregularities. For general construction we suggest that structural footing reinforcing steel be doubled top and bottom (minimum, four #4 reinforcing bars, two each top and bottom) extending a minimum of 10 feet continuous length on both sides of the transition/irregularity. Heavy construction such as the proposed storage tank should be founded on uniform soil conditions for mitigate for these conditions.

All footings should be founded below an imaginary 2H:1V plane projected up from the bottoms of adjacent footings and/or parallel utility trenches, or to a depth that achieves a minimum horizontal clearance of 6 feet from the outside toe of the footings to the slope face, whichever requires a deeper excavation.

Foundations for one and two-story concrete slab-on-grade structures should be a minimum of 12 inches in width, and be founded a minimum of 12 inches below the lowest adjacent grade. Isolated pad footings should be a minimum of 24 inches wide.

Subgrade Conditions: Footings should never be cast atop soft, loose, organic, slough, debris, nor atop subgrades covered by ice or standing water. A representative of our firm should be retained to observe all subgrades during footing excavations and prior to concrete placement so that a determination as to the adequacy of subgrade preparation can be made.

Shallow Footing / Stemwall Backfill: All footing/stemwall backfill soil should be compacted to at least 90 percent of the maximum dry density (based on ASTM D1557).

Seismic Criteria

Based on the 2010 California Building Code, Chapter 16, and our previous site investigation findings, the following seismic parameters are recommended from a geotechnical perspective for structural design. The final choice of design parameters, however, remains the purview of the project structural engineer.

Seismic Design Criteria

2010 CBC Chapter 16	Seismic Parameter	Recommended Value
Table No. 1613.5.2	Site Class	C
Figure No. 1613.5(3)*	Short-Period MCE at 0.2s, S_S	0.46g
Figure No. 1613.5(4)*	1.0s Period MCE, S_1	0.19g
Table No. 1613.5.3(1)**	Site Coefficient, F_a	1.2
Table No. 1613.5.3(2)**	Site Coefficient, F_v	1.6
Equation 16-36	Adjusted MCE Spectral Response Parameters, $S_{MS} = F_a S_s$	0.55
Equation 16-37	Adjusted MCE Spectral Response Parameters, $S_{M1} = F_v S_1$	0.31
Equation 16-38	Design Spectral Acceleration Parameters, $S_{DS} = \frac{2}{3} S_{MS}$	0.36
Equation 16-39	Design Spectral Acceleration Parameters, $S_{D1} = \frac{2}{3} S_{M1}$	0.21
Table 1613.5.6(1)	Seismic Design Category (Short Period), Occupancy I to III	C
Table 1613.5.6(1)	Seismic Design Category (Short Period), Occupancy IV	D
Table 1613.5.6(2)	Seismic Design Category (1-Second Period), Occupancy I to III	D
Table 1613.5.6(2)	Seismic Design Category (1-Second Period), Occupancy IV	D

* Values from Figures 1613.5(3)/(4) are derived from the National Earthquake Hazards Reduction Program (NEHRP) for Site Class B soil profiles.

** Values from Tables 1613.3(1)/(2) are adjustments to account for the Site Class (Project Specific) provided in Table 1613.5.2.

Slab-on-Grade Construction

It is our opinion that soil-supported slab-on-grade floors could be used for the main floor, contingent on proper subgrade preparation. Often the geotechnical issues regarding the use of slab-on-grade floors include proper soil support and subgrade preparation, proper transfer of loads through the slab underlayment materials to the subgrade soils, and the anticipated presence or absence of moisture at or above the subgrade level. We offer the following comments and recommendations concerning support of slab-on-grade floors. *The slab design (concrete mix, reinforcement, joint spacing, moisture protection and underlayment materials) is the purview of the project Structural Engineer.*

Slab Subgrade Preparation: All subgrades proposed to support slab-on-grade floors should be prepared and compacted to the requirements of engineered fill as discussed in the Site Grading and Improvements section of this report.

Slab Underlayment: As a minimum for slab support conditions, the slab should be underlain by a minimum 4 inch crushed rock layer and covered by a moisture retarding plastic membrane. An optional 1 inch blotter sand layer above the plastic membrane is sometimes used to aid in curing of the concrete. If the blotter is omitted, special curing procedures may be necessary. The blotter layer can become a reservoir for excessive moisture if inclement weather occurs

prior to pouring the slab, excessive water collects in it from the concrete pour, or an external source of water enters above or bypasses the membrane. The membrane may only be functional when it is above the vapor sources. The bottom of the crushed rock layer should be above the exterior grade to act as a capillary break and not a reservoir, unless it is provided with an underdrain system. The slab design and underlayment should be in accordance with ASTM E1643 and E1745.

Slab Moisture Protection: Due to the potential for landscape to be present directly adjacent to the slab edge/foundation or for drainage to be altered following our involvement with the project, varying levels of moisture below, at, or above the pad subgrade level should be anticipated. The slab designer should include the potential for moisture vapor transmission when designing the slab. Our experience has shown that vapor transmission through concrete is controlled through slab thickness as well as proper concrete mix design.

It should be noted that placement of the recommended plastic membrane, proper mix design, and proper slab underlayment and detailing per ASTM E1643 and E1745 will not provide a waterproof condition. If a waterproof condition is desired, we recommend that a waterproofing expert be consulted for slab design.

Slab Thickness and Reinforcement: Geotechnical reports have historically provided minimums for slab thickness and reinforcement for general crack control. The concrete mix design and construction practices can additionally have a large impact on concrete crack control. All concrete should be anticipated to crack. As such, these minimums should not be considered to be stand alone items to address crack control, but are suggested to be considered in the slab design methodology.

In order to help control the growth of cracks in interior concrete from becoming significant, we suggest the following minimums. Interior concrete slabs-on-grade not subject to heavy loads should be a minimum of 4 inches thick. A 4 inch thick slab should be reinforced. A minimum of No. 3 deformed reinforcing bars placed at 30 inches on center both ways, at the center of the structural section is suggested. Joint spacing should be provided by the structural engineer. Troweled joints recovered with paste during finishing or "wet sawn" joints should be considered every 10 feet on center. Expansion joint felt should be provided to separate floating slabs from foundations and at least at every third joint. Cracks will tend to occur at recurrent corners, curved or triangular areas and at points of fixity. Trim bars can be utilized at right angle to the predicted crack extending 40 bar diameters past the predicted crack on each side.

Vertical Deflections: Soil-supported slab-on-grade floors can deflect downward when vertical loads are applied, due to elastic compression of the subgrade. For design of concrete floors, a modulus of subgrade reaction of k = 250 psi per inch would be applicable for native soils and engineered fills.

Exterior Flatwork: Exterior concrete flatwork need not be underlain by a rock cushion where non-expansive soils are encountered. However, some vertical movement of concrete should be anticipated when arranging outside concrete flatwork joints where rock is omitted. Where expansive soils are encountered, a 4 inch rock cushion under concrete flatwork and pre-saturation is recommended.

If exterior flatwork concrete is against the floor slab edge without a moisture separator it may transfer moisture to the floor slab. Expansion joint felt should be provided to separate exterior

flatwork from foundations and at least at every third joint. Contraction / groove joints should be provided to a depth of at least 1/4 of the slab thickness and at a spacing of less than 30 times the slab thickness for unreinforced flatwork, dividing the slab into nearly square sections. Cracks will tend to occur at recurrent corners, curved or triangular areas and at points of fixity. Trim bars can be utilized at right angle to the predicted crack extending 40 bar diameters past the predicted crack on each side.

Retaining Walls

Our design recommendations and comments regarding retaining walls for the project site are discussed below.

Retaining Wall Foundations: For footings founded in firm native soil or engineered fill, an allowable dead plus live load bearing capacity of 2,500 psf should be used. For footings with a minimum depth of 12 inches into weathered bedrock, an allowable dead plus live load bearing capacity of 4,000 pounds per square foot is considered appropriate. The following allowable pressures may be increased by 1/3 for short term wind or seismic loads.

Resisting Forces: Lateral forces on the retaining walls may be resisted by passive pressure acting against the side of the wall footing and/or friction between the soil and the bottom of the footing. A passive equivalent fluid weight of 300 pcf may be used against the sides of shallow footings founded in firm native soil or engineered fill. A friction factor of 0.30 may be used at the base of footings founded on firm native soil or engineered fill. For footings founded into bedrock conditions, a passive equivalent fluid weight of 450 pcf may be used against the sides of shallow footings and a friction factor of 0.45 may be used at the base of footings. If friction and passive pressures are combined, the lesser value should be reduced by 50 percent. All backfill placed behind retaining walls or against retaining wall footings should be compacted in accordance with the "Engineered Fill" section of this report.

Retaining Wall Lateral Pressures: Based on our observations and testing, the retaining wall should be designed to resist lateral pressure exerted from a soil media having an equivalent fluid weight as follows.

Retaining Wall Parameters

Wall Type	Wall Slope Configuration	Equivalent Fluid Weight (pcf)	Surcharge Load (psf)*	Lateral Pressure Coefficient	Earthquake Loading (plf)***
Free Cantilever	Flat	40	per structural	0.33	$18H^2$ Applied 0.6H above the base of the wall
	2H:1V	60	per structural	0.50	
Restrained**	Flat	60	per structural	0.50	

* The surcharge loads should be applied as uniform loads over the full height of the walls as follows: Surcharge Load (psf) = (q) (K), where q = surcharge in psf, and K = coefficient of lateral pressure. Final design is the purview of the project structural engineer.

** Restrained conditions shall be defined as walls which are structurally connected to prevent flexible yielding, or rigid wall configurations (i.e. walls with numerous turning points) which prevent the yielding necessary to reduce the driving pressures from an at-rest state to an active state.

*** Section 1802.2.7 of the 2007 California Building Code states that a determination of lateral pressures on basement and retaining walls due to earthquake loading shall be provided for structures to be designed in Seismic Design Categories D, E or F (Load value derived from Wood (1973) and modified by Whitman (1991)).

Wall Drainage: The above criteria are based on fully drained conditions. For these conditions, we recommend that a blanket of filter material be placed behind all proposed walls. The blanket of filter material should be a minimum of 12 inches thick and should extend from the bottom of

the wall to within 12 inches of the ground surface. The filter material should conform to Class One, Type B permeable material as specified in Section 68 of the California Department of Transportation Standard Specifications, current edition. A clean ⅜ inch angular gravel or ¾ inch crushed rock is also acceptable, provided filter fabric is used to separate the open graded gravel/rock from the surrounding soils. The top 12 inches of wall backfill should consist of a compacted native soil cap. A filter fabric should be placed on top of the gravel filter material to separate it from the native soil cap. A 4 inch diameter drain pipe should be installed near the bottom of the filter blanket with perforations facing down. The drain pipe should be underlain by at least 4 inches of filter-type material. As an alternative to drain pipe, where deemed appropriate, weep holes may be provided. Adequate gradients should be provided to discharge water that collects behind the retaining wall to an controlled discharge system. Prior to placement of the drainage blanket, additional consideration should be given to the use of a waterproofing membrane such as bituthene or equivalent membrane system on the outside of the wall.

Drainage Considerations

In order to maintain the engineering strength characteristics of the soil presented for use in this Geotechnical Engineering Study, maintenance of the site will need to be performed. This maintenance generally includes, but is not limited to, proper drainage and control of surface and subsurface water which could affect structural support and fill integrity. A difficulty exists in determining which areas are prone to the negative impacts resulting from high moisture conditions due to the diverse nature of potential sources of water; some of which are outlined in the paragraph below. We suggest that measures be installed to minimize exposure to the adverse effects of moisture, but this will not guarantee that excessive moisture conditions will not affect the structure.

Some of the diverse sources of moisture could include water from annual rainfall, offsite construction activities, runoff from impermeable surfaces, collected and channeled water, and water in fractures or perched on the weathered bedrock. Some of these sources can be controlled through drainage features installed either by the owner or builder. Others may not become evident until they, or the effects of the presence of excessive moisture, are visually observed on the property.

Some measures that can be employed to minimize the build up of moisture include, but are not limited to; proper backfill materials and compaction of utility trenches on the site and within the footprint of the proposed facilities to minimize the transmission of moisture through these areas; grout plugs at foundation penetrations; collection and channeling of drained water from impermeable surfaces (i.e. roofs and paved areas), and installation of subdrain/cut-off drain provisions.

All grades should provide rapid removal of surface water runoff; ponding water should not be allowed on building pads or adjacent to foundations or other structural improvements (during and following construction). All soils placed against foundations during finish grading should be compacted to minimize water infiltration. Finish and landscape grading should include positive drainage away from all foundations. Surface drainage should be designed by the Project Architect/Civil Engineer in general accordance with Section 1804.3 of the 210 California Building Code. Downspouts should be tight piped via an area drain network and discharged to an appropriate non-erosive outlet.

Post Construction: All drainage related issues may not become known until after construction and landscaping are complete. Therefore, some mitigation measures may be necessary following site development. In foothill areas with construction using cut/fill pads on shallow bedrock conditions, seepage may not be apparent until post construction. In order to mitigate these conditions additional subdrainage measures may be necessary.

5.0 DESIGN REVIEW AND CONSTRUCTION MONITORING

The design plans and specifications should be reviewed and accepted by Youngdahl Consulting Group, Inc., hereinafter described as the Geotechnical Engineer, prior to contract bidding. A review should be performed to determine whether the recommendations contained within this report are still applicable and/or are properly reflected and incorporated into the project plans and specifications.

Construction Monitoring

Construction monitoring is a continuation of the findings and recommendations provided in this report. It is essential that our representative be involved with all grading activities in order for us to provide supplemental recommendations as field conditions dictate. Youngdahl Consulting Group, Inc. should be notified at least two working days before site clearing or grading operations commence, and should observe the stripping of deleterious material overexcavation of existing fills and provide consultation to the Grading Contractor in the field.

Low Impact Development Standards

Low Impact Development or LIDs standards have become a consideration for many projects in the region. LID standards are intended to address and mitigate urban storm water quality concerns. These methods include the use of Source Controls, Run-off Reduction and Treatment Controls. For the purpose of this report use of proposed Run-off Reduction measures and some Treatment Controls may impact geotechnical recommendations for the project. Use of any LID measure that would require infiltration of discharge of water to surfaces adjacent to structures/pavement or include infiltration type measures should be reviewed by Youngdahl Consulting Group, Inc. during the design process.

A review of soil survey and the data collected from test pits indicate that soils within the project are Hydrologic Soil Group D (low permeability) with a depth of less than 3 feet. Based on this condition use of infiltration type LID methods (Infiltration trenches, dry wells, infiltration basins, Permeable Pavements, etc.) should not be considered for this property. Youngdahl Consulting Group, Inc. did not perform any percolation of infiltration testing for the site as part of the Geotechnical Investigation.

Post Construction Monitoring

As described in Post Construction section of this report, all drainage related issues may not become known until after construction and landscaping are complete. Youngdahl Consulting Group, Inc. can provide consultation services upon request that relate to proper design and installation of drainage features during and following site development.

6.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. This report has been prepared for the exclusive use of Psomas Engineering for specific application to the Auburn Lake Trails Water Treatment Plant project. Youngdahl Consulting Group, Inc. has endeavored to comply with generally accepted geotechnical engineering practice common to the local area. Youngdahl Consulting Group, Inc. makes no other warranty, express or implied.

2. As of the present date, the findings of this report are valid for the property studied. With the passage of time, changes in the conditions of a property can occur whether they be due to natural processes or to the works of man on this or adjacent properties. Legislation or the broadening of knowledge may result in changes in applicable standards. Changes outside of our control may cause this report to be invalid, wholly or partially. Therefore, this report should not be relied upon after a period of three years without our review nor should it be used or is it applicable for any properties other than those studied.

3. Section 106.3.4.1 of the International Building Code and Appendix Chapter 1 of the 2010 California Building Code states that, in regard to the design professional in responsible charge, the building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

   WARNING: Do not apply any of this report's conclusions or recommendations if the nature, design, or location of the facilities is changed. If changes are contemplated, Youngdahl Consulting Group, Inc. must review them to assess their impact on this report's applicability. Also note that Youngdahl Consulting Group, Inc. is not responsible for any claims, damages, or liability associated with any other party's interpretation of this report's subsurface data or reuse of this report's subsurface data or engineering analyses without the express written authorization of Youngdahl Consulting Group, Inc.

4. The analyses and recommendations contained in this report are based on limited windows into the subsurface conditions and data obtained from subsurface exploration. The methods used indicate subsurface conditions only at the specific locations where samples were obtained, only at the time they were obtained, and only to the depths penetrated. Samples cannot be relied on to accurately reflect the strata variations that usually exist between sampling locations. Should any variations or undesirable conditions be encountered during the development of the site, Youngdahl Consulting Group, Inc., will provide supplemental recommendations as dictated by the field conditions.

5. The recommendations included in this report have been based in part on assumptions about strata variations that may be tested only during earthwork. Accordingly, these recommendations should not be applied in the field unless Youngdahl Consulting Group, Inc. is retained to perform construction observation and thereby provide a complete professional geotechnical engineering service through the observational method. Youngdahl Consulting Group, Inc. cannot assume responsibility or liability for the adequacy of its recommendations when they are used in the field without Youngdahl Consulting Group, Inc. being retained to observe construction. Unforeseen subsurface conditions containing soft native soils, loose or previously placed non-engineered fills should be a consideration while preparing for the grading of the property. It should be noted that it is the responsibility of the owner or his/her representative to notify Youngdahl Consulting Group, Inc., in writing, a minimum of 48 hours before any excavations commence at the site.

6. Our experience has shown that vapor transmission through concrete is controlled through proper concrete mix design. As such, proper control of moisture vapor transmission should be considered in the design of the slab as provided by the project

architect, structural or civil engineer. It should be noted that placement of the recommended plastic membrane, proper mix design, and proper slab underlayment and detailing per ASTM E1643 and E1745 will not provide a waterproof condition. If a waterproof condition is desired, we recommend that a waterproofing expert be consulted for slab design.

7. Following site development, additional water sources (ie. landscape watering, downspouts) are generally present. The presence of low permeability materials can prohibit rapid dispersion of surface and subsurface water drainage. Utility trenches typically provide a conduit for water distribution. Provisions may be necessary to mitigate adverse effects of perched water conditions. Mitigation measures may include the construction of cut-off systems and/or plug and drain systems. Close coordination between the design professionals regarding drainage and subdrainage conditions may be warranted.

   Seepage may be observed emanating from the cut slopes following their excavation during the following rainy season or following development of the areas above the cut. Generally this seepage is not enough flow to be a stability issue to the cut slope, but may be an issue for the owner of the lot at the base of the cut from a surface drainage and standing water (damp spot) standpoint. This amount of water is generally collected easily with landscaping drainage, surface drainage at the toe of the slope, or subsurface toe drains. Recommendations may be provided at the time of observed seepage; however, we recommend that the developer of the property disclose this possibility to future owners.

CHECKLIST OF RECOMMENDED SERVICES

	Item Description	Recommended	Not Anticipated
1	Provide foundation design parameters	Included	
2	Review grading plans and specifications	✓	
3	Review foundation plans and specifications	✓	
4	Observe and provide recommendations regarding demolition	✓	
5	Observe and provide recommendations regarding site stripping	✓	
6	Observe and provide recommendations on moisture conditioning removal, and/or precompaction of unsuitable existing soils	✓	
7	Observe and provide recommendations on the installation of subdrain facilities	✓	
8	Observe and provide testing services on fill areas and/or imported fill materials	✓	
9	Review as-graded plans and provide additional foundation recommendations, if necessary	✓	
10	Observe and provide compaction tests on storm drains, water lines and utility trenches	✓	
11	Observe foundation excavations and provide supplemental recommendations, if necessary, prior to placing concrete	✓	
12	Observe and provide moisture conditioning recommendations for foundation areas and slab-on-grade areas prior to placing concrete		✓
13	Provide design parameters for retaining walls	Included	
14	Provide finish grading and drainage recommendations	Included	
15	Provide geologic observations and recommendations for keyway excavations and cut slopes during grading	✓	
16	Excavate and recompact all test pits within structural areas	✓	

APPENDIX A

Field Study

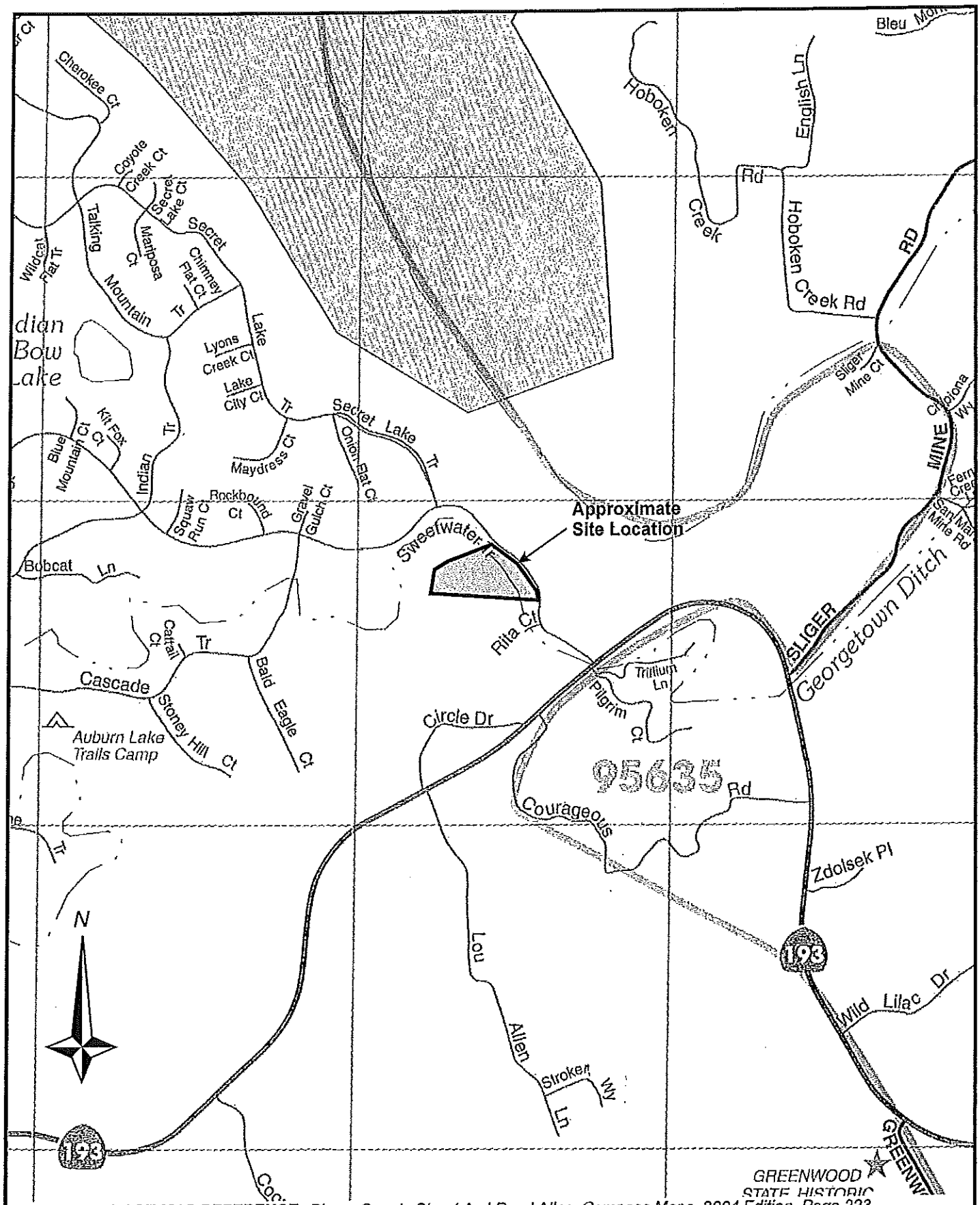
Vicinity Map
Site Plan
Logs of Exploratory Test Pits
Soil Classification Chart and Log Exploration

Introduction
The contents of this appendix shall be integrated with the geotechnical engineering study of which it is a part. They shall not be used in whole or in part as a sole source for information or recommendations regarding the subject site.

Field study
Our field study included a site reconnaissance by a Youngdahl Consulting Group, Inc. representative followed by a subsurface exploration program conducted on 7 December 2011, which included the excavation of 5 test pits at the locations selected by Psomas Engineering. The approximate locations shown on Figure A-2, this Appendix. Excavation of the test pits was accomplished with a CAT 430D rubber tire-mounted backhoe equipped with an 18-inch wide bucket. Bulk and bag samples were also collected from the pits.

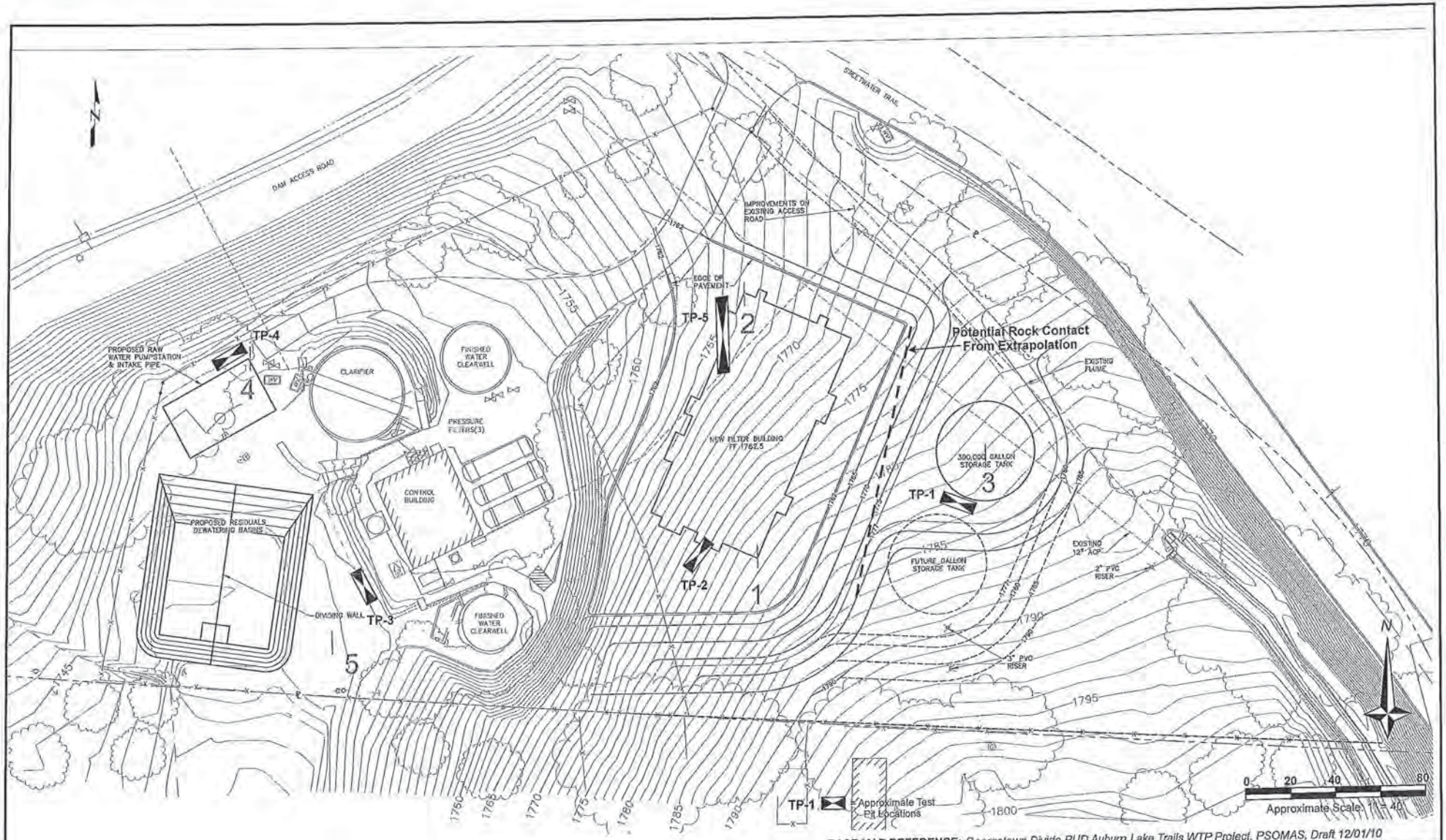
The Exploratory Test Pit Logs describe the vertical sequence of soils and materials encountered in each test pit, based primarily on our field classifications and supported by our subsequent laboratory examination and testing. Where a soil contact was observed to be gradual, our logs indicate the average contact depth. Our logs also graphically indicate the sample type, sample number and approximate depth of each soil sample obtained from the test pits.

The soils encountered were logged during excavation and provide the basis for the "Logs of Test Pits", Figures A-3 through A-7, this Appendix. These logs show a graphic representation of the soil profile, the location and depths at which samples were collected.



BASE MAP REFERENCE: *Placer County Street And Road Atlas, Compass Maps, 2004 Edition, Page 223*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL • ENVIRONMENTAL • MATERIALS TESTING	Project No.: E10208.000	**VICINITY MAP** **Auburn Lake Trails Water Treatment Plant** Greenwood, California	**FIGURE** **A-1**
	January 2011		

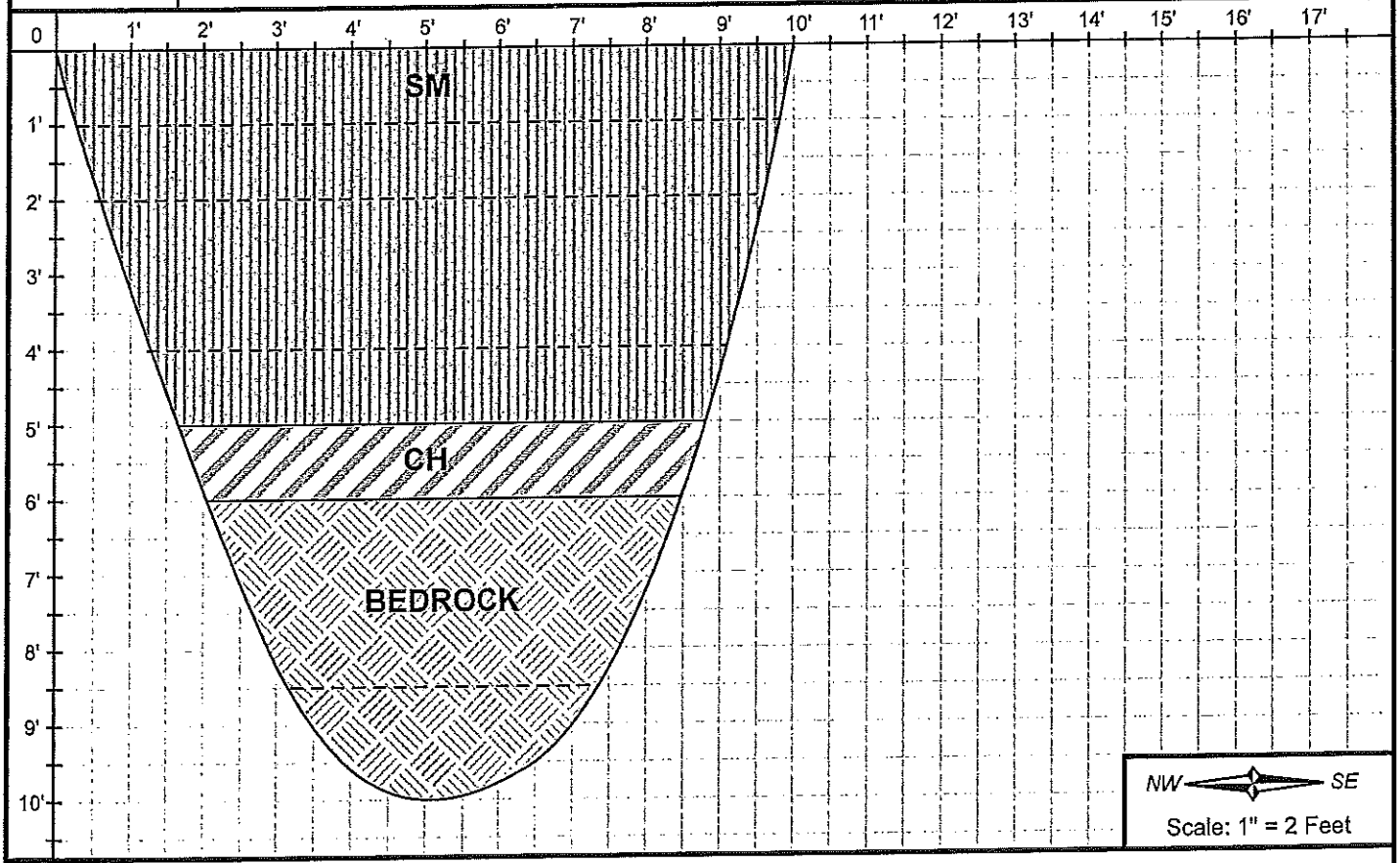


BASE MAP REFERENCE: *Georgetown Divide PUD Auburn Lake Trails WTP Project, PSOMAS, Draft 12/01/10*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL • ENVIRONMENTAL • MATERIALS TESTING	Project No.: E10208.000	**SITE PLAN** Auburn Lake Trails Water Treatment Plant Greenwood, California	FIGURE A-2
	January 2011		

Logged By: **MJG**	Date: **7 December 2010**	Elevation: **~ 1783'**	Pit No. **TP-1**
Equipment: **CAT 430D With 18" Bucket**		Pit Orientation: **NW - SE**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0 - 1'	Dark red brown silty **SAND (SM)**, very loose to loose, moist		
@ 1' - 2'	*Grades loose*		
@ 2' - 4'	*Grades red brown, loose to medium dense*		
@ 4' - 5'	*Grades medium dense*		
@ 5' - 6'	Yellow brown **CLAY (CH)** rind		
@ 6' - 8.5'	Yellow brown to red brown completely weathered metasedimentary **BEDROCK**		
@ 8.5' - 10'	*Grades moderately weathered*		
	Test pit terminated at 10' No free groundwater encountered No caving noted		

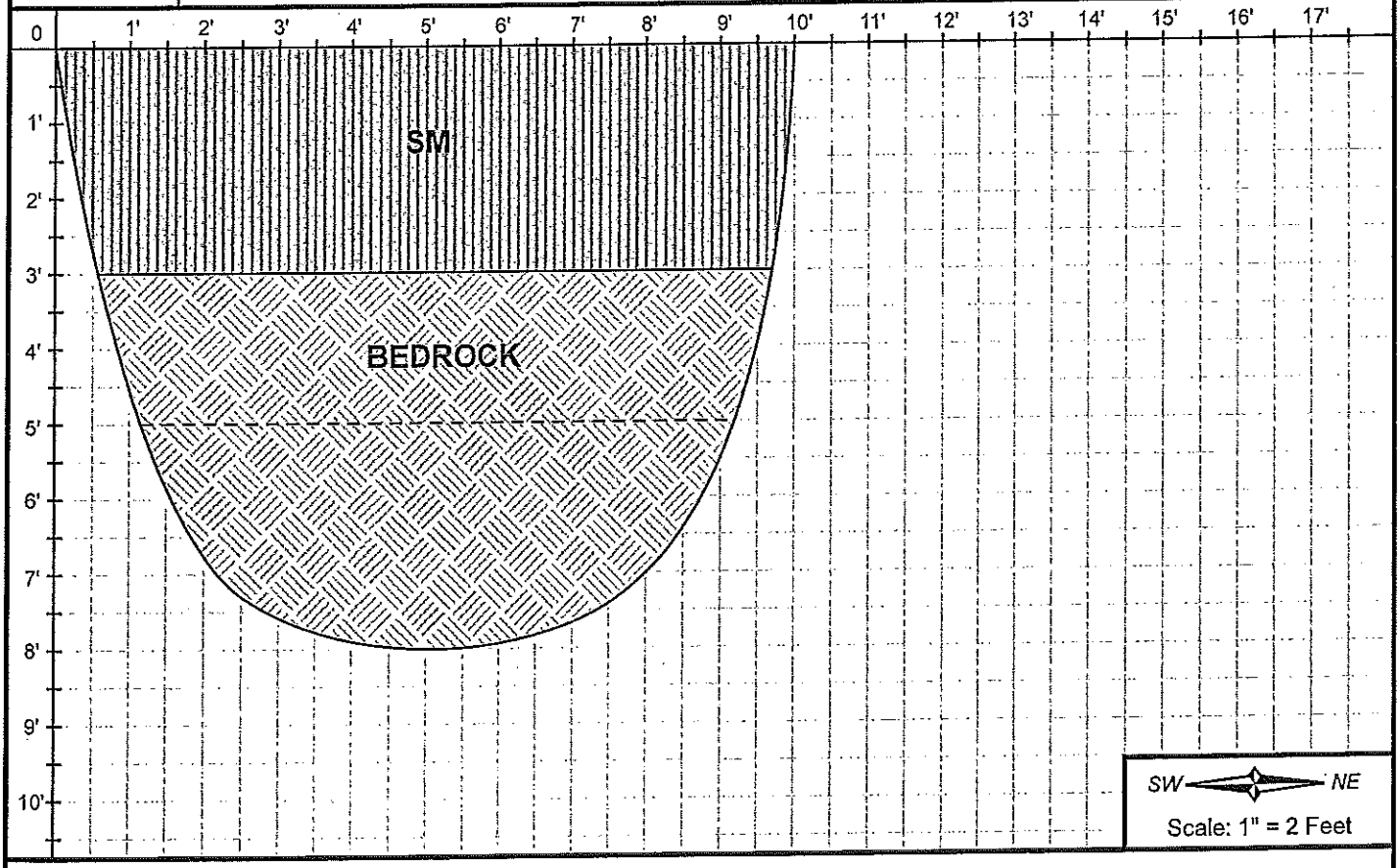


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL • ENVIRONMENTAL • MATERIALS TESTING	Project No.: E10208.000 January 2011	**EXPLORATORY TEST PIT LOG** **Auburn Lake Trails** **Water Treatment Plant** Greenwood, California	FIGURE **A-3**

Logged By: **MJG**	Date: **7 December 2010**	Elevation: **~ 1774'**	Pit No. **TP-2**
Equipment: **CAT 430D With 18" Bucket**		Pit Orientation: **SW - NE**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0 - 3'	Dark red brown silty **SAND (SM)**, loose, moist		
@ 3' - 5'	Red brown to yellow brown highly weathered metasedimentary **BEDROCK**, very closely fractured, fragments <6" Diameter, seams filled with clay and angular sand, select areas with close fracture spacing		
@ 5' - 8'	Yellow brown to blue gray moderately weathered metasedimentary **BEDROCK**, closely fractured, moist, with clay in seams		
	Test pit terminated at 8' (practical refusal) No free groundwater encountered No caving noted		

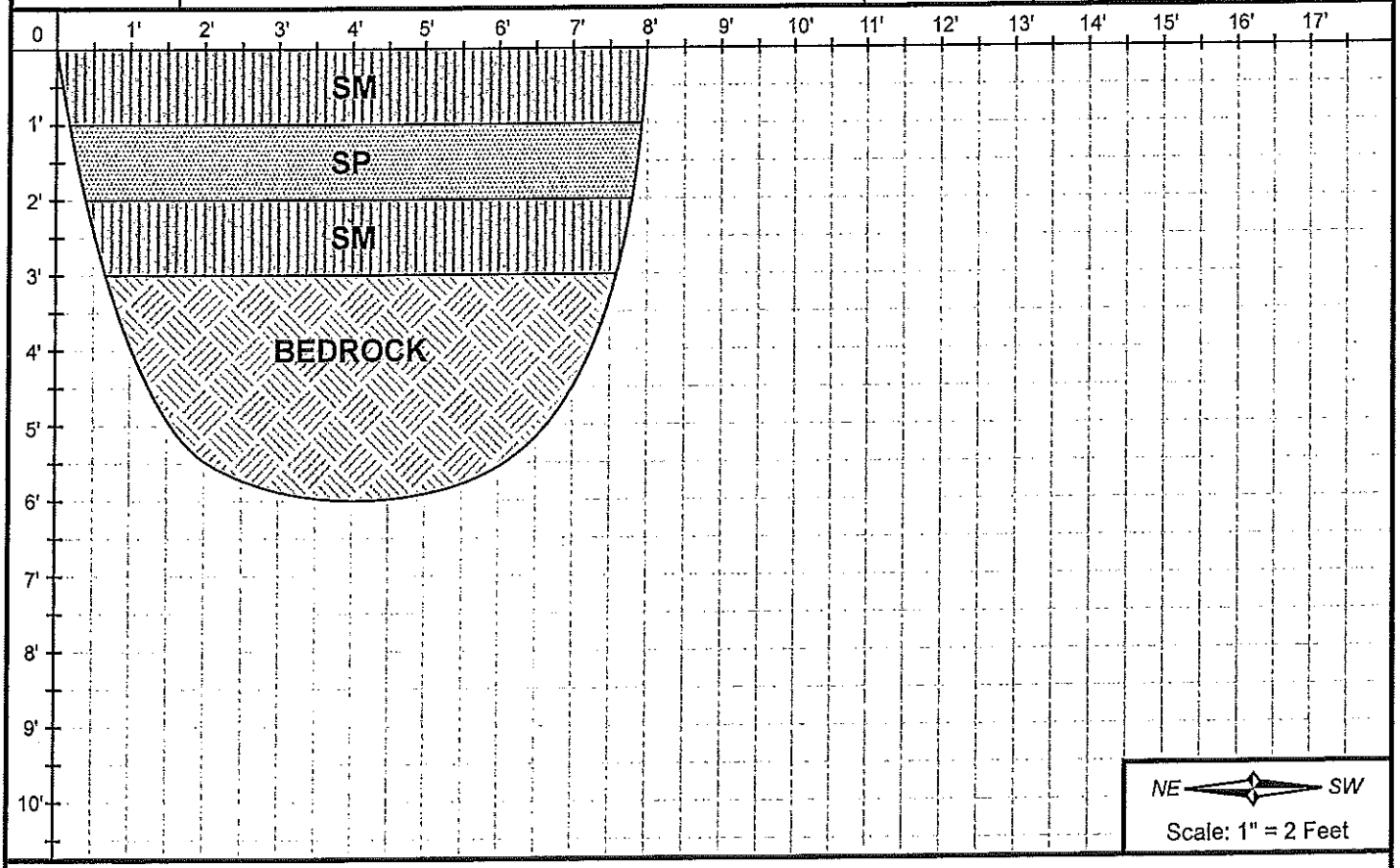


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL • ENVIRONMENTAL • MATERIALS TESTING	Project No.: E10208.000 January 2011	**EXPLORATORY TEST PIT LOG** **Auburn Lake Trails** **Water Treatment Plant** Greenwood, California	FIGURE **A-4**

Logged By: **MJG**	Date: **7 December 2010**	Elevation: **~ 1750'**	Pit No. **TP-3**
Equipment: **CAT 430D With 18" Bucket**		Pit Orientation: **NE - SW**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0 - 1'	Dark red brown silty **SAND (SM)**, very loose, very moist		
@ 1' - 2'	Yellow gray brown coarse **SAND (SP)** with gravel and rock, loose, wet		
@ 2' - 3'	Red brown silty **SAND (SM)**, loose, wet		
@ 3' - 6'	Gray moderately weathered metasedimentary **BEDROCK**, closely fractured, mildly friable		
	Test pit terminated at 6' (practical refusal) Seepage encountered at 1' Caving noted from 0 - 6'		

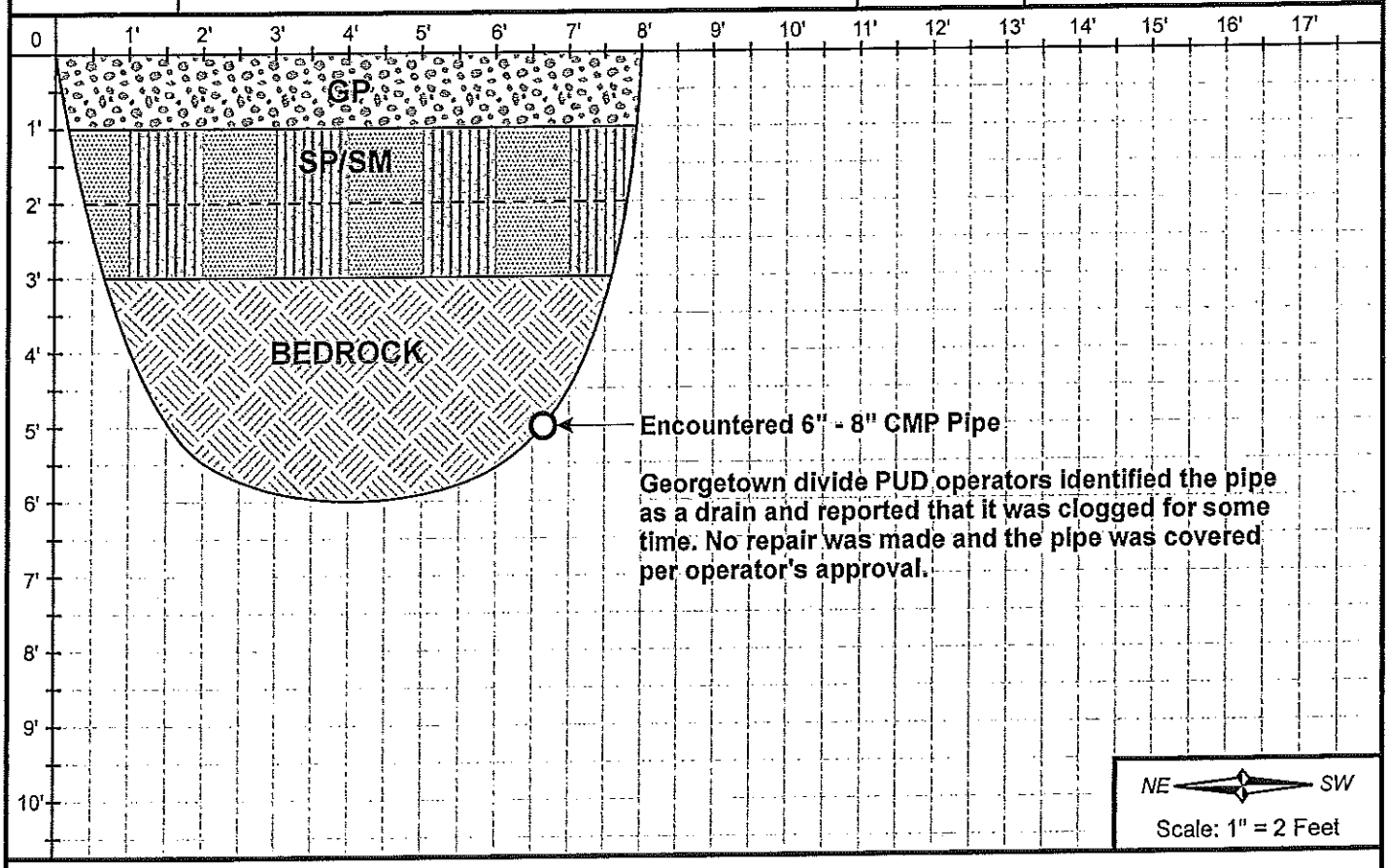


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL • ENVIRONMENTAL • MATERIALS TESTING	Project No.: E10208.000 January 2011	**EXPLORATORY TEST PIT LOG** **Auburn Lake Trails** **Water Treatment Plant** Greenwood, California	FIGURE **A-5**

Logged By: **MJG**	Date: **7 December 2010**	Elevation: **~ 1746'**	Pit No. **TP-4**
Equipment: **CAT 430D With 18" Bucket**		Pit Orientation: **NE - SW**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0 - 1'	Blue gray **GRAVEL (GP)**, loose, slightly moist (road base)		
@ 1' - 2'	Red brown silty coarse **SAND (SP/SM)**, moderately dense, very moist		
@ 2' - 3'	*Grades loose to moderately dense*		
@ 3' - 6'	Red brown to yellow brown moderately weathered metasedimentary **BEDROCK**, closely fractured, mildly to slightly friable fragments		
	Test pit terminated at 6' (practical refusal) Seepage encountered at 3' No caving noted		

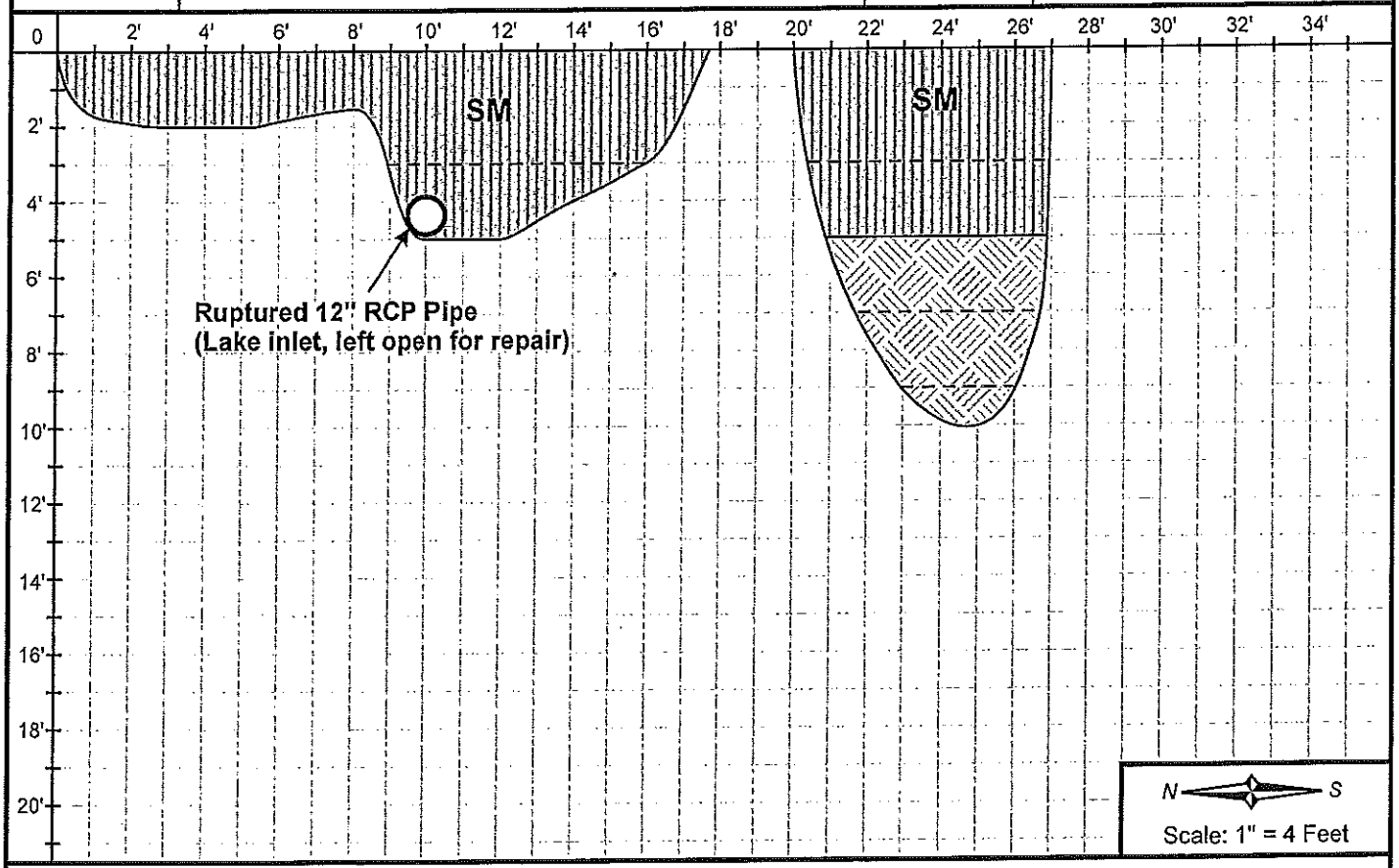


Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL • ENVIRONMENTAL • MATERIALS TESTING	Project No.: E10208.000	**EXPLORATORY TEST PIT LOG** **Auburn Lake Trails** **Water Treatment Plant** Greenwood, California	FIGURE **A-6**
	January 2011		

Logged By: **MJG**	Date: **7 December 2010**	Elevation: **~ 1765'**	Pit No. **TP-5**
Equipment: **CAT 430D With 18" Bucket**		Pit Orientation: **N - S**	

Depth (Feet)	Geotechnical Description & Unified Soil Classification	Sample	Tests & Comments
@ 0 - 3'	Red brown silty **SAND (SP/SM)**, loose, slightly moist		
@ 3' - 5'	*Grades loose to moderately dense*		
@ 5' - 7'	Red to blue gray slightly to moderately weathered metasedimentary **BEDROCK**		
@ 7' - 9'	*Grades moderately weatherd*		
@ 9' - 10'	*Grades less weathered*		
	Test pit terminated at 10' (practical refusal) No free groundwater encountered No caving noted		



Note: The test pit log indicates subsurface conditions only at the specific location and time noted. Subsurface conditions, including groundwater levels, at other locations of the subject site may differ significantly from conditions which, in the opinion of Youngdahl Consulting Group, Inc., exist at the sampling locations, Note, too, that the passage of time may affect conditions at the sampling locations.

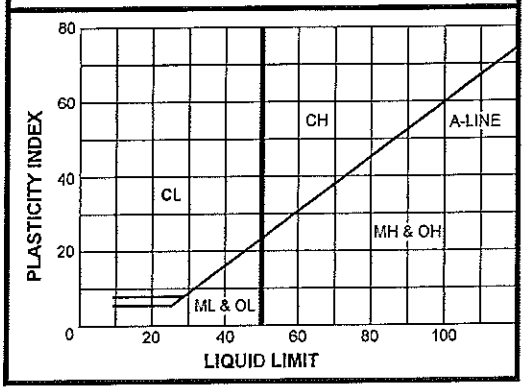
YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL • ENVIRONMENTAL • MATERIALS TESTING	Project No.: E10208.000 January 2011	**EXPLORATORY TEST PIT LOG** **Auburn Lake Trails** **Water Treatment Plant** Greenwood, California	FIGURE **A-7**

UNIFIED SOIL CLASSIFICATION SYSTEMS

MAJOR DIVISION			SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS Over 50% > #200 sieve	GRAVELS Over 50% > #4 sieve	Clean GRAVELS With Little Or No Fines	GW	Well graded **GRAVELS, GRAVEL-SAND** mixtures
			GP	Poorly graded **GRAVELS, GRAVEL-SAND** mixtures
		GRAVELS With Over 12% Fines	GM	Silty **GRAVELS**, poorly graded **GRAVEL-SAND-SILT** mixtures
			GC	Clayey **GRAVELS**, poorly graded **GRAVEL-SAND-CLAY** mixtures
	SANDS Over 50% < #4 sieve	Clean SANDS With Little Or No Fines	SW	Well graded **SANDS**, gravelly **SANDS**
			SP	Poorly graded **SANDS**, gravelly **SANDS**
		SANDS With Over 12% Fines	SM	Silty **SANDS**, poorly graded **SAND-SILT** mixtures
			SC	Clayey **SANDS**, poorly graded **SAND-CLAY** mixtures
FINE GRAINED SOILS Over 50% < #200 sieve	SILTS & CLAYS Liquid Limit < 50		ML	Inorganic **SILTS**, silty or clayey fine **SANDS**, or clayey **SILTS** with plasticity
			CL	Inorganic **CLAYS** of low to medium plasticity, gravelly, sandy, or silty **CLAYS**, lean **CLAYS**
			OL	Organic **CLAYS** and organic silty **CLAYS** of low plasticity
	SILTS & CLAYS Liquid Limit > 50		MH	Inorganic **SILTS**, micaceous or diamacious fine sandy or silty soils, elastic **SILTS**
			CH	Inorganic **CLAYS** of high plasticity, fat **CLAYS**
			OH	Organic **CLAYS** of medium to high plasticity, organic **SILTS**
HIGHLY ORGANIC CLAYS			PT	PEAT & other highly organic soils

PLASTICITY CHART

USED FOR CLASSIFICATION OF FINE GRAINED SOILS



SAMPLE DRIVING RECORD

BLOWS PER FOOT	DESCRIPTION
25	25 Blows drove sampler 12 inches, after initial 6 inches of seating
50/7"	50 Blows drove sampler 7 inches, after initial 6 inches of seating
50/3"	50 Blows drove sampler 3 inches during or after initial 6 inches of seating

Note: To avoid damage to sampling tools, driving is limited to 50 blows per 6 inches during or after seating interval.

SOIL GRAIN SIZE

U.S. STANDARD SIEVE	6"	3"	¾"	4	10	40	200		
	BOULDER	COBBLE	GRAVEL		SAND			SILT	CLAY
			COARSE	FINE	COARSE	MEDIUM	FINE		
SOIL GRAIN SIZE IN MILLIMETERS	150	75	19	4.75	2.0	.425	0.075	0.002	

KEY TO PIT & BORING SYMBOLS

	Standard Penetration test
	2.5" O.D. Modified California Sampler
	3" O.D. Modified California Sampler
	Shelby Tube Sampler
	2.5" Hand Driven Liner
	Bulk Sample
	Water Level At Time Of Drilling
	Water Level After Time Of Drilling
P	Perched Water

KEY TO PIT & BORING SYMBOLS

	Joint
	Foliation
	Water Seepage
NFWE	No Free Water Encountered
FWE	Free Water Encountered
REF	Sampling Refusal
DD	Dry Density (pcf)
MC	Moisture Content (%)
LL	Liquid Limit
PI	Plasticity Index
PP	Pocket Penetrometer
UCC	Unconfined Compression (ASTM D2166)
TVS	Pocket Torvane Shear
EI	Expansion Index (ASTM D4829)
Su	Undrained Shear Strength

YOUNGDAHL CONSULTING GROUP, INC.
GEOTECHNICAL • ENVIRONMENTAL • MATERIALS TESTING

Project No.: E10208.000

January 2011

SOIL CLASSIFICATION CHART AND LOG EXPLANATION
Auburn Lake Trails WTP
Greenwood, California

FIGURE
A-8

Georgetown Divide Public Utility District

6425 Main Street
P.O.4240
Georgetown, CA 95634

2018 TREATED WATER LINE REPLACEMENT PROJECT

ADDENDUM NO. 2

August 8, 2019

This addendum forms a part of the Contract Documents and modifies the original Contract Documents as noted below. Acknowledge receipt of this addendum by including a signed copy of this addendum with bidder's proposal. Failure to do so may subject Bidder to disqualification.

Item #1: Bid Bond Form

Attached is the Bidder's Bond Form to be submitted with the Bid.

Thank you in advance for your bids.

Steven Palmer, PE
General Manager
Georgetown Divide Public Utility District

I acknowledge receipt of this addendum and all attachments by including a signed copy of this addendum with bidder's proposal. Failure to do so may subject Bidder to disqualification.

8.13.19

Bidders Signature **Date**

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

BIDDER'S BOND

We, Caggiano General Engineering, Inc.

as Principal, and

Western National Mutual Insurance Company

as Surety are bound unto the GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT, State of California, hereafter referred to as "Obligee", in the penal sum of ten percent (10%) of the total amount of the bid of the Principal submitted to the Obligee for the work described below, for the payment of which sum we bind ourselves, jointly and severally,

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT:

WHEREAS, the Principal has submitted a proposal to the Obligee, for 2018 Treated Water Line Replacement Project,

(Copy here the exact description of work, including location as it appears on the proposal)

Replace 4" water main with 6" & 8" PVC pipe, install valves and appurtenances, Kit Fox Court & Angel Camp Court, Georgetown, CA 95634

for which bids are to be opened at * on August 13th, 2019

(Insert place where bids will be opened) *(Insert date of bid opening)*

* 6425 Main St., PO Box 4240 Georgetown, CA 95634

NOW, THEREFORE, if the Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in conformance with the bid, and files two bonds with the Obligee, one to guarantee faithful performance of the contract and the other to guarantee payment for labor and materials as provided by law, then this obligation shall be null and void; otherwise, it shall remain in full force.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including a reasonable attorney's fee to be fixed by the court.

Dated: August 13th , 2019 .

Caggiano General Engineering, Inc.

Principal

Western National Mutual Insurance Company

Surety

By

Pietro Micciche, *Attorney-in-fact*

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT **CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)

County of Los Angeles)

On AUG 13 2019 before me, Angel Nunez, Notary Public,

Date *Here Insert Name and Title of the Officer*

personally appeared Pietro Micciche

Name(s) of Signer(s)

,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

Signature of Notary Public

ANGEL NUNEZ
Commission # 2171501
Notary Public - California
Los Angeles County
My Comm. Expires Mar 14, 2020

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____ Document Date: _____

Number of Pages: _____ Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer — Title(s): _____	☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General	☐ Partner — ☐ Limited ☐ General
☐ Individual ☑ Attorney in Fact	☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator	☐ Trustee ☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer Is Representing: _____	Signer Is Representing: _____

WESTERN NATIONAL
The relationship company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Western National Mutual Insurance Company, a Minnesota mutual insurance company, does make, constitute and appoint: Patricia Zenizo, Angel Nunez, Pietro Micciche, and Elsa Escobar

Preferred Bonding Services (#9760)

Its true and lawful Attorney(s)-in-Fact, with full power and authority for and on behalf of the Company as surety, to execute and deliver and affix the seal of the Company thereto (if a seal is required) bond, undertakings recognizances or other written obligations in the nature thereof, **(other than bail bonds, bank depository bonds, mortgage deficiency bonds, mortgage guaranty bonds, guarantees of installment paper and note guaranty bonds, self-insurance workers compensation bonds guaranteeing payment of benefits, hazardous waste remediation bonds or black lung bonds),** as follows:

All written instruments in an amount not to exceed an aggregate of Seven Million Five Hundred Thousand and 00/100 ($7,500,000) for any single obligation, regardless of the number of instruments issued for the obligation.

and to bind Western National Mutual Insurance Company thereby, and all of the acts of said Attorneys-in-Fact, pursuant to these presents, are ratified and confirmed. This appointment is made under and by authority of the board of directors at a meeting held on September 28, 2010. This Power of Attorney is signed and sealed by facsimile under and by the authority of the following resolutions adopted by the board of directors of Western National Mutual Insurance Company on September 28, 2010:

RESOLVED that the president, any vice president, or assistant vice president in conjunction with the secretary or any assistant secretary, may appoint attorneys-in-fact or agents with authority as defined or limited in the instrument evidencing the appointment in each case, for and on behalf of the company to execute and deliver and affix the seal of the Company to bonds, undertakings, recognizances, and suretyship obligations of all kinds, and said officers may remove any such attorney-in-fact or agent and revoke any Power of Attorney previously granted to such person.

RESOLVED FURTHER that any bond, undertaking, recognizance, or suretyship obligation shall be valid and binding upon the Company

(i) when signed by the president, any vice president or assistant vice president, and attested and sealed (if a seal be required) by any secretary or assistant secretary; or

(ii) when signed by the president, any vice president or assistant vice president, secretary or assistant secretary, and countersigned and sealed (if a seal be required) by a duly authorized attorney-in-fact or agent; or

(iii) when duly executed and sealed (if a seal be required) by one or more attorneys-in-fact or agents pursuant to and within the limits of the authority evidenced by the Power of Attorney issued by the Company to such person or persons.

RESOLVED FURTHER that the signature of any authorized officer and the seal of the company may be affixed by facsimile to any Power of Attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company; and such signature and seal when so used shall have the same force and effect as though manually affixed.

IN WITNESS WHEREOF, Western National Mutual Insurance Company has caused these presents to be signed by its proper officer and its corporate seal to be affixed this 16th day of December, 2015.

Jon R. Hebeisen, Secretary

WESTERN NATIONAL MUTUAL INSURANCE CORPORATE SEAL MINNESOTA

Larry A. Byers, Sr. Vice President

STATE OF MINNESOTA, COUNTY OF DAKOTA

On this 16th day of December, 2015, personally came before me, Jon R. Hebeisen and Larry A. Byers and to me known to be the individuals and officers of the Western National Mutual Insurance Company who executed the above instrument, and they each acknowledged the execution of the same, and being by me duly sworn, did severally dispose and say; that they are the said officers of the corporation aforesaid, and that the seal affixed to the above instrument is the seal of the corporation, and that said corporate seal and their signatures as such officers were duly affixed and subscribed to the said instrument by the authority of the board of directors of said corporation.

JENNIFER A YOUNG
NOTARY PUBLIC - MINNESOTA
MY COMMISSION EXPIRES 01/31/2021

Jennifer A. Young, Notary Public
My commission expires January 31,2021

CERTIFICATE

I, the undersigned, assistant secretary of the Western National Mutual Insurance Company, a Minnesota corporation, CERTIFY that the foregoing and attached Power of Attorney remains in full force and has not been revoked; and furthermore, that the Resolutions of the board of directors set forth in the Power of Attorney, are now in force.

Signed and sealed at the City of Edina, MN this 13th day of August, 2019

WESTERN NATIONAL MUTUAL INSURANCE CORPORATE SEAL MINNESOTA

Jennifer A. Young, Assistant Secretary

AGENDA ITEM 7.B.

Attachment 4

Resolution

RESOLUTION NO. 2019-

OF THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT AUTHORIZING THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH CAGGIANO GENERAL ENGINEERING FOR AN AMOUNT NOT TO EXCEED $280,005 FOR THE 2018 TREATED WATER LINE REPLACEMENT PROJECT, AND AUTHORIZING THE GENERAL MANAGER TO APPROVE CHANGE ORDERS NOT TO EXCEED 10% OF THE CONTRACT AMOUNT

WHEREAS, the 2018 Treated Water Line Replacement Project is planned for Fiscal Year 2019/202 in the Board adopted Five Year Capital Improvement Plan; and

WHEREAS, a notice inviting bids to select a contractor to perform the Project was issued on July 15, 2019, and six (6) bids were received on August 14, 2019; and

WHEREAS, after reviewing bids, District Staff have determined that Caggiano was the lowest responsive and responsible bidder; and

WHEREAS, the Caggiano bid is in the amount of $280,005; and

WHEREAS, the project expenditures are expected to be in the amount of $376,861, which is within the total project budget of $379,500.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT THAT

1. The construction contract is awarded to Caggiano General Engineering.
2. The General Manager is authorized to execute a construction contract with Caggiano General Engineering in the amount of $280,005 for the Project.
3. The General Manager is authorized to approve change orders not to exceed 10% of the contract amount.

PASSED AND ADOPTED by the Board of Directors of the Georgetown Divide Public Utility District at a meeting of said Board held on the tenth day of September 2019, by the following vote:

AYES:

NOES:

ABSENT/ABSTAIN:

_____
Dane Wadle, President, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

Attest:

_____
Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CERTIFICATION

I hereby certify that the foregoing is a full, true and correct copy of Resolution 2019-__ duly and regularly adopted by the Board of Directors of the Georgetown Divide Public Utility District, County of El Dorado, State of California, on this tenth day of September 2019.

_____
Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF September 10, 2019
AGENDA ITEM NO. 7.C.

AGENDA SECTION: **NEW BUSINESS**

SUBJECT: **APPROVE APPLICATION AND COMMIT TO FINANCIAL AND LEGAL OBLIGATIONS ASSOCIATED WITH WATERSMART GRANTS: WATER AND ENERGY EFFICIENCY GRANTS FOR FISCAL YEAR 2020, FUNDING OPPORTUNITY ANNOUNCEMENT: NO. BOR-DO-20-F001**

PREPARED BY: Adam Brown, Water Resources Manager AB

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

On August 5, 2019, Bureau of Reclamation (BOR) released funding opportunity in water and energy efficiency grants (Attachment A) for years 2020 and 2021.

> *"The objective of this funding opportunity announcement (FOA) is to invite state, Indian tribes, irrigation districts, water districts and other organizations with water or power delivery authority to leverage their money and resources by cost sharing with Reclamation on projects that seek to conserve and use water more efficiently, increase the production of hydropower; mitigate conflict risk areas at a high risk of future water conflict; enable farmers to make additional on-farm improvements in the future, including improvements that may be eligible for Natural Resources Conservation Service (NRCS) funding; and accomplish other benefits that contribute to water supply reliability in the western United States."*

The FOA is split into two funding groups, funding group I and funding group II as detailed below;

- Funding group I – Provides funding up to $300,000 and requires a project be complete within two years of award.
- Funding group II – Provides funding up to $1,500,000 and requires a project be complete within three years of award.

Each funding group requires a cost sharing or 50 percent or more of the total project cost. Cost sharing may be made through cash, costs contributed by the applicant, or third-party in-kind contributions.

Specific projects eligible for this FOA include:

- Water Conservation Projects
    - Canal Lining/Piping;
    - Municipal Metering;
    - Irrigation Flow Measurement;
    - Supervisory Control and Data Acquisition and Automation; and
    - Irrigation Measures; and
- Hydropower Projects.

This Grant will fund all phases of a project including engineering, environmental review, and construction. Proposals received before October 3, 2019 will be considered for fiscal year 2020 funding. Proposals received after October 3, 2019 and before September 30, 2020 will be considered for fiscal year 2021.

DISCUSSION

Georgetown Divide Public Utility District (District) staff evaluated FOA eligibility and identified the Upcountry Ditch Reliability Project as an eligible project that has high potential to obtain funding from this Grant. This Project is included in the Board adopted 2019-2024 Capital Improvement Plan (CIP), and the project information sheets from the CIP are included in Attachment B.

The main source of the Districts water supply originates from Stumpy Meadows Reservoir (Reservoir) that stores 20,000-acre feet. Surface water is released into Pilot Creek which is diverted at the Pilot Creek Diversion Dam into the Districts water supply system approximately two miles downstream of the Reservoir. Raw water travels through approximately 70 miles of supply ditch/conduits from the Pilot Creek Diversion Dam to water treatment plants near Walton Lake and Auburn Lake Trails. Much of the 70 miles of supply ditch/conduits is unlined earthen channel.

The Upcountry Ditch Reliability Project implements improvements identified in the 2002 Water System Reliability Study for the Georgetown Divide Public Utility District (Study) prepared by KASL Consulting Engineering, Inc. The Study is available on the District website at https://www.gd-pud.org/studies-and-reports. The Study evaluated the Districts raw water ditch system on the basis of performance, condition and capacity. Priority reliability improvement measures were identified that would result in water savings and improve water

delivery reliability. The Upcountry Ditch is the section of ditch identified between Pilot Creek Diversion and Walton Lake Treatment Plant. The improvements are located between Structure #1 and Structure #2 (The Narrows). A project description is presented below:

The Narrows (Structure #1 to Structure #2)

> The area identified as *The Narrows* is approximately 450 liner feet of open ditch that utilizes a narrow 2 to 6 foot wide access road located along a northern slope, approximately 250 feet above Pilot Creek. Due to the extreme topography the access road adjacent directly adjacent to the ditch section no longer provides access and slope destabilization is threating to compromise ditch delivery capabilities. In order to maintain water delivery reliability, the scope includes replacing the open ditch with 48-inch diameter high density polyethylene (HDPE) pipe, and slope and roadway stabilization. Slope and roadway stabilization will include retaining wall construction and access road.

On March 12, 2019, Staff requested Board approval of an application for funding from a prior round of WaterSMARTS funding for this same Project. The Board did not approve the application at that time.

A Draft Application is included as Attachment C to this staff report. The application includes photographs, maps, cross-section and engineering cost estimates. Staff has reached out to various organizations for letters of support, including El Dorado County Water Agency, District Four Supervisor and Senator Brian Dahle.

Applications are required to be submitted by Thursday, October 3, 2019, 4:00 p.m. Mountain Daylight Time. Funding awards are anticipated in Winter of 2020 and the Project must be completed within three years of award.

In order for the application to be complete, the BOR requires that the Board adopt the attached resolution authorizing the application, committing to providing the required local funding to complete the Project, and designating the General Manager to execute the financial agreement and other Project related documents as required by the BOR.

FISCAL IMPACT

This Project is already included in the adopted 2019-2024 Capital Improvement Plan (CIP), and was planned for in the FY2019/2020 Operating Budget. However, during development of grant application and project area visit, the repair area was increased from 250 feet to approximately 450 linear feet. This change increases the construction cost by $120,000, and the District cost share would increase by $60,000.

The estimated Project budget is presented in the table below.

Task	Local Match	Grant	Total
Preliminary Engineering	$ 47,500	$ 47,500	$ 95,000
Environmental	$ 21,500	$ 21,500	$ 43,000
Construction Engineering	$ 25,000	$ 25,000	$ 50,000
Construction Contract	$ 536,500	$ 536,500	$ 1,073,000
Other CIP Costs	$ 25,000	$ 25,000	$ 50,000
Total	$ 655,500	$ 655,500	$ 1,311,000

The full cost of this Project is already programmed in the CIP for $1,191,000, and the new Project cost estimate is $1,311,000, so the five year capital improvement plan will need to be updated. Receipt of the grant would reduce costs to the District to $655,500. In other words, if successful the District would spend $655,500 less of its own funds to complete the revised Project.

CEQA ASSESSMENT

This action approving the grant application is not a CEQA Project. If the District receives the Grant funding, then a CEQA assessment will be performed as part of the environmental work associated with this Project.

RECOMMENDED ACTION

Staff recommends that the Board adopt the attached Resolution (Attachment D) authorizing the Grant application and associated cost sharing obligations.

ATTACHMENTS

1. WaterSMARTS – Funding Opportunity Announcement: No. BOR-DO-20-F001
2. Project Information Sheets
3. Grant Application
4. Resolution

AGENDA ITEM 7.C.

Attachment 1

RECLAMATION

Managing Water in the West

Funding Opportunity Announcement No. BOR-DO-20-F001

WaterSMART Grants: Water and Energy Efficiency Grants for Fiscal Years 2020 and 2021

U.S. Department of the Interior
Bureau of Reclamation
Policy and Administration
Denver, Colorado

August 2019

Mission Statements

The Department of the Interior conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Cover photo: Pathfinder Irrigation District's Lateral 21A Pipeline Project in Nebraska, which was an FY 2017 Water and Energy Efficiency Grant project. Photo Courtesy of Pathfinder Irrigation District.

Synopsis

Federal Agency Name:	Department of the Interior, Bureau of Reclamation, Policy and Administration
Funding Opportunity Title:	WaterSMART Grants: Water and Energy Efficiency Grants for fiscal years (FY) 2020 and 2021
Announcement Type:	Funding Opportunity Announcement (FOA)
Funding Opportunity Number:	BOR-DO-20-F001
Catalog of Federal Domestic Assistance Number:	15.507
Dates: (See FOA Sec. D.4)	This FOA covers two application submittal periods: Proposals received before October 3, 2019, 4:00 p.m. Mountain Daylight Time (MDT), will be considered for FY 2020 funding, contingent on appropriations. Proposals received after October 3, 2019, 4:00 p.m. MDT and before September 30, 2020, 4:00 p.m.MDT, will be considered for FY 2021 funding, contingent on appropriations.
Eligible Applicants: (See FOA Sec. C.1)	States, Indian tribes, irrigation districts, water districts, or other organizations with water or power delivery authority located in the Western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended
Recipient Cost Share: (See FOA Sec. C.2)	50 percent or more of project costs
Federal Funding Amount: (See FOA Sec. B.1)	**Funding Group I:** Up to $300,000 per agreement **Funding Group II:** Up to $1,500,000 per agreement
Estimated Number of Agreements to be Awarded: (See FOA Sec. B.1)	Approximately 15-20 projects per application submittal period and contingent on appropriations.

This page is intentionally left blank.

Application Checklist

The following table contains a summary of the information that you are required to submit with your application.

√	What to submit	Required content	Form or format	When to submit
	Mandatory Federal Forms: Application for Federal Financial Assistance Budget Information Assurances Disclosure of Lobbying Activities	See Sec. D.2.2.1	SF-424, SF-424A, SF-424B, SF-424C, SF-424D and SF-LLL forms may be obtained at www.grants.gov/web/grants/forms/sf-424-family.html	*
	Title page	See Sec. D.2.2.2	Page 15	*
	Table of contents	See Sec. D.2.2.3	Page 15	*
	Technical proposal:			*
	Executive summary	See Sec. D.2.2.4	Page 15	*
	Background data	See Sec. D.2.2.4	Page 16	*
	Project description	See Sec. D.2.2.4	Page 16	*
	Evaluation criteria	See Sec. E.1	Page 31	*
	Project Budget:			*
	Funding plan	See Sec. D.2.2.5	Page 17	*
	Budget proposal	See Sec. D.2.2.5	Page 19	*
	Budget narrative	See Sec. D.2.2.5	Page 20	*
	Environmental and cultural resources compliance	See Sec. F.2.1	Page 49	*
	Required permits or approvals	See Sec. D.2.2.6	Page 24	*
	Letters of support	See Sec. D.2.2.7	Page 25	*
	Official Resolutions	See Sec. D.2.2.8	Page 25	**
	Unique Entity Identifier and System for Award Management	See Sec. D.3	Page 25	***

* Submit materials with your application.

** Document should be submitted with your application; however, please refer to the applicable section of the FOA for extended submission date.

*** Should be completed prior to the application deadline; however, please refer to the applicable section of the FOA for extended completion date.

This page is intentionally left blank.

Acronyms and Abbreviations

AFY	acre-feet per year
AMI	advanced metering infrastructure
ASAP	Automated Standard Application for Payments
ARC	Application Review Committee
CE	Categorical Exclusion
CEC	Categorical Exclusion Checklist
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWMP	Cooperative Watershed Management Program
Department	U.S. Department of the Interior
DUNS	Data Universal Number System
EA	Environmental Assessment
EIS	Environmental Impact Statement
EQIP	Environmental Quality Incentives Program
ESA	Endangered Species Act
ET	evapotranspiration
FAPIIS	Federal Award Performance Integrity Information System
FAQ	Frequently Asked Question
FERC	Federal Energy Regulatory Commission
FOA	Funding Opportunity Announcement
FONSI	Finding of No Significant Impact
FY	fiscal year
LOPP	Lease of Power Privilege
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
OM&R	operations, maintenance, and replacement
P.L.	Public Law
Reclamation	Bureau of Reclamation
SAM	System of Award Management
SCADA	Supervisory Control and Data Acquisition and Automation
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service
WaterSMART	Sustain and Manage America's Resources for Tomorrow

This page is intentionally left blank.

Contents

This page is intentionally left blank.

Section A. Funding Opportunity Description

A.1. Program Information

Through WaterSMART (Sustain and Manage America's Resources for Tomorrow), the Bureau of Reclamation (Reclamation) leverages Federal and non-Federal funding to support stakeholder efforts to stretch scarce water supplies and avoid conflicts over water. WaterSMART provides support for the U.S. Department of the Interior's (Department) priorities, including creating a legacy of conservation stewardship, sustainably developing our energy and natural resources, modernizing our infrastructure through public-private partnerships, striking a regulatory balance, and restoring trust with local communities by improving relationships and communication with states, tribes, local governments, communities, landowners and water users.

Through Water and Energy Efficiency Grants, Reclamation provides assistance to states, tribes, irrigation districts, water districts, and other entities with water or power delivery authority to undertake projects that result in quantifiable and sustained water savings and support broader water reliability benefits. Water and Energy Efficiency Grants are a component of Reclamation's WaterSMART Grants Program, which also includes Water Marketing Strategy Grants and Small-Scale Water Efficiency Projects. For further information on the WaterSMART Grants Program, please see www.usbr.gov/watersmart/index.html.

This Water and Energy Efficiency Grants FOA provides funding for projects that result in quantifiable water savings and support broader water reliability benefits. These projects conserve and use water more efficiently; increase the production of hydropower; mitigate conflict risk in areas at a high risk of future water conflict; and accomplish other benefits that contribute to water supply reliability in the western United States.

Through this FOA, Reclamation provides funding for projects that increase water reliability consistent with sections 3 and 4 of the October 19, 2018, Presidential Memorandum on Promoting the Reliable Supply and Delivery of Water in the West.

A list of Frequently Asked Questions (FAQs) about WaterSMART and this FOA can be found online at www.usbr.gov/WaterSMART/weeg/faq.html. The list of FAQs will be updated periodically during the application period. For further information on WaterSMART Grants, please see www.usbr.gov/watersmart/weeg/index.html. For further information on the WaterSMART Program, please see www.usbr.gov/WaterSMART.

A.2. Objective of this Funding Opportunity Announcement

The objective of this FOA is to invite states, Indian tribes, irrigation districts, water districts, and other organizations with water or power delivery authority to leverage their money and resources by cost sharing with Reclamation on projects that seek to conserve and use water more efficiently; increase the production of hydropower; mitigate conflict risk in areas at a high risk of future water conflict; enable farmers to make additional on-farm improvements in the future, including improvements that may be eligible for Natural Resources Conservation Service (NRCS) funding; and accomplish other benefits that contribute to water supply reliability in the western United States.

A.3. Statutory Authority

This FOA is issued under the authority of Section 9504(a) of the Secure Water Act, Subtitle F of Title IX of the Omnibus Public Land Management Act of 2009, Public Law (P.L.) 111-11 (42 United States Code [U.S.C.] 10364).

A.4. Other Related Funding Opportunities

Through WaterSMART Grants, Reclamation also provides other funding opportunities. Through **Small-Scale Water Efficiency Projects**, Reclamation provides funding for small-scale water management projects (up to $75,000 in Federal funding for each project) that have been identified through previous planning efforts. Reclamation has developed a streamlined selection and review process to reflect the small-scale nature of these projects.

In addition, through **Water Marketing Strategy Grants**, Reclamation provides meaningful support for entities exploring actions that can be taken to develop or facilitate water marketing. Under this funding opportunity applicants will be invited to conduct planning activities to develop a water marketing strategy to establish or expand water markets or water marketing transactions.

Reclamation provides funding for water management projects through several other programs under WaterSMART. Through the **Drought Response Program**, Reclamation provides funding to help build resilience to drought. Through Drought Contingency Planning, Reclamation supports the development of drought contingency plans with participation from a diverse set of stakeholders. Reclamation also provides funding for Drought Resiliency Projects that increase water supply flexibility and improve water management to build long term resilience to drought and are supported by an existing drought contingency plan.

In addition, through the **Cooperative Watershed Management Program (CWMP)**, Reclamation provides funding to watershed groups to encourage diverse stakeholders to form local solutions to address their watershed management needs. Reclamation provides funding through Phase I of the CWMP for watershed group development, restoration planning, and watershed management project design and through Phase II for the implementation of watershed management projects.

For information on the timing for these FOAs, please visit the WaterSMART Program website: www.usbr.gov/watersmart/index.html.

A.5. Collaboration with the Natural Resources Conservation Service

Reclamation and NRCS are collaborating to align program resources in areas of the Western United States where our mission areas overlap (17 Western States), to improve the impact of the agencies' respective drought resiliency and water efficiency investments. In 2011, NRCS and Reclamation began efforts to coordinate water conservation activities in California. Beginning in 2012, Reclamation made changes to WaterSMART Grants: Water and Energy Efficiency Grants to support similar collaboration on a West-wide basis. Applicants under WaterSMART Grants receive additional consideration in the evaluation process for delivery system improvements that complement on-farm improvements supported by NRCS such as through their Environmental Quality Incentives Program (EQIP). Contingent on available appropriations, NRCS provides dedicated EQIP funding to support on-farm water efficiency improvements by producers served by water delivery infrastructure improved through a WaterSMART Grant. Also, in FY 2017, Reclamation and NRCS began working together to expand this partnership to include collaboration on a broader range of activities, including projects funded through this FOA.

Please note that on-farm improvements themselves are not eligible activities for funding under this FOA. NRCS will have a separate application process for the on-farm components of selected projects.

Under this FOA, consideration will be given under *Section E.1.2. Evaluation Criterion D—Complementing On-Farm Irrigation Improvements* for proposals that describe on-farm efficiency work that is currently being completed or is anticipated to be completed in collaboration with NRCS in the area (e.g., with a direct connection to the district's water supply). Please contact your state NRCS office for more information regarding NRCS assistance. You can find the contact information for your state NRCS office on the United States Department of Agriculture's website, www.nrcs.usda.gov/wps/portal/nrcs/main/national/contact/states/.

This page is intentionally left blank.

Section B. Award Information

B.1. Total Project Funding

The President's FY 2020 budget request includes $10 million for WaterSMART Grants. Reclamation will determine the final amount of funding available for award under this FOA once final FY 2020 appropriations have been made. Information about FY 2021 funding will be provided when appropriations information is released. The amount of funding available for awards under this FOA will depend on the demand for funding under this and other categories of WaterSMART Grants.

Applications submitted under this FOA may also be considered if other funding becomes available in FY 2020 or subsequently.

B.2. Project Funding Limitations

Multiple applications for funding may be submitted for consideration (for example, an applicant may submit a proposal for funding under Funding Group I and a separate proposal under Funding Group II). ***However, no more than $1,500,000 will be awarded in any fiscal year to any one applicant under this FOA (i.e., an applicant may apply and receive up to $1,500,000 in FY 2020 and up to $1,500,000 in FY 2021).***

The Federal share (Reclamation's share in addition to any other sources of Federal funding) of any one proposed project shall not exceed 50 percent of the total project costs. Generally, the non-Federal share of project costs must be expended at the same or greater rate as the Federal share of project costs.

Applicants are invited to submit proposals under the following two funding groups.

B.2.1. Funding Group I

Up to $300,000 in Federal funds provided through this FOA will be available for smaller, on-the-ground projects.

- In general, projects funded under Funding Group I should be completed within two years of award (see *Section C.3.3. Length of Projects* for additional information).

- It is expected that more awards will be made for projects in Funding Group I than Funding Group II (described below).

B.2.2. Funding Group II

Up to $1,500,000 in Federal funds provided through this FOA will be available for larger, phased on-the-ground projects that may take up to 3 years to complete.

- Projects selected under Funding Group II will be funded on an annual basis, for a period of up to 3 years, with a maximum of $1,500,000 available for the entire project. Funding for the remaining project years will be made available contingent on subsequent congressional appropriations. (Note: Recipients will not be asked to reapply to receive FY 2021, FY 2022, and FY 2023 funding).
- Recipients must demonstrate sufficient progress to receive subsequent funding for remaining phases of the project.
- It is expected that only a small number of awards will be made for projects in Funding Group II.

B.3. Environmental and Cultural Resource Compliance

All projects selected for funding under this FOA will be required to comply with Federal environmental and cultural resource laws and other regulations. Projects funded under this FOA may require the completion of an environmental assessment under the National Environmental Policy Act (NEPA), which can be costly. Please consider this when developing your project budget. See *Section D.2.2.5 Project Budget* for additional information.

B.4. Assistance Instrument

Project awards will be made through grants or cooperative agreements as applicable to each project. If a cooperative agreement is awarded, the recipient should expect Reclamation to have substantial involvement in the project.

Substantial involvement by Reclamation may include:

- Collaboration and participation with the recipient in the management of the project and close oversight of the recipient's activities to ensure that the program objectives are being achieved.

- Oversight may include review, input, and approval at key interim stages of the project.

At the request of the recipient, Reclamation can provide technical assistance after award of the project. If you receive Reclamation's assistance, you must account for these costs in your budget. To discuss available assistance and these costs, contact the Program Coordinator identified in *Section G. Agency Contacts.*

Section C. Eligibility Information

C.1. Eligible Applicants

Under P.L. 111-11, Section 9502, an eligible applicant is a state, Indian tribe, irrigation district, water district, or other organization with water or power delivery authority.

Applicants must also be located in the Western United States or Territories as identified in the Reclamation Act of June 17, 1902, as amended and supplemented; specifically: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wyoming, American Samoa, Guam, the Northern Mariana Islands, and the Virgin Islands.

Those not eligible include, but are not limited to, the following entities:

- Federal Governmental entities
- Individuals
- Institutes of higher education
- 501(c)4 organizations
- 501(c)6 organizations

C.2. Cost Sharing Requirements

Applicants must be capable of cost sharing ***50*** percent or more of the total project costs. The total project cost is defined as the total allowable costs incurred under a Federal award and all required cost share and voluntary committed cost share contributions, including third-party contributions.

Cost share may be made through cash, costs contributed by the applicant, or third-party in-kind contributions. Third-party in-kind contributions is the value of non-cash contributions of property or services that benefit the federally assisted project and are contributed by non-Federal third parties, without charge. Cost share funding from sources outside the applicant's organization (e.g., loans or state grants) should be secured and available to the applicant prior to award. Please see *Section D.2.2.9 Official Resolution* and *Section D.2.2.5 Funding Plan and Letters of Commitment* for more information regarding the documentation required to verify commitments to meet cost sharing requirements.

Other sources of Federal funding may not be counted towards the required cost share. The exception to this requirement is where the Federal statute authorizing a program specifically provides that Federal funds made available for such program can be applied to matching or cost sharing requirements of other Federal programs, such as awards to tribal organizations under P.L. 93-638, as amended.

If it is determined that the Federal funding cannot be applied towards the non-Federal cost share, the work associated with the funding may be removed from the proposed project.

C.2.1. Cost Share Regulations

All cost-share contributions must meet the applicable administrative and cost principles criteria established in 2 Code of Federal Regulations (CFR) Part 200, available at www.ecfr.gov.

C.2.2. Third-Party In-Kind Contributions

Third-party in-kind contributions may be in the form of equipment, supplies, and other expendable property, as well as the value of services directly benefiting and specifically identifiable to the proposed project. The cost or value of third-party in-kind contributions that have been or will be relied on to satisfy a cost-sharing or matching requirement for another Federal financial assistance agreement, a Federal procurement contract, or any other award of Federal funds may not be relied on to satisfy the cost-share requirement for an award under this FOA. Applicants should refer to 2 CFR §200.434 *Contributions and donations* for regulations regarding the valuation of third-party in-kind contributions, available at www.ecfr.gov.

C.3. Eligible Projects

C.3.1. Eligible Projects

Water conservation and hydropower projects eligible for funding under this FOA are described below. Applications may include any one, or a combination, of the types of projects described. In general, if you are seeking funding for multiple projects (e.g., a piping project and a hydropower project) and the projects are interrelated or closely related, they should be combined in one application.

Applicants may submit multiple project proposals; however, no more than $1,500,000 will be awarded in any FY to any one applicant under this FOA (i.e., an applicant may apply and receive up to $1,500,000 in FY 2020 and up to $1,500,000 in FY 2021).

C.3.1.1. Water Conservation Projects

Projects that result in quantifiable and sustained water savings or improved water management (please note that an agreement will not be awarded for an improvement to conserve irrigation water unless the applicant agrees to the terms of Section 9504(a)(3)(B) of Public Law 111-11. See *Section F.2.3. Requirements for Agricultural Operations under Public Law 111-11, Section 9504(a)(3)(D)* of this FOA for further information). Projects include:

- **Canal Lining/Piping:** Projects that line or pipe canals, resulting in conserved water. Projects include, but are not limited to:
  - Installing new proven lining materials or technology
  - Converting open canals to pipeline
  - Constructing conveyance improvements, turnouts, or pipelines
- **Municipal Metering:** Projects that install meters, resulting in measurable water savings. Projects include, but are not limited to:
  - Installing water service meters
  - Installing distribution systems meters associated with production and/or leakage quantification
- **Irrigation Flow Measurement:** Projects that improve measurement accuracy and result in reduced spills and over-deliveries to irrigators. Projects include, but are not limited to:
  - Installing weirs, flumes, ramps, etc. in open channels
  - Installing meters in pressurized pipes
- **Supervisory Control and Data Acquisition and Automation (SCADA)**: Projects that install SCADA and/or automation components that provide water savings when irrigation delivery system operational efficiency is improved to reduce spills, over-deliveries, and seepage. Projects include, but are not limited to:
  - Installing SCADA components that allow for remote monitoring of irrigation delivery system conditions (flow rates, water elevations, controls devices openings, etc.)
  - Installing automation components that allow for remote operation of delivery system control features (gates, valves, turnouts, etc.)
- **Irrigation Measures:** Projects that provide water savings by reducing outdoor water usage. These measures include turf removal, Smart irrigation controllers (weather or soil-moisture based) and high-efficiency nozzles (sprinkler heads). These measures are typically promoted by water entities through rebates or direct-install programs. Projects include, but are not limited to:
  - Removing turf
  - Installing Smart irrigation controllers
  - Installing high-efficiency nozzles (e.g., sprinkler heads)

C.3.1.2. Hydropower Projects

Projects that increase the use of hydropower in managing and delivering water. Projects include, but are not limited to, those discussed in the following subsections.

Implementing Hydropower Projects Related to Water Management and Delivery

Hydropower projects related to water management and delivery include, but are not limited to:

- Installing a small-scale hydroelectric facility that enables use of renewable energy sources (e.g., installing low-head hydrokinetic power generation units in a water system)

Proposals including a hydropower component typically require additional permitting not needed for other water management improvements (e.g., canal lining). In evaluating these proposals, Reclamation may consider the applicant's progress in obtaining a Federal Energy Regulatory Commission (FERC) license or a Reclamation Lease of Power Privilege (LOPP), depending on which is applicable. Applicants for a project including a hydropower component are asked to include documentation of steps taken to date for obtaining a FERC license or a LOPP.

Note that improvements to Federal facilities that are implemented through any project awarded funding through this FOA must comply with additional requirements. The Federal government will continue to hold title to the Federal facility and any improvement that is integral to the existing operations of that facility. Please see *Section F.2.4. Title to Improvements Under Public Law 111-11, Section 9504(a)(3)(D).*

Applicants proposing hydropower development may wish to contact the Program Coordinator listed in *Section G, Agency Contacts*, prior to the application deadline to discuss the requirements listed above.

Note: other types of renewable energy projects, including large-scale solar, wind, and geothermal projects, are not eligible under this FOA

C.3.2. Ineligible Projects

Any project not specifically described in *Section 3.1. Eligible Projects* is not eligible under this FOA. The following subsections further explain ineligible projects.

C.3.2.1. Operations, Maintenance, and Replacement

Projects that are considered normal operations, maintenance and replacement (OM&R) are not eligible. OM&R is described as system improvements that replace or repair existing infrastructure or function without providing increased efficiency or effectiveness of water distribution over the expected life of the improvement. Examples of ineligible OM&R projects include:

- Replacing malfunctioning components of an existing facility with the same components
- Improving an existing facility to operate as originally designed
- Performing an activity on a recurring basis, even if that period is extended (e.g., 10-year interval)
- Sealing expansion joints of concrete lining because the original sealer or the water stops have failed
- Sealing cracks in canals and/or pipes, including those sealant projects intending to improve facilities with inherent design and construction flaws
- Replacing broken meters with new meters of the same type
- Replacing leaky pipes with new pipes of the same type

Applicants that have questions regarding OM&R are encouraged to contact the Program Coordinator listed in *Section G. Agency Contacts*, prior to the application deadline for further information.

C.3.2.2. Water Reclamation, Recycling, and Reuse

Water reclamation, reuse, and desalination projects are not eligible for funding under this FOA. Entities seeking funding for these types of projects should consider Reclamation's Title XVI Water Reclamation and Reuse Program and Drought Response Program. If you have questions about a water reclamation, reuse, or desalination project please contact Ms. Amanda Erath at 303-445-2766 or aerath@usbr.gov.

C.3.2.3. Groundwater Recharge

Groundwater recharge projects are not eligible. Applicants proposing such projects should consider applying for funding under the WaterSMART Drought Resiliency Projects FOA. See the WaterSMART Drought Response Program webpage, www.usbr.gov/drought, for more information.

C.3.2.4. Water Purchases

A project that proposes using Federal funding primarily for the purchase of water is not eligible under this FOA.

C.3.2.5. Building Construction

A project that proposes to construct a building is not eligible for Federal funding under this FOA (e.g., a building to house administrative staff or to promote public awareness of water conservation).

C.3.2.6. Pilot Projects

A project that proposes to conduct a pilot study to evaluate technical capability, economic feasibility, or viability for full-scale implementation, or to test an unproven material or technology is not eligible for Federal funding under this FOA.

C.3.2.7. High-Efficiency Indoor Appliance and Fixture Installation

A project that includes the installation of high-efficiency indoor appliances and fixtures, including toilets and urinals, whether through rebates, direct install, or by other means, is not eligible for funding under this FOA.

C.3.2.8. Other Types of Renewable Energy Projects

Renewable energy projects other than hydropower projects, including large-scale solar, wind, and geothermal projects, are not eligible under this FOA

C.3.3. Length of Projects

In general, Funding Group I projects should be completed within two years of award. Funding Group II projects should be completed within three years of award and each year are expected to complete the work planned as part of that year's phase. Applications for projects requiring more time will be considered for funding only under limited circumstances. For example, some hydropower project installations may require additional time to secure necessary permits.

Reclamation will determine the capability of an applicant to complete the proposed project within the timeframe identified in the application.

Section D. Application and Submission Information

D.1. Address to Request Application Package

This document contains all information, forms, and electronic addresses required to obtain the information required for submission of an application.

If you are unable to access this information electronically, you can request paper copies of any of the documents referenced in this FOA by contacting:

By mail: Bureau of Reclamation
Financial Assistance Support Section
Attn: Ms. Janeen Koza
P.O. Box 25007, MS 84-27814
Denver, CO 80225

By email: jkoza@usbr.gov

By telephone: 303-445-3446

D.2. Content and Form of Application Submission

All applications must conform to the requirements set forth below.

D.2.1. Application Format and Length

The technical proposal and criteria section (defined below) shall be limited to a maximum of **50** consecutively numbered pages. If this section of the application exceeds 50 pages, only the first 50 pages will be evaluated. The font shall be at least 12 points in size and easily readable. Page size shall be 8½ by 11 inches, including charts, maps, and drawings. Margins should be standard 1-inch margins. Oversized pages will not be accepted.

Applications will be prescreened for compliance to the above page number limitation. Excess pages will be removed and not considered in the evaluation of the proposed project.

D.2.2. Application Content

The application must include the following elements to be considered complete:

- Mandatory Federal Forms
  - SF-424 Application for Federal Assistance
  - SF-424 Budget Information (A or C Form, as applicable to the project)

  - SF-424 Assurances (B or D Form, as applicable to the project)
  - SF-LLL Disclosure of Lobbying Activities (if applicable)

  These forms may be obtained at www.grants.gov/web/grants/forms/sf-424-family.html

- Title page
- Table of contents
- Technical proposal and evaluation criteria (limited to **50** pages)
  - Executive summary
  - Background data
  - Project location
  - Technical project description
  - Evaluation criteria
- Project budget
  - Funding plan and letters of commitment
  - Budget proposal
  - Budget narrative
- Environmental and cultural resources compliance
- Required permits or approvals
- Letters of project support
- Official resolution

It is highly recommended that application packages be structured in the order identified above.

D.2.2.1. Mandatory Federal Forms

The application must include the following standard Federal forms:

SF-424 Application for Federal Assistance

A fully completed SF-424, Application for Federal Assistance signed by a person legally authorized to commit the applicant to performance of the project must be submitted with the application. Failure to submit a properly signed SF-424 may result in the elimination of the application from further consideration.

SF-424 Budget Information

A fully completed SF-424A Budget Information Non-Construction Programs, or an SF-424C Budget Information Construction Programs must be submitted with the application.

SF-424 Assurances

A SF-424B Assurances Non-Construction Programs, or an SF-424D Assurances Construction Programs, signed by a person legally authorized to commit the applicant to performance of the project shall be included. Questions regarding whether to use SF-424B or SF-424D should be referred to the Grants Management Point of Contact under Agency Contacts. Failure to submit a properly signed SF-424B or SF-424D may result in the elimination of the application from further consideration.

SF-LLL Disclosure of Lobbying Activities

A fully completed and signed SF-LLL, Disclosure of Lobbying Activities is required is required if the applicant has made or agreed to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. *Note – this form cannot be submitted by a contractor or other entity on behalf of an applicant.*

D.2.2.2. Title Page

Provide a brief, informative, and descriptive title for the proposed work that indicates the nature of the project. Include the name and address of the applicant, and the name and address, email address, and telephone of the project manager.

D.2.2.3. Table of Contents

List all major sections of the proposal in the table of contents.

D.2.2.4. Technical Proposal and Evaluation Criteria

The technical proposal and evaluation criteria (**50** pages maximum) includes:

(1) Executive summary
(2) Background data
(3) Project Location
(4) Technical project description
(5) Evaluation criteria

Executive Summary

The executive summary should include:

- The date, applicant name, city, county, and state

- A one paragraph project summary that specifies the work proposed, including how funds will be used to accomplish specific project activities and briefly identifies how the proposed project contributes to accomplishing the goals of this FOA

- State the length of time and estimated completion date for the proposed project

- Whether or not the proposed project is located on a Federal facility

Background Data

As applicable, describe the source of water supply, the water rights involved, current water uses (e.g., agricultural, municipal, domestic, or industrial), the number of water users served, and the current and projected water demand. Also, identify potential shortfalls in water supply. If water is primarily used for irrigation, describe major crops and total acres served.

In addition, describe the applicant's water delivery system as appropriate. For agricultural systems, please include the miles of canals, miles of laterals, and existing irrigation improvements (e.g., type, miles, and acres). For municipal systems, please include the number of connections and/or number of water users served and any other relevant information describing the system.

If the application includes a hydropower component, describe existing energy sources and current energy uses.

Identify any past working relationships with Reclamation. This should include the date(s), description of prior relationships with Reclamation, and a description of the project(s).

Project Location

Provide detailed information on the proposed project location or project area including a map showing the specific geographic location. For example, {project name} is located in {state and county} approximately {distance} miles {direction, e.g., northeast} of {nearest town}. The project latitude is {##°##'N} and longitude is {###°##'W}.

Technical Project Description

The technical project description should describe the work in detail, including specific activities that will be accomplished. This description shall have sufficient detail to permit a comprehensive evaluation of the proposal. *Please note, if the work for which you are requesting funding is a phase of a larger project, please only describe the work that is reflected in the budget and exclude description of other activities or components of the overall project.*

Evaluation Criteria

The evaluation criteria portion of your application should thoroughly address each criterion and subcriterion in the order presented to assist in the complete and accurate evaluation of your proposal.

(See *Section E.1. Technical Proposal: Evaluation Criteria* for additional details, including a detailed description of each criterion and subcriterion and points associated with each.)

It is suggested that applicants copy and paste the evaluation criteria and subcriteria in* Section E.1. Technical Proposal: Evaluation Criteria *into their applications to ensure that all necessary information is adequately addressed.

D.2.2.5. Project Budget

The project budget includes:

(1) Funding plan and letters of commitment
(2) Budget proposal
(3) Budget narrative

Project costs for environmental and cultural compliance and engineering/design that were incurred or are anticipated to be incurred prior to award should be included in the proposed project budget.

If the proposed project is selected, the awarding Reclamation Grants Officer will review the proposed pre-award costs to determine if they are consistent with program objectives and are allowable in accordance with the authorizing legislation. Proposed pre-award costs must also be compliant with all applicable administrative and cost principles criteria established in 2 CFR Part 200, available at www.ecfr.gov, and all other requirements of this FOA**. In no case will costs incurred prior to July 1, 2019, be considered for inclusion in the proposed project budget for FY 2020 funding; similarly, no costs incurred prior to July 1, 2020, will be considered for inclusion in the proposed project budget for FY 2021 funding.**

Please note that the costs for preparing and submitting an application in response to this FOA, including the development of data necessary to support the proposal, are not eligible project costs under this FOA and must not be included in the project budget. In addition, Budget Proposals must not include costs for the purchase of water or land, or to secure an easement other than a construction easement. These costs are not eligible project costs under this FOA.

Funding Plan and Letters of Commitment

Describe how the non-Federal share of project costs will be obtained. Reclamation will use this information in making a determination of financial capability.

Project funding provided by a source other than the applicant shall be supported with letters of commitment from these additional sources. Letters of commitment shall identify the following elements:

- The amount of funding commitment
- The date the funds will be available to the applicant
- Any time constraints on the availability of funds
- Any other contingencies associated with the funding commitment

Commitment letters from third party funding sources should be submitted with your application. If commitment letters are not available at the time of the application submission, please provide a timeline for submission of all commitment letters. Cost-share funding from sources outside the applicant's organization (e.g., loans or State grants), should be secured and available to the applicant prior to award.

Reclamation will not make funds available for an award under this FOA until the recipient has secured non-Federal cost-share. Reclamation will execute a financial assistance agreement once non-Federal funding has been secured or Reclamation determines that there is sufficient evidence and likelihood that non-Federal funds will be available to the applicant subsequent to executing the agreement.

Please identify the sources of the non-Federal cost-share contribution for the project, including:

- Any monetary contributions by the applicant towards the cost-share requirement and source of funds (e.g., reserve account, tax revenue, and/or assessments).
- Any costs that will be contributed by the applicant.
- Any third party in-kind costs (i.e., goods and services provided by a third party).
- Any cash requested or received from other non-Federal entities.
- Any pending funding requests (i.e., grants or loans) that have not yet been approved and explain how the project will be affected if such funding is denied.

In addition, please identify whether the budget proposal includes any project costs that have been or may be incurred prior to award. For each cost, describe:

  - The project expenditure and amount.
  - The date of cost incurrence.
  - How the expenditure benefits the project.

Budget Proposal

The total project cost (Total Project Cost), is the sum of all allowable items of costs, including all required cost sharing and voluntary committed cost sharing, including third-party contributions, that are necessary to complete the project.

Table 1.—Total Project Cost Table

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	$
Costs to be paid by the applicant	$
Value of third party contributions	$
TOTAL PROJECT COST	**$**

The budget proposal should include detailed information on the categories listed below and must clearly identify ***all*** items of cost, including those that will be contributed as non-Federal cost share by the applicant (required and voluntary), third-party in-kind contributions, and those that will be covered using the funding requested from Reclamation, and any requested pre-award costs. Unit costs must be provided for all budget items including the cost of services or other work to be provided by consultants and contractors. Applicants are strongly encouraged to review the procurement standards for Federal awards found at 2 CFR §200.317 through §200.326 before developing their budget proposal. If you have any questions regarding your budget proposal or eligible costs, please contact the grants management specialist identified in *Section G. Agency Contacts.*

It is also strongly advised that applicants use the budget proposal format shown on the next page in Table 2 or a similar format that provides this information. If selected for award, successful applicants must submit detailed supporting documentation for all budgeted costs. It is not necessary to include separate columns indicating which cost is being contributed as non-Federal cost share or which costs will be reimbursed with Federal funds.

Note: The costs of preparing bids, proposals, or applications on potential Federal and non-Federal awards or projects, including the development of data necessary to support the non-Federal entity's application are not eligible project costs and should not be included in the budget proposal (2 CFR §200.460).

Table 2.—Sample Budget Proposal Format

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	$/Unit	Quantity		
Salaries and Wages				
Employee 1				$
Employee 2				$
Employee 3				$
Fringe Benefits				
Full-Time Employees				$
Part-Time Employees				$
Travel				
Trip 1				$
Trip 2				$
Trip 3				$
Equipment				
Item A				$
Item B				$
Item C				$
Supplies and Materials				
Item A				$
Item B				$
Contractual/Construction				
Contractor A				$
Contractor B				$
Third-Party Contributions				
Contributor A				$
Contributor B				$
Other				
Other				$
TOTAL DIRECT COSTS				**$**
Indirect Costs				
Type of rate	percentage	$base		**$**
TOTAL ESTIMATED PROJECT COSTS				**$**

Budget Narrative

Submission of a budget narrative is mandatory. An award will not be made to any applicant who fails to fully disclose this information. The budget narrative provides a discussion of, or explanation for, items included in the budget

proposal. The types of information to describe in the narrative include, but are not limited to, those listed in the following subsections. Costs, including the valuation of third-party in-kind contributions, must comply with the applicable cost principles contained in 2 CFR Part §200, available at the Electronic Code of Federal Regulations (www.ecfr.gov).

Salaries and Wages

Indicate the Project Manager and other key personnel by name and title. The Project Manager must be an employee or board member of the applicant. Other personnel should be indicated by title alone. For all positions, indicate salaries and wages, estimated hours or percent of time, and rate of compensation. The labor rates must identify the direct labor rate separate from the fringe rate or fringe cost for each category. All labor estimates must be allocated to specific tasks as outlined in the applicant's technical project description. Labor rates and proposed hours shall be displayed for each task.

The budget proposal and narrative should include estimated hours for compliance with reporting requirements, including final project and evaluation. Please see *Section F.3. Program Performance Reports* for information on types and frequency of reports required.

Generally, salaries of administrative and/or clerical personnel will be included as a portion of the stated indirect costs. If these salaries can be adequately documented as direct costs, they should be included in this section; however, a justification should be included in the budget narrative.

Fringe Benefits

Identify the rates/amounts, what costs are included in this category, and the basis of the rate computations. Federally approved rate agreements are acceptable for compliance with this item.

Travel

Identify the purpose of each anticipated trip, destination, number of persons traveling, length of stay, and all travel costs including airfare (basis for rate used), per diem, lodging, and miscellaneous travel expenses. For local travel, include mileage and rate of compensation.

Equipment

If equipment will be purchased, itemize all equipment valued at or greater than $5,000. For each item, identify why it is needed for the completion of the project and how the equipment was priced. *Note: if the value is less than $5,000, the item should be included under materials and supplies.*

If equipment is being rented, specify the number of hours and the hourly rate. Local rental rates are only accepted for equipment actually being rented or leased.

If the applicant intends to use their own equipment for the purposes of the project, the proposed usage rates should fall within the equipment usage rates outlined by the United States Army Corps of Engineers within their Construction Equipment Ownership and Operating Expense Schedule (EP 1110-1-8) at www.publications.usace.army.mil/USACE-Publications/Engineer-Pamphlets/u43545q/313131302D312D38.

Note: If the equipment will be furnished and installed under a construction contract, the equipment should be included in the construction contract cost estimate.

Materials and Supplies

Itemize supplies by major category, unit price, quantity, and purpose, such as whether the items are needed for office use, research, or construction. Identify how these costs were estimated (i.e., quotes, engineering estimates, or other methodology). *Note: If the materials/supplies will be furnished and installed under a contract, the equipment should be included in the construction contract cost estimate.*

Contractual

Identify all work that will be accomplished by consultants or contractors, including a breakdown of all tasks to be completed, and a detailed budget estimate of time, rates, supplies, and materials that will be required for each task. For each proposed contract, identify the procurement method that will be used to select the consultant or contractor and the basis for selection. Please note that all procurements with an anticipated aggregate value that exceeds the Micro-purchase Threshold (currently $10,000) must use a competitive procurement method (see 2 CFR §200.320 – *Methods of procurement to be followed*). Only contracts for architectural/engineering services can be awarded using a qualifications-based procurement method. If a qualifications-based procurement method is used, profit must be negotiated as a separate element of the contract price. See 2 CFR §200.317 through §200.326 for additional information regarding procurements, including required contract content. Note: A modification to an existing contract for services without first obtaining multiple quotes or proposals is considered a noncompetitive procurement, regardless of the method used to award the existing contract.

Third-Party In-Kind Contributions

Identify all work that will be accomplished by third-party contributors, including a breakdown of all tasks to be completed, and a detailed budget estimate of time, rates, supplies, and materials that will be required for each task. Third-party in-kind contributions, including contracts, must comply with all applicable administrative and cost principles criteria, established in 2 CFR Part 200, available at www.ecfr.gov, and all other requirements of this FOA.

Environmental and Regulatory Compliance Costs

Prior to awarding financial assistance, Reclamation must first ensure compliance with Federal environmental and cultural resources laws and other regulations ("environmental compliance"). Every project funded under this program will have environmental compliance costs associated with activities undertaken by Reclamation and the recipient.

To estimate environmental compliance costs, please contact compliance staff at your local Reclamation Office for additional details regarding the type and costs of compliance that may be required for your project. *Note, support for your compliance costs estimate will be considered during review of your application.* Contact the Program Coordinator *(*see *Section G. Agency Contacts)* for Reclamation contact information regarding compliance costs and requirements.

Environmental compliance costs are considered project costs and must be included as a line item in the project budget and will be cost shared accordingly.

The amount of the line item should be based on the actual expected environmental compliance costs for the project, including Reclamation's cost to review environmental compliance documentation. Environmental compliance costs will vary based on project type, location, and potential impacts to the environment and cultural resources.

How environmental compliance activities will be performed (e.g., by Reclamation, the applicant, or a consultant) and how the environmental compliance funds will be spent, will be determined pursuant to subsequent agreement between Reclamation and the applicant. The amount of funding required for Reclamation to conduct any environmental compliance activities, including Reclamation's cost to review environmental compliance documentation, will be withheld from the Federal award amount and placed in an environmental compliance account to cover such costs. If any portion of the funds budgeted for environmental compliance is not required for compliance activities, such funds may be reallocated to the project, if appropriate.

Costs associated with environmental and regulatory compliance must be included in the budget. Compliance costs include costs associated with any required documentation of environmental compliance, analyses, permits, or approvals. Applicable Federal environmental laws could include NEPA, Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Clean Water Act (CWA), and other regulations depending on the project. Such costs may include, but are not limited to:

- The cost incurred by Reclamation to determine the level of environmental compliance required for the project.
- The cost incurred by Reclamation, the recipient, or a consultant to prepare any necessary environmental compliance documents or reports.

- The cost incurred by Reclamation to review any environmental compliance documents prepared by a consultant.
- The cost incurred by the recipient in acquiring any required approvals or permits, or in implementing any required mitigation measures.

Other Expenses

Any other expenses not included in the above categories shall be listed in this category, along with a description of the item and why it is necessary. No profit or fee will be allowed.

Indirect Costs

Indirect costs are costs incurred by the applicant for a common or joint purpose that benefit more than one activity of the organization and are not readily assignable to the activities specifically benefitted without undue effort. Costs that are normally treated as indirect costs include, but are not limited to, administrative salaries and fringe benefits associated with overall financial and organizational administration; operation and maintenance costs for facilities and equipment; and, payroll and procurement services. If indirect costs will be incurred, identify the proposed rate, cost base, and proposed amount for allowable indirect costs based on the applicable cost principles for the applicant's organization. It is not acceptable to simply incorporate indirect rates within other direct cost line items.

If the applicant has never received a Federal negotiated indirect cost rate, the budget may include a *de minimis* rate of up to 10 percent of modified total direct costs. For further information on modified total direct costs, refer to 2 CFR §200.68 available at www.ecfr.gov.

If the applicant does not have a federally approved indirect cost rate agreement and is proposing a rate greater than the *de minimis* 10 percent rate, include the computational basis for the indirect expense pool and corresponding allocation base for each rate. Information on "Preparing and Submitting Indirect Cost Proposals" is available from the Department, the Interior Business Center, and Indirect Cost Services, at www.doi.gov/ibc/services/finance/indirect-cost-services. If the proposed project is selected for award, the recipient will be required to submit an indirect cost rate proposal with their cognizant agency within three months of award. Reimbursement of indirect costs will not be allowable until the recipient enters into the indirect cost rate agreement.

D.2.2.6. Required Permits or Approvals

Applicants must state in the application whether any permits or approvals are required and explain the plan for obtaining such permits or approvals.

Note that improvements to Federal facilities that are implemented through any project awarded funding through this FOA must comply with additional requirements. The Federal government will continue to hold title to the Federal

facility and any improvement that is integral to the existing operations of that facility. Please see P.L. 111-11, Section 9504(a)(3)(B). Reclamation may also require additional reviews and approvals prior to award to ensure that any necessary easements, land use authorizations, or special permits can be approved consistent with the requirements of 43 CFR Section 429, and that the development will not impact or impair project operations or efficiency.

D.2.2.7. Letters of Support

Please include letters from interested stakeholders supporting the proposed project. To ensure your proposal is accurately reviewed, please attach all letters of support/ partnership letters as an appendix. Letters of support received after the application deadline for this FOA will not be considered in the evaluation of the proposed project.

D.2.2.8. Official Resolution

Include an official resolution adopted by the applicant's board of directors or governing body, or, for State government entities, an official authorized to commit the applicant to the financial and legal obligations associated with receipt of a financial assistance award under this FOA, verifying:

- The identity of the official with legal authority to enter into an agreement.
- The board of directors, governing body, or appropriate official who has reviewed and supports the application submitted.
- The capability of the applicant to provide the amount of funding and/or in-kind contributions specified in the funding plan.
- That the applicant will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement.

An official resolution meeting the requirements set forth above is mandatory. If the applicant is unable to submit the official resolution by the application deadline because of the timing of board meetings or other justifiable reasons, the official resolution may be submitted up to 30 days after the application deadline.

D.3. Unique Entity Identifier and System for Award Management

All applicants (unless the applicant has an exception approved by Reclamation under 2 CFR §25.110[d]) are required to:

(i) Be registered in the System for Award Management (SAM) before submitting its application;

(ii) Provide a valid unique entity identifier in its application; and

(iii) Continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency.

Meeting the requirements set forth above is mandatory. If the applicant is unable to complete registration by the application deadline, the unique entity identifier must be obtained and SAM registration must be initiated within 30 days after the application deadline in order to be considered for selection and award.

Reclamation will not make a Federal award to an applicant until the applicant has complied with all applicable unique entity identifier and SAM requirements and, if an applicant has not fully complied with the requirements by the time Reclamation is ready to make an award, Reclamation may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

D.4. Submission Date and Time

This FOA includes two submittal periods. The deadlines for submitting an application are:

- October 3, 2019, 4:00 p.m. MDT for FY 2020 funding; and
- September 30, 2020, 4:00 p.m. MDT for FY 2021 funding.

Applications received after the application deadline will not be considered unless it can be determined that the delay was caused by Reclamation mishandling or technical issues with the Grants.gov application system. Please note that difficulties related to an applicant's Grants.gov profile (e.g., incorrect organizational representative), the upload of documents to Grants.gov or an applicant's SAM registration are not considered technical issues with the Grants.gov system.

Please note that any application submitted for funding under this FOA may be subjected to a Freedom of Information Act request (5 U.S.C. Section 552, as amended by P.L. No. 110-175), and as a result, may be made publicly available. Following awards of funding, Reclamation will post all successful applications on the Reclamation website, www.usbr.gov/WaterSmart/, after conducting any redactions determined necessary by Reclamation, in consultation with the recipient.

D.4.1. Application Delivery Instructions

The application may be submitted electronically through Grants.gov (www.grants.gov) or a hard copy may be submitted to either one of the following addresses. Under no circumstances will applications received through any other method (such as email or fax) be considered eligible for award.

By mail or USPS overnight services:

Bureau of Reclamation
Financial Assistance Support Section
Attn: Ms. Janeen Koza
P.O. Box 25007, MS 84-27814
Denver, CO 80225

All other express delivery:

Bureau of Reclamation mail services
Attn: Ms. Janeen Koza
Denver Federal Center
Bldg. 67, Rm. 152
6th Avenue and Kipling Street
Denver, CO 80225

By courier services:

Bureau of Reclamation
Attn: Ms. Janeen Koza
Denver Federal Center
Bldg. 67, Rm. 581
6th Avenue and Kipling Street
Denver, CO 80225

D.4.2. Instructions for Submission of Project Application

Each applicant should submit an application in accordance with the instructions contained in this section.

D.4.2.1. Applications Submitted by Mail, Express Delivery or Courier Services

Please follow these instructions to submit your application by mail, express delivery, or courier services.

- Applicants should submit one copy of all application documents for hardcopy submissions. Only use a binder clip for documents submitted. Do not staple or otherwise bind application documents.

- Hard copy applications may be submitted by mail, express delivery, or courier services to the addresses identified in this FOA.

- Materials arriving separately will not be included in the application package and may result in the application being rejected or not funded. This does not apply to letters of support, funding commitment letters, or official resolutions.

- Faxed and emailed copies of application documents will not be accepted.

- Do not include a cover letter or company literature/brochure with the application. All pertinent information must be included in the application package.

D.4.2.2. Applications Submitted Electronically

If the applicant chooses to submit an electronic application, it must be submitted through Grants.gov (www.grants.gov). Reclamation encourages applicants to submit their applications for funding electronically through the URL: www.grants.gov/applicants/apply-for-grants.html. Applicant resource documents and a full set of instructions for registering with Grants.gov (www.grants.gov) and completing and submitting applications online are available at: www.grants.gov/applicants/apply-for-grants.html.

- Please note that submission of an application electronically requires prior registration through Grants.gov, which may take 7 to 21 days. Please see registration instructions at www.grants.gov/applicants/apply-for-grants.html. *In addition, please note that the Grants.gov system only accepts applications submitted by individuals that are registered and active in SAM as both a user and an Authorized Organizational Representative.*

- Applicants have experienced significant delays when attempting to submit applications through Grants.gov. If you plan to submit your application through Grants.gov you are encouraged to submit your application several days prior to the application deadline. If you are a properly registered Grants.gov applicant and encounter problems with the Grants.gov application submission process, you must contact the Grants.gov Help Desk to obtain a case number. This case number will provide evidence of your attempt to submit an application prior to the submission deadline.

Regardless of the delivery method used, you must ensure that your proposal arrives by the date and time deadline stated in this FOA. Applications received after this date and time due to weather or express delivery/courier performance will not be considered for award. Late applications will not be considered unless it is determined that the delay was caused by Reclamation mishandling or technical issues with the Grants.gov application system. Please note that

difficulties related to an applicant's Grants.gov profile (e.g., incorrect organizational representative), the upload of documents to Grants.gov, or an applicant's SAM registration are not considered technical issues with the Grants.gov system.

D.4.2.3. Acknowledgement of Application Receipt.

If an application is submitted by mail, express delivery, or courier, Reclamation will notify you via email that your application was received.

If an application is submitted through Grants.gov, you will receive an email acknowledging receipt of the application from Grants.gov. In addition, Reclamation will confirm via email that your application was successfully downloaded from Grants.gov.

Notification will be sent to the points of contact identified on the applicant's SF-424 Application for Federal Assistance.

D.5. Intergovernmental Review

This FOA is not subject to Executive Order 12372, "Intergovernmental Review of Federal Programs."

D.6. Automated Standard Application for Payments Registration

All applicants must also be registered with and willing to process all payments through the Department of Treasury Automated Standard Application for Payments (ASAP) system. All recipients with active financial assistance agreements with Reclamation must be enrolled in ASAP under the appropriate Agency Location Code(s) and the Data Universal Number System (DUNS) Number prior to the award of funds. If a recipient has multiple DUNS numbers they must separately enroll within ASAP for each unique DUNS Number and/or Agency. All of the information on the enrollment process for recipients, including the enrollment initiation form and the enrollment mailbox can be found at www.usbr.gov/mso/aamd/asap.html.

Note that if your entity is currently enrolled in the ASAP system with an agency other than Reclamation, you must enroll specifically with Reclamation in order to process payments.

This page is intentionally left blank.

Section E. Application Review Information

E.1. Technical Proposal: Evaluation Criteria

The evaluation criteria portion should be addressed in the technical proposal section of the application. Applications should thoroughly address each criterion and any sub-criterion in the order presented below. It is suggested that applicants copy and paste the below criteria and subcriteria into their applications to ensure that all necessary information is adequately addressed. **Applications will be evaluated against the evaluation criteria listed below.** If the work described in your application is a phase of a larger project, only discuss the benefits that will result directly from the work discussed in the technical project description and that is reflected in the budget, not the larger project.

Evaluation Criteria: Scoring Summary	Points:
A. Quantifiable Water Savings	**30**
B. Water Supply Reliability	**18**
C. Implementing Hydropower	**18**
D. Complementing On-Farm Irrigation Improvements	**10**
E. Department of the Interior Priorities	**10**
F. Implementation and Results	**6**
G: Nexus to Reclamation Project Activities	**4**
H: Additional Non-Federal Funding	**4**
Total	***100***

Note: Since the FOA is open to a variety of project types, Evaluation Criteria A-D may not apply to every project. For example, a water savings project (Criterion A) may not include implementation of a hydropower component (Criterion C). Please provide as much detail and support as you can for those criteria in A-D that are applicable to your project. All applicants should respond to Evaluation Criteria E-H.

E.1.1. Evaluation Criterion A—Quantifiable Water Savings (30 points)

*Up to **30 points** may be awarded for this criterion. This criterion prioritizes projects that will conserve water and improve water use efficiency by modernizing existing infrastructure. Points will be allocated based on the quantifiable water savings expected as a result of the project. Points will be allocated to give greater consideration to projects that are expected to result in more significant water savings.*

All applicants should be sure to address the following:

Describe the amount of estimated water savings. For projects that conserve water, please state the estimated amount of water expected to be conserved (in acre-feet per year) as a direct result of this project.

Please include a specific quantifiable water savings estimate; do not include a range of potential water savings.

Describe current losses: Please explain where the water that will be conserved is currently going (e.g., back to the stream, spilled at the end of the ditch, seeping into the ground)?

Describe the support/documentation of estimated water savings: Please provide sufficient detail supporting how the estimate was determined, including all supporting calculations. Note: projects that do not provide sufficient supporting detail/calculations may not receive credit under this section. Please be sure to consider the questions associated with your project type (listed below) when determining the estimated water savings, along with the necessary support needed for a full review of your proposal. *In addition, please note that the use of visual observations alone to calculate water savings, without additional documentation/data, are not sufficient to receive credit under this section. Further, the water savings must be the result of reducing or eliminating a current, ongoing loss, not the result of an expected future loss.*

Please address the following questions according to the type of infrastructure improvement you are proposing for funding. See *Appendix A: Benefit Quantification and Performance Measure Guidance* for additional guidance on quantifying water savings.

(1) **Canal Lining/Piping:** Canal lining/piping projects can provide water savings when irrigation delivery systems experience significant losses due to canal seepage. Applicants proposing lining/piping projects should address the following:

   a. How has the estimated average annual water savings that will result from the project been determined? Please provide all relevant calculations, assumptions, and supporting data.

   b. How have average annual canal seepage losses been determined? Have ponding and/or inflow/outflow tests been conducted to determine seepage rates under varying conditions? If so, please provide detailed descriptions of testing methods and all results. If not, please provide an explanation of the method(s) used to calculate seepage losses. All estimates should be supported with multiple sets of data/measurements from representative sections of canals.

c. What are the expected post-project seepage/leakage losses and how were these estimates determined (e.g., can data specific to the type of material being used in the project be provided)?

d. What are the anticipated annual transit loss reductions in terms of acre- feet per mile for the overall project and for each section of canal included in the project?

e. How will actual canal loss seepage reductions be verified?

f. Include a detailed description of the materials being used.

(2) **Municipal Metering:** Municipal metering projects can provide water savings when individual user meters are installed where none exist to allow for unit or tiered pricing, when existing individual user meters are replaced with advanced metering infrastructure (AMI) meters, and when new meters are installed within a distribution system to assist with leakage reduction. To receive credit for water savings for a municipal metering project, an applicant must provide a detailed description of the method used to estimate savings, including references to documented savings from similar previously implemented projects. Applicants proposing municipal metering projects should address the following:

a. How has the estimated average annual water savings that will result from the project been determined? Please provide all relevant calculations, assumptions, and supporting data.

b. How have current distribution system losses and/or the potential for reductions in water use by individual users been determined?

c. For installing individual water user meters, refer to studies in the region or in the applicant's service area that are relevant to water use patterns and the potential for reducing such use. In the absence of such studies, please explain in detail how expected water use reductions have been estimated and the basis for the estimations.

d. If installing distribution main meters will result in conserved water, please provide support for this determination (including, but not limited to leakage studies, previous leakage reduction projects, etc.). Please provide details underlying any assumptions being made in support of water savings estimates (e.g., how leakage will be reduced once identified with improved meter data).

e. What types (manufacturer and model) of devices will be installed and what quantity of each?

f. How will actual water savings be verified upon completion of the project?

(3) **Irrigation Flow Measurement:** Irrigation flow measurement improvements can provide water savings when improved measurement accuracy results in reduced spills and over-deliveries to irrigators. Applicants proposing municipal metering projects should address the following:

a. How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

b. Have current operational losses been determined? If water savings are based on a reduction of spills, please provide support for the amount of water currently being lost to spills.

c. Are flows currently measured at proposed sites and if so what is the accuracy of existing devices? How has the existing measurement accuracy been established?

d. Provide detailed descriptions of all proposed flow measurement devices, including accuracy and the basis for the accuracy.

e. Will annual farm delivery volumes be reduced by more efficient and timely deliveries? If so, how has this reduction been estimated?

f. How will actual water savings be verified upon completion of the project?

(4) **Turf Removal:** Applicants proposing turf removal projects should address the following:

a. How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

b. What is the total surface area of turf to be removed and what is the estimated average annual turf consumptive use rate per unit area?

c. Was historical water consumption data evaluated to estimate average annual turf consumptive use per unit area? If so, did the evaluation include a weather adjustment component?

d. Will site audits be performed before applicants are accepted into the program?

e. How will actual water savings be verified upon completion of the project?

(5) **Smart Irrigation Controllers and High-Efficiency Nozzles:** Applicants proposing smart irrigation controller or high-efficiency nozzle projects should address the following:

a. How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

b. Was historical water consumption data evaluated to estimate the percent reduction in water demand per unit area of irrigated landscape? If so, did the evaluation include a weather adjustment component?

c. What types (manufacturer and model) of devices will be installed and what quantity of each?

d. Will the devices be installed through a rebate or direct-install program?

e. Will site audits be performed before and after installation?

f. How will actual water savings be verified upon completion of the project?

Note: a project that includes the installation of high-efficiency indoor appliances and fixtures, including toilets, whether through rebates, direct install, or by other means, is not eligible for funding under this FOA.

E.1.2. Evaluation Criterion B—Water Supply Reliability (18 points)

*Up to **18 points** may be awarded under this criterion. This criterion prioritizes projects that address water reliability concerns, including making water available for multiple beneficial uses and resolving water related conflicts in the region.*

Note that an agreement will not be awarded for an improvement to conserve irrigation water unless the applicant agrees to the terms of Section 9504(a)(3)(B) of Public Law 111-11 (see p. 52 of the FOA for additional information).

Please address how the project will increase water supply reliability. Proposals that will address more significant water supply shortfalls benefitting multiple sectors and multiple water users, will be prioritized. General water supply reliability benefits (e.g., proposals that will increase resiliency to drought) will also be considered. Please provide sufficient explanation of the project benefits and their significance. These benefits may include, but are not limited to, the following:

1. Will the project address a specific water reliability concern? Please address the following:

    - Explain and provide detail of the specific issue(s) in the area that is impacting water reliability, such as shortages due to drought, increased demand, or reduced deliveries. Will the project directly address a heightened competition for finite water supplies and over-allocation (e.g., population growth)?

    - Describe how the project will address the water reliability concern? In your response, please address where the conserved water will go and how it will be used, including whether the conserved water will be used to offset groundwater pumping, used to reduce diversions, used to address shortages that impact diversions or reduce deliveries, made available for transfer, left in the river system, or used to meet another intended use.

    - Provide a description of the mechanism that will be used, if necessary, to put the conserved water to the intended use.

    - Indicate the quantity of conserved water that will be used for the intended purpose.

2. Will the project make water available to achieve multiple benefits or to benefit multiple water users? Consider the following:

    - Will the project benefit multiple sectors and/or users (e.g., agriculture, municipal and industrial, environmental, recreation, or others)?

        - Will the project benefit species (e.g., federally threatened or endangered, a federally recognized candidate species, a state listed species, or a species of particular recreational, or economic importance)? Please describe the relationship of the species to the water supply, and whether the species is adversely affected by a Reclamation project.

        - Will the project benefit a larger initiative to address water reliability?

    - Will the project benefit Indian tribes?

    - Will the project benefit rural or economically disadvantaged communities?

- Describe how the project will help to achieve these multiple benefits. In your response, please address where the conserved water will go and where it will be used, including whether the conserved water will be used to offset groundwater pumping, used to reduce diversions, used to address shortages that impact diversions or reduce deliveries, made available for transfer, left in the river system, or used to meet another intended use.

3. Does the project promote and encourage collaboration among parties in a way that helps increase the reliability of the water supply?

   - Is there widespread support for the project?
   - What is the significance of the collaboration/support?
   - Is the possibility of future water conservation improvements by other water users enhanced by completion of this project?
   - Will the project help to prevent a water-related crisis or conflict? Is there frequently tension or litigation over water in the basin?
   - Describe the roles of any partners in the process. Please attach any relevant supporting documents.

4. Will the project address water supply reliability in other ways not described above?

E.1.3. Evaluation Criterion C—Implementing Hydropower (18 points)

*Up to **18 points** may be awarded for this criterion. This criterion prioritizes projects that will install new hydropower capacity in order to utilize our natural resources to ensure energy is available to meet our security and economic needs.*

If the proposed project includes construction or installation of a hydropower system, please address the following:

Describe the amount of energy capacity. For projects that implement hydropower systems, state the estimated amount of capacity (in kilowatts) of the system. Please provide sufficient detail supporting the stated estimate, including all calculations in support of the estimate.

Describe the amount of energy generated. For projects that implement hydropower systems, state the estimated amount of energy that the system will generate (in kilowatt hours per year). Please provide sufficient detail supporting the stated estimate, including all calculations in support of the estimate.

Describe any other benefits of the hydropower project. Please describe and provide sufficient detail on any additional benefits expected to result from the hydropower project, including:

- Any expected reduction in the use of energy currently supplied through a Reclamation project.
- Anticipated benefits to other sectors/entities.
- Expected water needs, if any, of the system.

E.1.4. Evaluation Criterion D—Complementing On-Farm Irrigation Improvements (10 points)

*Up to **10 points** may be awarded for projects that describe in detail how they will **complement on-farm irrigation improvements** eligible for NRCS financial or technical assistance.*

Note: Scoring under this criterion is based on an overall assessment of the extent to which the WaterSMART Grant project will complement ongoing or future on-farm improvements. Applicants should describe any proposal made to NRCS, or any plans to seek assistance from NRCS in the future, and how an NRCS-assisted activity would complement the WaterSMART Grant project. Financial assistance through EQIP is the most commonly used program by which NRCS helps producers implement improvements to irrigation systems, but NRCS does have additional technical or financial assistance programs that may be available. Applicants may receive maximum points under this criterion by providing the information described in the bullet points below. **Applicants are *not* required to have assurances of NRCS assistance by the application deadline to be awarded the maximum number of points under this sub-criterion.** Reclamation may contact applicants during the review process to gather additional information about pending applications for NRCS assistance if necessary.

Please note: on-farm improvements themselves are *not* eligible activities for funding under this FOA. This criterion is intended to focus on how the WaterSMART Grant project will complement ongoing or future on-farm improvements. NRCS will have a separate application process for the on-farm components of selected projects that may be undertaken in the future, separate of the WaterSMART Grant project.

If the proposed project will complement an on-farm improvement eligible for NRCS assistance, please address the following:

- Describe any planned or ongoing projects by farmers/ranchers that receive water from the applicant to improve on-farm efficiencies.
    - Provide a detailed description of the on-farm efficiency improvements.

- Have the farmers requested technical or financial assistance from NRCS for the on-farm efficiency projects, or do they plan to in the future?

- If available, provide documentation that the on-farm projects are eligible for NRCS assistance, that such assistance has or will be requested, and the number or percentage of farms that plan to participate in available NRCS programs.

- Applicants should provide letters of intent from farmers/ranchers in the affected project areas.

- Describe how the proposed WaterSMART project would complement any ongoing or planned on-farm improvement.

  - Will the proposed WaterSMART project directly facilitate the on-farm improvement? If so, how? For example, installation of a pressurized pipe through WaterSMART can help support efficient on-farm irrigation practices, such as drip-irrigation.

  OR

  - Will the proposed WaterSMART project complement the on-farm project by maximizing efficiency in the area? If so, how?

- Describe the on-farm water conservation or water use efficiency benefits that are expected to result from any on-farm work.

  - Estimate the potential on-farm water savings that could result in acre-feet per year. Include support or backup documentation for any calculations or assumptions.

Note: On-farm water conservation improvements that complement the water delivery improvement projects selected through this FOA may be considered for NRCS funding and technical assistance to the extent that such assistance is available. For more information, including application deadlines and a description of available funding, please contact your local NRCS office. See the NRCS website for office contact information, www.nrcs.usda.gov/wps/portal/nrcs/main/national/contact/states/.

E.1.5. Evaluation Criterion E—Department of the Interior Priorities (10 points)

*Up to **10 points** may be awarded based on the extent that the proposal demonstrates that the project supports the Department priorities. Please address those priorities that are applicable to your project. It is not necessary to address priorities that are not applicable to your project. A project will not necessarily receive more points simply because multiple priorities are addressed. Points will*

be allocated based on the degree to which the project supports one or more of the priorities listed, and whether the connection to the priority(ies) is well supported in the proposal.

1. *Creating a conservation stewardship legacy second only to Teddy Roosevelt*
    a. Utilize science to identify best practices to manage land and water resources and adapt to changes in the environment;
    b. Examine land use planning processes and land use designations that govern public use and access;
    c. Revise and streamline the environmental and regulatory review process while maintaining environmental standards;
    d. Review Department water storage, transportation, and distribution systems to identify opportunities to resolve conflicts and expand capacity;
    e. Foster relationships with conservation organizations advocating for balanced stewardship and use of public lands;
    f. Identify and implement initiatives to expand access to Department lands for hunting and fishing;
    g. Shift the balance towards providing greater public access to public lands over restrictions to access.

2. *Utilizing our natural resources*
    a. Ensure American Energy is available to meet our security and economic needs;
    b. Ensure access to mineral resources, especially the critical and rare earth minerals needed for scientific, technological, or military applications;
    c. Refocus timber programs to embrace the entire 'healthy forests' lifecycle;
    d. Manage competition for grazing resources.

3. *Restoring trust with local communities*
    a. Be a better neighbor with those closest to our resources by improving dialogue and relationships with persons and entities bordering our lands;
    b. Expand the lines of communication with Governors, state natural resource offices, Fish and Wildlife offices, water authorities, county commissioners, Tribes, and local communities.

4. *Striking a regulatory balance*
    a. Reduce the administrative and regulatory burden imposed on U.S. industry and the public;
    b. Ensure that Endangered Species Act decisions are based on strong science and thorough analysis.

5. *Modernizing our infrastructure*
   a. Support the White House Public/Private Partnership Initiative to modernize U.S. infrastructure;
   b. Remove impediments to infrastructure development and facilitate private sector efforts to construct infrastructure projects serving American needs;
   c. Prioritize Department infrastructure needs to highlight:
      1. Construction of infrastructure;
      2. Cyclical maintenance;
      3. Deferred maintenance.

E.1.6. Evaluation Criterion F—Implementation and Results (6 points)

*Up to **6 points** may be awarded for these subcriteria.*

E.1.6.1. Subcriterion F.1— Project Planning

Points may be awarded for proposals with planning efforts that provide support for the proposed project.

Does the applicant have a Water Conservation Plan and/or System Optimization Review (SOR) in place? Please self-certify or provide copies of these plans where appropriate to verify that such a plan is in place.

Provide the following information regarding project planning:

(1) Identify any district-wide, or system-wide, planning that provides support for the proposed project. This could include a Water Conservation Plan, SOR, Drought Contingency Plan or other planning efforts done to determine the priority of this project in relation to other potential projects.

(2) Describe how the project conforms to and meets the goals of any applicable planning efforts and identify any aspect of the project that implements a feature of an existing water plan(s).

E.1.6.2. Subcriterion F.2— Performance Measures

Points may be awarded based on the description and development of performance measures to quantify actual project benefits upon completion of the project.

Provide a brief summary describing the performance measure that will be used to quantify actual benefits upon completion of the project (e.g., water saved or better managed, energy generated or saved). For more information calculating performance measure, see *Appendix A: Benefit Quantification and Performance Measure Guidance.*

All Water and Energy Efficiency Grants applicants are required to propose a "performance measure" (a method of quantifying the actual benefits of their project once it is completed). A provision will be included in all assistance agreements with Water and Energy Efficiency Grants recipients describing the performance measure and requiring the recipient to quantify the actual project benefits in their final report to Reclamation upon completion of the project. If information regarding project benefits is not available immediately upon completion of the project, the financial assistance agreement may be modified to remain open until such information is available and until a Final Report is submitted. Quantifying project benefits is an important means to determine the relative effectiveness of various water management efforts, as well as the overall effectiveness of Water and Energy Efficiency Grants.

Note: program funding may be used to install necessary equipment to monitor progress. However, program funding may not be used to measure performance after project construction is complete (these costs are considered normal operation and maintenance costs and are the responsibility of the applicant).

E.1.6.3. Subcriterion F.3— Readiness to Proceed

Points may be awarded based upon the extent to which the proposed project is capable of proceeding upon entering into a financial assistance agreement.

Applicants that describe a detailed plan (e.g., estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates) will receive the most points under this criterion.

- Describe the implementation plan of the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

- Describe any permits that will be required, along with the process for obtaining such permits.

- Identify and describe any engineering or design work performed specifically in support of the proposed project.

- Describe any new policies or administrative actions required to implement the project.

- Describe how the environmental compliance estimate was developed. Has the compliance cost been discussed with the local Reclamation office?

E.1.7. Evaluation Criterion G— Nexus to Reclamation Project Activities (4 Points)

*Up to **4 points** may be awarded if the proposed project is in a basin with connections to Reclamation project activities. No points will be awarded for proposals without connection to a Reclamation project or Reclamation activity.*

- Is the proposed project connected to Reclamation project activities? If so, how? Please consider the following:
  - Does the applicant receive Reclamation project water?
  - Is the project on Reclamation project lands or involving Reclamation facilities?
  - Is the project in the same basin as a Reclamation project or activity?
  - Will the proposed work contribute water to a basin where a Reclamation project is located?
- Will the project benefit any tribe(s)?

E.1.8. Evaluation Criterion H— Additional Non-Federal Funding (4 points)

*Up to **4 points** may be awarded to proposals that provide non-Federal funding in excess of 50 percent of the project costs. State the percentage of non-Federal funding provided using the following calculation:*

$$\frac{\text{Non-Federal Funding}}{\text{Total Project Cost}}$$

E.2. Review and Selection Process

The Federal government reserves the right to reject any and all applications that do not meet the requirements or objectives of this FOA. Awards will be made for projects most advantageous to the Federal Government. Award selection may be made to maintain balance among the eligible projects listed in this FOA. The evaluation process will be comprised of the steps described in the following subsections.

E.2.1. Initial Screening

All application packages will be screened to ensure that:

- The applicant meets the eligibility requirements stated in this FOA.
- The applicant meets the unique entity identifier and SAM registration requirements stated in this FOA (this may be completed up to 30 days after the application deadline).
- The application meets the content requirements of the FOA package, including submission of a technical proposal, including responses to the evaluation criteria, a funding plan, budget proposal, and budget narrative.
- The application contains a properly executed SF-424, Application for Financial Assistance and form SF-424B, Assurances Non-Construction Programs, or SF-424D, Assurances Construction Programs and a completed SF-424A, Budget Information Non-Construction Programs or SF-424C, Budget Information Construction Programs.
- The application includes an official resolution, adopted by the applicant's board of directors, governing body, or appropriate authorized official (this may be submitted up to 30 days after the application deadline).
- The application and funding plan meets or exceeds the minimum non-Federal cost-share requirements identified in this FOA.
- The project can be completed in two years for Funding Group I project, or in three years for Funding Group II project.

Reclamation reserves the right to remove an application from funding consideration if it does not pass all Initial Screening criteria listed above. An applicant that has submitted an application that is determined to be ineligible for funding will be notified along with other applicants, or sooner, if possible.

E.2.2. Application Review Committee

Evaluation criteria will comprise the total evaluation weight as stated in the *Section E.1 Evaluation Criteria*. Application Review Information. Applications will be scored against the evaluation criteria by an Application Review Committee (ARC), made up of experts in relevant disciplines selected from across Reclamation. The ARC will also review the application to ensure that the project meets the description of eligible projects and meets the objective of this FOA.

During ARC review, Reclamation may contact applicants to request clarifications to the information provided, if necessary.

E.2.3. Red-Flag Review

Following the results of the ARC review, Reclamation offices will review the top-ranking applications and will identify any reasons why a proposed project would not be feasible or otherwise advisable, including environmental or cultural resources compliance issues, permitting issues, legal issues, or financial position. Positive or negative past performance by the applicant and any partners in previous working relationships with Reclamation may be considered, including whether the applicant is making significant progress toward the completion of outstanding financial assistance agreements and whether the applicant is in compliance with all reporting requirements associated with previously funded projects.

In addition, during this review, Reclamation will address any specific concerns or questions raised by members of the ARC, conduct a preliminary budget review, and evaluate the applicant's ability to meet cost share as required.

E.2.4. Managerial Review

Reclamation management will prioritize projects to ensure the total amount of all awards does not exceed available funding levels. Management will also ensure that all projects meet the scope, priorities, requirements, and objectives of this FOA. Management may also prioritize projects to ensure that multiple project types are represented. After completion of the Managerial Review, Reclamation will notify applicants whose proposals have been selected for award consideration.

E.2.5. Pre-Award Clearances and Approvals

The following pre-award clearances and approvals must be obtained before an award of funding is made. If the results of all pre-award reviews and clearances are satisfactory, an award of funding will be made once the agreement is finalized (approximately one to three months from the date of initial selection). If the results of pre-award reviews and clearances are unsatisfactory, consideration of funding for the project may be withdrawn.

E.2.5.1. Environmental Review

Reclamation will forward all proposals to the appropriate Reclamation Regional or Area Office for completion of environmental compliance. To the extent possible, environmental compliance will be completed before a financial assistance agreement is signed by the parties. However, in most cases, the award will be made contingent on completion of environmental compliance. The financial assistance agreement will describe how compliance will be carried out and how the costs will be paid. Ground disturbing activities may not occur until environmental compliance is complete and a notice to proceed is issued.

Even in cases where environmental compliance work has been completed previously or is being completed by another Federal agency, Reclamation must still review and adopt such environmental compliance and issue a notice to proceed before ground disturbing activities may be initiated.

E.2.5.2. Budget Analysis and Business Evaluation

A Reclamation Grants Officer will also conduct a detailed budget analysis and complete a business evaluation and responsibility determination. During this evaluation, the Grants Officer will consider several factors that are important, but not quantified, such as:

- Allowability, allocability, and reasonableness of proposed costs
- Financial strength and stability of the applicant
- Past performance, including satisfactory compliance with all terms and conditions of previous awards, such as environmental compliance issues, reporting requirements, proper procurement of supplies and services, and audit compliance
- Adequacy of personnel practices, procurement procedures, and accounting policies and procedures, as established by applicable Office of Management and Budget circulars

E.3. Federal Award Performance Integrity Information System

Prior to making an award with a Federal total estimated amount greater than $150,000, Reclamation is required to review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently Federal Award Performance Integrity Information System [FAPIIS]) (see 41 U.S.C. §2313). An applicant, at its option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about itself that a Federal awarding agency previously entered and is currently in the designated integrity and performance system accessible through SAM. Reclamation will consider any comments by the applicant, in addition to the other information in FAPIIS, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in 2 CFR §200.205 Federal awarding agency review of risk posed by applicants.

E.4. Anticipated Announcement and Federal Award Date

Reclamation expects to contact potential award recipients and unsuccessful applicants in spring of 2020 regarding selections for FY 2020 funding, subject to the timing and amount of final FY 2020 appropriations. Similarly, Reclamation expects to contact potential award recipients and unsuccessful applicants in spring 2021 for FY 2021 funding, subject to the timing and amount of final FY 2021 appropriations. Financial assistance agreements will be awarded to applicants that successfully pass all pre-award reviews and clearances. Award recipients will be contacted individually to discuss the time frame for the completion of their agreement.

This page is intentionally left blank.

Section F. Federal Award Administration Information

F.1. Federal Award Notices

Successful applicants will receive by electronic mail, a notice of selection signed by a Reclamation Grants Officer. This notice is not an authorization to begin performance.

F.2. Administrative and National Policy Requirements

F.2.1. Environmental and Cultural Resources Compliance

All projects being considered for award funding will require compliance with the NEPA before any ground-disturbing activity may begin. Compliance with all applicable state, Federal and local environmental, cultural, and paleontological resource protection laws and regulations is also required. These may include, but are not limited to, the CWA, the ESA, the NHPA, consultation with potentially affected tribes, and consultation with the State Historic Preservation Office.

Reclamation will be the lead Federal agency for NEPA compliance and will be responsible for evaluating technical information and ensuring that natural resources, cultural, and socioeconomic concerns are appropriately addressed. As the lead agency, Reclamation is solely responsible for determining the appropriate level of NEPA compliance. Further, Reclamation is responsible to ensure that findings under NEPA, and consultations, as appropriate, will support Reclamation's decision on whether to fund a project. Environmental and cultural resources compliance costs are considered project costs. These costs will be considered in the ranking of applications.

Note, if mitigation is required to lessen environmental impacts, the applicant may, at Reclamation's discretion, be required to report on progress and completion of these commitments. Reclamation will coordinate with the applicant to establish reporting requirements and intervals accordingly.

Under no circumstances may an applicant begin any ground-disturbing activities (e.g., grading, clearing, and other preliminary activities) on a project before environmental and cultural resources compliance is complete and a Reclamation Grants Officer provides written notification that all such clearances have been obtained. This pertains to all components of the proposed project, including those that are part of the applicant's non-Federal cost-share. An applicant that proceeds before environmental and cultural resources compliance is complete may risk forfeiting Reclamation funding under this FOA. Costs incurred for ground-disturbing activities performed prior to award

are not eligible for reimbursement or cost share unless the recipient can provide documentation that Federal environmental and cultural resource clearances were obtained for the project prior to the commencement of the activities.

F.2.2. Approvals and Permits

Recipients shall adhere to Federal, state, territorial, tribal, and local laws, regulations, and codes, as applicable, and shall obtain all required approvals and permits. Recipients shall also coordinate and obtain approvals from site owners and operators.

F.2.3. Intangible Property (2 CFR §200.315)

a. Title to intangible property acquired under a Federal award vests upon acquisition in the non-Federal entity (see §200.59 Intangible Property [of this CFR]). The non-Federal entity must use that property for the originally-authorized purpose and must not encumber the property without approval of the Federal awarding agency. When no longer needed for the originally authorized purpose, disposition of the intangible property must occur in accordance with the provisions in §200.313(e) Equipment [of this CFR].

b. The non-Federal entity may copyright any work that is subject to copyright and was developed, or for which ownership was acquired, under a Federal award. The Federal awarding agency reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish, or otherwise use the work for Federal purposes, and to authorize others to do so.

c. The non-Federal entity is subject to applicable regulations governing patents and inventions, including government wide regulations issued by the Department of Commerce at 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Awards, Contracts and Cooperative Agreements."

d. The Federal government has the right to:

    (1) obtain, reproduce, publish, or otherwise use the data produced under a Federal award; and

    (2) authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.

e. Freedom of Information Act

    (1) In response to a FOIA request for research data relating to published research findings produced under a Federal award that were used by the Federal government in developing an agency action that has the force and effect of law, the Federal awarding

agency must request, and the non-Federal entity must provide, within a reasonable time, the research data so that they can be made available to the public through the procedures established under the FOIA. If the Federal awarding agency obtains the research data solely in response to a FOIA request, the Federal awarding agency may charge the requester a reasonable fee equaling the full incremental cost of obtaining the research data. This fee should reflect costs incurred by the Federal agency and the non-Federal entity. This fee is in addition to any fees the Federal awarding agency may assess under the FOIA (5 USC 552(a)(4)(A)).

(2) Published research findings means when:

i. Research findings are published in a peer-reviewed scientific or technical journal; or

ii. A Federal agency publicly and officially cites the research findings in support of an agency action that has the force and effect of law. "Used by the Federal government in developing an agency action that has the force and effect of law" is defined as when an agency publicly and officially cites the research findings in support of an agency action that has the force and effect of law.

(3) Research data means the recorded factual material commonly accepted in the scientific community as necessary to validate research findings, but not any of the following: preliminary analyses, drafts of scientific papers, plans for future research, peer reviews, or communications with colleagues. This "recorded" material excludes physical objects (e.g., laboratory samples). Research data also does not include:

i. Trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information which is protected under law; and

ii. Personnel and medical information and similar information the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, such as information that could be used to identify a particular person in a research study.

F.2.4. Requirements for Agricultural Operations under P.L. 111-11, Section 9504(a)(3)(B)

In accordance with Section 9504(a)(3)(B) of P.L. 111-11, grants and cooperative agreements under this authority will not be awarded for an improvement to conserve irrigation water unless the applicant agrees to both of the following conditions:

- Not to use any associated water savings to increase the total irrigated acreage of the applicant
- Not to otherwise increase the consumptive use of water in the operation of the applicant, as determined pursuant to the law of the State in which the operation of the applicant is located

F.2.5. Title to Improvements P.L. 111-11, Section 9504(a)(3)(D)

If the activities funded through an agreement awarded under this FOA result in a modification to a portion of a federally owned facility that is integral to the existing operations of that facility, the Federal government shall continue to hold title to the facility and the improvements thereto. Title to improvements, P.L. 111-11, Section 9504(a)(3)(D) that are not integral to existing water delivery operations shall reside with the project sponsor.

F.3. Reporting—Requirements and Distribution

If the applicant is awarded an agreement as a result of this FOA, the applicant will be required to submit the following reports during the term of the agreement.

F.3.1. Financial Reports

Recipients will be required to submit a fully completed form SF-425 Federal Financial Report on at least a semi-annual basis and with the final performance report. The SF-425 must be signed by a person legally authorized to obligate the recipient.

F.3.2. Interim Performance Reports

The specific terms and conditions pertaining to the reporting requirements will be included in the financial assistance agreement.

Interim performance reports submitted on at least a semi-annual basis, that include the following information:

- A comparison of actual accomplishments to the milestones established by the financial assistance agreement for the period
- The reasons why established milestones were not met, if applicable

- The status of milestones from the previous reporting period that were not met, if applicable
- Whether the project is on schedule and within the original cost estimate
- Any additional pertinent information or issues related to the status of the project

F.3.3. Final Performance Reports

Recipients will be required to submit a final performance report encompassing the entire period of performance. The final performance report must include, but is not limited to, the following information:

- Whether the project objectives and goals were met
- Discussion of the benefits achieved by the project, including information and/or calculations supporting the benefits
- How the project demonstrates collaboration, if applicable
- Photographs documenting the project are also appreciated

Note: Reclamation may print photos with appropriate credit to the applicant. Also, final reports are public documents and may be made available on Reclamation's website or as requested.

F.4. Conflicts of Interest

F.4.1. Applicability

This section intends to ensure that non-Federal entities and their employees take appropriate steps to avoid conflicts of interest in their responsibilities under or with respect to Federal financial assistance agreements. In the procurement of supplies, equipment, construction, and services by recipients and by subrecipients, the conflict of interest provisions in 2 CFR 200.318 apply.

F.4.2. Requirements

Non-Federal entities must avoid prohibited conflicts of interest, including any significant financial interests that could cause a reasonable person to question the recipient's ability to provide impartial, technically sound, and objective performance under or with respect to a Federal financial assistance agreement.

In addition to any other prohibitions that may apply with respect to conflicts of interest, no key official of an actual or proposed recipient or subrecipient, who is

substantially involved in the proposal or project, may have been a former Federal employee who, within the last year, participated personally and substantially in the evaluation, award, or administration of an award with respect to that recipient or subrecipient or in development of the requirement leading to the funding announcement.

No actual or prospective recipient or subrecipient may solicit, obtain, or use non-public information regarding the evaluation, award, or administration of an award to that recipient or subrecipient or the development of a Federal financial assistance opportunity that may be of competitive interest to that recipient or subrecipient.

F.4.3. Notification

Non-Federal entities, including applicants for financial assistance awards, must disclose in writing any conflict of interest to the Department's awarding agency or pass-through entity in accordance with 2 CFR 200.112, Conflicts of Interest. Recipients must establish internal controls that include, at a minimum, procedures to identify, disclose, and mitigate or eliminate identified conflicts of interest. The recipient is responsible for notifying the Financial Assistance Officer in writing of any conflicts of interest that may arise during the life of the award, including those that have been reported by subrecipients.

F.4.4. Restrictions on Lobbying

Non-Federal entities are strictly prohibited from using funds under this grant or cooperative agreement for lobbying activities and must provide the required certifications and disclosures pursuant to 4 3 CFR Part 18 and 31 USC 13 52.

F.4.5. Review Procedures

The Financial Assistance Officer will examine each conflict of interest disclosure on the basis of its particular facts and the nature of the proposed grant or cooperative agreement and will determine whether a significant potential conflict exists and, if it does, develop an appropriate means for resolving it.

F.4.6. Enforcement

Failure to resolve conflicts of interest in a manner that satisfies the Government may be cause for termination of the award. Failure to make required disclosures may result in any of the remedies described in 2 CFR 200.338, Remedies for Noncompliance, including suspension or debarment (see also 2 CFR Part 180).

F.5. Data Availability

F.5.1. Applicability

The Department is committed to basing its decisions on the best available science and providing the American people with enough information to thoughtfully and substantively evaluate the data, methodology, and analysis used by the Department to inform its decisions.

F.5.2. Use of Data

The regulations at 2 CFR 200.315 apply to data produced under a Federal award, including the provision that the Federal Government has the right to obtain, reproduce, publish, or otherwise use the data produced under a Federal award as well as authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.

F.5.3. Availability of Data

The recipient shall make the data produced under this award and any subaward(s) available to the Government for public release, consistent with applicable law, to allow meaningful third-party evaluation and reproduction of the following:

1. the scientific data relied upon;
2. the analysis relied upon; and
3. the methodology, including models, used to gather and analyze data.

F.6. Releasing Applications

Following awards of funding, Reclamation may post all successful applications on the Reclamation website after conducting any redactions determined necessary by Reclamation, in consultation with the recipient.

This page is intentionally left blank.

Section G. Agency Contacts

There will be no pre-application conference. Organizations or individuals interested in submitting applications in response to this FOA may direct questions to the Reclamation personnel identified below.

G.1. Reclamation Financial Assistance Contact

Questions regarding application and submission information and award administration may be submitted to the attention of Ms. Janeen Koza, Grants Management Specialist, as follows:

By mail: Bureau of Reclamation
Financial Assistance Support Section
Attn: Ms. Janeen Koza
P.O. Box 25007 MS: 84-27814
Denver, CO 80225

By email: jkoza@usbr.gov

By phone: 303-445-3446

G.2. Reclamation Program Coordinator Contact

Questions regarding applicant and project eligibility and application review may be submitted to the attention of Mr. Josh German, WaterSMART Grants Program Coordinator, or Ms. Robin Graber, Program Analyst, as follows:

By mail: Bureau of Reclamation
Water Resources and Planning Division
Attn: Mr. Josh German
P.O. Box 25007, MS 84-51000
Denver, CO 80225

By email: jgerman@usbr.gov

By phone: 303-445-2839

OR

By mail: Bureau of Reclamation
Water Resources and Planning Division
Attn: Ms. Robin Graber
P.O. Box 25007, MS 84-51000
Denver, CO 80225

By email: rgraber@usbr.gov

By phone: 303-445-2764

Section H. Other Information

The following is a brief overview of NEPA, NHPA, and ESA. While these statutes are not the only environmental laws that may apply, they are the Federal laws that most frequently do apply. Compliance with all applicable environmental laws will be initiated by Reclamation concurrently, immediately following the initial recommendation to award a financial assistance agreement under this FOA. The descriptions below are intended to provide you with information about the environmental compliance issues that may apply to your projects and to help you budget appropriately for the associated compliance costs.

H.1. Environmental and Cultural Resource Considerations

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants should consider the following list of questions focusing on the NEPA, ESA, and NHPA requirements. Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:

- Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

- Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

- Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as “Waters of the United States?” If so, please describe and estimate any impacts the proposed project may have.

- When was the water delivery system constructed?

- Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

- Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.

- Are there any known archeological sites in the proposed project area?

- Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?

- Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?

- Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

H.2. Background on Federal Environmental and Cultural Resource Laws

H.2.1. National Environmental Policy Act

NEPA requires Federal agencies such as Reclamation to evaluate, during the decision-making process, the potential environmental effects of a proposed action and any reasonable mitigation measures. Before Reclamation can make a decision to fund an award under this FOA, Reclamation must comply with NEPA. Compliance with NEPA can be accomplished in several ways, depending upon the degree and significance of environmental impacts associated with the proposal:

Some projects may fit within a recognized **Categorical Exclusion (CE)** to NEPA (i.e., one of the established categories of activities that generally do not have significant impacts on the environment). If a project fits within a CE, no further NEPA compliance measures are necessary. Use of a CE can involve simple identification of an applicable **Department CE** or documentation of a **Reclamation CE** using a **Categorical Exclusion Checklist (CEC)**. If a CE is being considered, Reclamation will determine the applicability of the CE and whether extraordinary circumstances (i.e., reasons that the CE cannot be applied) exist. That process can take anywhere from 1 day to about 30 days, depending upon the specific situation.

If the project does not fit within a CE, compliance with NEPA might require preparation of an **Environmental Assessment/Finding of No Significant Impact (EA/FONSI)**. Generally, where no CE applies but there are not believed to be any significant impacts associated with the proposed action, an EA will be required. The EA is used to determine whether any potentially significant effects exist

(which would trigger the further step of an **Environmental Impact Statement (EIS)**, below). If no potentially significant effects are identified, the EA process ends with the preparation of a FONSI. The EA/FONSI process is more detailed than the CE/CEC process and can take weeks or even months to complete. Consultation with other agencies and public notification are part of the EA process.

The most detailed form of NEPA compliance, where a proposed project has potentially significant environmental effects, is completion of an **EIS** and **Record of Decision.** An EIS requires months or years to complete, and the process includes considerable public involvement, including mandatory public reviews of draft documents. It is not anticipated that projects proposed under this program will require completion of an EIS.

During the NEPA process, potential impacts of a project are evaluated in context and in terms of intensity (e.g., will the proposed action affect the only native prairie in the county? Will the proposed action reduce water supplied to a wetland by 1 percent? Or 95 percent?). The best source of information concerning the potentially significant issues in a project area is the local Reclamation staff that has experience in evaluating effects in context and by intensity.

Reclamation has the sole discretion to determine what level of environmental NEPA compliance is required. If another Federal agency is involved, Reclamation will coordinate to determine the appropriate level of compliance. You are encouraged to contact your regional or area Reclamation office. See www.usbr.gov/main/offices.html with questions regarding NEPA compliance issues. You may also contact the Program Coordinator for further information (*see Section G. Agency Contacts*).

H.2.2. National Historic Preservation Act

To comply with Section 106 of the NHPA, Reclamation must consider whether a proposed project has the **potential to cause effects to historic properties**, before it can complete an award under this FOA. Historic properties are cultural resources (historic or prehistoric districts, sites, buildings, structures, or objects) that qualify for inclusion in the National Register of Historic Places. In some cases, water delivery infrastructure that is over 50 years old can be considered a historic property that is subject to review.

If a proposal is selected for initial award, the recipient will work with Reclamation to complete the Section 106 process. Compliance can be accomplished in several ways, depending on how complex the issues are, including:

- If Reclamation determines that the proposed project does not have the potential to cause effects to historic properties, then Reclamation will document its findings and the Section 106 process will be concluded. This can take anywhere from a couple of days to one month.

- If Reclamation determines that the proposed project could have effects on historic properties, a multi-step process, involving consultation with the State Historic Preservation Officer and other entities, will follow. Depending on the nature of the project and impacts to cultural resources, consultation can be complex and time consuming. The process includes:
    - A determination as to whether additional information is necessary
    - Evaluation of the significance of identified cultural resources
    - Assessment of the effect of the project on historic properties
    - A determination as to whether the project would have an adverse effect and evaluation of alternatives or modifications to avoid, minimize, or mitigate the effects
    - A Memorandum of Agreement is then used to record and implement any necessary measures. At a minimum, completion of the multi-step Section 106 process takes about two months.
- Among the types of historic properties that might be affected by projects proposed under this FOA are **historic irrigation systems** and **archaeological sites.** An irrigation system or a component of an irrigation system (e.g., a canal or headgate) is more likely to qualify as historic if it is more than 50 years old, if it is the oldest (or an early) system/component in the surrounding area, and if the system/component has not been significantly altered or modernized. In general, proposed projects that involve ground disturbance, or the alteration of existing older structures, are more likely to have the potential to affect cultural resources. However, the level of cultural resources compliance required, and the associated cost, depends on a case-by-case review of the circumstances presented by each proposal.

You should contact your State Historic Preservation Office and your local Reclamation office's cultural resources specialist to determine what, if any, cultural resources surveys have been conducted in the project area. See www.usbr.gov/cultural/crmstaff.html for a list of Reclamation cultural resource specialists. If an applicant has previously received Federal financial assistance it is possible that a cultural resources survey has already been completed.

H.2.3. Endangered Species Act

Pursuant to Section 7 of the ESA, each Federal agency is required to consult with the U.S. Fish and Wildlife Service (USFWS) or the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service to ensure any action it authorizes, funds, or carries out is not likely to **jeopardize the continued existence of any endangered or threatened species or destroy or adversely modify any designated critical habitat.**

Before Reclamation can approve funding for the implementation of a proposed project, it is required to comply with Section 7 of the ESA. The steps necessary for ESA compliance vary, depending on the presence of endangered or threatened species and the effects of the proposed project. A rough overview of the possible course of ESA compliance is:

- If Reclamation can determine that there are no endangered or threatened species or designated critical habitat in the project area, then the ESA review is complete and no further compliance measures are required. This process can take anywhere from one day to one month.

- If Reclamation determines that endangered or threatened species may be affected by the project, then a **Biological Assessment** must be prepared by Reclamation. The Biological Assessment is used to help determine whether a proposed action may affect a listed species or its designated critical habitat. The Biological Assessment may result in a determination that a proposed action **is not likely to adversely affect** any endangered or threatened species. If the USFWS/NOAA Fisheries Service concurs in writing, then no further consultation is required and the ESA compliance is complete. Depending on the scope and complexity of the proposed action, preparation of a Biological Assessment can range from days to weeks or even months. The USFWS/NOAA Fisheries Service generally respond to requests for concurrence within 30 days.

- If it is determined that the project **is likely to adversely affect listed species**, further consultation (**formal consultation**) with USFWS or NOAA Fisheries Service is required to comply with the ESA. The process includes the creation of a **Biological Opinion** by the USFWS/NOAA Fisheries Service, including a determination of whether the project would **jeopardize** listed species and, if so, whether any **reasonable and prudent** alternatives to the proposed project are necessary to avoid jeopardy. Nondiscretionary **reasonable and prudent measures** and **terms and conditions** to minimize the impact of incidental take may also be included. Under the timeframes established in the ESA regulations, the Biological Opinion is issued within 135 days from the date that formal consultation was initiated, unless an extension of time is agreed upon.

The time, cost, and extent of the work necessary to comply with the ESA depends upon whether endangered or threatened species are present in the project area and, if so, whether the project might have effects on those species significant enough to require formal consultation.

ESA compliance is often conducted parallel to the NEPA compliance process and, as in the case of a CEC, documented simultaneously. The best source of information concerning the compliance with the ESA in a particular project area is the local Reclamation environmental staff that can be helpful in determining the

presence of listed species and possible effects that would require consultation with the USFWS or NOAA Fisheries Service. Contact your regional or area Reclamation office, www.usbr.gov/main/offices.html with questions regarding ESA compliance issues.

Appendix A

This page is intentionally left blank.

Appendix A: Benefit Quantification and Performance Measures

The following information is included to provide applicants additional guidance on pre- and post-project benefit quantification.

All WaterSMART Grants applicants are required to propose a method (or "performance measure") of quantifying the actual benefits of their project once it is completed. Actual benefits are defined as water actually conserved or better managed, as a direct result of the project. A provision will be included in all assistance agreements with WaterSMART Grants recipients describing the performance measure and requiring the recipient to quantify the actual project benefits in their final report to Reclamation upon completion of the project.

Quantifying project benefits is an important means to determine the relative effectiveness of various water management efforts, as well as the overall effectiveness of WaterSMART Grants.

The following information is intended to provide applicants with examples of some acceptable methods that may be used to estimate benefits pre-project and to verify benefits upon completion of the project. **However, the following is not intended to be an exhaustive list of acceptable performance measures. Applicants are encouraged to propose alternatives to the measures listed below if another measure is more effective for the particular project.**

Reclamation understands that, in some cases, baseline information may not be available, and that methods other than those suggested below may need to be employed. If an alternative performance measure is suggested, the applicant must provide information supporting the effectiveness of the proposed measure as it applies to the proposed project.

Performance Measure A: Projects with Quantifiable Water Savings

The methods included below are examples that may be helpful in estimating the water conservation that will be realized upon completion of the proposed project and to verify this amount post-project.

Performance Measure A.1: Canal Lining/Piping

Canal lining or piping projects are implemented to decrease or eliminate canal water seepage and evapotranspiration. **The following information may be helpful in estimating the water conservation that will be realized upon completion of the proposed project and to verify this amount post-project.**

Pre-project estimation of benefits:

To calculate potential water savings, physical measurements of losses from seepage, evaporation, and/or transpiration are necessary. If evaporation will not be mitigated by the project (e.g., canal lining), evaporative losses should be estimated and deducted from the estimated water conservation. Two testing procedures which can be used are listed below:

- **Ponding tests:** Conduct ponding tests along canal reaches proposed for lining or piping. At least two tests, one early and one late season, are suggested since seepage rates vary significantly during the irrigation season. Multiple years of data are also suggested. Ponding test results should be provided in terms of both acre-feet per year (AFY) of seepage and cubic feet of seepage per square feet of canal surface per day (cfs/sf/day).

- **Inflow/outflow testing:** Measure the flow rate of water flowing in and out of the canal reach. At least two tests, one early and one late season, are suggested since seepage rates vary significantly during the irrigation season. Multiple years of data are also suggested. Inflow/outflow test results should be provided in terms of both AFY of seepage and cubic feet per second of seepage per cubic feet per second of canal flow per mile of canal (cfs/sf/mile).

If ponding or inflow/outflow tests cannot be performed, estimated historical seepage and evaporation rates for the canal reach may be based on a combination of soils/geology conditions, flow rates, diversion rates, irrigation methods and crops, weather information, and historical knowledge. Soils/geologic conditions can not represent the sole source for estimating seepage losses, but can be included as support for an estimate. Evaporation data are available at www.nws.noaa.gov/oh/hdsc/PMP_related_studies/TR34.pdf. A discussion should be included on why ponding or inflow/outflow tests cannot be performed that also includes a thorough description of the logic used in the estimation calculations performed.

Post-project methods for quantifying the benefits of canal lining or piping projects:

- Using tests listed above, compare pre-project and post-project test results to calculate water savings. For canal lining projects, evaporation should be calculated based on weather data and then subtracted from the total loss measured by testing. For piping projects, it is typically assumed all seepage and evaporation are eliminated with most types of pipe materials.

- If ponding or inflow/outflow tests cannot be performed, benefits can be calculated by comparing the estimated historical seepage and evaporation rates for the canal reach to the post-project seepage and evaporation (documentation of proposed method of measuring or estimating post-project seepage and evaporation should be provided).

- Results can be verified using a ratio of historical diversion and delivery rates if adequate data exists. The adequacy of the data should be discussed with regard to methods used to measure diversion and delivery quantities. This type of verification should also include a comparison of historical canal efficiencies and post-project canal efficiencies. For example, if an irrigation district needs to divert 6 acre-feet of water to deliver 2 acre-feet of water to a field through the canal pre-project, this would be a 33% efficiency:

$$\frac{2\ acrefeet}{6\ acrefeet} \times 100\% = 33\%\ \text{efficiency}$$

  If post-project, the irrigation district only needs to divert 4 acre-feet of water through the canal to deliver the 2 acre-feet, efficiency would improve by 17% to 50%:

$$\frac{2\ acrefeet}{4\ acrefeet} \times 100\% = 50\%\ \text{efficiency}$$

- Record reduction in water purchases by shareholders and compare to historical water purchases. Using this method would require consideration and explanation of other potential reasons for decreased water purchases (e.g., precipitation, temperature, etc.).

Useful references regarding canal seepage monitoring and verification may be found here:

- https://www.usbr.gov/tsc/techreferences/mands/wmm/index.htm

- https://www.usbr.gov/tsc/techreferences/hydraulics_lab/pubs/PAP/PAP-0015.pdf

- https://aglifesciences.tamu.edu/baen/wp-content/uploads/sites/24/2017/01/B-6218-Measuring-Seepage-Losses-from-Canals-Using-the-Ponding-Test-Method.pdf

Performance Measure A.2: Measuring Devices

Good water management requires accurate and timely water measurement at appropriate locations throughout a conveyance system. This includes irrigation delivery systems and municipal distribution systems.

Measuring Devices: A.2.a. Municipal Metering

For projects that install or replace existing municipal meters, the applicant should consider the following:

- Whether the project includes new meters where none existed previously or replaces existing meters

- Whether the project includes individual water user meters, main line meters, or both

- If the project replaces existing individual water user meters with new meters, whether new technologies (automatic meter reading or AMI meters) will be employed

- If main line meters are included, whether system leak detection and leak reduction will be improved

Include a description of both pre- and post-project rate structuring.

The following information about municipal meter installation and replacement may be helpful in estimating the water conservation that will be realized upon completion of the proposed project and to verify this amount post-project:

- Municipal water delivery meters are typically installed for each water user as well as at strategic locations within the distribution system to measure production, supply, and/or storage. Accurate measurement allows for demand assessments, customer billing, diagnostic testing, locating and quantifying leakage, and other management needs.

- Significant water savings can be achieved when meters are installed where none existed previously. In the case of individual water user metering, most customers use significantly less water when billed at a usage rate; and especially so when a tiered rate is applied (i.e., higher rates for higher use). Installing new meters within the distribution system can also result in

savings through improved meter accuracy and leak detection/correction. Replacing existing meters can also result in water savings when new technologies are employed. For example, automatic meter reading and AMI devices provide real time measurement to the operator and, in some cases, to the customer as well. This allows for improved management by the operator, more conscientious use by the customer, and improved leakage detection by both.

- Quantifying savings associated with meter installation and/or replacement requires analysis of pre- and post-installation measurements from existing meters at strategic locations within the system. If installing meters will result in conserved water, please provide support for this determination (e.g., studies, previous projects, etc.). A logical scheme should be developed that compares pre- and post-installation flow quantities and that accounts for leakage and other considerations. The site-specific water savings verification plan should be as detailed as possible and clearly state all assumptions and the relative level of accuracy expected. In addition, please provide details underlying any assumptions being made in support of water savings estimates (e.g., residential users will reduce use once a more advanced billing structure is imposed).

Measuring Devices: A.2.b. Irrigation Metering

Measuring devices that may be installed can include, but is not limited to, the following:

- Flow meters (current or acoustic)
- Weirs
- Flumes
- Meter gates
- Submerged orifices

Potential benefits from improved irrigation delivery system measurement include:

- Quantification of system losses between measurement locations
- Quantification of waste way (spill) flows
- Accurate billing of customers for the actual amount of water delivered
- Facilitation of accurate and equitable distribution of water within a district
- Allow for implementation of future system improvements such as seepage reduction, remote flow monitoring, and canal operation automation projects

The following performance measures may be helpful in estimating the water conservation that will be realized upon completion and to verify this amount post-project for improved irrigation delivery system measurement.

Pre-project estimations of baseline data:

- Pre-project flows may be difficult to estimate without a measuring device in place. Ideally, temporary measurement devices or other methods to estimate flow rates may be used to estimate flow rates as accurately as possible.

- In lieu of temporary measurement devices, the applicant may be able to use data from measurement devices located elsewhere in the delivery system (if available). Otherwise, the applicant may have to rely on other historical data and/or estimates based on a combination of soils/geology, delivery data, flow data, and weather data.

Post-project methods for quantifying the benefits of projects to install measuring devices:

- Compare post-project water measurement (deliveries, diversions, and waste/spills) data to pre-project data or estimates—taking into account other factors which may have cause changes

- Survey users to determine utility of the devices for decision making

- Present how measurement devices were used to identify water losses which were previously unknown and how these will be addressed

- Document the benefits of any rate structure changes made possible by the installation of measuring devices (e.g., if districts that convert from non-metered to metered deliveries are able to convert from billing water users at a flat rate to billing for actual water use using a volumetric or tiered water pricing structure)

Performance Measure A.3: SCADA and Geographic Information Systems (GIS)

Proposals may involve installing or expanding a SCADA or combined SCADA/GIS system that monitors flows in an individual district or in a basin that includes several districts. SCADA systems provide water managers with real-time data on the flow rates and volumes of water at key points within an irrigation water delivery system. Access to such data allows water managers to make

accurate and timely deliveries of water, reducing over-deliveries and spillage at the end of the canal. SCADA/GIS systems can provide water users with real time delivery data to promote improved on-farm efficiencies.

For projects that install or expand a SCADA and/or GIS system, the applicant should consider the following:

- How SCADA or SCADA/GIS implementation will differ from pre-project operations in terms of how improved data availability will be incorporated into daily operational decisions

- How the SCADA or SCADA/GIS systems will be maintained once implemented. Discuss balance of in-house expertise anticipated vs. reliance on third party service provider(s)

- The projected opportunities for improved operational efficiencies that could be realized through implementation of a SCADA or SCADA/GIS system (e.g., improved delivery equity, improved response to unanticipated events, reduced administrative spillage, and enhanced productivity of human resources)

- The response process to SCADA or SCADA/GIS failures/outages

- Applicants are encouraged to review published reports on considerations when implementing a SCADA system (e.g., Freeman, B., and C. Burt (2009), *Practical experience with state-of-the-art technologies in scada systems*, San Luis Obispo, CA).

The following performance measures may be helpful in estimating the water conservation that will be realized upon completion and to verify this amount post-project for installing a SCADA or SCADA/GIS system.

Pre-project estimations of baseline data:

- Collect data on diversions and deliveries to water users

- Collect data on waste way flows

- Document employee pre-project time spent on ditch/canal monitoring and water control

Post-project methods for quantifying benefits of SCADA or SCADA/GIS system projects:

- Calculate amount of increased carryover storage in associated reservoirs. This is a long-term measure which will be more meaningful over a period of years.

- Track and record the diversions to water users and compare to pre-project diversions. This would show results of improved management if yearly fluctuations in weather are accounted for.

- Report delivery improvements (e.g., changes in supply, duration, or frequency that are available to end users because of SCADA/GIS).

- Calculate if there was a reduction in waste way flows and, if so, how much they were reduced.

- Document other benefits such as less mileage by operators on dusty roads (which saves time and influences air quality) and less damage to canal banks.

Performance Measure A.4: Automation

Proposals may include system automaton projects aimed at *preventing or reducing* spillage from canals, or drainage capture/reuse projects focused on *intercepting* spills and redirecting them to drains, canals, or reregulation reservoirs for reuse.

For projects that automate a system, the applicant should consider the following:

- The rationale of long-term automation plans (e.g., system-wide project vs. incremental implementation)

- Whether automation at given sites will result in heightened operational issues in other parts of the system (e.g., passing of supply/demand mismatches downstream)

- How automation technologies will be maintained (e.g., discuss balance of in-house expertise anticipated vs. reliance on third party service provider[s])

- The anticipated net benefits of implementing an automation project

- Applicants are encouraged to review published reports on considerations when implementing an automation system (e.g., Freeman, B., and C. Burt (2009), *Practical experience with state-of-the-art technologies in scada systems*, Irrigation Training and Research Center (ITRC), California Polytechnic State University (Cal Poly), San Luis Obispo, California).

The following performance measures may be helpful in estimating the water conservation that will be realized upon completion and to verify this amount post-project for automating delivery system components.

Pre-project estimations of baseline data:

- Establish baseline data by measuring existing spillage or document historical spillage with existing data. A measuring device should be positioned to measure spillage losses. To account for temporal variations, a minimum of a one-year history of continuous pre-project measurements is desirable for future comparison to post-project water usage. Spillage volumes can vary substantially between wet and dry years, operational changes, etc.; therefore, some multi-year estimates of spillage are preferred.

- Track pre-project water diversions using district diversion records, supplier diversion records, and/or district-recorded delivery records. Spillage estimates may be based on these data in some cases.

Post-project methods for quantifying benefits of spillage reduction projects:

- Measure spillage losses post-project and compare to pre-project data. Gather enough data to account for seasonal and temporal variations.

- Track post-project changes in the amount of water diverted and compare to pre-project diversion data.

- Compare estimated historical spills from district/project boundaries to post-project spills.

- Report specific annual volume changes to spills, diversions, or deliveries due to system automation.

Performance Measure No. A.5: Drain and Spill Water Reuse Projects

Drain and spill water reuse can be a district-level or regional conservation effort that consists of recovering irrigation water from drains and returning it to the water supply system for delivery to users.

Several types of projects can focus on drainage and reuse. Examples include:

- Pump stations with constant flow rates.

- Variable speed pump stations with or without SCADA controls.

- Storage reservoirs with pump stations at constant flow rates.

- Storage reservoirs with variable speed pump stations and SCADA controls.

The following performance measures may be helpful in estimating the water conservation that will be realized upon completion and to verify this amount post-project for drainage reuse projects:

Pre-project estimations of baseline data:

- A measuring device should be positioned to measure drain water losses.

- To account for temporal variations, a minimum of a one-year history of pre-project measurements is desirable for future comparison to post-project water usage.

- Drainage volumes can vary substantially between wet and dry years, as a function of operations, etc. Therefore, some multi-year measurements of drain water losses may be necessary.

Post-project methods for quantifying benefits of drainage reuse projects:

- Measure post-project drainage flows and compare to flow data collected pre-project.

- Gather enough data to account for temporal variations.

- Take readings from measuring devices positioned to measure drain water loss. A system analysis can be done with the following calculation:

$$Drainage\ with\ project = (100\% - \%\ Reuse) \times Drainage\ without\ project$$

- Measure and record post-project water deliveries to fields, drainage water volumes entering reservoirs, and drainage water volumes recycled to fields. Compare these data to historical data.

- Survey farmers and estimate any benefits to farmers, such as improved flexibility in water management, reduction in shortages of supply to users near the end of the canal, etc. If it is not possible to quantify these benefits in acre-feet, a narrative explanation may be acceptable.

Performance Measure A.6: Landscape Irrigation Measures

Municipal water providers can promote savings in outdoor water use by encouraging turf removal and installation of Smart irrigation controllers and high-efficiency irrigation nozzles (sprinkler heads). This is typically accomplished through rebate or direct installation programs.

Landscape Irrigation Measures: A.6.a. Turf Removal

For turf removal projects, the applicant should consider the total estimated quantity of turf to be removed, the estimated historical annual average quantity of water applied per unit area of turf, and the estimated amount of water to be applied to any replacement landscape vegetation.

Pre-project estimations of baseline data:

The historical average amount of water applied for turf irrigation should be estimated based on actual water consumption data or weather-based theoretical irrigation requirement estimates. Potential methods include the following:

- *Dedicated meter data.* Municipal water delivery entities often have users where dedicated irrigation meters exist (e.g., parks, home owners' associations, and golf courses). If so, metered water use can be divided by the irrigated area to calculate the average annual irrigation rate per unit area of turf. The greater the number of years of data used, the better the averages should be with regard to varying weather conditions. Also, when using this information, consider that parks and golf courses typically irrigate more efficiently relative to residential irrigation, so the actual turf removal savings for all types of users would be expected to be higher.

- *Winter/summer use data.* In the absence of dedicated irrigation meter data and where irrigation ceases during winter months, summer versus winter water use data can be compared to estimate irrigation use. This can be analyzed for a sample of users and combined with an estimate of the total area irrigated. An average turf irrigation rate can be calculated.

- *Theoretical irrigation requirement.* In areas where winter irrigation occurs and dedicated irrigation meter data are not available, weather data can be used to estimate theoretical irrigation demand. These calculations consider reference evapotranspiration (ET) values from local weather stations, a crop coefficient for the type of grass, and an assumed average irrigation efficiency rate.

- *Assumed domestic use rate.* An alternative method for calculating theoretical irrigation demand subtracts the assumed domestic (indoor) water use rates from total use. Domestic water use can be estimated based on household size and an assumed per person indoor usage rate. The age

of the community and existence of high-efficiency appliances and fixtures should be considered in the per-person domestic use rate. A thorough explanation relating the source of the estimated domestic use percentage to the users in the turf-removal area should be supplied.

Post-project methods for quantifying benefits of turf removal projects:

- Site audits can be performed to measure the amount of turf removed at each location and report on the water use for any vegetation which was placed in the area were turf was removed. The water conservation per site can be calculated using the pre-project turf irrigation rate and the measured area of turf removed minus estimated water use of any replacement landscape vegetation.

- Before and after water use data for each site should be evaluated using at least one year of post-project data. Weather conditions for the pre- and post-project data evaluation periods should be considered and adjustments should be made if conditions were significantly different during the pre- and post-periods.

- The project total savings should be calculated by summing the individual site savings.

Landscape Irrigation Measures: No. A.6.b. Smart Irrigation Controllers

A Smart irrigation controller automatically adjusts the amount of irrigation water applied to landscaped areas based on weather or soil moisture conditions. Weather based controllers receive weather information from either onsite sensors or from remote weather stations via radio, pager, or Internet signals. Soil moisture based controllers receive soil moisture information from one or more onsite sensors. Smart controllers have the potential to reduce landscape irrigation water use in situations where the landscape was initially being over-irrigated. In some cases, installation of Smart controllers has resulted in an increase in water use in situations where the landscape was initially being under-irrigated. For this reason, it is important to identify landscapes which are being over-irrigated prior to installation of a Smart controller.

The following performance measures may be helpful in estimating the water conservation that will be realized upon completion and to verify this amount post-project for installing Smart controllers:

Pre-project estimations of baseline data:

The historical average annual amount of water applied for landscape irrigation for each project site should be estimated based on actual water use data. Note that weather-based theoretical irrigation requirement estimates are

not suitable for baseline estimations as this is typically the method implemented by the Smart controller for estimating irrigation times. Ideally, post-project the landscape will be being irrigated at this rate. Suggested methods include the following:

- Site audits should be conducted at each location within the project to measure landscape area and estimate the irrigation system's efficiency. Site audit-based recommendations for system efficiency improvement are strongly recommended.

- The historical average annual landscape irrigation rate per unit area should be estimated using the dedicated meter data, winter/summer use data, or assumed domestic use rate methods discussed under the turf removal section.

- The total annual average water irrigation amount for each site should be calculated as the product of the landscape area and annual average application rate. These can be summed to estimate the water conservation for the project.

Post-project suggested methods for quantifying benefits of ET controllers:

Total project water savings can be estimated as the difference in annual pre- and post-project total metered water use or the difference in estimated annual outdoor water use. For the latter, irrigation use should be calculated at each site based on pre- and post-project meter data using the methods described under turf removal. Regardless of whether total metered usage or estimated outdoor use is used, weather conditions during the data periods should be considered (as also discussed under turf removal).

- Compare annual meter reading totals or estimated outdoor use prior to Smart controller installation and post installation for each site and sum all for project total.

- If results are required earlier, the calculations can also be performed monthly.

Landscape Irrigation Measures: A.7.c. High-Efficiency Nozzles

High-efficiency landscape irrigation nozzles (sprinkler heads) apply water more uniformly and at a lower rate relative to conventional type nozzles. Improved application uniformity reduces the need to over-irrigate some areas in order to eliminate brown spots in turf. The lower application rate reduces runoff and while the stronger stream of water is less effected by wind. Note that the lower application rate can require that irrigation times be increased in order to adequately irrigate the landscape.

Pre-project estimations of baseline data

Total irrigation water use for the project should be estimated using the same methods described above for turf removal and Smart controllers.

Post-project suggested methods for quantifying benefits of ET controllers:

Site audits should be conducted to verify correct installation, and water savings can be verified using the same methods as described above for Smart controllers (i.e., pre-project minus post-project total use or irrigation use from meter data). Site audits should include evaluation of irrigation system operations to verify adjustments have been made to compensate for the new nozzles.

Performance Measure B: Projects with Hydropower Benefits

The performance measures included below are examples that may be helpful in estimating a pre-project energy baseline and post-project energy benefits for energy projects that are expected to increase the use of hydropower in the management and delivery of water.

For hydropower projects, applicants should address the following as part of the performance measures they submit with their applications.

- Explain the methodology for calculating project hydropower capacity and generation benefits.
- Include an estimate of incremental hydropower capacity (measured in kW) and generation (measured in kWh) resulting from the project.
- Describe what loads will be served by project hydropower generation.

AGENDA ITEM 7.C.

Attachment 2

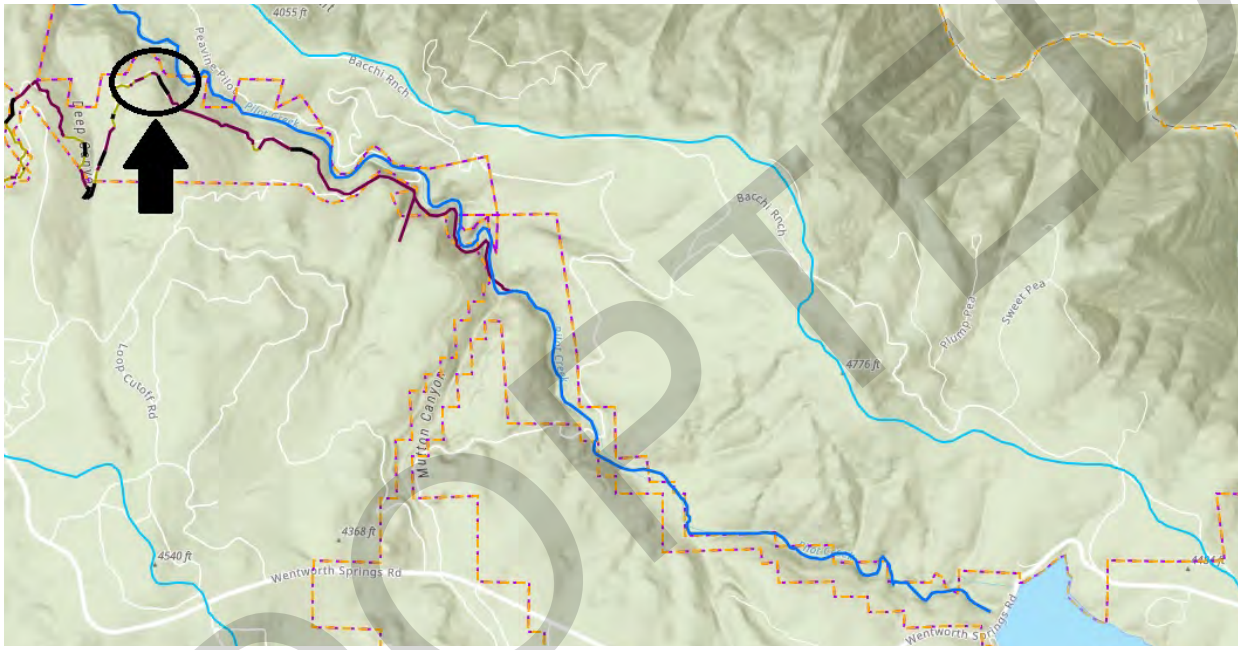
PROJECT NAME: Upcountry Ditch Reliability Improvement

PROJECT NUMBER: TBD

PROJECT DESCRIPTION:

This Project will improve a section of the Main Ditch identified as a priority segment in the 2002 Water System Reliability Study by KASL Engineering Consultants. This is a segment of the only conveyance facility that delivers raw water from Stumpy Meadows Reservoir to both water treatment plants and irrigation water customers. It is an earthen canal that is prone to slope failures and leakage. Anticipated improvement is to stabilize the adjacent slope and replace 250 feet of earthen canal with a pipe.

LOCATION MAP



PHOTOS

Project Name: Upcountry Ditch Reliability
Project Number:
Project Description: Prioritized repair of Upcountry Ditch

Funding Sources:

Sources	Prior Years	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	Future Years	Total
CABY Grant (9)								0
Capital Reserve (43)			197,287	526,500				723,787
Prior Reimbursements Received (35)								0
Capital Facility Charge (39)		138,000	329,213					467,213
ALT WTP Capital Reserve (24)								0
ALT Zone Fund (40)								0
ALT Tank Replacement Loans & Repair (41)								0
ALT CDS Reserve Connection (42)								0
Grants (EPA)								0
SRF Loan								0
General Fund (10)								0
Other (EDCWA Cost Share)								0
Unfunded								0
Total	0	138,000	526,500	526,500	0	0	0	1,191,000

Project Cost Estimate:

Elements	Prior Years	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	Future Years	Total
Preliminary Engineering (7020)		95,000						95,000
Environmental (7021)		43,000						43,000
Land/ROW Acquisition (7022)								0
Construction Engineering (7024)			25,000	25,000				50,000
Construction Contract (7023)			476,500	476,500				953,000
Other CIP Costs (7025)			25,000	25,000				50,000
Other - TBD								0
Total	0	138,000	526,500	526,500	0	0	0	1,191,000

AGENDA ITEM 7.C.

Attachment 3

TECHNICAL PROPOSAL

Priority Reliability Measures – Upcountry Ditch Pipe Installation Project

October 3, 2019

Prepared By:

Georgetown Divide Public Utility District
6425 Main Street
P.O. Box 4240
Georgetown, California 95634

Adam Brown
Water Resources Manager
(530) 333-4356 ext. 110
abrown@gd-pud.org

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

EXECUTIVE SUMMARY

The proposed project area is located in El Dorado County, El Dorado National Forest which is situated in Sierra Nevada Foothills of California between the middle and south forks of the American River. Georgetown Divide Public Utility District (the District) supplies treated and seasonal irrigation water within the service area of approximately 15,000 people for the communities of Garden Valley, Kelsey, Greenwood, Cool and Pilot Hill. Surface water is delivered to two water treatments plants for distribution and a series of irrigation ditches via gold rush era water conveyance system. The nearest town to the project area is Georgetown, California.

This application has been developed using a *Water Reliability Study* (Reliability Study) prepared for the District by engineering firm, KASL Consulting Engineering, Inc.. The Reliability Study identified numerous projects throughout the District that completed would improve/increase reliability water delivery to the District's service area. The project area selected for this Bureau of Reclamation (BOR) *WaterSMART Grants: Water and Energy Efficiency Grants for Fiscal Year 2020* (FOA) is identified as, "The Narrows". The area was identified as an area with limited access, venerable to slope instability and outdated delivery system. The proposed project replaces approximately 450-feet of degraded lined ditch with piped water conveyance, slope stability and access road improvement. The total project estimated cost is estimated at $1,311,000. This proposed cost includes all cost associated with the proposed projects including; engineering, environmental regulatory and permitting, construction, construction management and administrative. It is assumed potential grant award will be in winter 2019/2020. The project will be completed over a 3-year period in order for the District the meet cost sharing requirements and irrigation season coordination.

1.0 BACKGROUND DATA

The project area is located in El Dorado County which is situated in Sierra Nevada Foothills of California. More specifically, the District is located between the middle and south forks of the American River, an area commonly known as the Georgetown Divide (the Divide). Multiple communities located on the Divide that are served by the District include Georgetown, Garden Valley, Kelsey, Greenwood, Cool and Pilot Hill. The service boundary of the District encompasses approximately 107 square miles as shown on Figure 1. More specific project location detailed in Section 2.0.

1.1 Hydrologic, Geologic and Topographic Features

The project area lies within the western slope of the Sierra Nevada Foothills. The Sierra Nevada Foothills region consist of granitic rocks, metamorphic rocks, sedimentary deposits and volcanic rocks (USGS, 2014). Significant topographic relief occurs throughout the District. Water distribution lines flow east to west from an elevation of approximately 3,100 feet above mean sea level (amsl) to 1,200 feet amsl with various elevation changes. A topographic map is included as Figure 2.

1.2 Source of Supply/System Infrastructure

The District utilizes four appropriative water rights (A005644A, A016212, A016688 and A027174) and five statements of diversions (S014597, S014598, S014599, S014600 and S014601) to supply the Divide with drinking and irrigation water. Main source of the Districts water supply originates from Stumpy Meadows Reservoir (Reservoir) located at 4,262 feet amsl which is formed by a 162-foot high rock and earth fill dam (Mark Edson Dam) on Pilot Creek that stores 20,000-acre feet. Surface water is released from the Reservoir into Pilot Creek which is then diverted at the Pilot Creek Diversion Dam into the Districts water supply system, approximately two miles downstream of the Reservoir. Source water travels through approximately 70 miles of supply ditch/conduits throughout the District. The first raw water surface impoundment is Walton Lake, which supplies raw water to the Water Lake Water Treatment Plant. The plant is located four miles east of Georgetown and has a production capacity of three million gallons per day (MGD). After treatment, water is pumped into the distribution system that serves Georgetown, portions of Greenwood, Kelsey and Garden Valley.

A system of pipes and open ditches conveys raw water beyond Walton Lake to another 10-acre foot surface water impoundment that serves the Auburn Lake Trails Water Treatment Plant and the western portion of the service area including Cool, Pilot Hill and portions of Greenwood. The plant is located directly adjacent to the Auburn Lake Trails subdivision and has a production capacity of three MGD. Source of supply and the aforementioned infrastructure is shown on Figure 3 and 4.

1.3 Land Use

The District boundary encompasses low to high density residential intermixed with agricultural land and commercial properties generally located within community centers. The majority of land use consists of single-family residential homes. Future land use is not expected to change.

Approximately 3,800 customers are served by the District which are identified into five water use categories: residential, multi-family, commercial, governmental/institutional and large landscape service for treated water and agricultural service for untreated water. Treated water customers are primarily residential, with 96% of the accounts serving single family residents (3,590 accounts) and 4% serving commercial/governmental accounts (161 accounts). Customer accounts have been steady during the previous seven years and with limited area development and slow growth. Due to topography, zoning, water supply and sewage disposal constraints, the District's growth rate is not expected to significantly increase in the coming years.

1.4 Current Population and Trends

Using the most recent 2010 census data population within the Districts service area is approximately 15,153 with approximately 9,264 residences accessing treated water services. Population projections were based on a number of sources such as the El Dorado County Water Agency's *Water Resource Development and Management Plan,* 2014 West Slope update (0.99% growth rate), the Department of Finance population growth rate for Eldorado County (1.1% growth rate from 2010-2020) and the Sacramento Area council of Governments (1.5% for the Unincorporated El Dorado County).

1.5 Demand

The District has approximately 3,700 treated water accounts. The current treated water demand is approximately 1,900-acre feet per year. The current irrigation (raw) water demand is approximately 4,200-acre feet per year.

1.6 Historical Reclamation Relationship

In 1960, the District received a loan from BOR under public law 984 to construct Stumpy Meadows Reservoir and drought loan (#7-07-20-W0068). Neither have an outstanding balance.

2.0 PROJECT LOCATION

The priority reliability project is located on a section of the Upcountry Ditch between Structure #1 and Structure #2:

The Narrows – Located in California's El Dorado County approximately 1.7 miles northeast of the community of Quintette at project latitude (38°56'3.55"N) and longitude (120°39'58.29"W). Location map is included in Appendix A as sheet UC-5.

Proposed construction area is shown on Figure 5.

3.0 TECHNICAL PROJECT DESCRIPTION

This Project is identified in a larger Reliability Study prepared for the District by KASL Consulting Engineering, Inc. (Appendix B). The proposed project meets the BOR *WaterSMART Grants: Water and Energy Efficiency Grants for Fiscal Year 2019* water conservation eligibility criteria for canal piping projects.

The Reliability Study, in part evaluated the Districts raw water ditch system on the basis of performance, condition and capacity. Each segment of the ditch, maps were produced to include high maintenance areas, high loss areas, previous repair areas and lined and piped sections. As a result, priority and second priority measures were identified in order to assist the District in future ditch repairs that would result in water savings and improve water delivery reliability. The area presented in this WaterSMART grant application include, *The Narrows*.

The Narrows

This segment of ditch identified as *The Narrows* is approximately 450 liner feet of open ditch that utilizes an abandoned 2 to 6 foot wide access path located along a northern slope, approximately 250 feet above pilot creek. Due to the extreme topography the access road adjacent directly adjacent to the ditch section no longer provides access and slope destabilization is threating to compromise ditch delivery capabilities. In order to maintain water delivery reliability, the scope of work includes replacing the open ditch with 48-inch diameter high density polyethylene (HDPE) pipe, and slope and roadway stabilization. Slope and roadway stabilization will include retaining wall construction and access road. Repair area is shown on sheet UC-5 included in Appendix A. Replacing this ditch section with HDPE pipe will connect two sections of ditch where the District has already installed pipe, effectively completing a gap and forming approximately 2,800 feet of continuous pipe.

A summary of the proposed project area is shown on Figure 5. Cross-sectional layout is presented in Appendix C. Current photographs are included in Appendix D.

3.1 Major Project Construction Components

Project components primarily consist of pipe installation for ditch sections identified as priority areas to maintain a reliable water supply to the District. The anticipated construction related features are summarized in the table below:

Construction Feature	Description
Mobilization	The contractor will setup a central staging area for storing equipment and materials.
Access	Proposed construction areas are generally accessible. Heavy equipment and material will be staged and mobilized to project site during the appropriate construction phase.
Dewatering	As much work as possible will be scheduled following irrigation season between October 1 and April 30. Bypass piping and pumping will be required in order to maintain a continuous raw water supply.
Storm Water Pollution Prevention Plan (SWPPP)	With scheduled work during fall months, some precipitation is expected and SWPPP measures will be put in place such as silt fencing, waddles and siltation trenches, as necessary.
Excavation/	Existing ditch/pipe material will be removed and disposed off-site. Segments will be excavated to appropriate depth for installation of new HDPE pipe.
Pipe Installation	HDPE pipe will be installed with required bedding material and cover material
Slope Stabilization and Access Road Restoration	Slope will be stabilized, and access road restored to a usable width. Slope will be stabilized using mechanical methods such as retaining wall or mechanically stabilized earth. Access road will be earth or road base.
Restoration	Upon completion, distributed areas anti-erosion measures including hydroseeding, straw waddles and mulching will be applied to minimize erosion.
De-mobilization	The contractor will restore the central staging area and remove all equipment.

3.2 Non-Construction Technical Services

Implementation of the projects will also require non-construction efforts prior to and throughout the construction period. These include: grant administration services, environmental documentation and processing, design/bid documentation preparation, geotechnical and surveying services, public outreach, regulatory permitting and construction administration. Non-construction activities are summarized in the table below:

Technical Service	Description
Surveying and Geotechnical Services	Surveying for the project will include GPS locating and staking of the reaches slated for construction. The District will provide typical cross-sections to the engineers for each segment. Additional surveying may be necessary for access road widening construction. District maps will be used to show limits of work, staging areas and any parcels requiring temporary construction easements. A geotechnical firm will be consulted to provide a report addressing the compaction requirements and slope stability.
Design Bid Document Preparation	The design engineers will create the overall design plans showing project reaches, lengths, typical sections, staging areas and any related construction details. Design specifications will accompany the design drawings providing detailed direction on contract processes, permit requirements, bidding instructions, materials selection, methods of construction and installation and any other special provisions to carry out construction contract.
Construction and Grant Administration	A construction manager will be assigned to administer the contract documents and to provide adequate inspection services to assure adherence to the construction documents and to monitor schedule and progress payments. The Construction Manager may also serve as the Project Manager. The Project Manager will report to the General Manager on the progress of the project and on payment requests.

4.0 EVALUATION CRITERIA

4.1 Evaluation Criterion A – Quantifiable Water Savings

Describe the amount of estimated water savings -

This project will result in an estimated 5.07 acre feet per year (ac-ft/yr) of water savings. Estimated savings were calculated by using the Davis-Wilson seepage formula defined as follows:

$$S = C \times \frac{WP \times L}{4 \times 10^6 + 2000\sqrt{v}} \times Hw^{1/3}$$

Where:[1]
S = cubic feet per second per length of canal (cfs)
L = Length of canal (feet)
WP = Wetted perimeter (feet)
Hw = Mean water depth (feet)
v= Velocity (ft/sec)
C = Constant

The 2018 annual water supply delivery was 6,030 acre feet. Water is supplied to residential, institutional and agricultural users throughout the Georgetown Divide using separate raw water and treated water systems. The Upcountry Ditch proposed for repair supplies water to all District customers.

Describe current loses -

The District calculates water loss annually from raw water supply and treated water conveyance and distribution system, respectively. In 2018 the District calculated losses of approximately 302 acre feet from treated water distribution system and 2,897 acre feet from the raw water distribution system, respectively. Losses are generally related to inaccurate customer meters and raw water conveyance ditch.

Describe the support/documentation of estimated water savings -

[1] Davis-Wilson Formula

	Length (feet)	Wetted Perimeter (feet)	Mean Water Depth (feet)	Velocity (ft/sec)	Constant
The Narrows	450	13.03	1.91	3.3	8

1) Canal Lining/Piping

a) How has the estimated average annual water savings that will result from the project been determined? Please provide all relevant calculations, assumptions, and supporting data.

The upcountry ditch selected for repair was identified in the Reliability Study as an area needing repair for water source reliability which will be discussed further in the Section. Approximately 450 feet of repair area is lined with a gunite lining that is approximately 40-years old and is degraded. Constant value ranges between 1 to 10, one being best condition and 10 being in worst condition on the line. Based on observed lining condition and age a value of eight was used. The estimated annual seepage rate is approximately 5.07 ac-ft/yr.

b) How have average canal seepage losses been determined? Have ponding and/or inflow/outflow tests been conducted to determine seepage rates under varying conditions? If so, please provide detailed descriptions of testing methods and all results. If not, please provide an explanation of the method(s) used to calculate seepage losses. All estimates should be supported with multiple sets of data/measurements from representative sections of canals.

The District's annual average water losses for the past 19 years for the entire water system operations is nearly 40 percent. The leakage rate was determined in the Reliability Study. Typical ditch flows and usage monitoring, KASL estimated that the losses in the ditch systems specifically are approximately 25 percent of the total design flows.

c) What are the expected post-project seepage/leakage losses and how were these estimates determined (e.g., can data specific to the type of material being used in the project be provided)?

Proposed rehabilitation areas un-lined ditch will be replaced with HDPE pipe. With the exception of pipe joints infiltration is not possible. In addition, pipe does not allow for evaporation.

d) What are the anticipated annual transit loss reductions in terms of ac-ft per mile for the overall project and for each section of canal included in the project?

The estimated overall transit loss for The Narrows was calculated at 47.63 ac-ft per mile.

e) Include a detailed description of the materials being used.

Construction material will include 48-inch HDPE pipe, bedding material and road base and retaining wall gabions to complete the scope of work. Complete material list will be prepared upon the completion of engineering design.

4.2 Evaluation Criterion B – Water Supply Reliability

1. Will the project address a specific water reliability concern? Please address the following:

a) Explain and provide detail of the specific issue(s) in the area that is impacting water reliability, such as shortages due to drought, increased demand, or reduced deliveries. Will the project directly address a heightened competition for finite water supplies and over-allocation (e.g., population growth)?

The Reliability Study identified the proposed project area based on the vulnerability to failure. The project location is located along sloped areas ranging from 45 to 59 percent. In the event ditch location was damaged, source water supply would be cutoff from all District customers until a repair could be made.

b) Describe how the project will address the water reliability concern? In your response, please address where the conserved water will go and how often it will be used, including whether conserved water will be used to offset groundwater pumping, used to reduce diversions, used to address shortages that impact diversions or reduce deliveries, made available for transfer, left in the river system, or used to meet another intended use.

The projects will address reliability concerns by installing HDPE below grade that will not be susceptible to surface slope instability. This provides increased reliability to the entire District customer base. In addition, as discussed in Section 4.1, the installation of HDPE significantly limit infiltration making additional water available for river system and/or future water demands.

c) *Provide a description of the mechanism that will be used, if necessary, to put the conserved water to the intended use.*

The Districts diversion located on Pilot Greek, gaging station is monitored to adjust flows into the Districts distribution system to meet demand.

d) *Indicate the quantity of conserved water that will be used for the intended purpose.*

If demand for conserved water is warranted, conserved water will be put to beneficially use. If demand does not warrant additional water supply, conserved water will remain within the Pilot Creek Watershed and the larger American River Watershed.

2. *Will the project make water available to achieve multiple benefits or to benefit multiple water users? Consider the following:*

a) *Will the project benefit multiple sectors and/or users (e.g., agriculture, municipal and industrial, environmental, recreation, or others)?*

Source water commercial uses includes both treated water and irrigation water. Water conservation aspect, although minimal could potentially benefit all sectors and/or users. However; additional water will be available to the system, it is unknown if any federally recognized species will benefit from the project.

b) *Will the project benefit Indian Tribes?*

The proposed project will not benefit Indian Tribes

c) *Will the project benefit rural or economically disadvantaged communities?*

Being that the District serves a rural community and a portion an economically disadvantaged community, the project will benefit both.

d) *Describe how the project will help to achieve these multiple benefits. In your response, please address where the conserved will go and where is will be used, including whether the conserved water will be used to offset groundwater pumping, used to reduce diversions, used to address shortages that impact diversions or reduce deliveries, made available for transfer, left in the river system, or used to meet another intended use.*

As discussed previously the project main focus is to improve source water delivery reliability to the District. However; with the replacement of degraded lined ditch with HDPE pipe approximately 5.07 ac-ft/yr of water conservation was calculated.

3. *Does the project promote and encourage collaboration among parties in a way that helps increase the reliability of the water supply?*

   a) *Is there widespread support of the project?*

   The project was identified as a priority reliability measure by the Reliability Study. The District conveyance system is large unknown to the public; however, the District relies on a single surface water supply and maintaining delivery infrastructure impacts all customers of the District.

   b) *What is the significance of the collaboration/support?*

   Minimal to none

   c) *Is the possibility of future water conservation improvement by other water users enhanced by completion of this project?*

   No

   d) *Will the project help to prevent a water-related crisis or conflict? Is there frequently tension or litigation over water in the basin?*

   The project has the potential to avert a water-related crisis by increasing the reliability of source water. The District has experienced litigation and community tension.

   e) *Describe the roles of any partners in the process. Please attach any relevant supporting documents.*

   Not Applicable

4. *Will the project address water supply reliability in other ways not described above?*

   No

4.3 Evaluation Criterion C – Implementing Hydropower

Implementing hydropower does not apply to this project.

4.4 Evaluation Criterion D – Complementing On-Farm Irrigation Improvements

As discussed throughout the applications technical proposal the District supplies treated and irrigation water to the community. The priority objective related to the project is to increase the reliability of water delivery. Increased reliability provides customers with confidence the District is making the effort to provide a reliable delivery of water to all its customers. An indirect impact would encourage customers to depend on water delivery and would encourage use, either treated or irrigation/farm related.

4.5 Evaluation Criterion E – Department of the Interior Priorities

The project is applicable to criteria five as discussed below.

1. *Modernizing our infrastructure*
   a) *Support the White House Public/Private Partnership Initiative to modernize U.S. infrastructure.*

      This project applies to both the public/private partnership and modernizing of U.S. infrastructure. The Ditch system is owned and operated by the District. In order to complete a project of this scale the District would utilize private contractors to assist in engineering and construction of the project. This will allow the District to keep supplying drinking and irrigation water to customers. The project will also replace gold rush era water conveyance technology with 21st century construction material.

   b) *Remove impediments to infrastructure development and facilitate private sector efforts to construct infrastructure project serving American needs;*

      As detailed above significant portions of the project will be completed by private contractors. The District will streamline the process to complete the project efficiently and effectively as possible.

   c) *Prioritize Department of the Interior (DOI) infrastructure needs to highlight: Construction of infrastructure*

The project replaces aging degraded lined ditch conveyance system with the construction of new infrastructure. The infrastructure to maintain water reliability for communities receiving drinking and irrigation water.

4.6 Evaluation Criterion E – Implementation of Results

4.6.1 Project Planning

As discussed in Section 3.0 the proposed area was identified as a priority reliability project and was discussed in detail in the Reliability Study. The Reliability Study is included in Appendix B of this Proposal. Proposed ditch rehabilitation project meets the goals outlined in the Reliability Study to increase water delivery reliability.

4.6.2 Performance Measures

Primary purpose of the proposed project is to increase water reliability to the District and customers by replacing portions of a gold rush era water conveyance system with subsurface HDPE pipe. As an added benefit infiltration via degraded lined canal will nearly be eliminated with the installation of pipe. Verification of this performance measure will be tabulated by monitoring flows up- and down-stream of the rehabilitation area. Prior to construction a baseline flow will be established that will be compared to post construction flows. Measurements we be presented in the final performance report.

4.6.3 Readiness to Proceed

The proposed project has five major milestones that include identification, contractor selection, permitting/planning, implementation and completion. An estimated schedule is summarized in Table 1. As detailed in this application the District has identified the priority reliability project. A bid package will be assembled by the District and released for engineering firms to completed applicable permits, engineered plans and construction methodology. Associated environmental documents will include; biological resources, cultural resources/tribal consultation and California Environmental Quality Act (CEQA) / National Environmental Protection Act (NEPA) review. Following completion of pre-construction documents project will be completed. It is not anticipated new policies or administrative actions will be needed to implement the project.

4.6.4 Nexus of Reclamation Project Activities

This project does not have a connection to a BOR project or activity.

4.6.5 Additional Non-Federal Funding

$$\frac{Non - Federal\ Funding}{Total\ Construction\ Cost} = \frac{\$655{,}500}{\$1{,}311{,}000} = 50\%$$

5.0 PROJECT BUDGET

5.1 Funding Plan

The Districts cost sharing responsibility for the proposed project source of funding will be generated from the capital reserve fund between fiscal years 2019/2020 and 2021/2022. There are no funding sources outside the District.

Funding Source	Funding Amount
Non-Federal Entities	
Georgetown Divide Public Utility District	$655,500
Non-Federal Subtotal	$655,500
Other Federal Entities	
None	--
Other Federal Subtotal	--
Requested Reclamation Funding	$655,500
Total Project Funding	**$1,311,000**

5.2 Budget Proposal

The tables below detail estimated associated with project areas, The Narrows and Structure #3.

Estimated Cost - The Narrows	
Task	**Cost**
Engineering Design	$95,000
Environmental Permitting	$43,000
Retaining Wall, Slope Stabilization	$583,000
Pipe Installation	$270,000
Access Road Widening	$65,000
Construction Management	$50,000
Administrative Management	$50,000
Subtotal	1,028,000
Contingency (15%)	$155,000
Total	**$1,311,000**

5.3 Budget Narrative

5.3.1 Salaries and Wages

Adam Brown, Water Resources Manager at the District will act as the Project Manager for the proposed project. Additional District staff personnel will include the General Manager and administrative staff. It is estimated a total of four interim reports will be complete during the duration of the project and one final performance report will be completed detailing the completion of the proposed project. Itemized budget estimate is included in Section 5.2.

5.3.2 Fringe Benefits

Not applicable to the proposed project.

5.3.3 Travel

Not applicable to the proposed project.

5.3.4 Equipment

Not applicable to the proposed project.

5.3.5 Materials and Supplies

In order to meet the performance reporting requirements miscellaneous report production supplies are included in budget proposal table in Section 5.2.

5.3.6 Contractual

Construction of the proposed project will be completed by a series of contractors. A design engineer will be selected through a qualifications-based procurement method that will be tasked with preparing an engineered design package. In addition, a bid package will be prepared that will be utilized to prepare a request for bid (RFB) document by the District to select a construction contractor. A separate consultant will be utilized to complete environmental compliance permitting. Detailed cost is presented in Section 5.2.

5.3.7 Third-Party In-Kind Contributions

Not applicable to the proposed project.

5.3.8 Environmental and Regulatory Compliance Costs

Environmental and regulatory compliance cost include; biological resources evaluation/permitting, cultural resources evaluation and CEQA/NEPA. Cost include time for BOR to review environmental and regulatory compliance. Detailed cost is included in Section 5.2.

5.3.9 Other Expenses

Not applicable to the proposed project.

5.3.10 Indirect Costs

Not applicable to the proposed project.

5.4 Letters of Support

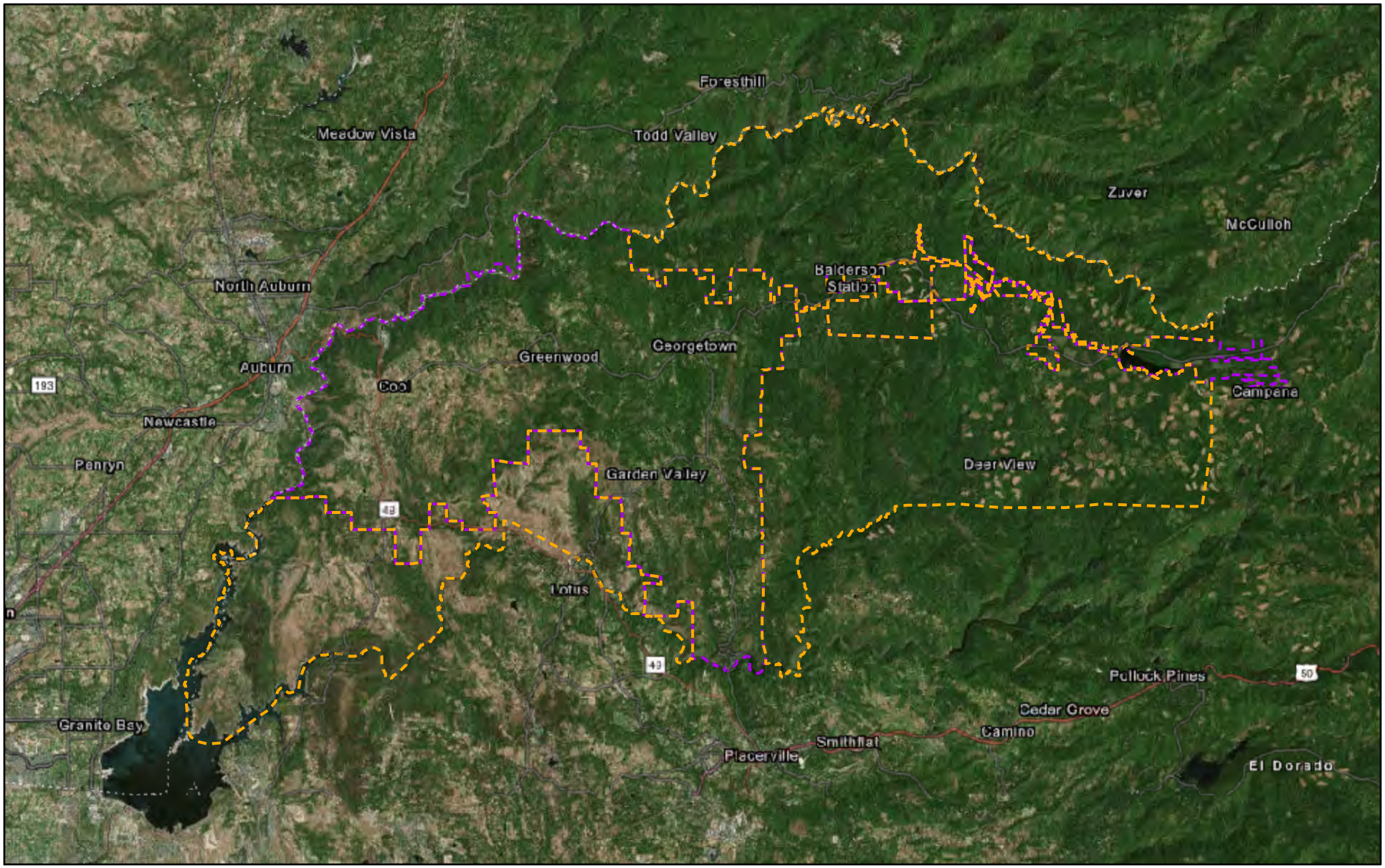
Letters of support are included in Appendix E.

5.5 Official Resolution

Official resolution adopted the District's board of directors is included in Appendix F.

FIGURES

Figure 1 - GDPUD Service Boundary and Sphere of Influence



GDPUD Sphere of Influence

GDPUD District Boundary

1:335,540

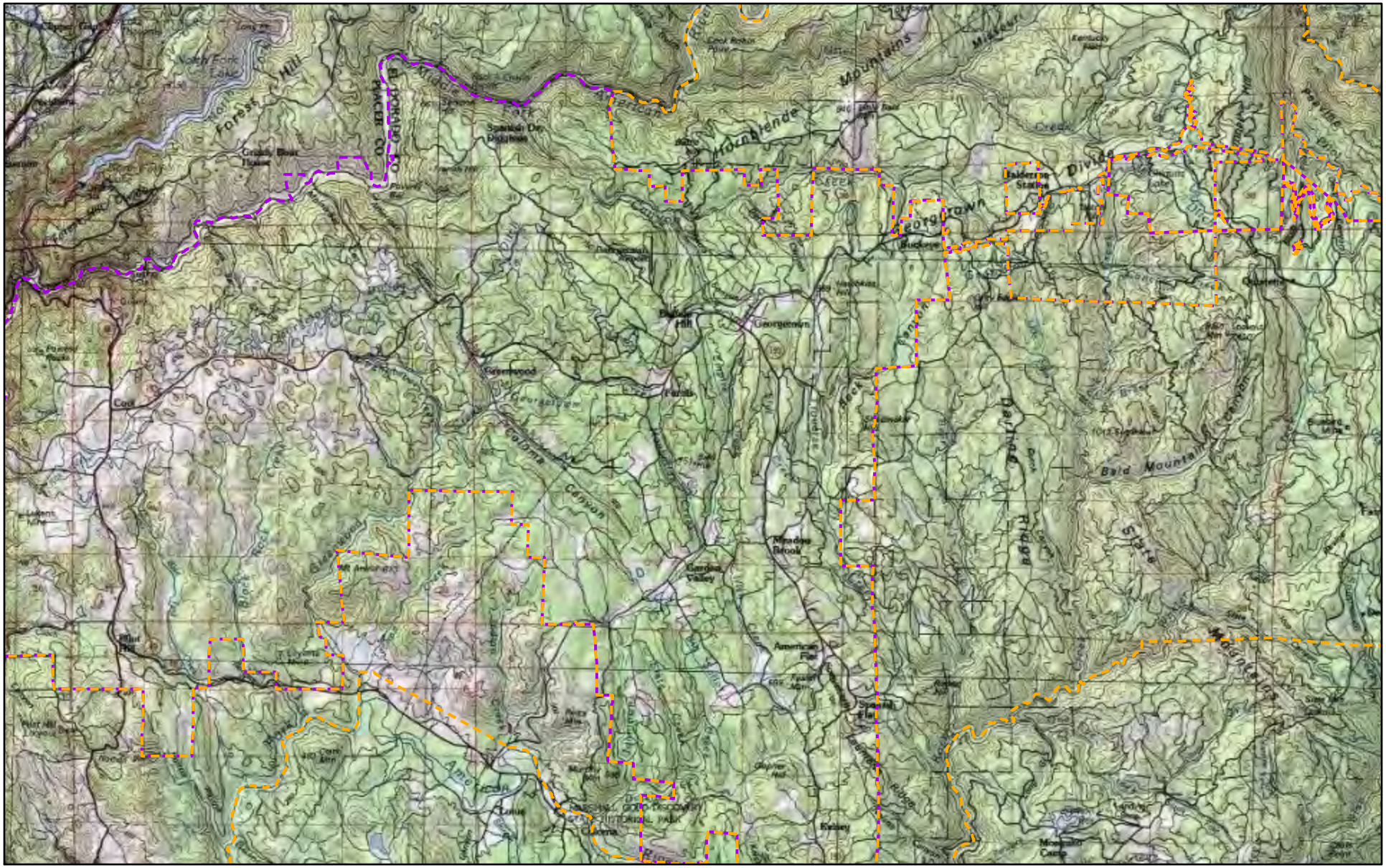
0 2.25 4.5 9 mi

0 3.5 7 14 km

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus

Earthstar Geographics | Esri, HERE, Garmin, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA |

Figure 2 - Topographic Map



1:167,770

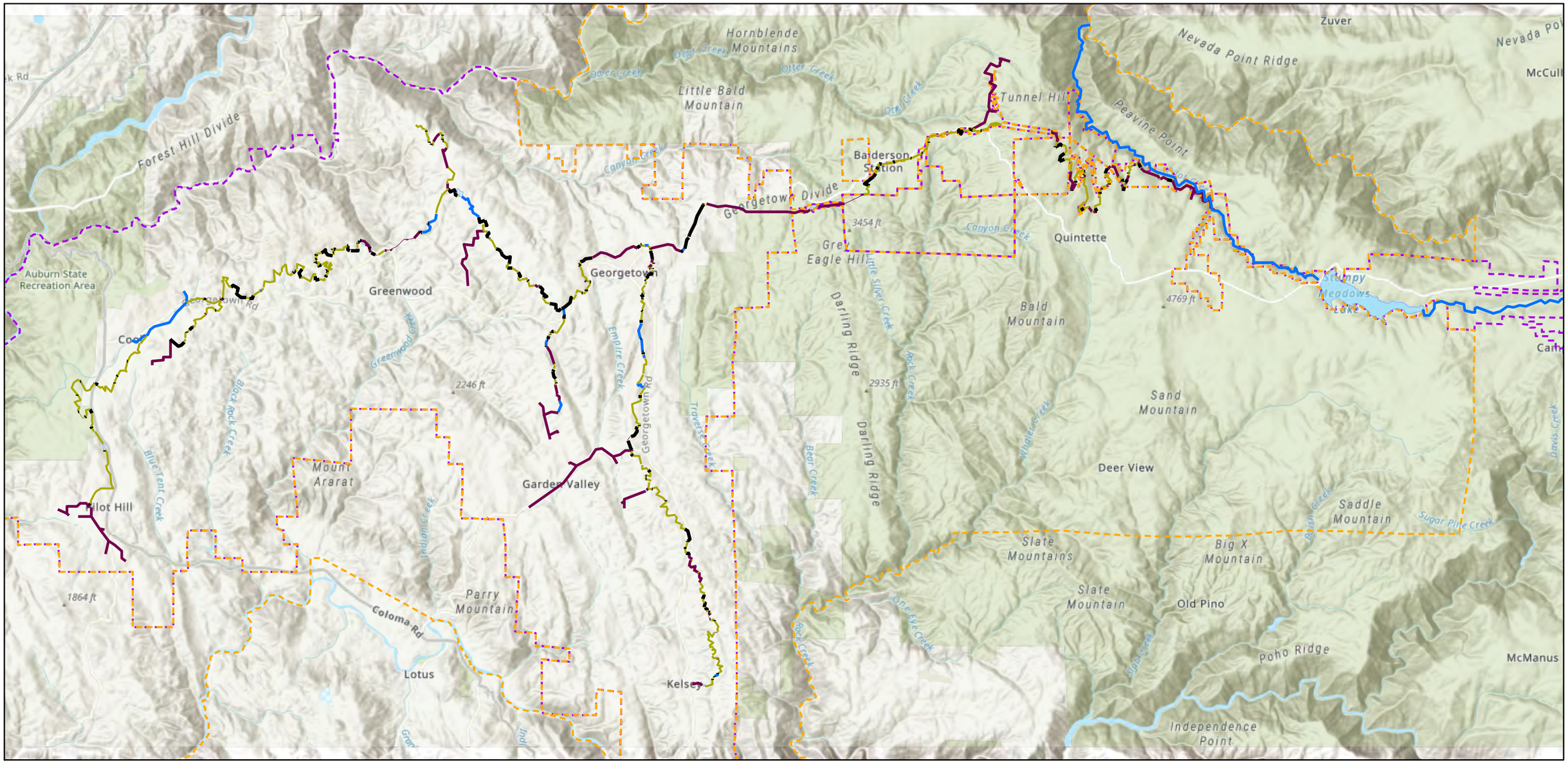
0 1 2 4 mi

0 1.75 3.5 7 km

GDPUD Sphere of Influence

GDPUD District Boundary

Figure 3 - Source Water Conveyance System



Legend

- Culvert
- Flume
- Lined Ditch
- Un-lined Ditch
- Creek/Waterfall
- Piped Ditch
- Siphon
- Storage Area
- GDPUD Sphere of Influence
- GDPUD District Boundary

1:144,448

0 1.25 2.5 5 mi

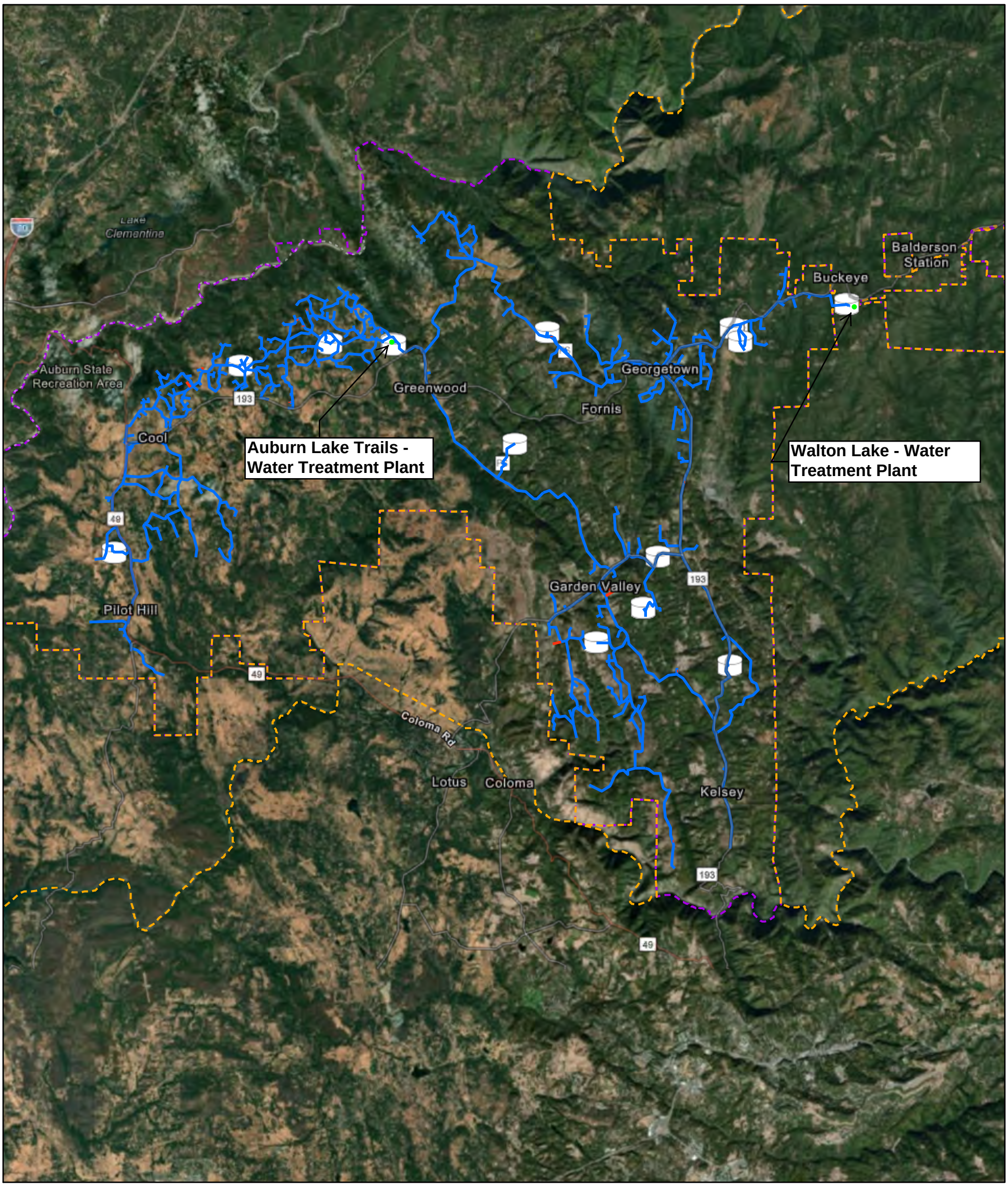
0 2 4 8 km

Sources: Esri, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

GDPUD

Esri, NASA, NGA, USGS | Esri, HERE, Garmin, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA |

Figure 4 - Distribution System



Legend

- Main Distribution Line
- Private Line
- Storage Tank
- Water Treatment Plant
- GDPUD District Boundary
- GDPUD Sphere of Influence

1:144,448

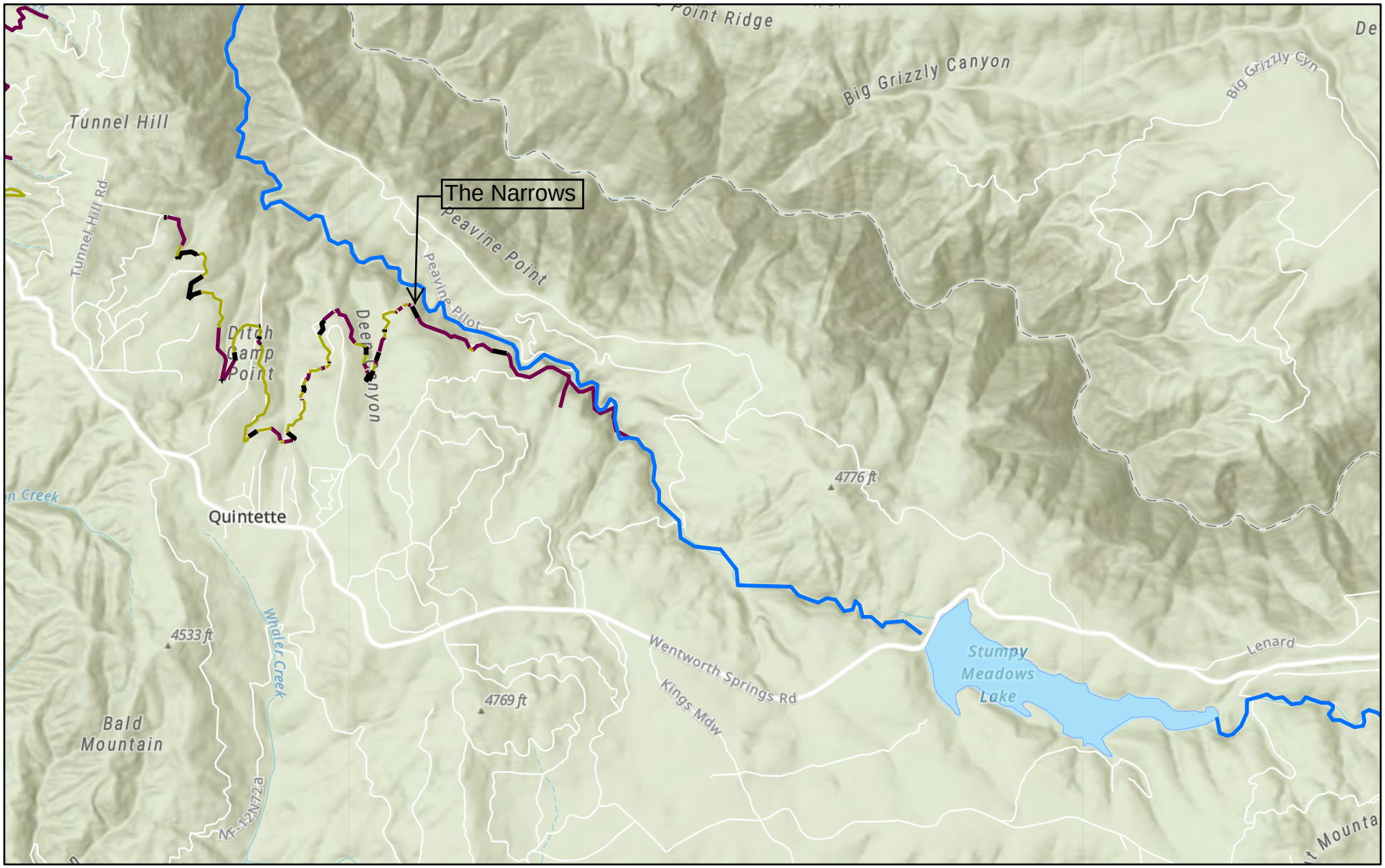
0 1.25 2.5 5 mi

0 2 4 8 km

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/ Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

GDPUD

Figure 5 - Project Location Map



9/4/2019 3:58:55 PM

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

Culvert

Un-lined Ditch

IrrigationDistribution - iPipe

Piped Ditch

IrrigationDistribution - iDitch

Lined Ditch

IrrigationDistribution - iNaturalFeatures

Creek

IrrigationDistribution - iStorageArea

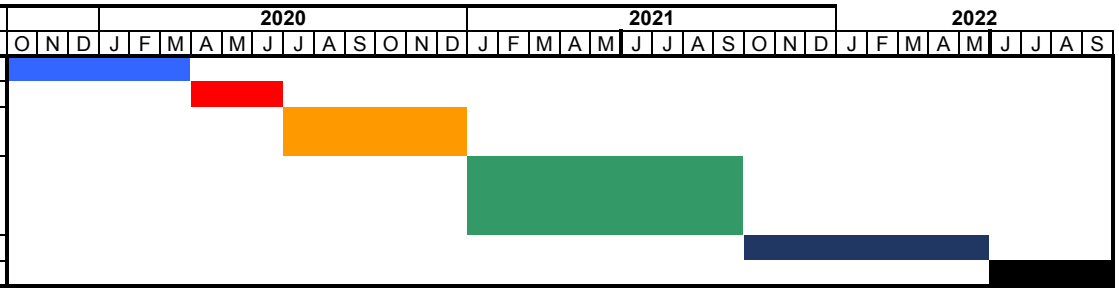
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, GDPUD

Esri, NASA, NGA, USGS, FEMA | Esri, HERE, Garmin, INCREMENT P, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA |

TABLES

Table 1
Estimated Priority Water Reliability Project Schedule
Georgetown Divide Public Utility District
Georgetown, California

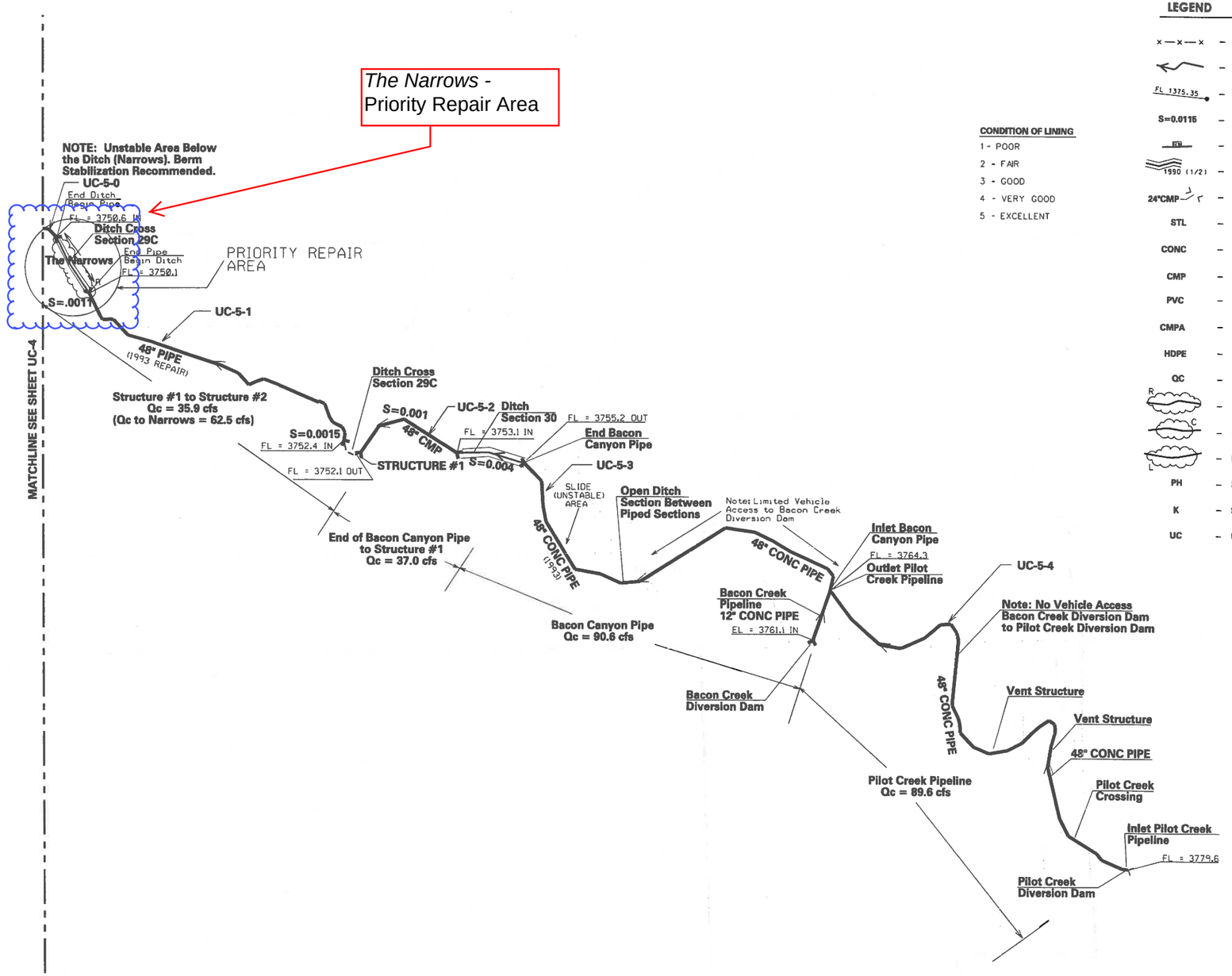
Description	Start	End
	Date	
Bureau of Reclamation Application Review	*Oct-19*	*Mar-20*
Potential Award and Contract Execution	*Apr-20*	*Jun-20*
Engineering/Permitting Contractor Procurement	*Jul-20*	*Dec-20*
Design Preparation and Permit Acquisition/Bureau of Reclamation Environmental Review	*Jan-21*	*Sep-21*
Construction	*Oct-21*	*May-22*
Final Performance Report	*Jun-22*	*Sep-22*



APPENDIX A

PROJECT LOCATIONS

The Narrows -
Priority Repair Area



CONDITION OF LINING

1 - POOR
2 - FAIR
3 - GOOD
4 - VERY GOOD
5 - EXCELLENT

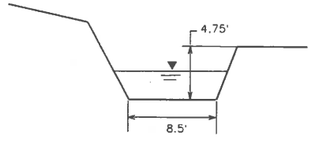
LEGEND

- x—x—x – FENCE
- – DITCH ℄ W/FLOW DIRECTION
- FL 1375.35 – FLOW LINE ELEVATION
- S=0.0115 – APPROXIMATE DITCH SLOPE
- RWP – RAW WATER PIPELINE (SIZE UNKNOWN)
- 1990 (1/2) – LINED DITCH, DATE CONSTRUCTED, (CONDITION)
- 24"CMP – PIPE/CULVERT W/SIZE&MATERIAL
- STL – STEEL (PIPE)
- CONC – CONCRETE (PIPE)
- CMP – CORRUGATED METAL PIPE
- PVC – POLYVINYL CHLORIDE PIPE
- CMPA – CORRUGATED METAL PIPE ARCH
- HDPE – HIGH DENSITY POLYETHELENE PIPE
- QC – DITCH CAPACITY (CLEAN)
- R – ℄ REPAIR AREA
- C – CRIB WALL AREA
- L – LOW BERM AREA
- PH – PILOT HILL
- K – KELSEY
- UC – UP COUNTRY

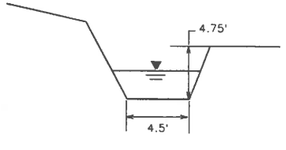
N

SCALE IN FEET

Note: GIS Base maps provided by El Dorado County were prepared from a "best fit" of recorded maps. The GPS data collected by KASL for the location of the ditch is more accurate than the county base data and may not allign with the county base maps in all areas.



DITCH CROSS SECTION 29C
N.T.S.



DITCH CROSS SECTION 30
N.T.S.

7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610
Tel (916) 723-1000
Fax (916) 723-1005
KASL
CIVIL - WATER RESOURCES - SURVEYING

UP COUNTRY DITCH SYSTEM
Pilot Creek to Str#1/Str#2

APPROX. SCALE
JOB. NO. 2895-02
DATE: NOV. 2002

ELEV :
DATUM :
BENCH MARK :
DESCRIPTION :

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT
EL DORADO COUNTY, CALIFORNIA

NO.	REVISION	DESCRIPTION	COUNTY APPROVAL APPROVED BY	DATE

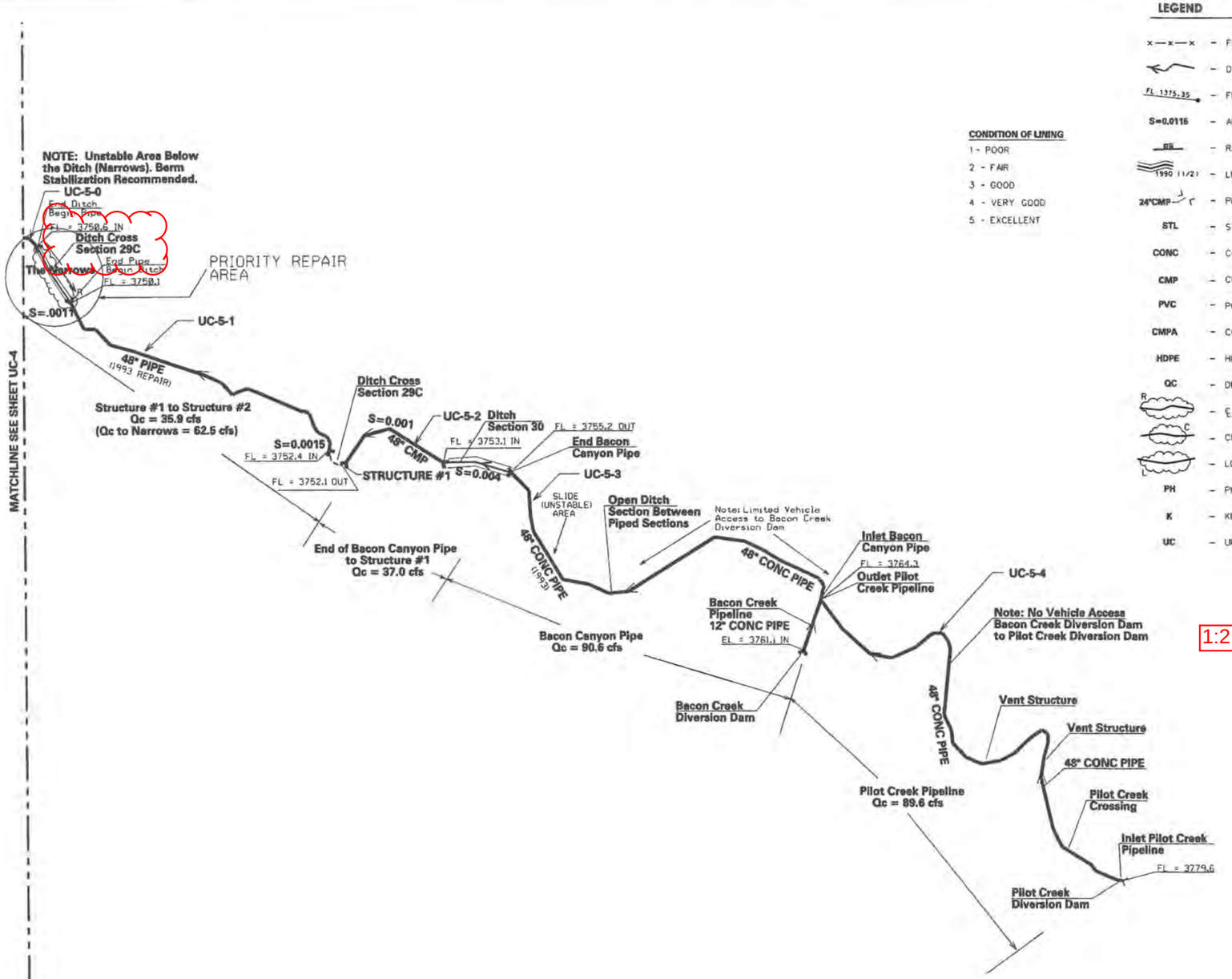
SHEET
UC-5
OF
22

APPENDIX B

KASL WATER RELIABILITY STUDY

APPENDIX C

CROSS-SECTIONAL LAYOUTS



CONDITION OF LINING

1 - POOR
2 - FAIR
3 - GOOD
4 - VERY GOOD
5 - EXCELLENT

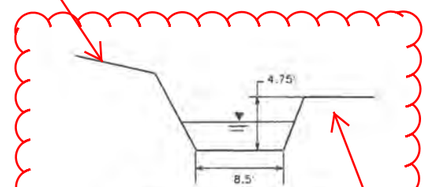
LEGEND

- x—x—x – FENCE
- – DITCH ℄ W/FLOW DIRECTION
- FL 1375.35 – FLOW LINE ELEVATION
- S=0.0115 – APPROXIMATE DITCH SLOPE
- RW – RAW WATER PIPELINE (SIZE UNKNOWN)
- 1990 (1/2) – LINED DITCH, DATE CONSTRUCTED, (CONDITION)
- 24"CMP – PIPE/CULVERT W/SIZE&MATERIAL
- STL – STEEL (PIPE)
- CONC – CONCRETE (PIPE)
- CMP – CORRUGATED METAL PIPE
- PVC – POLYVINYL CHLORIDE PIPE
- CMPA – CORRUGATED METAL PIPE ARCH
- HDPE – HIGH DENSITY POLYETHELENE PIPE
- QC – DITCH CAPACITY (CLEAN)
- R – ℄ REPAIR AREA
- C – CRIB WALL AREA
- L – LOW BERM AREA
- PH – PILOT HILL
- K – KELSEY
- UC – UP COUNTRY

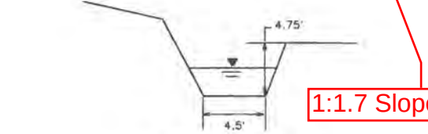
SCALE IN FEET

Note: GIS Base maps provided by El Dorado County were prepared from a "best fit" of recorded maps. The GPS data collected by KASL for the location of the ditch is more accurate than the county base data and may not allign with the county base maps in all areas.

1:2.2 Slope



DITCH CROSS SECTION 29C
N.T.S.



DITCH CROSS SECTION 30
N.T.S.

1:1.7 Slope

KASL
CIVIL • WATER RESOURCES • SURVEYING

UP COUNTRY DITCH SYSTEM
Pilot Creek to Sl+1/Sl+2

APPROX. SCALE
JOB NO. 2895-02
DATE: NOV. 2002

ELEV =
DATUM =
BENCH MARK =
DESCRIPTION =

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT
EL DORADO COUNTY, CALIFORNIA

NO.	DESCRIPTION	COUNTY APPROVAL APPROVED BY	DATE
REVISION			

SHEET
UC-5
OF
22

APPENDIX D

PHOTOGRAPHS

Picture 1 – Downslope of ditch bank looking downstream.

Picture 2 – Downslope of ditch bank looking upstream.

Picture 3 – Upslope of ditch looking upstream.

Picture 4 – Upslope of ditch bank looking downtream.

APPENDIX E

LETTERS OF SUPPORT

APPENDIX F

OFFICIAL RESOLUTION

AGENDA ITEM 7.C.

Attachment 4

RESOLUTION NO. 2019-
OF THE BOARD OF DIRECTORS OF THE
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

AUTHORIZING THE GENERAL MANAGER TO SIGN, APPROVE, EXECUTE CERTAIN DOCMENTS AND PLEDGING AND DEDICATING NET WATER REVENUES TO WATER RELIBILITY PROJECT ASSOCIATED WITH WATERSMARTS GRANTS: WATER AND ENERGY EFFICIENCY GRANTS FOR FISCAL YEAR 2020: FUNDING OPPURTUNITY ANNOUNCEMENT NO. BOR-DO-20-F001

WHEREAS, the District is entering into a financial agreement with the Bureau of Reclamation (BOR) WaterSMARTS Grants: Water and Energy Efficiency Grants for Fiscal Year 2020: Funding Opportunity Announcement No. BOR-DO-20-F001;

WHEREAS, the Priority water reliability project associated with the grant application incorporates sections of upcountry ditch identified as "The Narrows" for rehabilitation (the Project);

WHEREAS, the District obligates to funding 50 percent or more of the total project cost of $1,311,000; and

WHEREAS, the District will work with BOR to meet established deadlines for entering into a grant or cooperative agreement.

NOW, THEREFORE, IT IS HEREBY RESOLVED BY THE BOARD OF DIRECTORS OF THE GEORGETOWN PUBLIC UTILITY DISTRICT THAT:

1. Authorizes the General Manager to sign and file, for and on behalf of the District, the application for a funding agreement from the BOR for the planning, design, and construction of the Project;
2. The General Manager, or designee, is designated to provide the assurances, certifications, and commitments required for the financial assistance application, including executing a financial agreement from the BOR and any amendments or changes thereto;
3. The General Manager, or designee, is designated to represent the District in carrying out the Districts responsibilities under the grant agreement, including certifying requests on behalf of the District and compliance with applicable state and federal laws.

PASSED AND ADOPTED by the Board of Directors of the Georgetown Divide Public Utility District at a meeting of said Board held on the tenth day of September 2019, by the following vote:

AYES:

NOES:

ABSENT/ABSTAIN:

_____
Dane Wadle, President
Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

ATTEST:

_____
Steven Palmer, Clerk and Ex Officer
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CERTIFICATION

I hereby certify that the foregoing is a full, true and correct copy of Resolution 2019-XX duly and regularly adopted by the Board of Directors of the Georgetown Divide Public Utility District, County of El Dorado, State of California, on the tenth day of September 2019.

_____
Steven Palmer, Clerk and Ex Officer
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF September 10, 2019
AGENDA ITEM NO. 7.D.

AGENDA SECTION: **NEW BUSINESS**

SUBJECT: **New Board Policy Required for SDLF Transparency Certification – 5040 Rules of Order for Conduct of Board and Committee Meetings**

PREPARED BY: Christina Cross, Management Analyst

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

On August 13, 2019 at the Regular Board of Directors meeting outstanding policies needed to obtain the Special District Leadership Foundation District of Transparency Certificate of Excellence were presented to the Board. At that time, the Board adopted policies 5030 and 5000, and directed Staff to revise CSDA model policy 5040 - Rules of Order for Conduct of Board and Committee Meetings to include current Board meeting procedures for making motions.

DISCUSSION

Director Saunders asked that section 5040.4.5 have additional verbiage as indicated in the redlines in Attachment 1. The Board also directed Staff to revise section 5040.3 ro reflect the current Board procedures. Consequently, the markup in Attachment 1 also includes modifications by legal counsel

FISCAL IMPACT

There is no fiscal impact to adopting the policy presented.

CEQA ASSESSMENT

This action is not a CEQA project.

RECOMMENDED ACTION

Staff recommends the Board of Directors of the Georgetown Divide Public Utility District (GDPUD) adopt the attached Board policy.

ALTERNATIVES

Alternatively, the Board may (a) Request substantive changes to the Policy(s) for staff to implement; (b) Reject the Policy(s)

ATTACHMENTS

1. Policy # 5040 Rules of Order for Conduct of Board and Committee Meetings
2. Resolution 2019-54

AGENDA ITEM 7.D.

Attachment 1

POLICY TITLE: Rules of Order for Conduct of Board and Committee Meetings

POLICY NUMBER: 5040

5040.1 General:

5040.1.1 Action items shall be brought before and considered by the Board by motion in accordance with this policy. These rules of order are intended to be informal and applied flexibly. The Board prefers a flexible form of meeting and, therefore, does not conduct its meetings under formalized rules - Robert's Rules of Order.

5040.1.1.1 If a Director believes order is not being maintained or procedures are not adequate, then he/she should raise a point of order - not requiring a second - to the President. If the ruling of the President is not satisfactory to the Director, then it may be appealed to the Board. A majority of the Board will govern and determine the point of order.

5040.2 Obtaining the Floor:

5040.2.1 Any Director desiring to speak should address the President and, upon recognition by the President, may address the subject under discussion.

5040.3 Motions:

5040.3.1 Any Director, ~~including~~ excluding the President, may make or second a motion. A motion shall be brought and considered as follows:

5040.3.1.1 The Board President opens discussion of the matter, the matter is then discussed and debated by the Board, the public is provided an opportunity to comment, then a~~A~~ Director makes a motion; another Director seconds the motion; and the President states the motion.

5040.3.2 Once the motion has been stated by the President, it is open to further ~~discussion~~ clarification ~~and debate~~by the Board members. ~~After the matter has been fully debated, and after the public in attendance has had an opportunity to comment~~, the President will then call for the vote.

5040.3.2.1 If the public in attendance has had an opportunity to comment on the proposed action, any Director may move to immediately bring the question being debated to a vote, suspending any further debate. The motion must be made, seconded, and approved by a majority vote of the Board.

5040.4 Secondary Motions: Ordinarily, only one motion can be considered at a time and a motion must be disposed of before any other motions or business are considered. There are a few exceptions to this general rule, though, where a secondary motion concerning the main motion may be made and considered before voting on the main motion.

5040.4.1 Motion to Amend: A main motion may be amended before it is voted on, either by the consent of the Directors who moved and seconded, or by a new motion and second.

5040.4.2 Motion to Table: A main motion may be indefinitely tabled before it is voted on by motion made to table, which is then seconded and approved by a majority vote of the Board.

5040.4.3 Motion to Postpone: A main motion may be postponed to a certain time by a motion to postpone, which is then seconded and approved by a majority vote of the Board.

5040.4.4 Motion to Refer to Committee: A main motion may be referred to a Board committee for further study and recommendation by a motion to refer to committee, which is then seconded and approved by a majority vote of the Board.

5040.4.5 Motion to Close Debate and Vote Immediately: As provided above, any Director may move to close debate and immediately vote on a main motion, which move to close is then seconded and approved by a majority vote of the Board.. ~~-~~

5040.4.6 Motion to Adjourn: A meeting may be adjourned by motion made, seconded, and approved by a majority vote of the Board before voting on a main motion.

5040.5 Decorum:

5040.5.1 The President shall take whatever actions are necessary and appropriate to preserve order and decorum during Board meetings, including public hearings. The President may eject any person or persons making personal, impertinent or slanderous remarks, refusing to abide by a request from the President, or otherwise disrupting the meeting or hearing.

5040.5.2 The President may also declare a short recess during any meeting.

5040.6 Amendment of Rules of Order:

5040.6.1 By motion made, seconded and approved by a majority vote, the Board may, at its discretion and at any meeting: a) temporarily suspend these rules in whole or in part; b) amend these rules in whole or in part; or, c) both.

AGENDA ITEM 7.D.

Attachment 2

RESOLUTION NO. 2019-54

OF THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT ADOPTING BOARD POLICIES AS REQIRED BY THE SDLF FOR THE DISTRICT TRANSPARENCY CERTIFICATE OF EXCELLENCE

WHEREAS, The Board of Directors adopted Goals for 2019/20 to pursue certification as a District of Distinction; and

WHEREAS, The District Transparency Certificate of Excellence is required to obtain certification as a District of Distinction; and

WHEREAS, Policy #5040 Rules of Order for Conduct of Board and Committee Meetings must be adopted in order to obtain the District Transparency Certificate of Excellence.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT THAT Policy #5040 Rules of Order for Conduct of Board and Committee Meetings included in Exhibit A is hereby adopted.

PASSED AND ADOPTED by the Board of Directors of the Georgetown Divide Public Utility District at a meeting of said Board held on the tenth day of September 2019, by the following vote:

AYES:

NOES:

ABSENT/ABSTAIN:

_____

Dane Wadle, President, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

Attest:

_____

Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CERTIFICATION

I hereby certify that the foregoing is a full, true and correct copy of Resolution 2019-54 duly and regularly adopted by the Board of Directors of the Georgetown Divide Public Utility District, County of El Dorado, State of California, on this tenth day of September 2019.

_____

Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF SEPTEMBER 10, 2019
AGENDA ITEM NO. 7.E.

AGENDA SECTION: **NEW BUSINESS**

SUBJECT: **APPROVE DIRECTOR SOUZA ATTENDANCE AND EXPENSE REIMBURSEMENTS FOR ACWA REGION 3 AND 4 PROGRAMS, AND MOUNTAIN COUNTIES WATER SYMPOSIUM**

PREPARED BY: Steven Palmer, PE, General Manager

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

The Association of California Water Agencies ("ACWA") and Mountain Counties Water Resources Association (MCWRA) are holding upcoming events nearby the District. The events are:

September 17, 2019 -	ACWA Region 4 Program: Overcoming Obstacles of Habitat Restoration and Cache Slough (Attachment 1)
October 3, 2019 -	ACWA Region 3 Program: Forests: A Resource that Must be Managed – Watersheds, Water Supplies, and Resilience
November 8, 2019 –	MCWRA Water Symposium

DISCUSSION

In accordance with Board adopted District policy, training attendance and travel by Directors is paid on a reimbursement basis. Directors must pay for their own registration fees, hotels, travel, and meals, then request reimbursement after attending the conference or workshop and reporting back to the full Board. Cash advances or use of District credit cards for these purposes is not permitted.

If other Directors wish to attend these events, the resolution can be amended accordingly.

FISCAL IMPACT

Training for Staff and Directors is included in the FY 2019/2020 District Budget. The FY 2019/2020 budget did not anticipate attendance at these events.

The total cost to attend all three events including mileage reimbursement is $334.43, as detailed in the table below.

Liberty Island Duck Club, 5300 Liberty Island Road, Dixon, CA 95620

Date	Event	Registration	Mileage	Total
September 17	ACWA Region 4 Program	$60.00	$105.55 (182 miles)	$165.55
October 3	ACWA Region 3 Program	$45.00	$49.88 (86 miles)	$ 94.88
November 8	MCWRA Water Symposium	$45.00	$29.00 (50 miles)	$ 74.00
			Total	**$334.43**

Attendance at this training is likely to cause the Travel/Conference (5042) expenses to exceed the budget estimate for this item. The magnitude of these expenses is low as compared to the overall operating budget. Additionally, the Travel/Conference expenses can run under budget if staff and Directors are unable to attend planned events due to scheduling conflicts, etc. For those reasons, a budget amendment is not being requested at this time. Staff will monitor this budget item and if an adjustment is needed, it will be presented with the Fiscal Year 2019/2020 mid-year budget review.

CEQA ASSESSMENT

This is not a CEQA project.

RECOMMENDED ACTION

Staff recommends the Board of Directors of the Georgetown Divide Public Utility District (GDPUD) adopt the attached resolution approving expense reimbursement for Director Souza to attend the ACWA Region 3 and 4 Programs, and the Mountain Counties Water Symposium.

ALTERNATIVES

Amend or reject the resolution.

ATTACHMENTS

1. ACWA Region 4 Program Information
2. ACWA Region 3 Program Information
3. MCWRA Water Symposium Information
4. Resolution

AGENDA ITEM 7.E.

Attachment 1

ACWA Region 4 Program Information

From: Region Events
To: General Manager
Subject: DEADLINE APPROACHING - ACWA Region 4 Program & Tour
Date: Monday, August 26, 2019 1:25:23 PM

Click here to view it in your browser.

2 Weeks Left to Register!

ACWA Region 4 Program and Boat Tour:

Overcoming Obstacles of Habitat Restoration and Cache Slough

September 17, 2019

Online Registration Deadline: September 10, 2019

ACWA Region 4 invites you to a program highlighting how Yolo County is overcoming obstacles of habitat restoration and a boat tour of Cache Slough led by USGS and DWR. All registrants will enjoy lunch and a lively panel discussion. Panelist will cover a new partnership approach for managing the development and implementation of a multi-benefit water management programs in the Yolo Bypass and Cache Slough Region. Collectively, these projects benefit many of the actions identified in the 2014 California Water Action Plan. These partnerships are comprised of fifteen federal, state, and local agencies, working toward coequal management goals focusing on efficient integration and

leveraging existing interagency interaction in the Yolo Bypass and Cache Slough region to overcome independent project obstacles.

Preliminary agenda available here.

TOUR INFORMATION

The tour is 2.5-hours via boat of Cache Slough and Liberty Island. **Attendees must select a morning (before the program) or afternoon (following the program)** boat tour during their registration process.

Morning Tour Time: 8:00 - 11:00 - a.m.
Lunch & Panel Discussion: 11:15 - 1:15 p.m.
Afternoon Tour Time: 1:30 - 4:00 p.m.

Questions?

Contact Senior Regional Affairs Representative Michael Cervantes at michaelc@acwa.com or (916) 441-4545.

ACWA Region 4 Board 2018-2019

Chair: Pam Tobin, San Juan Water District • **Vice Chair:** Mark Emmerson, Carmichael Water District

Board Members: Bryan Busch, Reclamation District #2068; John Mensinger, Modesto Irrigation District; Thomas McGurk, Stockton East Water District; Kristin Sicke, Yolo County Flood Control and Conservation District; Dan York, Sacramento Suburban Water District

In Cooperation with: Reclamation District #2068; The California Department of Water Resources; The United States Geological Survey

910 K Street, Suite 100, Sacramento, CA 95814

ACWA Region 4 Event

September 17, 2019 Liberty Island Duck Club

5300 Liberty Island Road, Dixon, CA 95620

Program Agenda

8:30 a.m.	**Boat Tour #1 (Check in begins at 8:00 a.m.)**
11:00 a.m.	**Lunch**
11:15 a.m.	**Welcome**
	Pam Tobin, Chair, ACWA Region 4
	Brent Hastey, President, ACWA
11:20 a.m.	**Presentations**
	Moderator: Eric Nagy, Principal, Larsen Wurzel & Associates
	North Delta Arc of Native Fishes
	Ted Sommer, Lead Scientist, CA Department of Water Resources
	Lookout Slough Project
	Glen Williams, CA Project Director, Ecosystems Investment Partners
	Agriculture Sustainability
	John Vasquez, Supervisor District 4, Solano County
	Water Supply & Food
	Mike Hardesty, General Manager Emeritus, Reclamation District #2068
	Overcoming Obstacles: All Boats Must Rise
	Tim Washburn, Director of Planning, Sacramento Area Flood Control Agency
12:45 p.m.	**ACWA Update**
	Dave Eggerton, Executive Director, ACWA
1:00 p.m.	**Concluding Remarks**
	Mark Emmerson, Vice Chair, ACWA Region 4
	Steve Lamar, Vice President, ACWA
1:30 p.m.	**Boat Tour #2 (Check in begins at 1:15 p.m.)**

QUESTIONS

Michael Cervantes
Senior Regional Affairs Representative at
michaelc@acwa.com or
(916) 441-4545.

AGENDA ITEM 7.E.

Attachment 2

ACWA Region 3 Program Information

From: Region Events
To: Steven Palmer
Subject: DON"T DELAY, REGISTER TODAY: ACWA Region 3 Program & Tour
Date: Tuesday, August 27, 2019 12:49:55 PM

Click here to view it in your browser.

Don't Miss Out - Space is Limited to 50!

Region 3 Program & Tour

Forests: *A Resource That Must Be Managed - Watersheds, Water Supplies and Resilience*

October 4, 2019

Online Registration Deadline: Sept. 27, 2019

ACWA Region 3 is hosting a forest management and headwaters resilience program overview spearheaded by Region 3 member agencies, followed by a forest management tour at NID's Scotts Flat Reservoir and a USFS Prescribed burn tour at Alpha Omega.

FOREST MANAGEMENT PROGRAM

Discover the efforts of Region 3 water agencies to improve the health of the watersheds, protect water supplies, and support headwaters resilience. Projects highlighted during this program include NID's Wildland/Urban Interface projects and their partnership with the Sierra

Nevada Conservancy for headwaters resiliency & forest health, PCWA's climate downscaling and USFS partnership related to French Meadows Reservoir, EID's watershed management on the lands surrounding Jenkinson Lake/Sly Park Reservoir and their USFS partnership for 8,800 acres of prescribed burning in the Caples Watershed.

TOUR OF SCOTTS FLAT RESERVOIR & ALPHA OMEGA

Upon completion of the morning program, attendees will board a bus for lunch and a 3 hour tour experience; including:

- BBQ lunch at the Ditch Tender House on scenic Scotts Flat Reservoir
- Fire fuels reduction projects, forest thinning practices, forest demonstration plot, power line clearing, and campground hazard fuel removal
- Powerhouse at Scotts Flat Reservoir
- USFS prescribed burns at Alpha Omega

Preliminary agenda available soon.

Questions?

Contact Regional Affairs Representative Brian Sanders at brians@acwa.com or (916) 441-4545.

ACWA Region 3 Board 2018-2019

Chair: Joshua Alpine, Placer County Water Agency • **Vice Chair:** Shannon Cotulla, South Tahoe Public Utility District

Board Members: Gene Mancebo, Amador Water Agency; Michael Minkler, Calaveras County Water District; Steven Palmer, Georgetown Divide Public Utility District; Remleh Scherzinger, Nevada Irrigation District, VACANT

In Cooperation with: Nevada Irrigation District

AGENDA ITEM 7.E.

Attachment 3

Mountain Counties Water Symposium Information

From: Mountain Counties Water Resource Association
To: Steven Palmer
Subject: MCWRA News
Date: Tuesday, July 23, 2019 6:02:15 AM

MCWRA November 8, 2019 Water Symposium – Time to RSVP

Registration now open for the November 8, 2019 MCWRA Water Symposium

Click here to RSVP:

A LOOK INTO THE FUTURE FOR CALIFORNIA'S WATERSHEDS

AND

WATER CONSERVATION LEGISLATION FRAMEWORK-UPDATE

Date: Friday, November 8, 2019

Program: 8:30 a.m. to 2:30 p.m.

8:00 a.m. Doors Open/Networking

Location: The Ridge Golf Course & Event Center, 2020 Golf Course Rd, Auburn, CA 95602

Keynote: SENATOR BRIAN DAHLE

Confirmed Speakers:

- Thom Porter, Chief, California Department of Forestry and Fire Protection
- Barnie Gyant, Deputy Regional Forester, USDA Forest Service
- Michael Woodbridge, District Ranger, USDA Forest Service
- Andy Fecko, Director of Strategic Affairs, Placer County Water Agency
- Ed Smith, Regional Ecologist, The Nature Conservancy
- Brett Storey, Principal Management Analyst, County of Placer
- Arthur Hinojosa, Chief, Division of Integrated Regional Water Management, California Department of Water Resources
- Peter Brostrom, Manager, Water Use Efficiency, California Department of Water Resources

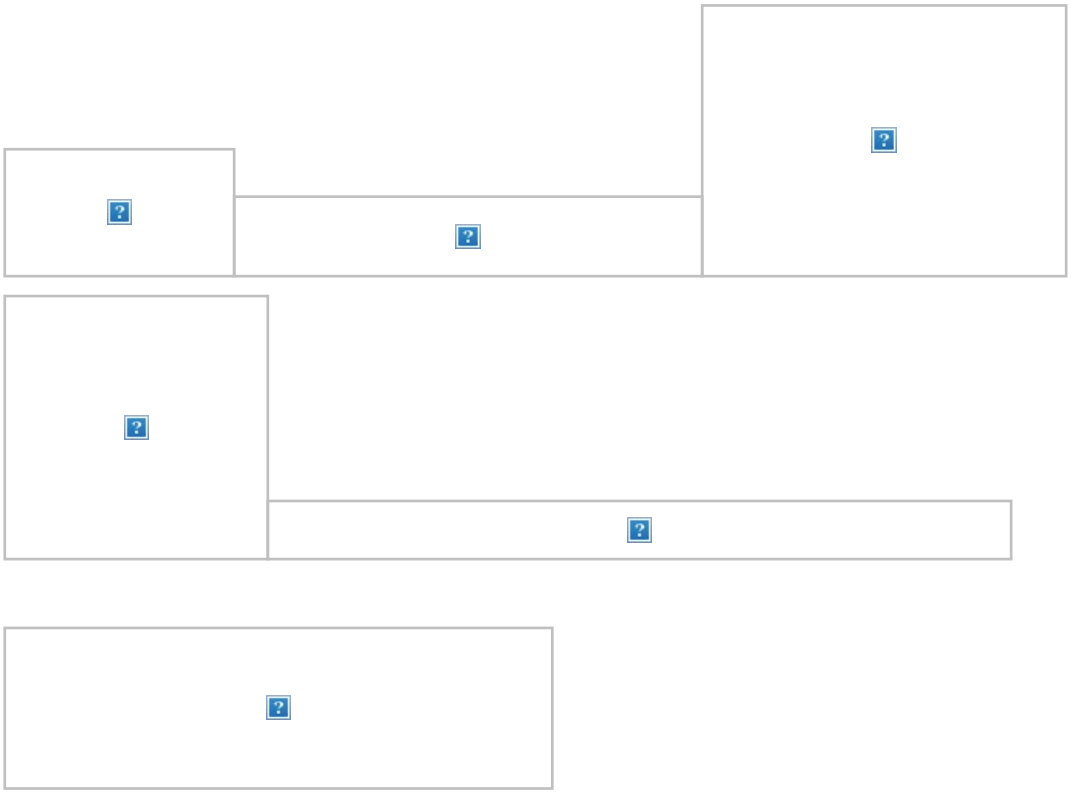
Invited:

- Wade Crowfoot, California Secretary for Natural Resources
- James Nachbaur, Director of Research, Planning, and Performance, State Water Resources Control Board

Click here for the November 8 Agenda

Click here to RSVP:

Water Symposium made possible by MCWRA Associate Members



Mountain Counties
WATER RESOURCES ASSOCIATION

A LOOK INTO THE FUTURE FOR CALIFORNIA'S WATERSHEDS

Friday, November 8, 2019

Program: 8:30 a.m. to 2:30 p.m.

Location:
The Ridge Golf Course & Events Center
2020 Golf Course Road, Auburn, CA 95602

8:00 a.m. **Doors Open/Networking**

8:30 a.m. **Welcome/Introductions**

9:00 a.m. **FORESTED LAND PARTNERSHIPS**

Case Study: French Meadows Restoration Project

- Andy Fecko, Director of Strategic Affairs, Placer County Water Agency
- Ed Smith, Regional Ecologist, The Nature Conservancy
- Brett Storey, Principal Management Analyst, County of Placer
- Michael Woodbridge, District Ranger, USDA Forest Service

Special Guest: Barnie Gyant, Deputy Regional Forester, USDA Forest Service

10:30 a.m. **SOLVING OUR NATURAL RESOURCE CHALLENGES TOGETHER**

Thom Porter, Chief, California Department of Forestry and Fire Protection

Wade Crowfoot, California Secretary for Natural Resources ***(invited)***

11:30 a.m. **SENATOR BRIAN DAHLE**

Noon **Mix – Mingle – Lunch**

1:00 p.m. Arthur Hinojosa, Chief, Division of Integrated Regional Water Management, California Department of Water Resources

WATER CONSERVATION LEGISLATION FRAMEWORK-UPDATE

Peter Brostrom, Manager, Water Use Efficiency, California Department of Water Resources

James Nachbaur, Director of Research, Planning, and Performance, State Water Resources Control Board ***(Invited)***

Program Host

PCWA
Water • Energy • Stewardship

Symposium Sponsors

D&A CIVIL ENGINEERING

HDR

DUDEK

WEST YOST ASSOCIATES

Recology Auburn Placer WASTE ZERO

THE WATER GROUP LLC

AGENDA ITEM 7.E.

Attachment 4

Resolution

RESOLUTION NO. 2019-

OF THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT AUTHORIZING REIMBURSEMENT OF TRAINING AND TRAVEL EXPENSES ASSOCIATED WITH ACWA REGION 3 & 4 PROGRAMS, AND MCWRA WATER SYMPOSIUM FOR DIRECTOR DAVID SOUZA

WHEREAS, Director Souza has indicated a desire to participate in the following events: Association of California Water Agencies (ACWA) Region 4 Program: Overcoming Obstacles of Habitat Restoration and Cache Slough on September 17, 2019, ACWA Region 3 Program: Forests: A Resource that Must be Managed- Watersheds, Water Supplies, and Resilience on October 3, 2019, and Mountain Counties Water Resources Association (MCWRA) Water Symposium on November 8, 2019; and

WHEREAS, in accordance with Board adopted District policy, training attendance and travel by Directors is paid on a reimbursement basis with participants providing a report to the Board of Directors on training activities; and

WHEREAS, training for Staff and Directors is included in the annual operating budget; and

WHEREAS, the total cost to attend these trainings including registration and estimated mileage is $334.43.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT THAT reimbursements for training and travel-related expenses for participation by Director Souza in the ACWA Region 4 Program, ACWA Region 3 Program, and MCWRA Water Symposium are approved.

PASSED AND ADOPTED by the Board of Directors of the Georgetown Divide Public Utility District at a meeting of said Board held on the tenth day of September 2019, by the following vote:

AYES:

NOES:

ABSENT/ABSTAIN:

_____

Dane Wadle, President, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

Attest:

_____
Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CERTIFICATION

I hereby certify that the foregoing is a full, true and correct copy of Resolution 2019- duly and regularly adopted by the Board of Directors of the Georgetown Divide Public Utility District, County of El Dorado, State of California, on this tenth day of September 2019.

_____
Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF SEPTEMBER 10, 2019
AGENDA ITEM NO. 7F.

AGENDA SECTION: **NEW BUSINESS**

SUBJECT: **CONSIDER APPROVING A PROFESSIONAL SERVICES AGREEMENT FOR ENGINEERING SERVICES FOR THE ENGINEERING EVALUATION OF THE CAPITAL REPLACEMENT PROGRAM WITH BENNETT ENGINEERING SERVICES, INC. FOR AN AMOUNT NOT TO EXCEED $61,996**

PREPARED BY: Steven Palmer, PE, General Manager

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

On February 12, 2019 the District Board of Directors directed the General Manager to issue a Request for Proposals for professional engineering services to perform an independent evaluation of the capital replacement program that was developed for the Water Financial Analysis, dated October 2017 prepared by Rural Community Assistance Corporation (RCAC). The minutes and staff report for that meeting are Attachments 1 and 2 to this report.

DISCUSSION

An RFP was issued on March 2019 (Attachment 3). In issuing the RFP and selecting a consultant, District Staff followed the professional services procurement policy that was adopted on February 13, 2018 and complied with California Government Code Section 4527.

One (1) proposal was received on April 8, 2019 from Bennett Engineering Services. The proposal from Bennett Engineering Services, Inc. is included as Attachment 4.

Since the District's Purchasing Policy requires three (3) proposals for this work, the RFP was advertised again in an attempt to obtain more responses.

In addition to posting the RFP on the District website, eBidBoard, and the California Special District Association (CSDA), the General Manager personally contacted Bennett Engineering, Coastland Engineering, GHD, Psomas, and Wood Rodgers, Inc..

Bennett Engineering Services indicated that they would honor their original proposal for the second solicitation. The second round of proposals were due on August 20,2019, and no additional proposals were received.

The General Manager reviewed the proposal for criteria listed in the RFP and determined that it meets the requirements of the District. The General Manager then opened and reviewed

Bennett Engineering Services, Inc. fee proposal, and concluded that the level of effort, rates, and total amount are appropriate for the scope of work.

FISCAL IMPACT

This work was not identified in the Fiscal Year 2019/2020 Operating Budget and a budget increase is required in order to fund this PSA. This results in a proposed increase of $61,996 to department 5600 Administration account 5080 Outside Service, thereby reducing the July 31, 2020 projected balance of the water general fund (Fund 10) from $1,554,445 to $1,492,449. A budget amendment form is included as Attachment .5

CEQA ASSESSMENT

This action is not a CEQA project.

RECOMMENDED ACTION

In order to continue with this work, the Board of Directors of the Georgetown Divide Public Utility District (GDPUD) needs to adopt the attached Resolution authorizing the General Manager to execute a Professional Services Agreement (Attachment 6) with Bennett Engineering Services, Inc. for an amount not to exceed $61,996 for Engineering Services for the Engineering Evaluation of the Capital Replacement Program, and authorizing a budget increase of $61,996 to fund this work

ALTERNATIVES

The Board may provide other direction regarding this work.

ATTACHMENTS

1. Minutes from February 12, 2019 Board Meeting
2. Staff Report from February 12, 2019 Board Meeting
3. Request for Proposals
4. Bennett Engineering Proposal
5. Budget Amendment
6. Professional Services Agreement
7. Resolution

ATTACHMENT 1

Minutes from February 12, 2019

CONFORMED AGENDA

REGULAR MEETING

JOINT MEETING OF
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT FINANCE COMMITTEE
AND
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT BOARD OF DIRECTORS
6425 MAIN STREET, GEORGETOWN, CALIFORNIA 95634

TUESDAY, FEBRUARY 12, 2019
2:00 P.M.

MISSION STATEMENT

It is the purpose of the Georgetown Divide Public Utility District to:

- Provide reliable water supplies
- Ensure high quality drinking water
- Promote stewardship to protect community resources, public health, and quality of life
- Provide excellent and responsive customer services through dedicated and valued staff
- Ensure fiscal responsibility and accountability are observed by balancing immediate and long-term needs.

1. CALL TO ORDER, ROLL CALL, AND PLEDGE OF ALLEGIANCE

The meeting was called to order at 2:16 P.M.

Directors Present: *Cynthia Garcia, David Halpin, Michael Saunders, David Souza, Dane Wadle.*

Finance Committee Members Present: *Rick Gillespie, Tom Crawford, Sierra Nyokka.*

Staff Present: *General Manager Steven Palmer; Management Analyst Christina Cross; Operations Manager Darrell Creeks; Board Assistant Diana Michaelson. Legal Counsel: Barbara Brenner, Churchwell White, LLP.*

The Pledge of Allegiance was led by Director Saunders.

2. ADOPTION OF AGENDA

Motion by Director Halpin to adopt the agenda. Second by Director Souza.

Director Garcia asked if there was an item on the agenda that speaks to the Finance Committee.

Public Comment: *Steven Proe asked if the audit was available for the public.*

Roll call vote was taken, and the vote was as follows:

Garcia: ***Aye***
Halpin: ***Aye***

Mr. Palmer introduced Brandon Young of LSL who presented a synopsis of the audit report. The only issue noted was the ALT Water Treatment Plant project costs which should have been capitalized, requiring a material journal entry.

Director Saunders asked if the mid-year corrections regarding processes were made. Mr. Young responded that the auditor had no formal mid-year recommendations. The recommendations that were not reportable conditions were corrected at year-end.

Director Souza commented that there were no red flags other than the required journal entry.

Director Wadle noted that there were no deficiencies in internal controls other than the one noted.

Rick Gillespie, chair of the Finance Committee, was pleased that there were very few suggestions by the auditor, a clear change from prior years.

Director Wadle was also pleased saying that the difference between this report and previous years was like night and day and commended staff.

Director Garcia expressed appreciation for LSL and District staff.

Public Comment:

Ms. Carlyon inquired regarding the audit process and testing.

Mr. Proe commented regarding the item that required the journal entry.

The Board received the report.

D. Adopt a Resolution Freezing the 2019 Treated and Untreated Water Rates at the 2018 Rates, and Provide Direction on a Review of the Capital Replacement Program

Possible Board Action: Adopt Resolution 2019-14 and Provide Direction.

Mr. Palmer presented the staff report.

Director Souza commented that rate payers had requested the freeze and the Board is responding.

Director Saunders commented regarding irrigation costs and suggested looking at changing the tax ratio.

Director Halpin commented that the GM brought something back to the Board that was responsive to the direction provided at the last Board meeting.

Director Garcia stated that she felt this discussion was outside the scope of the agenda and the Board should simply take action on the Resolution without discussing second

steps laid out by the GM. Barbara Brenner, District Legal Counsel, commented that the agenda includes "provide direction on a review of the Capital Replacement Program" and allows for such discussion.

There was some discussion by Board members and Finance Committee members on the type of entity to do the audit, an engineering firm versus accounting firm. The discussion included the issue of capital replacement numbers.

Public Comment:

An audience member spoke in favor of a team of subject matter experts.

Phyllis Polito spoke regarding items on the list.

Ms. Carlyon spoke regarding formulas used in the spreadsheet.

Ms. Neeley asked that discussions stick to the facts.

Mr. Proe had numerous comments.

Director Saunders said the first part of the discussion is whether the rates can be lowered and if so, how much. The second part of the discussion is how best to determine what the actual replacement costs will be without spending a lot of money in the process, or whether something else besides capital replacement should be looked at.

Motion by Director Saunders to approve Resolution 2019-14. Second by Director Garcia.

Roll call vote was taken, and the vote was as follows:

Garcia:	***Aye***
Halpin:	***Aye***
Saunders:	***Aye***
Souza:	***Aye***
Wadle:	***No***

The motion passed 4-1.

There was much discussion regarding what direction should be given to staff at this point. It was agreed that the General Manager would post an RFP (Request for Proposals) for an engineering firm to calculate capital replacement cost. Staff will rank the proposals and bring them back to the Board for review.

8. **BOARD MEMBER COMMENTS, REQUESTS FOR ADDITIONS TO FUTURE MEETING AGENDAS AND REQUESTS FOR INFORMATION OR RESEARCH TO BE COMPLETED BY STAFF** – Opportunity for Board members to discuss matters of interest to them and provide input for future meetings as well as report on their District-related meeting attendance.

ATTACHMENT 2

Staff Report from February 12, 2019

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF FEBRUARY 12, 2019
AGENDA ITEM NO. 7.D.

AGENDA SECTION: **NEW BUSINESS**

SUBJECT: **ADOPT A RESOLUTION FREEZING TREATED AND IRRIGATION WATER RATES FOR THE CALENDAR YEAR 2019, AND REVIEW AND PROVIDE DIRECTION ON THE PLAN TO REVIEW THE CAPITAL REPLACEMENT PROGRAM INCLUDED IN THE WATER FINANCIAL ANALYSIS BY RURAL COMMUNITY ASSISTANCE CORPORATION, DATED OCTOBER 2017**

PREPARED BY: Steven Palmer, PE, General Manager

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

In December 2017, the District completed a roughly 15-month process to update its treated and irrigation water rates. The 15-month process to update water rates included two (2) public workshops, and seven (7) meetings of either the Board of Directors or Finance Committee. The process followed is detailed in the Staff Report from January 8, 2019, which is included as **Attachment 1**.

At the culmination of that process, the Board of Directors accepted and closed the Proposition 218 Public Notice and protest process, and adopted the following rates for water service:

Treated Water

	Monthly Base Charge					
Meter Size	**Current**	**Jan 1, 2018**	**Jan 1, 2019**	**Jan 1, 2020**	**Jan 1, 2021**	**Jan 1, 2022**
5/8, 3/4, 1"	$ 23.57	$ 29.41	$ 30.88	$ 32.42	$ 34.04	$ 35.74
1.5"	$ 23.57	$ 98.02	$ 102.92	$ 108.07	$ 113.47	$ 119.15
2"	$ 23.57	$ 156.83	$ 164.67	$ 172.91	$ 181.55	$ 190.63
3"	$ 23.57	$ 313.66	$ 329.34	$ 345.81	$ 363.10	$ 381.25
4"	$ 25.16	$ 490.09	$ 514.60	$ 540.33	$ 567.34	$ 595.71

An ALT treatment plant supplemental charge of $15.08 per month is also added to the base charge for all treated water customers.

	Usage Rate (per CF)					
Tier	**Current**	**Jan 1, 2018**	**Jan 1, 2019**	**Jan 1, 2020**	**Jan 1, 2021**	**Jan 1, 2022**
<1000 CF	--	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
1000-2000	$ 0.0138	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
2001-3000	$ 0.0165	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
3001-4000	$ 0.0193	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
>4001 CF	$ 0.0221	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310

Irrigation Water

	Monthly Base Charge (Irrigation Season Only)					
Meter Size	**Current**	**Jan 1, 2018**	**Jan 1, 2019**	**Jan 1, 2020**	**Jan 1, 2021**	**Jan 1, 2022**
½"	$ 47.00	$ 77.00	$ 84.80	$ 93.20	$ 102.60	$ 112.80
Per each 1"	$ 72.74	$ 154.20	$ 169.60	$ 186.60	$ 205.20	$ 225.80

Note: Irrigation water is delivered, and monthly charges are only billed during the five (5) month irrigation season.

At the January 8, 2019 Board meeting, the Board of Directors voted 4-1 to "temporarily freeze the rate increases for no more than 12 months and direct the General Manger, Staff, and Finance Committee members to scope out what it would take and what it would cost to do a forensic audit. And then they'll bring back recommendations to the Board for possible rate adjustments."

DISCUSSION / ANALYSIS

The first part of the Board action from January 8, 2019 was to "temporarily freeze the rate increases for no more than 12 months." In order to freeze the rates, the Board needs to adopt a resolution setting the rates lower than the previously adopted rates. That resolution is included as **Attachment 2**. The resolution also specifies that after the November/December 2019 billing period, the rates will increase to the previously adopted rates for 2019 as described in Resolution 2017-30 (**Attachment 3**).

The second part of the Board action from January 8, 2019 was to "direct the General Manger, Staff, and Finance Committee members to scope out what it would take and what it would cost to do a forensic audit." A forensic audit is an examination and evaluation of financial transactions for presentation to court and for the purpose of identifying and documenting fraud.

Based on the discussions among the Directors at that Board meeting, it is the General Manager's understanding that the Board's goal is to have an independent evaluation of the capital replacement program that was developed for the Water Financial Analysis prepared by Rural Community Assistance Corporation (RCAC), dated October 2017. A forensic audit would not meet this goal. In order to provide an independent evaluation of the capital replacement program developed for the Water Financial Analysis, the General Manager recommends the District hire a professional engineering firm to review the costs listed for each project. The basic scope of work for the engineering firm would include the following:

- Estimate the cost to replace each item identified in the capital replacement program. The cost estimates would be prepared in 2019 dollars and based on the engineering firms experience with recent similar projects and readily available public records.
- Estimate the replacement year for each item identified in the capital replacement program.
- Adjust the costs estimates from 2019 dollars to the replacement year for each item. Engineering firm will provide written justification for the cost adjustment from 2019 dollars to the replacement year for each item.

The expected deliverable would be a report from the engineering firm detailing the assumptions, methodology, references; and summarizing the results. The report would likely include table(s) similar in form and content to the capital replacement program that is Exhibits 1T and 1I in the Water Financial Analysis. Those exhibits are also included with this Staff Report as **Attachment 4**.

Following today's Board meeting, the General Manager will prepare and distribute a Request for Proposals (RFP) to select an engineering firm to provide these services. The RFP will be circulated for four (4) weeks. The proposals would be reviewed and independently ranked by three District staff members. Rankings will be based on criteria listed in the RFP. Depending on the results of the independent ranking, firms may be interviewed to identify the engineering firm most qualified to perform this work for the District. Interviews are not typically conducted or required for contracts of this scope and magnitude. If the price submitted by the most qualified firm is $45,000 or less, then the General Manager will execute the agreement. If the price submitted by the most qualified firm is more than $45,000, then Board approval of the agreement is required it will be presented to the Board for approval. In either case, this expense was unforeseen and not included in the Fiscal Year 2018/2019 operating budget. The Board will need to approve a budget amendment to fund this work.

The last part of the January 8, 2019 Board action is "And then they'll bring back recommendations to the Board for possible rate adjustments." Once the engineering firm's work is complete, the results of the independent evaluation of the capital replacement program would be presented to the Board at the next possible Board meeting. At that point, the Board can provide direction to the General Manager on whether to proceed with developing possible rate adjustments.

FISCAL IMPACT

As reported in the Staff Report from January 8, 2019 regarding freezing treated and irrigation water rates, the action to freeze rates for 12-months will reduce revenue by $210,000.

The actual cost of the independent evaluation of the costs in the capital replacement program is not known at this time and will not be known until proposals are received and ranked. The General Manager estimates that costs are likely to be in the range of $50,000 and could be more. This expense was unforeseen and not included in the Fiscal Year 2018/2019 operating budget. The Board will need to approve a budget amendment at a future meeting to fund this work.

CEQA ASSESSMENT

This is not a CEQA Project.

RECOMMENDED ACTION

In order to freeze the rates for 2019, the Board must adopt the attached resolution.

As a second and independent action, if the Board wishes to proceed with an independent evaluation of the costs in the capital replacement program, then the Board needs to direct the General Manager to proceed with the RFP and selection process to select an engineering firm. A budget amendment and the professional services agreement, if needed, for this work will be presented to the Board at a future meeting.

ATTACHMENTS

1. January 8, 2019 Staff Report Regarding Freezing Treated and Irrigation Water Rates
2. Resolution 2019-14 Freezing Treated and Irrigation Water Rates
3. Resolution 2017-30
4. Capital Replacement Program (Exhibits 1T and 1I) from Water Financial Analysis, October 2017

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF JANUARY 8, 2019
AGENDA ITEM NO. 7.B.

AGENDA SECTION: **NEW BUSINESS**

SUBJECT: **DISCUSS AND PROVIDE DIRECTION ON FREEZING TREATED AND IRRIGATION WATER RATES AT THE CALENDAR YEAR 2018 RATES**

PREPARED BY: Steven Palmer, PE, General Manager

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

In December 2017, the District completed a roughly 15-month process to update its treated and irrigation water rates. The District started this process for several reasons:

1. Prior to December 2017, the last time the rates were reviewed and updated was 2008. It is considered best practice to evaluate water rates every three to five years.
2. In 2008, the Board adopted rate increases for 2009, 2010, and 2011; however, they did not adopt the recommended increase for 2012 and 2013. If the recommended rates for 2012 and 2013 had been adopted, the treated water base rate would have been $52.98 and the irrigation water rate for one miner's inch for one season would have been $440. Instead, the rates for 2011 through 2017 were charged at the 2011 rate of $47.14 base rate for treated water, and $363.70 for one miner's inch for one season.
3. The District's water rates were too low to qualify for State and Federal grants. State and Federal agencies measure water affordability using the water rate as a percentage of the median household income. To qualify for State and Federal grants, the District must maintain an affordability index ranging between 1.5% and 4.0%. In 2017, the water affordability for the District was 1.25%.
4. The District's water rates were too low to qualify for loans. When considering lending money, lenders look at the ratio of net operating income to debt service, which is called the debt-service coverage ratio. Lenders require a minimum ratio of 1.20 to qualify for loan programs. The District's debt-service coverage ratio were projected to decrease to 1.0 in 2020.
5. Operating expenses were forecast to exceed future revenue projections by significant and ever-increasing amounts, reaching over $300,000 annually within three years.
6. Over 60% of the District's infrastructure is over 40 years old and failures are becoming common.
7. The District did not have enough revenue to adequately fund capital replacement projects.

8. Recent court decisions require the District to justify its tiered rate system, including the practice of including a water allowance in the fixed base charge (e.g. Capistrano Taxpayers Association, Inc. versus City of San Juan Capistrano).
9. The 2016 Grand Jury Report, dated May 17, 2017, recommended that "Once the rate study is submitted to the Board, the District must initiate a voter-approved rate increase process as soon as possible," and made the following findings:
    a. "The District water rates are insufficient to support current operations and infrastructure and maintenance."
    b. "Total revenues are not adequate to support operations and fund needed capital improvement reserves."
    c. "The District loses significant revenue due to outdated water meters."
    d. "The District also loses water and revenue due to leaks in the aging infrastructure."
    e. "Employee compensation is too low for an agency this size, making recruitment and retention difficult."
    f. "The current staffing levels are insufficient, which impairs the District's ability to operate efficiently."
    g. "The District cannot depend on new hookups and ratepayers to supplement revenues as population growth has slowed on the Divide, necessitating the need for the District to look internally for revenue."
    h. "The Jury found no evidence that either the District Board or staff is "preparing the ground" with their customers for what may be steep increases in their bills."
10. Other recommendations of the 2016 Grand Jury Report included:
    a. "Along with replacing aging water meters, the District must upgrade their aging infrastructure and prioritize maintenance and capital improvement projects."
    b. "The District must offer competitive salaries to attract qualified professional staff."
    c. "The District must review staffing levels and fill key positions with permanent staff to ensure continuity of operations."

The 15-month process to update water rates included two (2) public workshops, and seven (7) meetings of either the Board of Directors or Finance Committee. A summary of those meetings is presented below:

- September 27, 2016 – Board initiated the process to enlist Rural Community Assistance Corporation (RCAC) to perform a Water Financial Analysis and calculate water rates at no cost to the District. RCAC receives funding from the State to help communities like the District to stay in compliance with regulations.
- April 25, 2017 – Staff and RCAC provided the District Finance Committee with a presentation regarding the methodology being followed for the current rate study and requested input regarding several policy related decisions. The policy questions discussed were: subsidy program for low income customers, capital reserve fund balance, non-operating revenue/property tax allocation, rate tiers, quantity of water included in the base rate, and functional cost allocation.
- May 8, 2017 – Staff presented the information from the April Finance Committee meeting to the Board to obtain Board concurrence on moving forward with this methodology for the rate calculation. By motion action, the Board provided direction on the subsidy program, loan and grant assumptions for the

recapitalization program, and excluding hydroelectric revenue from the operating budget and rate calculation.

- August 22, 2017 – Board approved an outreach approach for the water rate calculations consisting of two public workshops, one Board meeting workshop, one Board meeting to authorize the 45-day public hearing, and one Board meeting to hold the public hearing required to adopt the rates.
- September 18, 2017 – Public Workshop #1 at Georgetown Elementary School.
- October 3, 2017 – Presentation to Board regarding Public Workshop #1.
- October 12, 2017 – Public Workshop #2 at Cool Community Hall. RCAC presented the following rates at that meeting:

Scenario	Treated Water				Irrigation Water	
	Year One		Year Five		Year One	Year Five
	Monthly Base Charge	Usage Rate ($/CF)	Monthly Base Charge	Usage Rate ($/CF)	Monthly per MI	Monthly per MI
1 - (85/15)	$ 49.62	0.0225	$ 60.30	0.0273	$383.60	$561.60
2 - (74/26)	$ 55.81	0.0225	$ 67.84	0.0273	$356.20	$521.40
3 - (50/50)	$ 62.00	0.0225	$ 75.38	0.0273	$274.00	$401.20

Notes:

1. Scenario 1 splits property tax based on asset values (85% treated, 15% irrigation). Scenario 2 splits property tax based on operating expenses (74% treated, 26% irrigation. Scenario 3 splits property tax evenly between treated and irrigation.
2. Monthly base charge shown is for ¾-inch meter size.
3. Irrigation rate shown is for 1 miner's inch. One (1) miner's inch equates to an approximate flow rate of 1.5 cubic feet per minute (11.22 gallons per minute). During a 5-month irrigation season this is approximately 330,480 cubic feet (2,471,990 gallons).

- October 18, 2017 – Board Workshop at Northside School. As recommended at the Public Workshop #2, Scenario 2 was presented to the Board along with a few alternatives.
  - Staff received direction from the Board to prepare a Rate Study report based on Scenario 2 with the following changes for review and possible approval at a Special Board Meeting on October 24, 2017:
    - Residential 5/8-inch, ¾-inch, and 1-inch meters pay the same base rate.
    - Allocate property tax revenue to cover all administration costs, allocate $35,000 of property tax revenue for a low-income rate assistance program, and allocate remainder to irrigation water capital reserves;
    - Review and revise capital replacement schedule; and
    - Achieve a balanced budget for operating and capital reserves in 10 years instead of 5 years.
- October 24, 2017 – Based on input received, direction from the Board, and sound financial and best government practices, RCAC prepared a Water Financial

Analysis and rate calculation for review by the Board at the October 24, 2017 Board Meeting. The Water Financial Analysis provides an explanation and justification of the calculated treated and irrigation water rates for five years, and documents compliance with laws and regulations. The Board reviewed the Water Financial Analysis and adopted a resolution authorizing the General Manager to prepare and deliver notice of a public hearing pursuant to Proposition 218. The Final Water Financial Analysis is included as Attachment 1.

- December 12, 2017 – Board of Directors accepted and closed the Proposition 218 Public Notice and protest process, and adopted the following rates for water service:

Treated Water

	Monthly Base Charge					
Meter Size	**Current**	**Jan 1, 2018**	**Jan 1, 2019**	**Jan 1, 2020**	**Jan 1, 2021**	**Jan 1, 2022**
5/8, 3/4, 1"	$ 23.57	$ 29.41	$ 30.88	$ 32.42	$ 34.04	$ 35.74
1.5"	$ 23.57	$ 98.02	$ 102.92	$ 108.07	$ 113.47	$ 119.15
2"	$ 23.57	$ 156.83	$ 164.67	$ 172.91	$ 181.55	$ 190.63
3"	$ 23.57	$ 313.66	$ 329.34	$ 345.81	$ 363.10	$ 381.25
4"	$ 25.16	$ 490.09	$ 514.60	$ 540.33	$ 567.34	$ 595.71

An ALT treatment plant supplemental charge of $15.08 per month is also added to the base charge for all treated water customers.

	Usage Rate (per CF)					
Tier	**Current**	**Jan 1, 2018**	**Jan 1, 2019**	**Jan 1, 2020**	**Jan 1, 2021**	**Jan 1, 2022**
<1000 CF	–	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
1000-2000	$ 0.0138	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
2001-3000	$ 0.0165	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
3001-4000	$ 0.0193	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
>4001 CF	$ 0.0221	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310

Irrigation Water

	Monthly Base Charge (Irrigation Season Only)					
Meter Size	**Current**	**Jan 1, 2018**	**Jan 1, 2019**	**Jan 1, 2020**	**Jan 1, 2021**	**Jan 1, 2022**
½"	$ 47.00	$ 77.00	$ 84.80	$ 93.20	$ 102.60	$ 112.80
Per each 1"	$ 72.74	$ 154.20	$ 169.60	$ 186.60	$ 205.20	$ 225.80

Note: Irrigation water is delivered, and monthly charges are only billed during the five (5) month irrigation season.

Based on the Board adopted rate schedule, the monthly base charge and usage rates for treated water rates are set to increase by 5% with the January and February billing cycle. This equates to an increase of $1.47 per month for the monthly base charge and an increase of $0.0013 per cubic foot ($0.0097 per gallon) for the usage rate. A customer who uses the District average of 2,100 cubic feet of water per billing cycle would expect their bill to increase by $2.83 per month ($5.67 per billing cycle).

Irrigation water rates are set to increase by 10%. The cost for one miner's inch of water will increase by $15.40 per month, or $77.00 per season. One miner's inch equates to 16,156 gallons of water per day, or 2,471,990 gallons (330,480 cubic feet) per five (5) month irrigation season. This equates to a cost of $0.00233 per cubic foot in 2018, and $0.00257 per cubic foot in 2019.

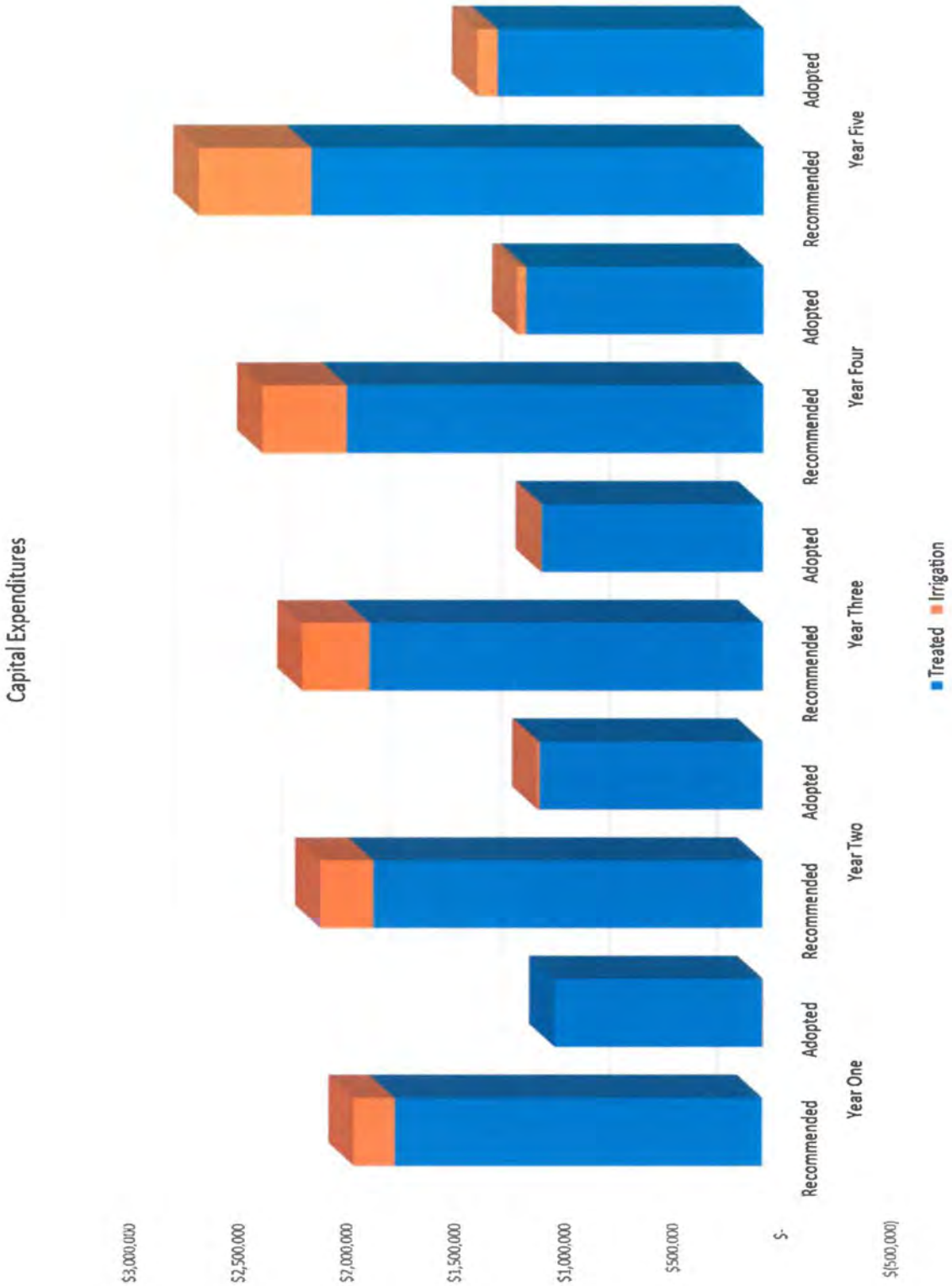
At the December 12, 2018 Board meeting, the Board of Directors requested that the General Manager bring back for discussion and direction an item to keep water rates at the current rates of $29.41 per month and $0.0255 per cubic foot of treated water, and $154.20 per miner's inch per month for irrigation water.

DISCUSSION

Any changes to the adopted rate structure will have a direct impact on the service received by District customers. The adopted rates structure already includes a level of service that is lower than the initial recommendation from RCAC's analysis. The RCAC analysis that was presented to the Board on October 18, 2017 recommended a first-year contribution of $1,995,634 from treated water customers and $377,759 from irrigation water customers towards replacement and rehabilitation of assets and infrastructure (e.g. canals, pipelines, tanks, meters, pumps, etc.).

The Board reviewed the information presented in the RCAC study and directed staff to assume that assets and infrastructure (e.g. canals, pipelines, tanks, meters, pumps, etc.) would last longer than industry standards, and to reach the capital contribution goal in ten (10) years instead of five (5). Consequently, the Final Water Financial Analysis included lower contributions to capital replacements, and lower water rates than originally recommended by RCAC. The adopted rates plan for an annual contribution of $957,026 from treated water customers and $0 from irrigation water customers in year one of the new rates, increasing to $1,223,578 and $89,924, respectively, in year five of the new rates. The recommended and adopted capital expenditures in the Water Financial Analysis are summarized in the following table and chart.

	Year One		Year Two		Year Five	
	Recommended	**Adopted**	**Recommended**	**Adopted**	**Recommended**	**Adopted**
Treated	$1,686,326	$957,026	$1,786,107	$1,028,624	$2,077,079	$1,223,578
Irrigation	$ 189,272	$ (1,054)	$ 244,626	$ 6,975	$ 513,987	$ 89,924

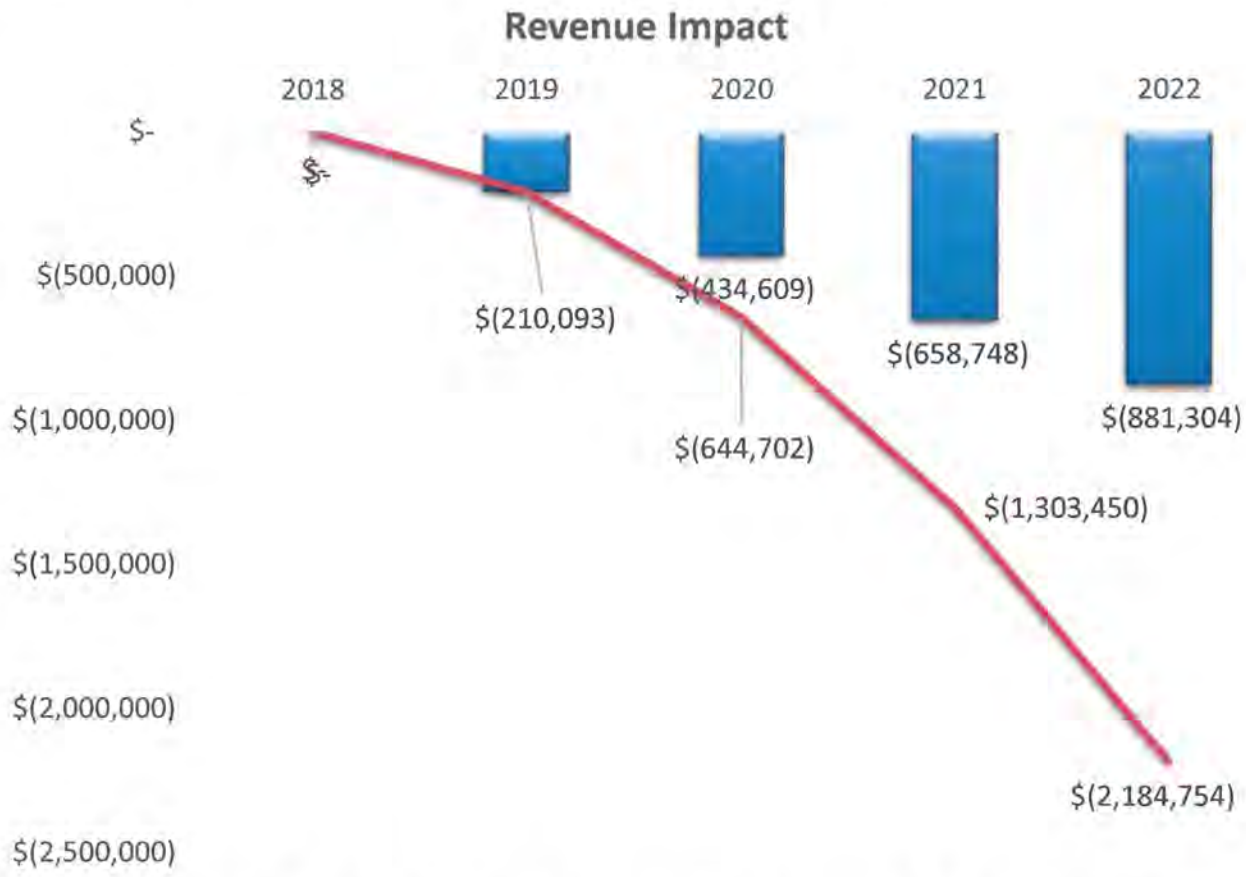


The adopted 2018-2023 Capital Improvement Plan (CIP) planned expenditures of $4,234,585 of District funds over the next five years to replace and rehabilitate aging infrastructure (average $846,917). This does not include new loans or current loan payments. Over the life of the CIP, District fund balance available to replace aging infrastructure are estimated to increase by approximately $2,000,000.

ANALYSIS

The Board has the authority to adopt a resolution setting the 2019 water rates lower than recommended by the RCAC Water Financial Analysis, and lower than those approved in December 2017.

There are financial impacts to not implementing the already approved rate increase for 2019. This action will reduce revenue by approximately $210,093 in the first year (2019) increasing to $881,304 in the fifth year. If rates are not increased during the next five years, the total amount of lost revenue will be $2,184,754. The revenue impacts are shown in the following chart.



This loss of revenue will result in reduced service to customers in the form of reduced maintenance and deferred replacement of pipelines, tanks, meters, pumps, etc.

The adoption of the current rate structure was the culmination of a 15-month long process involving nine (9) public meetings that resulted in a Water Financial Analysis prepared by an experienced professional. This Water Financial Analysis and adopted rate structure address findings and recommendations from the 2016 Grand Jury Report, bring the District into compliance with recent court decisions regarding tiered rates, and made the District eligible for grants and loans.

A freeze in rates for any length of time will result in lost revenue that will never be recovered. A freeze for an extended length of time will jeopardize the District's ability to deliver water, result in increased capital replacement costs, and would likely raise concerns with the El Dorado County Grand Jury.

The District Finance Committee reviewed this proposed rate freeze at their Special Meeting on January 4, 2019. Their input was not available at the time this Staff Report was prepared, but it will be incorporated into the oral presentation to the Board.

FISCAL IMPACT

Rates must be set to provide for the future sustainability of the District. Rates must account for years of inflation since 2011, reduction in revenue due to water conservation, elimination of tiered water rates, and to set aside adequate funding to replace capital infrastructure. If rates are not set properly, initially the District will be forced to draw from reserves to fund operating expenses and to defer much needed capital improvements and replacements. Once reserves are depleted the District will be unable to pay its bills and obligation. Ultimately, lack of keeping rates set properly will result in pressure from the State to consolidate with a neighboring district and could result in the State taking over the assets and obligations of the District.

CEQA ASSESSMENT

This is not a CEQA Project.

RECOMMENDED ACTION

Staff recommendation is that the Board does not freeze treated and irrigation water rates at the Calendar Year 2018 rates.

ALTERNATIVES

1. Provide other direction regarding freezing the treated and irrigation water rates at the Calendar Year 2018 rates.

ATTACHMENTS

1. RCAC Water Financial Analysis
2. Grand Jury Report Link and Findings Pages
3. Capistrano Taxpayers Case Summary

RESOLUTION NO. 2019-14

OF THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT FREEZING TREATED AND WATER IRRIGATION RATES AT THE 2018 RATES UNTIL THE END OF THE DECEMBER 2019 BILLING PERIOD

WHEREAS, Georgetown Divide Public Utility District ("District") provides irrigation and treated water services to residents and businesses of the District; and

WHEREAS, in December 2017, the District completed a roughly 15-month process to update its treated and irrigation water rates; and

WHEREAS, that process resulted in a Water Financial Analysis (aka Water Rate Study), dated October 24, 2017, prepared by Rural Community Assistance Corporation (RCAC) that established various proposed rates; and

WHEREAS, on December 12, 2017, pursuant to Proposition 218 (Cal. Const., Art. XIIID, Sec. 6) the District Board heard and considered all oral testimony, written materials, and written protests concerning the rate increase; verified and counted the protests and determined that the District may proceed with the proposed water rates; and

WHEREAS, the Board then adopted Resolution 2017-30 Adopting New Rates for Treated Water and Irrigation Water Services; and

WHEREAS, those rates were set to increase effective with the January/February 2019 billing period; and

WHEREAS, at the January 8, 2019 meeting the Board acted by motion to "temporarily freeze the rate increases for no more than 12 months;" and

WHEREAS, Board determinations regarding District rates should be made by resolution or ordinance; and

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT HEREBY RESOLVES THE FOLLOWING:

1. Effective with the January/February 2019 billing period, the monthly charges (billed bi-monthly) for treated water customers are established as follows:

Meter Size	Monthly Base Charge
5/8, 3/4, 1"	$ 29.41
1.5"	$ 98.02
2"	$ 156.83
3"	$ 313.66
4"	$ 490.09

An ALT treatment plant supplemental charge of $15.08 per month is also added to the above listed base charge for all treated water customers.

2. Effective with the January/February 2019 billing period, the usage rate for treated water customers will be $0.0255 per cubic foot.

3. Effective with the January/February 2019 billing period, the monthly charges for irrigation water customers are established as follows:

Meter Size	Monthly Base Charge (Irrigation Season Only)
½"	$ 77.00
Per each 1"	$ 154.20

4. The above listed rates will be effective through the November/December 2019 billing period.

5. Effective with the January/February billing period for each following year, respectively, the monthly charges (billed bi-monthly) for treated water customers are established as follows:

	Monthly Base Charge		
Meter Size	**2020**	**2021**	**2022**
5/8, 3/4, 1"	$ 30.88	$ 32.42	$ 34.04
1.5"	$ 102.92	$ 108.07	$ 113.47
2"	$ 164.67	$ 172.91	$ 181.55
3"	$ 329.34	$ 345.81	$ 363.10
4"	$ 514.60	$ 540.33	$ 567.34

An ALT treatment plant supplemental charge of $15.08 per month is also added to the above listed base charge for all treated water customers.

6. Effective with the January/February billing period each following year, respectively, the usage rate for treated water customers are established as follows:

Usage Charge (per CF)		
2020	**2021**	**2022**
$ 0.0268	$ 0.0281	$ 0.0295

7. Effective with the January/February billing period each following year, respectively, the monthly charges for irrigation water customers are established as follows:

	Monthly Base Charge (Irrigation Season Only)		
Meter Size	**2020**	**2021**	**2022**
½"	$ 84.80	$ 93.20	$ 102.60
Per each 1"	$ 169.60	$ 186.60	$ 205.20

PASSED AND ADOPTED by the Board of Directors of the Georgetown Divide Public Utility District at a meeting of said Board held on the twelfth day of February 2019, by the following vote:

AYES:

NOES:

ABSENT/ABSTAIN:

_____
Dane Wadle, President, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

Attest:

_____
Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CERTIFICATION

I hereby certify that the foregoing is a full, true and correct copy of Resolution 2019-14 duly and regularly adopted by the Board of Directors of the Georgetown Divide Public Utility District, County of El Dorado, State of California, on this twelfth day of February 2019.

_____
Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

RESOLUTION NO. 2017-30

A RESOLUTION OF THE BOARD OF DIRECTORS OF GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT ADOPTING NEW RATES FOR TREATED WATER AND IRRIGATION WATER SERVICES

WHEREAS, Georgetown Divide Public Utility District ("District") provides irrigation and treated water services to residents and businesses of the District; and

WHEREAS, a Water Rate Study, dated October 24, 2017, prepared by RCAC ("Water Rate Study"), establishes various rates proposed therein, which the District Board finds are reasonably related to the cost of service for the District; and

WHEREAS, in preparing the Water Rate Study, staff and RCAC held several workshops and recommended a range of alternatives that the District could adopt regarding the revised water rates, which the District Board has reviewed; and

WHEREAS, on December 12, 2017, pursuant to Proposition 218 (Cal. Const., Art. XIIID, Sec. 6) the District Board heard and considered all oral testimony, written materials, and written protests concerning the rate increase; and

WHEREAS, the District has verified and counted the protests and determined that the District may proceed with the proposed water rates.

NOW, THEREFORE, BE IT RESOLVED THAT THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT, DOES HEREBY ACCEPT AND CLOSE the Proposition 218 proceedings in connection with the District's proposed water rates, with receipt of less than a majority protest vote as declared by the District Secretary. The District Board may adopt multi-year rate increases for water rates, in accordance with the Water Rate Study, in compliance with Proposition 218.

NOW, THEREFORE, BE IT and it is hereby RESOLVED by the Board of Directors of the Georgetown Divide Public Utility District as follows:

Beginning on January 1, 2018, the monthly charges (billed bi-monthly) for treated water customers are established as follows:

	Monthly Base Charge					
Meter Size	**Current**	**Jan 1, 2018**	**Jan 1, 2019**	**Jan 1, 2020**	**Jan 1, 2021**	**Jan 1, 2022**
5/8, 3/4, 1"	$ 23.57	$ 29.41	$ 30.88	$ 32.42	$ 34.04	$ 35.74
1.5"	$ 23.57	$ 98.02	$ 102.92	$ 108.07	$ 113.47	$ 119.15
2"	$ 23.57	$ 156.83	$ 164.67	$ 172.91	$ 181.55	$ 190.63
3"	$ 23.57	$ 313.66	$ 329.34	$ 345.81	$ 363.10	$ 381.25
4"	$ 25.16	$ 490.09	$ 514.60	$ 540.33	$ 567.34	$ 595.71

An ALT treatment plant supplemental charge of $15.08 per month is also added to the above listed base charge for all treated water customers.

	Usage Rate (per CF)					
Tier	**Current**	**Jan 1, 2018**	**Jan 1, 2019**	**Jan 1, 2020**	**Jan 1, 2021**	**Jan 1, 2022**
<1000 CF	--	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
1000-2000	$ 0.0138	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
2001-3000	$ 0.0165	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
3001-4000	$ 0.0193	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310
>4001 CF	$ 0.0221	$ 0.0255	$ 0.0268	$ 0.0281	$ 0.0295	$ 0.0310

NOW, THEREFORE, BE IT and it is hereby RESOLVED by the Board of Directors of the Georgetown Divide Public Utility District as follows:

Beginning on January 1, 2018, the monthly charges for irrigation water customers are established as follows:

	Monthly Base Charge (Irrigation Season Only)					
Meter Size	**Current**	**Jan 1, 2018**	**Jan 1, 2019**	**Jan 1, 2020**	**Jan 1, 2021**	**Jan 1, 2022**
½"	$ 47.00	$ 77.00	$ 84.80	$ 93.20	$ 102.60	$ 112.80
Per each 1"	$ 72.74	$ 154.20	$ 169.60	$ 186.60	$ 205.20	$ 225.80

PASSED, APPROVED, AND ADOPTED by the Georgetown Divide Public Utility District District at a special meeting held on the 12th day of December 2017; motioned by Director Hanschild, seconded by Director Wadle, and upon roll call was carried by the following vote of:

AYES: Halpin, Hanschild, Uso, Wadle

NAYS:

ABSENT:

ABSTAIN:

Londres Uso, President
Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

ATTEST:

Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CERTIFICATION

I hereby certify that the foregoing is a full, true and correct copy of Resolution 2017-30 duly and regularly adopted by the Board of Directors of the Georgetown Divide Public Utility District, County of El Dorado, State of California, on the 12th day of December 2017.

Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

Capital Replacement Program **Exhibit 1T**

Georgetown Divide PUD TW

Date: 10/20/17
System Number: 910013
Service Connections: 3774

Qty	Component	Year Acquired	Unit Cost (Historic, Current or Future)	Cost Type (H, C, F)	Estimated Historic Cost	Normal Estimated Life	Current Age	Estimated Current Cost	Planned Remaining Life	Estimated Remaining Life	Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
	Existing Capital Replacement Program															
	SOURCE OF SUPPLY PLANT #5100														$0	
1	Mark Edson Dam & Stumpy Meadows Res.	1962	$106,333	H	$106,333	100	55	$315,993	45	50	$850,524	10%	50%	40%	$12,389	$1,072
1	Tunnel Hill Tunnel	1962	$22,577	H	$22,577	100	55	$67,092	45	46	$166,831	25%	20%	55%	$6,076	$586
1	Kaiser Siphon Replacement (1)	1964	$83,961	C	$28,778	100	53	$83,961	47	46	$208,778	25%	20%	55%	$7,603	$734
1	Sand Trap Siphon (1)	1964	$34,125	C	$11,696	100	53	$34,125	47	48	$88,284	50%		50%	$6,430	$587
1	Up Country Ditch Imp (Pilot Ck Diversion to Tunnell Hill Inlet) (1)	1964	$424,830	C	$145,612	100	53	$424,830	47	56	$1,287,731	10%	50%	40%	$18,758	$1,392
															$0	
															$0	
	5200 SHARED														$0	
1	Cabin Waste Gate Replacement (1)	1972	$6,300	C	$2,538	40	45	$6,300	-5	20	$9,361	100%		0%	$1,364	$357
1	Bacon Creek Pipe (1)	1964	$53,576	C	$18,363	40	53	$53,576	-13	20	$79,611	50%		50%	$5,798	$1,518
1	Buckeye Conduit (1)	1964	$94,461	C	$32,377	40	53	$94,461	-13	20	$140,364	25%		75%	$5,112	$1,338
1	Up Country Ditch (Penn Stock Bypass to Shroeder Conduit) (1)	1964	$156,056	C	$53,489	40	53	$156,056	-13	5	$172,299	25%		75%	$6,275	$7,189
1	Main Ditch #1 Imp (1)	1964	$433,821	C	$148,694	40	53	$433,821	-13	5	$478,973	10%	50%	40%	$6,977	$7,994
1	Main Ditch #2 to ALT (1)	1964	$101,194	C	$34,685	40	53	$101,194	-13	5	$111,726	25%		75%	$4,069	$4,662
															$0	
															$0	
	5200 IRRIGATION ONLY (1)														$0	
1	Main Ditch #2 below ALT	1964	$0	C	$0	40	53	$0	-13	10		25%		75%	$0	
1	Pilot Hill Ditch (Main)	1964	$0	C	$0	40	53	$0	-13	10		50%		50%	$0	
1	Pilot Hill Ditch	1964	$0	C	$0	40	53	$0	-13	10		25%		75%	$0	
1	Kelsey Ditch #1	1964	$0	C	$0	40	53	$0	-13	10		25%		75%	$0	
1	Kelsey Ditch #2 Imp	1964	$0	C	$0	40	53	$0	-13	10		25%		75%	$0	
1	Spanish Dry Diggins Ditch	1964	$0	C	$0	40	53	$0	-13	10		100%		0%	$0	
1	Taylor Mine Ditch	1964	$0	C	$0	40	53	$0	-13	10		100%		0%	$0	
															$0	
															$0	
	5300 - Lake Walton WTP														$0	
1	Lake Walton Plant Replacement (4)	1992	$12,728,909	C	$7,681,448	50	25	$12,728,909	25	25	$20,883,124	25%		75%	$760,506	$154,431
1	Raw Water Bypass (1)	1974	$500,000	C	$209,745	40	43	$500,000	-3	19	$728,406	25%		75%	$26,527	$7,354
1	Lake Walton Outlet Works (1)	1974	$50,000	C	$20,974	40	43	$50,000	-3	19	$72,841	100%		0%	$10,611	$2,942
1	Lake Walton Dredging (1)	1974	$500,000	C	$301,732	40	25	$500,000	15	22	$772,990	25%		75%	$28,150	$6,617
							43		-43						$0	
	5300 - AUBURN LAKE TRAILS PLANT														$0	
1	ALT Water Treatment Plant (4)	2018	$12,728,909	C	$12,988,683	50	-1	$12,728,909	51	59	$40,945,042	25%		75%	$1,491,105	$102,887
															$0	
															$0	
	5400 T & D METERS & METER BOXES														$0	
1	Automated Meter Reading and Meter Replacement Project (5)	2018	$1,745,800	C	$1,781,429	20	-1	$1,745,800	21	2	$1,816,330	25%		75%	$66,146	$192,839
															$0	
	T & D TREATED WATER #5400 (2)														$0	
1	Angel Camp Tank (0.5 MG)	1974	$776,602	C	$325,777	40	43	$776,602	-3	10	$946,674	25%		75%	$34,475	$19,174
1	Deer Ravine Tank (0.25 MG)	1974	$388,301	C	$162,888	40	43	$388,301	-3	10	$473,337	50%		50%	$34,475	$19,174
1	Pilot Hill Tank (0.47 MG)	1974	$730,006	C	$306,230	40	43	$730,006	-3	10	$889,873	25%		75%	$32,407	$18,023
1	Black Ridge Road Tank (0.06 MG)	1974	$93,192	C	$39,093	40	43	$93,192	-3	10	$113,601	75%		25%	$12,411	$6,903
1	Hotchkiss Hill Tank (0.06 MG)	1974	$93,192	C	$39,093	40	43	$93,192	-3	10	$113,601	75%		25%	$12,411	$6,903
1	Spanish Dry Diggins Tank (0.2 MG)	1971	$310,641	C	$122,647	40	46	$310,641	-6	10	$378,670	50%		50%	$27,580	$15,339

1	Black Oak Mine Tank (0.3 MG)	1974	$465,961	C	$195,466	40	43	$465,961	-3	10	$568,004	25%		75%	$20,685	$11,504
1	Garden Park Tank (0.2 MG)	1974	$310,641	C	$130,311	40	43	$310,641	-3	10	$378,670	50%		50%	$27,580	$15,339
1	Kelsey Tank (0.21 MG)	1974	$332,386	C	$139,432	40	43	$332,386	-3	10	$405,177	50%		50%	$29,511	$16,413
1	Hotchkiss Hill Subtank (0.06 MG)	1974	$93,192	C	$39,093	40	43	$93,192	-3	10	$113,601	75%		25%	$12,411	$6,903
1	Black Ridge Road Pump Station	1974	$123,400	C	$51,765	40	43	$123,400	-3	5	$136,244	75%		25%	$14,885	$17,055
1	Chipmunk Trail Pump Station	1974	$123,400	C	$51,765	40	43	$123,400	-3	5	$136,244	75%		25%	$14,885	$17,055
1	Reservoir Road Pump Station	1974	$123,400	C	$51,765	40	43	$123,400	-3	5	$136,244	75%		25%	$14,885	$17,055
1	4-Inch Pipelines (42,130 AC, 50,771 PVC lf)	1974	$3,437,337	C	$1,441,927	60	43	$3,437,337	17	15	$4,626,203	25%		75%	$168,474	$60,618
1	6-Inch Pipelines (175,142 AC, 3,981 DI, 235,640 PVC lf)	1974	$19,908,624	C	$8,351,462	60	43	$19,908,624	17	15	$26,794,387	25%		75%	$975,778	$351,090
1	8-Inch Pipelines (42,068 AC, 85,394 PVC lf)	1974	$7,392,796	C	$3,101,201	60	43	$7,392,796	17	15	$9,949,730	25%		75%	$362,342	$130,373
1	10-Inch Pipelines (36,484 AC, 10,359 PVC lf)	1974	$2,951,109	C	$1,237,960	60	43	$2,951,109	17	15	$3,971,804	25%		75%	$144,642	$52,043
1	12-Inch Pipelines (42,346 AC lf)	1974	$3,388,480	C	$1,421,432	60	43	$3,388,480	17	15	$4,560,448	25%		75%	$166,079	$59,756
															$0	
															$0	
															$0	
															$0	
															$0	
	TRANSPORTATION EQUIPMENT (3)														$0	
1	Mobile Radios	1971	$4,056	H	$4,056	5	46	$10,085	-41	5	$11,134	100%		0%	$1,622	$1,858
1	Truck	2017	$38,250	C	$38,250	15	0	$38,250	15	15	$51,479	100%		0%	$7,499	$2,698
1	Excavator	2017	$55,250	C	$55,250	15	0	$55,250	15	15	$74,359	100%		0%	$10,832	$3,897
1	Trailer for excavator	2017	$10,625	C	$10,625	20	0	$10,625	20	20	$15,788	100%		0%	$2,300	$602
1	Trailer & Hookups	1991	$9,469	H	$9,469	5	26	$15,846	-21	10	$19,316	100%		0%	$2,814	$1,565
1	1998 Ford Pickup Truck	1998	$10,340	H	$10,340	5	19	$15,064	-14	10	$18,363	100%		0%	$2,675	$1,488
1	1999 Ford F150 Pickup	1999	$10,304	H	$10,304	5	18	$14,717	-13	10	$17,940	100%		0%	$2,613	$1,453
1	2002 Ford F-150 4x4	2001	$11,448	H	$11,448	5	16	$15,715	-11	10	$19,157	100%		0%	$2,791	$1,552
1	Chevy Truck - 1500	2003	$11,298	H	$11,298	5	14	$14,908	-9	10	$18,173	100%		0%	$2,647	$1,472
1	2004 Chevy 1500 Pickup	2004	$11,265	H	$11,265	5	13	$14,573	-8	10	$17,764	100%		0%	$2,588	$1,439
1	2004 Chevy 4 WD Pickup	2004	$18,421	H	$18,421	5	13	$23,829	-8	10	$29,047	100%		0%	$4,231	$2,353
1	2005 Chevy ID#1GBHK24U95E333348	2005	$17,911	H	$17,911	5	12	$22,715	-7	10	$27,690	100%		0%	$4,034	$2,243
1	2006 Chevy Colorado	2006	$12,068	H	$12,068	5	11	$15,005	-6	10	$18,291	100%		0%	$2,664	$1,482
1	2007 Chevy CK2500 Regular Cab	2007	$18,097	H	$18,097	5	10	$22,061	-5	10	$26,892	100%		0%	$3,917	$2,179
1	2008 Chevy 1500	2008	$14,480	H	$14,480	5	9	$17,305	-4	10	$21,095	100%		0%	$3,073	$1,709
1	Sundowner Trailer	2010	$4,588	H	$4,588	5	7	$5,270	-2	10	$6,425	100%		0%	$936	$520
1	Re-manufactured Long block Unit #32	2013	$3,489	H	$3,489	20	4	$3,777	16	17	$5,288	100%		0%	$770	$242
1	2016 Ford F-150	2016	$14,158	H	$14,158	10	1	$14,441	9	10	$17,604	100%		0%	$2,564	$1,426
															$0	
	SHOP & FIELD EQUIPMENT (3)														$0	
1	Fully Depreciated	1965	$1,082	H	$1,082	10	52	$3,030	-42	5		100%		0%	$0	
1	Tool Set	2017	$5,550	C	$5,550	10	0	$5,550	10	10	$6,765	100%		0%	$985	$548
1	New Radio System	1989	$7,192	H	$7,192	10	28	$12,521	-18	5	$13,825	100%		0%	$2,014	$2,307
1	Steam Cleaner (Pressure Washer)	1989	$1,886	H	$1,886	10	28	$3,284	-18	5		100%		0%	$0	
1	Welder	1991	$1,515	H	$1,515	10	26	$2,535	-16	5		100%		0%	$0	
1	Backhoe	1991	$27,385	H	$27,385	20	26	$45,827	-6	5	$50,597	75%		25%	$5,528	$6,334
1	Dump Truck	1991	$26,610	H	$26,610	20	26	$44,530	-6	5	$49,164	75%		25%	$5,371	$6,154
1	Tilt-bed Trailer	1992	$4,775	H	$4,775	10	25	$7,833	-15	5	$8,648	100%		0%	$1,260	$1,443
1	Dozer	1996	$13,655	H	$13,655	5	21	$20,697	-16	5	$22,851	100%		0%	$3,329	$3,814
1	Mini Excavator	2000	$22,535	H	$22,535	20	17	$31,555	3	5	$34,839	100%		0%	$5,075	$5,815
1	IR Portable Air Compressor	2003	$7,308	H	$7,308	20	14	$9,643	6	7	$11,077	100%		0%	$1,614	$1,305
1	2008 Chevy Truck 3500 1 ton Dump Truck	2008	$26,551	H	$26,551	10	9	$31,731	1	5	$35,033	100%		0%	$5,103	$5,847
1	Clark Equip.-excavator	2010	$23,678	H	$23,678	20	7	$27,198	13	14	$35,887	100%		0%	$5,228	$2,028
1	Meters	2014	$6,687	H	$6,687	20	3	$7,096	17	18	$10,135	100%		0%	$1,476	$435
1	Ditch Witch FX30 Vac Trailer	2015	$30,886	H	$30,886	20	2	$32,134	18	19	$46,813	75%		25%	$5,114	$1,418
1	Rammer Small Compactor	2016	$4,105	H	$4,105	20	1	$4,187	19	20	$6,221	100%		0%	$906	$237
															$0	

	GENERAL PLANT (3)														$0	
1	Office Building	1976	$137,335	H	$137,335	40	41	$309,307	-1	15	$416,286	25%		75%	$15,160	$5,455
1	Chip, Seal Parking Lot	1985	$2,953	H	$2,953	10	32	$5,565	-22	1	$5,677	100%		0%	$827	$4,850
1	Yard Fence	1986	$3,088	H	$3,088	10	31	$5,704	-21	5	$6,298	100%		0%	$917	$1,051
1	Generator & Electrical	1986	$2,210	H	$2,210	20	31	$4,084	-11	5		100%		0%	$0	
1	Gas Heat/Air System	1987	$1,650	H	$1,650	20	30	$2,989	-10	5		100%		0%	$0	
1	Rheem Cooling & Heating Unit	1989	$1,751	H	$1,751	20	28	$3,048	-8	5		100%		0%	$0	
1	Metal Building	1990	$5,811	H	$5,811	20	27	$9,918	-7	5	$10,950	100%		0%	$1,595	$1,828
1	Office & Shop Privacy Fence	2004	$6,080	H	$6,080	10	13	$7,865	-3	5	$8,683	100%		0%	$1,265	$1,449
1	Hangtown Fence - Add'l Ground Fencing	2006	$4,895	H	$4,895	10	11	$6,086	-1	5	$6,720	100%		0%	$979	$1,122
1	Carpet Replacement	2007	$3,724	H	$3,724	7	10	$4,540	-3	5	$5,012	100%		0%	$730	$837
1	Partial Re-roof of Main Maintenance Building	2016	$3,088	H	$3,088	30	1	$3,149	29	30	$5,704	100%		0%	$831	$136
															$0	
	OFFICE EQUIPMENT (3)														$0	
1	Computer Network	2001	$3,254	H	$3,254	10	16	$4,468	-6	5		100%		0%	$0	
1	Canon Copier	2002	$4,795	H	$4,795	10	15	$6,454	-5	5	$7,125	100%		0%	$1,038	$1,189
1	Phone System (Equip&Software)	2002	$4,744	H	$4,744	3	15	$6,385	-12	5	$7,049	100%		0%	$1,027	$1,177
1	Dell Server &software	2005	$2,185	H	$2,185	3	12	$2,771	-9	5		100%		0%	$0	
1	5 DELL Computers	2007	$4,637	H	$4,637	5	10	$5,652	-5	5	$6,240	100%		0%	$909	$1,042
															$0	
	DISTRIBUTION (3)														$0	
38	Pressure Reducing Valves	1987	$2,455	H	$93,278	40	30	$168,960	10	10	$205,961	50%		50%	$15,001	$8,343
172	Air Relief Valves	1987	$709	H	$121,970	40	30	$220,932	10	10	$269,315	50%		50%	$19,615	$10,909
422	Isolation Valves	1987	$2,291	H	$966,816	40	30	$1,751,254	10	10	$2,134,769	25%		75%	$77,742	$43,237
247	Other Valves	1987	$2,018	H	$498,518	40	30	$902,997	10	10	$1,100,748	25%		75%	$40,086	$22,294
581	Firehydrants	1987	$3,273	H	$1,901,558	60	30	$3,444,410	30	35	$6,888,439	25%		75%	$250,858	$34,170
20	Pressure Reducing Valves	2017	$5,000	C	$100,000	40	0	$100,000	40	40	$220,804	50%		50%	$16,082	$1,856
															$0	
	Subtotal Existing Capital Assets				$45,159,718			$78,663,010			$135,559,165	26%	1%	73%	$5,118,046	$1,544,026

Capital Replacement Program — **Exhibit 1I**

Georgetown Divide PUD IW

Date: 10/20/17
System Number: 910013
Service Connections: 408

Qty	Component	Year Acquired	Unit Cost (Historic, Current or Future)	Cost Type (H, C, F)	Estimated Historic Cost	Normal Estimated Life	Current Age	Estimated Current Cost	Planned Remaining Life	Estimated Remaining Life	Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
	Existing Capital Replacement Program															
	SOURCE OF SUPPLY PLANT #5100														$0	
1	Mark Edson Dam & Stumpy Meadows Res.	1962	$400,015	H	$400,015	100	55	$1,188,737	45	50	$3,199,589	10%	50%	40%	$14,980	$4,664
1	Tunnel Hill Tunnel	1962	$84,931	H	$84,931	100	55	$252,393	45	46	$627,604	25%	20%	55%	$7,346	$2,543
1	Kaiser Siphon Replacement (1)	1964	$315,852	C	$108,259	100	53	$315,852	47	46	$785,402	25%	20%	55%	$9,193	$3,183
1	Sand Trap Siphon (1)	1964	$128,375	C	$44,001	100	53	$128,375	47	48	$332,115	50%		50%	$7,775	$2,550
1	Up Country Ditch Imp (Pilot Ck Diversion to Tunnell Hill Inlet) (1)	1964	$1,598,171	C	$547,779	100	53	$1,598,171	47	56	$4,844,320	10%	50%	40%	$22,681	$6,090
															$0	
															$0	
	5200 SHARED														$0	
1	Cabin Waste Gate Replacement (1)	1972	$23,700	C	$9,548	40	45	$23,700	-5	20	$35,217	100%		0%	$1,649	$1,517
1	Bacon Creek Pipe (1)	1964	$201,549	C	$69,082	40	53	$201,549	-13	20	$299,491	50%		50%	$7,011	$6,450
1	Buckeye Conduit (1)	1964	$355,352	C	$121,798	40	53	$355,352	-13	20	$528,035	25%		75%	$6,180	$5,686
1	Up Country Ditch (Penn Stock Bypass to Shroeder Conduit) (1)	1964	$587,070	C	$201,220	40	53	$587,070	-13	5	$648,172	25%		75%	$7,587	$30,250
1	Main Ditch #1 Imp (1)	1964	$1,631,992	C	$559,371	40	53	$1,631,992	-13	5	$1,801,851	10%	50%	40%	$8,436	$33,636
1	Main Ditch #2 to ALT (1)	1964	$380,682	C	$130,480	40	53	$380,682	-13	5	$420,304	25%		75%	$4,920	$19,615
															$0	
															$0	
	5200 IRRIGATION ONLY (1)														$0	
1	Main Ditch #2 below ALT	1964	$663,376	C	$227,375	40	53	$663,376	-13	10	$808,652	25%		75%	$9,465	$18,377
1	Pilot Hill Ditch (Main)	1964	$429,126	C	$147,084	40	53	$429,126	-13	10	$523,102	50%		50%	$12,246	$23,775
1	Pilot Hill Ditch	1964	$1,070,876	C	$367,047	40	53	$1,070,876	-13	10	$1,305,392	25%		75%	$15,279	$29,665
1	Kelsey Ditch #1	1964	$571,625	C	$195,927	40	53	$571,625	-13	10	$696,808	25%		75%	$8,156	$15,835
1	Kelsey Ditch #2 Imp	1964	$1,112,565	C	$381,336	40	53	$1,112,565	-13	10	$1,356,211	25%		75%	$15,874	$30,820
1	Spanish Dry Diggins Ditch	1964	$37,375	C	$12,810	40	53	$37,375	-13	10	$45,560	100%		0%	$2,133	$4,141
1	Taylor Mine Ditch	1964	$36,563	C	$12,532	40	53	$36,563	-13	10	$44,570	100%		0%	$2,087	$4,051
															$0	
															$0	
	5300 - Lake Walton WTP														$0	
0	Lake Walton Plant Replacement (4)	1992	$0	C	$0	50	25	$0	25	25		25%		75%	$0	
0	Raw Water Bypass (1)	1974	$0	C	$0	40	43	$0	-3	19		25%		75%	$0	
0	Lake Walton Outlet Works (1)	1974	$0	C	$0	40	43	$0	-3	19		100%		0%	$0	
0	Lake Walton Dredging (1)	1974	$0	C	$0	40	25	$0	15	22		25%		75%	$0	
							43		-43						$0	
	5300 - AUBURN LAKE TRAILS PLANT														$0	
0	ALT Water Treatment Plant (4)	2018	$0	C	$0	50	-1	$0	51	59		25%		75%	$0	
															$0	
															$0	
	5400 T & D METERS & METER BOXES														$0	
0	Automated Meter Reading and Meter Replacement Project (5)	2018	$0	C	$0	20	-1	$0	21	2		25%		75%	$0	
															$0	
	T & D TREATED WATER #5400 (2)														$0	
0	Angel Camp Tank (0.5 MG)	1974	$0	C	$0	40	43	$0	-3	10		25%		75%	$0	
0	Deer Ravine Tank (0.25 MG)	1974	$0	C	$0	40	43	$0	-3	10		50%		50%	$0	
0	Pilot Hill Tank (0.47 MG)	1974	$0	C	$0	40	43	$0	-3	10		25%		75%	$0	
0	Black Ridge Road Tank (0.06 MG)	1974	$0	C	$0	40	43	$0	-3	10		75%		25%	$0	
0	Hotchkiss Hill Tank (0.06 MG)	1974	$0	C	$0	40	43	$0	-3	10		75%		25%	$0	

0	Spanish Dry Diggins Tank (0.2 MG)	1971	$0	C	$0	40	46	$0	-6	10		50%		50%	$0	
0	Black Oak Mine Tank (0.3 MG)	1974	$0	C	$0	40	43	$0	-3	10		25%		75%	$0	
0	Garden Park Tank (0.2 MG)	1974	$0	C	$0	40	43	$0	-3	10		50%		50%	$0	
0	Kelsey Tank (0.21 MG)	1974	$0	C	$0	40	43	$0	-3	10		50%		50%	$0	
0	Hotchkiss Hill Subtank (0.06 MG)	1974	$0	C	$0	40	43	$0	-3	10		75%		25%	$0	
0	Black Ridge Road Pump Station	1974	$0	C	$0	40	43	$0	-3	5		75%		25%	$0	
0	Chipmunk Trail Pump Station	1974	$0	C	$0	40	43	$0	-3	5		75%		25%	$0	
0	Reservoir Road Pump Station	1974	$0	C	$0	40	43	$0	-3	5		75%		25%	$0	
0	4-Inch Pipelines (42,130 AC, 50,771 PVC lf)	1974	$0	C	$0	60	43	$0	17	15		10%		90%	$0	
0	6-Inch Pipelines (175,142 AC, 3,981 DI, 235,640 PVC lf)	1974	$0	C	$0	60	43	$0	17	15		10%		90%	$0	
0	8-Inch Pipelines (42,068 AC, 85,394 PVC lf)	1974	$0	C	$0	60	43	$0	17	15		10%		90%	$0	
0	10-Inch Pipelines (36,484 AC, 10,359 PVC lf)	1974	$0	C	$0	60	43	$0	17	15		10%		90%	$0	
0	12-Inch Pipelines (42,346 AC lf)	1974	$0	C	$0	60	43	$0	17	15		10%		90%	$0	
															$0	
0	Highway 193/Sliger Mine Main Relocation (2)	1974	$0	C	$0	60	43	$0	17	5		50%		50%	$0	
0	Tank Telemetry Enhancements (2)	2020	$0	C	$0	15	-3	$0	18	5		100%		0%	$0	
															$0	
															$0	
	TRANSPORTATION EQUIPMENT (3)														$0	
1	Mobile Radios	1971	$668	H	$668	5	46	$1,661	-41	5		100%		0%	$0	
1	Truck	2017	$6,300	C	$6,300	15	0	$6,300	15	15	$8,479	100%		0%	$397	$500
1	Excavator	2017	$9,100	C	$9,100	15	0	$9,100	15	15	$12,247	100%		0%	$573	$723
1	Trailer for excavator	2017	$1,750	C	$1,750	20	0	$1,750	20	20		100%		0%	$0	
1	Trailer & Hookups	1991	$1,560	H	$1,560	15	26	$2,610	-11	10		100%		0%	$0	
1	1998 Ford Pickup Truck	1998	$1,703	H	$1,703	15	19	$2,481	-4	10		100%		0%	$0	
1	1999 Ford F150 Pickup	1999	$1,697	H	$1,697	15	18	$2,424	-3	10		100%		0%	$0	
1	2002 Ford F-150 4x4	2001	$1,886	H	$1,886	15	16	$2,588	-1	10		100%		0%	$0	
1	Chevy Truck - 1500	2003	$1,861	H	$1,861	15	14	$2,455	1	10		100%		0%	$0	
1	2004 Chevy 1500 Pickup	2004	$1,855	H	$1,855	15	13	$2,400	2	10		100%		0%	$0	
1	2004 Chevy 4 WD Pickup	2004	$3,034	H	$3,034	15	13	$3,925	2	10		100%		0%	$0	
1	2005 Chevy ID#1GBHK24U95E333348	2005	$2,950	H	$2,950	15	12	$3,741	3	10		100%		0%	$0	
1	2006 Chevy Colorado	2006	$1,988	H	$1,988	15	11	$2,471	4	10		100%		0%	$0	
1	2007 Chevy CK2500 Regular Cab	2007	$2,981	H	$2,981	15	10	$3,633	5	10		100%		0%	$0	
1	2008 Chevy 1500	2008	$2,385	H	$2,385	15	9	$2,850	6	10		100%		0%	$0	
1	Sundowner Trailer	2010	$756	H	$756	15	7	$868	8	10		100%		0%	$0	
1	Re-manufactured Long block Unit #32	2013	$575	H	$575	20	4	$622	16	17		100%		0%	$0	
1	2016 Ford F-150	2016	$2,332	H	$2,332	15	1	$2,379	14	10		100%		0%	$0	
															$0	
	SHOP & FIELD EQUIPMENT (3)														$0	
			~~$178~~							~~5~~		~~100%~~		0%	$0	
1	Tool Set	2017	$914	C	$914	10	0	$914	10	10		100%		0%	$0	
1	New Radio System	1989	$1,185	H	$1,185	10	28	$2,062	-18	5		100%		0%	$0	
1	Steam Cleaner (Pressure Washer)	1989	$311	H	$311	10	28	$541	-18	5		100%		0%	$0	
1	Welder	1991	$249	H	$249	10	26	$418	-16	5		100%		0%	$0	
1	Backhoe	1991	$4,511	H	$4,511	20	26	$7,548	-6	5	$8,334	75%		25%	$293	$1,167
1	Dump Truck	1991	$4,383	H	$4,383	20	26	$7,334	-6	5	$8,098	75%		25%	$284	$1,134
1	Tilt-bed Trailer	1992	$786	H	$786	15	25	$1,290	-10	5		100%		0%	$0	
1	Dozer	1996	$2,249	H	$2,249	20	21	$3,409	-1	5		100%		0%	$0	
1	Mini Excavator	2000	$3,712	H	$3,712	20	17	$5,197	3	5	$5,738	100%		0%	$269	$1,071
1	IR Portable Air Compressor	2003	$1,204	H	$1,204	20	14	$1,588	6	7		100%		0%	$0	
1	2008 Chevy Truck 3500 1 ton Dump Truck	2008	$4,373	H	$4,373	15	9	$5,226	6	5	$5,770	100%		0%	$270	$1,077
1	Clark Equip.-excavator	2010	$3,900	H	$3,900	20	7	$4,480	13	14	$5,911	100%		0%	$277	$376
1	Meters	2014	$1,101	H	$1,101	20	3	$1,169	17	18		100%		0%	$0	
1	Ditch Witch FX30 Vac Trailer	2015	$5,087	H	$5,087	20	2	$5,293	18	19	$7,710	75%		25%	$271	$264
1	Rammer Small Compactor	2016	$676	H	$676	20	1	$690	19	20		100%		0%	$0	

																$0	
	GENERAL PLANT (3)															$0	
1	Office Building	1976	$22,620	H	$22,620	40	41	$50,945	-1	15	$68,565	25%		75%	$803	$1,011
1	Chip, Seal Parking Lot	1985	$486	H	$486	10	32	$917	-22	1		100%		0%	$0	
1	Yard Fence	1986	$509	H	$509	10	31	$940	-21	5		100%		0%	$0	
1	Generator & Electrical	1986	$364	H	$364	20	31	$673	-11	5		100%		0%	$0	
1	Gas Heat/Air System	1987	$272	H	$272	20	30	$492	-10	5		100%		0%	$0	
1	Rheem Cooling & Heating Unit	1989	$288	H	$288	20	28	$502	-8	5		100%		0%	$0	
1	Metal Building	1990	$957	H	$957	20	27	$1,634	-7	5		100%		0%	$0	
1	Office & Shop Privacy Fence	2004	$1,001	H	$1,001	10	13	$1,295	-3	5		100%		0%	$0	
1	Hangtown Fence - Add'l Ground Fencing	2006	$806	H	$806	10	11	$1,002	-1	5		100%		0%	$0	
1	Carpet Replacement	2007	$613	H	$613	7	10	$748	-3	5		100%		0%	$0	
1	Partial Re-roof of Main Maintenance Building	2016	$509	H	$509	30	1	$519	29	30		100%		0%	$0	
															$0	
	OFFICE EQUIPMENT (3)														$0	
0	Computer Network	2001	$536	H	$0	10	16	$0	-6	5		100%		0%	$0	
1	Canon Copier	2002	$790	H	$790	10	15	$1,063	-5	5		100%		0%	$0	
1	Phone System (Equip&Software)	2002	$781	H	$781	3	15	$1,052	-12	5		100%		0%	$0	
			$360							5		100%		0%	$0	
1	5 DELL Computers	2007	$764	H	$764	5	10	$931	-5	5		100%		0%	$0	
															$0	
															$0	
	Existing Capital Replacement Program				$3,731,376			$10,749,508			$18,433,245				$166,432	$250,172

ATTACHMENT 3

Request for Proposals

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

REQUEST FOR PROPOSAL

Engineering Evaluation of the Capital Replacement Program

Responders to this Request for Proposals (RFP) must deliver one signed original, two (2) copies, and one electronic copy of the proposal.

Proposal Submission Deadline (date/time): August 20, 2019 at 3:00pm

Submit Proposal to: **Georgetown Divide Public Utility District Office**
6425 Main Street
Georgetown, CA 95634

REGISTERING YOUR EMAIL ADDRESS

FOR QUESTIONS CONCERNING THIS REQUEST FOR PROPOSAL:

Potential respondents who want to receive changes, additions, and deletions to the RFP, as well as a copy of all the questions and responses by the Georgetown Divide Public Utility District, should register online by following the link on the GDPUD website. The link to open RFPs is at the following website: http://gd-pud.org/#Bids_&_Proposals

TABLE OF CONTENTS

REQUEST FOR PROPOSAL
Engineering Evaluation of a Capital Replacement Program

SECTION 1 — INTRODUCTION

The Georgetown Divide Public Utility District (GDPUD) is soliciting proposals from Engineering Consultants to provide professional engineering evaluation of GDPUD's Capital Replacement Program. In general, the work will consist of researching the projects listed in the Capital Replacement Program (CRP), providing detailed engineering cost estimates, estimating the remaining useful life of each piece of infrastructure in the CRP, and estimating the annual investment required by GDPUD to implement the CRP.

GDPUD will use a "Qualifications Based Selection" process in determining which Consultant to be selected for the contract. The process will include an evaluation and ranking of Consultants based on set evaluation criteria. Top ranking Consultants may be asked to participate in an oral interview.

GDPUD will open and review the proposal of the top ranked consultant. If for any reason an acceptable contract cannot be negotiated with the top ranked consultant, negotiations will commence with the next-ranked firm.

GDPUD reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether that proposal is selected.

Proposals submitted will be evaluated by individuals from GDPUD and/or outside agencies. During the evaluation process, GDPUD reserves the right, where it may serve GDPUD's best interest, to request additional information from proposers, or to allow corrections of errors or omissions.

Submission of a proposal indicates acceptance by the firm of the conditions contained in this RFP, unless clearly and specifically noted in the proposal submitted and confirmed in the contract between GDPUD and the firm selected. GDPUD reserves the right, without prejudice, to reject any or all proposals

1.1 General Description of RFP

This RFP describes the general Scope of Services, necessary RFP components, consultant selection process, and required format of the RFP, as well as a sample copy of GDPUD's Professional Services Agreement.

1.2 RFP Schedule

Advertisement of RFP	July 18, 2019
Deadline for Questions	July 30, 2019
Response to Questions	August 6, 2019
Deadline for RFP Submittal	**No later than 3:00 PM, August 20, 2019**
Final Consultant Selection	Anticipated September 10, 2019

1.3 General Selection Process

GDPUD intends to select a Consultant based on demonstrated competence and qualifications for the types of services to be performed at a fair and reasonable price to the public. GDPUD will review all proposals and evaluate them according to the following criteria:

- Qualifications of Team
- Project Understanding and Innovation
- Work Plan / Scope of Work
- Project Schedule
- Similar Experience / References

Consultant may be either selected based on information included in the proposal or the Consultant may be requested to interview prior to final selection.

SECTION 2 — SCOPE OF SERVICES

The Consultant shall provide an engineering evaluation of GDPUD's CRP that was included in the Water Financial Analysis dated October 2017 prepared by Rural Community Assistance Corporation (RCAC). The CRP is included as Attachment B to this RFP. The CRP was prepared collaboratively between GDPUD Staff and RCAC. Cost estimates were taken from a Water System Reliability Study dated 2002 by KASL, a Capital Facility Charge Study dated 2007 by Stantec, and GDPUD's annual depreciation schedule. RCAC then used this information from Staff plus assumptions regarding interest rates and inflation to calculate an annual investment required to implement the CRP. The KASL and Stantec studies are available on the GDPUD website at https://www.gd-pud.org/studies-and-reports, and RCAC's Water Financial Analysis is at https://www.gd-pud.org/2017-water-rate-update.

GDPUD now desires to have an independent evaluation of that CRP. Scope of the evaluation will include all work necessary to provide engineering cost estimates, estimated useful life remaining, and the annual investment required to implement that CRP.

A typical scope is anticipated to include the following tasks:

Task 1: Project Initiation, Research, Field Work
The consultant shall attend a kick off meeting with District staff, visit District office to obtain available data, and perform any needed field work. Consultant shall perform as much research and field investigations as they deem necessary to perform the evaluation with an appropriate level of accuracy for work of this nature. District will make available all as-built engineering drawings, maintenance records, and facilities and infrastructure for investigation.

Deliverables:
- None

Task 2: Evaluation of Capital Replacement Program
For each piece of infrastructure listed in the existing CRP, the consultant shall provide an independent engineering cost estimate, estimated useful life remaining, and the annual investment required to replace infrastructure as needed.

Deliverables:
- Engineering report evaluating the existing CRP, including engineering cost estimates, estimated useful life remaining of each piece of infrastructure, and the annual investment required to implement. Format should be similar to the existing CRP to allow for a straightforward comparison. Deliverables shall include detailed engineering cost estimates with references, detailed discussions about infrastructure lifespans and justification for the estimated useful life, and description of the assumptions and methodology used to calculate the annual investment required.

SECTION 3 — RFP SUBMITTAL REQUIREMENTS

The intent of these requirements is to assist proposers in the preparation of their proposal and to simplify the review process for GDPUD. One signed original, two (2) copies, and one electronic copy of the proposal must be received and date stamped by GDPUD no later than **August 20, 2019 at 3:00 PM**. If a proposal is sent by mail or other delivery system, the sender is totally responsible for the mail or delivery system delivering the proposal to GDPUD on or before the deadline.

Proposals shall be clearly marked “Request for Proposals for Engineering Evaluation of the Capital Replacement Program,” and submitted to:

Steven Palmer
General Manager
Georgetown Divide Public Utility District
6425 Main Street
PO Box 4240
Georgetown, CA 95634

Note: Late submittals or submittals delivered to the wrong location will be rejected.

GDPUD requires the proposer to submit a concise proposal clearly addressing all the requirements outlined in this RFP. The proposal must be signed by proposer's representative authorized to execute a contract between GDPUD and proposer. The proposal must include, at a minimum, the following sections; however, the proposer is encouraged to expand on the scope as needed:

A. Cover Letter

- List the name, address, and telephone number of the firm.
- Signed by an authorized representative of the consultant. The Consultant shall furnish documentation that the person signing the proposal is empowered with signatory authority for the Consultant. The form could be a Corporate Resolution.
- State the proposal is firm for a 90-day period from the proposal submission deadline.
- Provide the name, title, address and telephone number of the individual to whom correspondence and other contacts should be directed during the Consultant selection process.
- Provide the location of the Consultant's headquarters. In addition, provide the location of any local support offices, which will provide service to GDPUD.
- Acknowledge that the Consultant will provide the insurance and indemnification required per the attached Professional service agreement.

B. Project Team Information

Consultant must provide the names and positions of all staff proposed including staff for proposed sub-consultants. The proposal should also designate who will be the project manager in charge of the project, and who will be GDPUD's contact throughout the project. It is allowable for a single individual to fulfill multiple roles by the Consultant's staff.

C. Project Understanding and Innovation

Include visions or concepts for performing the services.

D. Work Plan / Scope of Work

Include a work plan/scope of work meeting the minimum requirements of the projects listed in the Scope of Services. Consultant is encouraged to modify or expand the minimum Scope of Services if they believe it is necessary to achieve the goals.

E. Project Schedule

Schedule needs to adequate and reasonable to ensure timely completion of the tasks listed in the Work Plan / Scope of Work. Emphasis should be placed on realistic review cycles.

F. Sub-consultant & Work by Others

This section shall include a matrix showing the estimate of time (in hours) to perform the work, detailed by tasks, listed in the Scope of Work.

Identify any and all sub-consultant proposed to serve on the project, with background information for each and particular experience of key personnel, including project descriptions and resumes.

This section should describe all work not included in the proposal. Any work that is needed to complete the project that is not listed in the "Work Done by Others" will be considered part of the work provided by the Consultant and included in the proposal. Please include a list of tasks which the Consultant expects GDPUD staff to perform, information the Consultant expects GDPUD to provide, and an estimated amount of GDPUD staff time required for each task of the scope of work.

G. Relevant Experience and References

The Consultant must state the qualifications and experience of the proposed team, emphasizing the specific qualifications and experience acquired while providing services similar to those being sought by GDPUD, particularly for the Project Manager and other key project staff members assigned to the project.

For all staff members, describe their role giving not only their title but also the specific services they will perform and illustrate clearly the applicability of the individual's background, education, and experience to his or her assigned role.

Provide a brief description of at least three similar projects for which the Consultant has provided services during the past five years. For all referenced projects list the:

- Client (contact person, address and phone number)
- Project description and location
- Description of services by Consultant
- Total value of services provided by Consultant
- Consultant's project manager
- Key personnel involved
- Sub consultant employed

H. Fee Proposal

A fee proposal (one copy) for the engineering evaluation must be submitted in a separately sealed enveloped marked "Fee Proposal" and will be the basis for which the Consultant will be compensated. The rates quoted will remain in effect for the duration of the Agreement, unless approved by GDPUD. Rates shall be included for all employment categories necessary to perform the work outlined in this RFP in accordance with applicable State of California Industrial Labor Rate Standards.

Failure to provide a fee proposal in a separately sealed envelope can be grounds for GDPUD, at its sole discretion, to determine the submittal to be non-responsive and the proposal may be rejected.

SECTION 4 — SELECTION PROCESS AND EVALUATION CATEGORIES

Proposals submitted will be evaluated by individuals from GDPUD and/or outside agencies. During the evaluation process, GDPUD reserves the right, where it may serve GDPUD's best interest, to request additional information from proposers, or to allow corrections of errors or omissions.

4.1 Selection Criteria

GDPUD intends to select a Consultant based on demonstrated competence and qualifications for the types of services to be performed at a fair and reasonable price to the public. GDPUD will review all proposals and evaluate them according to the following criteria:

- Qualifications of team
- Project Understanding and Innovation
- Similar Experience / References
- Work Plan / Scope of Work
- Project Schedule

Consultant may be either selected based on information included in the proposal or the Consultant may be requested to interview prior to final selection.

SECTION 5 — GENERAL TERMS AND CONDITIONS

5.1 Limitation

This RFP does not commit GDPUD to award a contract, to pay any cost incurred in the preparation of the Consultant's RFP response, or to procure or contract for services or supplies. GDPUD is not responsible for proposals that are delinquent, lost, mismarked, and sent to an address other than that given above, or sent by mail or courier service. GDPUD reserves the right to accept or reject any or all RFP responses received because of this request or to cancel all or part of this RFP.

5.2 Public Records

All proposals shall become the property of GDPUD and will become public records and, as such, may be subject to public review.

5.3 Contract Agreement

Once a proposed contract agreement is accepted, the Consultant will be required to sign the Agreement for Consultant Services and submit all other required certifications and documentation within ten (10) calendar days of the Notice of Selection from GDPUD.

The contents of the submitted proposal will be relied upon and incorporated into the awarded contract and shall become a contractual obligation. Failure of the Consultant to agree to include the proposal as part of the contractual agreement will result in the cancellation of the award. GDPUD reserves the right to reject those parts that do not meet with the approval of GDPUD, or to modify the Scope of Services, as agreed by Consultant, in the final negotiated contract.

A sample agreement that will be used for this contract is included as Attachment A. GDPUD will require the selected Consultant to provide the indemnification and insurance required per the attached sample agreement. Consultant is advised to pay close attention to the indemnification and insurance requirements.

SECTION 6 — QUESTIONS

If you have any questions regarding this RFP, prior to July 30, 2019, please email:

Steven Palmer, General Manager
Email: spalmer@gd-pud.org

ATTACHMENT A

SAMPLE PROFESSIONAL SERVICES AGREEMENT

PROFESSIONAL SERVICES AGREEMENT

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is made and entered into this ____ day of _____ 201__, (the "Effective Date") by and between the Georgetown Divide Public Utilities District, a California Public Utilities District ("District"), and _____ ("Consultant"). District and Consultant may herein be referred to individually as a "Party" and collectively as the "Parties". There are no other parties to this Agreement.

RECITALS

A. District has determined that consultant services are required for non-audit services to assist the District in reviewing and updating finance and accounting policies and procedures (the "Project").

B. Consultant has submitted a proposal to District that includes a scope of proposed consultant services, attached hereto and described more fully in **Exhibit A** ("Services").

C. Consultant represents that it is qualified, willing and able to provide the Services to District, and that it will perform Services related to the Project according to the rate schedule included in the scope of proposed consultant services attached hereto as **Exhibit B** (the "Rates").

NOW, THEREFORE, in consideration of the promises and covenants set forth below, the Parties agree as follows:

AGREEMENT

1. Recitals. The recitals set forth above ("Recitals") are true and correct and are hereby incorporated into and made part of this Agreement by this reference. In the event of any inconsistency between the Recitals and Sections 1 through 20 of this Agreement, Section 1 through 20 shall prevail.

2. Consulting Services. Consultant agrees, during the term of this Agreement, to perform the Services for District in connection with the Project. Any request for services in addition to the Services described in **Exhibit A** will be considered a request for additional consulting services and not compensated unless the Parties otherwise agree in writing. No subcontract shall be awarded or an outside consultant engaged by Consultant unless prior written approval is obtained from District.

3. Compensation. District shall pay Consultant according to the fee schedule set forth in **Exhibit B** for a time and materials cost not to exceed _____, as full remuneration for the performance of the Services. Consultant agrees to maintain a log of time spent in connection with performing the Services. On a monthly basis, Consultant shall provide District, in reasonable and understandable detail, a description of the services rendered pursuant to the Services and in accordance with the Rates. If the work is satisfactorily completed, District shall pay such invoice within thirty (30) days of its receipt. If District disputes any portion of any invoice, District shall

pay the undisputed portion within the time stated above, and at the same time advise Consultant in writing of the disputed portion.

5. Term. This Agreement shall become effective on the Effective Date and will continue in effect until the Services provided herein have been completed, unless terminated earlier as provided in Section 6 or 7 below (the "Term").

6. Termination. District may terminate this Agreement prior to the expiration of the Term ("Termination"), without cause or reason, by notifying Consultant in writing of District's desire to terminate this Agreement (the "Termination Notice"). Upon receipt of a Termination Notice, Consultant shall immediately cease performing the Services. Consultant will be entitled to compensation, as of the date Consultant receives the Termination Notice, only for Services actually performed.

7. Termination for Cause. Notwithstanding Section 6 above, this Agreement may be terminated by District for cause based on the loss or suspension of any licenses, permits or registrations required for the continued provision of the Services, or Consultant's malfeasance. Termination of the Agreement for cause as set forth in this Section shall relieve District from compensating Consultant.

8. Confidential Information. Consultant understands and agrees that, in the performance of Services under this Agreement or in the contemplation thereof, Consultant may have access to private or confidential information that may be owned or controlled by District and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to District ("Confidential Information").

Consultant shall not, either during or after the Term, disclose to any third party any Confidential Information without the prior written consent of District. If District gives Consultant written authorization to make any such disclosure, Consultant shall do so only within the limits and to the extent of that authorization. Such authorization does not guarantee that the District will grant any further disclosure of Confidential Information. Consultant may be directed or advised by the District's General Counsel on various matters relating to the performance of the Services on the Project or on other matters pertaining to the Project, and in such event, Consultant agrees that it will treat all communications between itself, its employees and its subcontractors as being communications which are within the attorney-client privilege.

9. Performance by Key Employee. Consultant has represented to District that _____ will be the person primarily responsible for the performance of the Services and all communications related to the Services. District has entered into this Agreement in reliance on that representation by Consultant.

10. Property of District. The following will be considered and will remain the property of District:

A. Documents. All reports, drawings, graphics, working papers and Confidential Information furnished by District in connection with the Services ("Documents").

Nothing herein shall be interpreted as prohibiting or limiting District's right to assign all or some of District's interests in the Documents.

B. Data. All data collected by Consultant and produced in connection with the Services including, but not limited to, drawings, plans, specifications, models, flow diagrams, visual aids, calculations, and other materials ("Data"). Nothing herein shall be interpreted as prohibiting or limiting District's right to assign all or some of District's interests in the Data.

C. Delivery of Documents and Data. Consultant agrees, at its expense and in a timely manner, to return to District all Documents and Data upon the conclusion of the Term or in the event of Termination.

11. Duties of District. In order to permit Consultant to render the services required hereunder, District shall, at its expense and in a timely manner:

A. Provide such information as Consultant may reasonably require to undertake or perform the Services;

B. Promptly review any and all documents and materials submitted to District by Consultant in order to avoid unreasonable delays in Consultant's performance of the Services; and

C. Promptly notify Consultant of any fault or defect in the performance of Consultant's services hereunder.

12. Representations of Consultant. District relies upon the following representations by Consultant in entering into this Agreement:

A. Qualifications. Consultant represents that it is qualified to perform the Services and that it possesses the necessary licenses, permits and registrations required to perform the Services or will obtain such licenses or permits prior to the time such licenses or permits are required. Consultant represents and warrants to District that Consultant shall, at Consultant's sole cost and expense, keep in effect or obtain at all times during the Term of this Agreement, any licenses, permits, and registrations that are legally required for Consultant to practice Consultant's profession at the time the Services are rendered.

B. Consultant Performance. Consultant represents and warrants that all Services under this Agreement shall be performed in a professional manner and shall conform to the customs and standards of practice observed on similar, successfully completed projects by specialists in the Services to be provided. Consultant shall adhere to accepted professional standards as set forth by relevant professional associations and shall perform all Services required under this Agreement in a manner consistent with generally accepted professional customs, procedures and standards for such Services. All work or products completed by Consultant shall be completed using the best practices available for the profession and shall be free from any defects. Consultant agrees that, if a Service is not so performed, in addition to all of its obligations

under this Agreement and at law, Consultant shall re-perform or replace unsatisfactory Service at no additional expense to District.

13. Compliance with Laws and Standards. Consultant shall insure compliance with all applicable federal, state, and local laws, ordinances, regulations and permits, including but not limited to federal, state, and county safety and health regulations. Consultant shall perform all work according to generally accepted standards within the industry. Consultant shall comply with all ordinances, laws, orders, rules, and regulations, including the administrative policies and guidelines of District pertaining to the work.

14. Independent Contractor; Subcontracting. Consultant will employ, at its own expense, all personnel reasonably necessary to perform the Services. All acts of Consultant, its agents, officers, employees and all others acting on behalf of Consultant relating to this Agreement will be performed as independent contractors. Consultant, its agents and employees will represent and conduct themselves as independent contractors and not as employees of District. Consultant has no authority to bind or incur any obligation on behalf of District. Except as District may specify in writing, Consultant shall have no authority, express or implied, to act on behalf of District in any capacity whatsoever as an agent. Consultant shall have no authority, express or implied, pursuant to this Agreement to bind District to any obligation whatsoever. Consultant is prohibited from subcontracting this Agreement or any part of it unless such subcontracting is expressly approved by District in writing.

15. Insurance. Consultant and all of Consultant's contractors and subcontractors shall obtain and maintain insurance of the types and in the amounts described in this paragraph and its subparagraphs with carriers reasonably satisfactory to District.

A. General Liability Insurance. Consultant shall maintain occurrence version commercial general liability insurance or an equivalent form with a limit of not less than Two Million Dollars ($2,000,000) per claim and Two Million Dollars ($2,000,000) for each occurrence.

B. Workers' Compensation Insurance. Consultant shall carry workers' compensation insurance as required by the State of California under the Labor Code. Consultant shall also carry employer's liability insurance in the amount of One Million Dollars ($1,000,000.00) per accident, with a One Million Dollar ($1,000,000.00) policy limit for bodily injury by disease, and a One Million Dollar ($1,000,000.00) limit for each employee's bodily injury by disease.

C. Automobile Insurance. Consultant shall carry automobile insurance for the vehicle(s) Consultant uses in connection with the performance of this Agreement in the amount of One Million Dollars ($1,000,000.00) per occurance for bodily injury and property damage.

D. Errors and Omissions Liability. Consultant shall carry errors and omissions liability insurance in the amount of no less than One Million Dollars ($1,000,000.00) per occurrence or greater if appropriate for the Consultant's profession. Architects and engineers' coverage is to be endorsed to include contractual liability. Any deductibles or self-insured

retentions must be declared to and approved by the District. At the option of the District, either the insurer shall reduce or eliminate such deductibles or self-insured retentions with respect to the District, elected and appointed councils, commissions, directors, officers, employees, agents, and representatives ("District's Agents"); or the Consultant shall provide a financial guarantee satisfactory to the District guaranteeing payment of losses and related investigations, claims administration and defense expenses.

E. Other Insurance Requirements. Within five (5) days of the Effective Date, Consultant shall provide District with certificates of insurance for all of the policies required under this Agreement ("Certificates"), excluding the required worker's compensation insurance. Such Certificates shall be kept current for the Term of the Agreement and Consultant shall be responsible for providing updated copies and notifying District if a policy is cancelled, suspended, reduced, or voided. With the exception of the worker's compensation insurance, all of the insurance policies required in this Agreement shall: (a) provide that the policy will not be cancelled, allowed to expire, or materially reduced in coverage without at least thirty (30) days' prior written notice to District of such cancellation, expiration, or reduction and each policy shall be endorsed to state such; (b) name District, and District's Agents as additional insureds with respect to liability arising out of Services, work or operations performed by or on behalf of the Consultant; products and completed operations of the Consultant; premises owned, occupied, or used by the Consultant, or automobiles owned, leased, or hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the District; (c) be primary with respect to any insurance or self-insurance programs covering District or District's Agents and any insurance or self-insurance maintained by District or District's Agents shall be in excess of Consultant's insurance and shall not contribute to it; (d) contain standard separation of insured provisions; and (e) state that any failure to comply with reporting or other provisions of the policy including breaches of warranties shall not affect the coverage provided to the District.

16. Indemnification. Consultant hereby agrees to indemnify and hold harmless District, its agents, officers, employees and volunteers, against all liability, obligations, claims, loss, and expense (a) caused or created by Consultant, its subcontractors, or the agents or employees of either, whether negligent or not, pertaining to or related to acts or omissions of Consultant in connection with the Services, or (b) arising out of injuries suffered or allegedly suffered by employees of Consultant or its subcontractors (i) in the course of their employment, (ii) in the performance of work hereunder, or (iii) upon premises owned or controlled by District. Consultant's obligation to defend, indemnify and hold District and its agents, officers, employees and volunteers harmless is not terminated by any requirement in this Agreement for Consultant to procure and maintain a policy of insurance.

17. Consequential Damages. Notwithstanding any other provision of this Agreement, in no event shall District be liable, regardless of whether any claim is based on contract or tort, for any special, consequential, indirect or incidental damages, including, but not limited to, lost profits or revenue, arising out of or in connection with this Agreement or the Services performed in connection with this Agreement.

18. Litigation. In the event that either Party brings an action under this Agreement for the breach or enforcement hereof, or must incur any collection expenses for any amounts due hereunder the prevailing Party in such action shall be entitled to its costs including reasonable attorney's fees, whether or not such action is prosecuted to judgment.

19. Notices. Any notice or communication required hereunder between District or Consultant must be in writing, and may be given either personally, by registered or certified mail (return receipt requested), or by Federal Express, UPS or other similar couriers providing overnight delivery. If personally delivered, a notice shall be deemed to have been given when delivered to the Party to whom it is addressed. Notices given by registered or certified mail shall be deemed to have been given and received on the first to occur of (a) actual receipt by any of the addressees designated below as the party to whom notices are to be sent, (b) on the date delivered as shown on a receipt issued by the courier, or (c) five (5) days after a registered or certified letter containing such notice, properly addressed, with postage prepaid, is deposited in the United States mail. If given by Federal Express or similar courier, a notice or communication shall be deemed to have been given and received on the date delivered as shown on a receipt issued by the courier. Any Party hereto may at any time, by giving ten (10) days written notice to the other Party hereto, designate any other address in substitution of the address to which such notice or communication shall be given. Such notices or communications shall be given to the Parties at the addresses in this paragraph set forth below:

If to District:
Georgetown Divide Public Utility District
P.O. Box 4240
6425 Main Street
Georgetown, CA 95634
Attention: General Manager

With courtesy copies to:
Churchwell White LLP
1414 K Street, 3rd Floor
Sacramento, California 95814
Attention: Barbara A. Brenner, Esq.

If to Consultant:

Attention:

20. General Provisions.

A. Modification. No alteration, modification, or termination of this Agreement shall be valid unless made in writing and executed by all Parties.

B. Waiver. The waiver by any Party of a breach of any provision hereof shall be in writing and shall not operate or be construed as a waiver of any other or subsequent breach hereof unless specifically stated in writing.

C. Assignment. No Party shall assign, transfer, or otherwise dispose of this Agreement in whole or in part to any individual, firm, or corporation without the prior written consent of the other Party. Subject to the forgoing provisions, this Agreement shall be binding upon, and inure to the benefit of, the respective successors and assigns of the Parties.

D. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state of California.

E. Venue. Venue for all legal proceedings shall be in the Superior Court of California for the County of El Dorado.

F. Partial Invalidity. If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any way.

G. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall constitute an original and all of which shall be deemed a single agreement.

H. Severability. If any term, covenant, or condition of this Agreement is held by a court of competent jurisdiction to be invalid, the remainder of this Agreement shall remain in effect.

I. Audit. District shall have access at all reasonable times to all reports, contract records, contract documents, contract files, and personnel necessary to audit and verify Consultant's charges to District under this Agreement.

J. Entire Agreement. This Agreement sets forth the entire understanding between the Parties as to the subject matter of this Agreement and merges all prior discussions, negotiations, proposal letters or other promises, whether oral or in writing.

K. Headings Not Controlling. Headings used in this Agreement are for reference purposes only and shall not be considered in construing this Agreement.

L. Time is of the Essence. Time is of the essence in this Agreement for each covenant and term of a condition herein.

M. Drafting and Ambiguities. Any rule of construction that ambiguities are to be resolved against the drafting party does not apply in interpreting this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the last day and date below written.

DISTRICT:

GEORGETOWN DIVIDE PUBLIC UTILITIES DISTRICT, a California Public Utilities District

By: _____
Steven V. Palmer, General Manager

Date: _____

Approved as to Form:

_____
Barbara A. Brenner, General Counsel

CONSULTANT:

By: _____

Name: _____

Date: _____

EXHIBIT A

Services

EXHIBIT B

Rates

ATTACHMENT B

CAPITAL REPLACEMENT PROGRAM

Capital Replacement Program **Exhibit 1T**

Georgetown Divide PUD TW

Date: 10/20/17

System Number: 910013

Service Connections: 3774

Qty	Component	Year Acquired	Unit Cost (Historic, Current or Future)	Cost Type (H, C, F)	Estimated Historic Cost	Normal Estimated Life	Current Age	Estimated Current Cost	Planned Remaining Life	Estimated Remaining Life	Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
	Existing Capital Replacement Program															
	SOURCE OF SUPPLY PLANT #5100														$0	
1	Mark Edson Dam & Stumpy Meadows Res.	1962	$106,333	H	$106,333	100	55	$315,993	45	50	$850,524	10%	50%	40%	$12,389	$1,072
1	Tunnel Hill Tunnel	1962	$22,577	H	$22,577	100	55	$67,092	45	46	$166,831	25%	20%	55%	$6,076	$586
1	Kaiser Siphon Replacement (1)	1964	$83,961	C	$28,778	100	53	$83,961	47	46	$208,778	25%	20%	55%	$7,603	$734
1	Sand Trap Siphon (1)	1964	$34,125	C	$11,696	100	53	$34,125	47	48	$88,284	50%		50%	$6,430	$587
1	Up Country Ditch Imp (Pilot Ck Diversion to Tunnell Hill Inlet) (1)	1964	$424,830	C	$145,612	100	53	$424,830	47	56	$1,287,731	10%	50%	40%	$18,758	$1,392
															$0	
															$0	
	5200 SHARED														$0	
1	Cabin Waste Gate Replacement (1)	1972	$6,300	C	$2,538	40	45	$6,300	-5	20	$9,361	100%		0%	$1,364	$357
1	Bacon Creek Pipe (1)	1964	$53,576	C	$18,363	40	53	$53,576	-13	20	$79,611	50%		50%	$5,798	$1,518
1	Buckeye Conduit (1)	1964	$94,461	C	$32,377	40	53	$94,461	-13	20	$140,364	25%		75%	$5,112	$1,338
1	Up Country Ditch (Penn Stock Bypass to Shroeder Conduit) (1)	1964	$156,056	C	$53,489	40	53	$156,056	-13	5	$172,299	25%		75%	$6,275	$7,189
1	Main Ditch #1 Imp (1)	1964	$433,821	C	$148,694	40	53	$433,821	-13	5	$478,973	10%	50%	40%	$6,977	$7,994
1	Main Ditch #2 to ALT (1)	1964	$101,194	C	$34,685	40	53	$101,194	-13	5	$111,726	25%		75%	$4,069	$4,662
															$0	
															$0	
	5200 IRRIGATION ONLY (1)														$0	
1	Main Ditch #2 below ALT	1964	$0	C	$0	40	53	$0	-13	10		25%		75%	$0	
1	Pilot Hill Ditch (Main)	1964	$0	C	$0	40	53	$0	-13	10		50%		50%	$0	
1	Pilot Hill Ditch	1964	$0	C	$0	40	53	$0	-13	10		25%		75%	$0	
1	Kelsey Ditch #1	1964	$0	C	$0	40	53	$0	-13	10		25%		75%	$0	
1	Kelsey Ditch #2 Imp	1964	$0	C	$0	40	53	$0	-13	10		25%		75%	$0	
1	Spanish Dry Diggins Ditch	1964	$0	C	$0	40	53	$0	-13	10		100%		0%	$0	
1	Taylor Mine Ditch	1964	$0	C	$0	40	53	$0	-13	10		100%		0%	$0	
															$0	
															$0	
	5300 - Lake Walton WTP														$0	
1	Lake Walton Plant Replacement (4)	1992	$12,728,909	C	$7,681,448	50	25	$12,728,909	25	25	$20,883,124	25%		75%	$760,506	$154,431
1	Raw Water Bypass (1)	1974	$500,000	C	$209,745	40	43	$500,000	-3	19	$728,406	25%		75%	$26,527	$7,354
1	Lake Walton Outlet Works (1)	1974	$50,000	C	$20,974	40	43	$50,000	-3	19	$72,841	100%		0%	$10,611	$2,942
1	Lake Walton Dredging (1)	1974	$500,000	C	$301,732	40	25	$500,000	15	22	$772,990	25%		75%	$28,150	$6,617
							43		-43						$0	
	5300 - AUBURN LAKE TRAILS PLANT														$0	
1	ALT Water Treatment Plant (4)	2018	$12,728,909	C	$12,988,683	50	-1	$12,728,909	51	59	$40,945,042	25%		75%	$1,491,105	$102,887
															$0	
															$0	
	5400 T & D METERS & METER BOXES														$0	
1	Automated Meter Reading and Meter Replacement Project (5)	2018	$1,745,800	C	$1,781,429	20	-1	$1,745,800	21	2	$1,816,330	25%		75%	$66,146	$192,839
															$0	
	T & D TREATED WATER #5400 (2)														$0	
1	Angel Camp Tank (0.5 MG)	1974	$776,602	C	$325,777	40	43	$776,602	-3	10	$946,674	25%		75%	$34,475	$19,174
1	Deer Ravine Tank (0.25 MG)	1974	$388,301	C	$162,888	40	43	$388,301	-3	10	$473,337	50%		50%	$34,475	$19,174
1	Pilot Hill Tank (0.47 MG)	1974	$730,006	C	$306,230	40	43	$730,006	-3	10	$889,873	25%		75%	$32,407	$18,023
1	Black Ridge Road Tank (0.06 MG)	1974	$93,192	C	$39,093	40	43	$93,192	-3	10	$113,601	75%		25%	$12,411	$6,903
1	Hotchkiss Hill Tank (0.06 MG)	1974	$93,192	C	$39,093	40	43	$93,192	-3	10	$113,601	75%		25%	$12,411	$6,903
1	Spanish Dry Diggins Tank (0.2 MG)	1971	$310,641	C	$122,647	40	46	$310,641	-6	10	$378,670	50%		50%	$27,580	$15,339

1	Black Oak Mine Tank (0.3 MG)	1974	$465,961	C	$195,466	40	43	$465,961	-3	10	$568,004	25%		75%	$20,685	$11,504
1	Garden Park Tank (0.2 MG)	1974	$310,641	C	$130,311	40	43	$310,641	-3	10	$378,670	50%		50%	$27,580	$15,339
1	Kelsey Tank (0.21 MG)	1974	$332,386	C	$139,432	40	43	$332,386	-3	10	$405,177	50%		50%	$29,511	$16,413
1	Hotchkiss Hill Subtank (0.06 MG)	1974	$93,192	C	$39,093	40	43	$93,192	-3	10	$113,601	75%		25%	$12,411	$6,903
1	Black Ridge Road Pump Station	1974	$123,400	C	$51,765	40	43	$123,400	-3	5	$136,244	75%		25%	$14,885	$17,055
1	Chipmunk Trail Pump Station	1974	$123,400	C	$51,765	40	43	$123,400	-3	5	$136,244	75%		25%	$14,885	$17,055
1	Reservoir Road Pump Station	1974	$123,400	C	$51,765	40	43	$123,400	-3	5	$136,244	75%		25%	$14,885	$17,055
1	4-Inch Pipelines (42,130 AC, 50,771 PVC lf)	1974	$3,437,337	C	$1,441,927	60	43	$3,437,337	17	15	$4,626,203	25%		75%	$168,474	$60,618
1	6-Inch Pipelines (175,142 AC, 3,981 DI, 235,640 PVC lf)	1974	$19,908,624	C	$8,351,462	60	43	$19,908,624	17	15	$26,794,387	25%		75%	$975,778	$351,090
1	8-Inch Pipelines (42,068 AC, 85,394 PVC lf)	1974	$7,392,796	C	$3,101,201	60	43	$7,392,796	17	15	$9,949,730	25%		75%	$362,342	$130,373
1	10-Inch Pipelines (36,484 AC, 10,359 PVC lf)	1974	$2,951,109	C	$1,237,960	60	43	$2,951,109	17	15	$3,971,804	25%		75%	$144,642	$52,043
1	12-Inch Pipelines (42,346 AC lf)	1974	$3,388,480	C	$1,421,432	60	43	$3,388,480	17	15	$4,560,448	25%		75%	$166,079	$59,756
															$0	
															$0	
															$0	
															$0	
															$0	
	TRANSPORTATION EQUIPMENT (3)														$0	
1	Mobile Radios	1971	$4,056	H	$4,056	5	46	$10,085	-41	5	$11,134	100%		0%	$1,622	$1,858
1	Truck	2017	$38,250	C	$38,250	15	0	$38,250	15	15	$51,479	100%		0%	$7,499	$2,698
1	Excavator	2017	$55,250	C	$55,250	15	0	$55,250	15	15	$74,359	100%		0%	$10,832	$3,897
1	Trailer for excavator	2017	$10,625	C	$10,625	20	0	$10,625	20	20	$15,788	100%		0%	$2,300	$602
1	Trailer & Hookups	1991	$9,469	H	$9,469	5	26	$15,846	-21	10	$19,316	100%		0%	$2,814	$1,565
1	1998 Ford Pickup Truck	1998	$10,340	H	$10,340	5	19	$15,064	-14	10	$18,363	100%		0%	$2,675	$1,488
1	1999 Ford F150 Pickup	1999	$10,304	H	$10,304	5	18	$14,717	-13	10	$17,940	100%		0%	$2,613	$1,453
1	2002 Ford F-150 4x4	2001	$11,448	H	$11,448	5	16	$15,715	-11	10	$19,157	100%		0%	$2,791	$1,552
1	Chevy Truck - 1500	2003	$11,298	H	$11,298	5	14	$14,908	-9	10	$18,173	100%		0%	$2,647	$1,472
1	2004 Chevy 1500 Pickup	2004	$11,265	H	$11,265	5	13	$14,573	-8	10	$17,764	100%		0%	$2,588	$1,439
1	2004 Chevy 4 WD Pickup	2004	$18,421	H	$18,421	5	13	$23,829	-8	10	$29,047	100%		0%	$4,231	$2,353
1	2005 Chevy ID#1GBHK24U95E333348	2005	$17,911	H	$17,911	5	12	$22,715	-7	10	$27,690	100%		0%	$4,034	$2,243
1	2006 Chevy Colorado	2006	$12,068	H	$12,068	5	11	$15,005	-6	10	$18,291	100%		0%	$2,664	$1,482
1	2007 Chevy CK2500 Regular Cab	2007	$18,097	H	$18,097	5	10	$22,061	-5	10	$26,892	100%		0%	$3,917	$2,179
1	2008 Chevy 1500	2008	$14,480	H	$14,480	5	9	$17,305	-4	10	$21,095	100%		0%	$3,073	$1,709
1	Sundowner Trailer	2010	$4,588	H	$4,588	5	7	$5,270	-2	10	$6,425	100%		0%	$936	$520
1	Re-manufactured Long block Unit #32	2013	$3,489	H	$3,489	20	4	$3,777	16	17	$5,288	100%		0%	$770	$242
1	2016 Ford F-150	2016	$14,158	H	$14,158	10	1	$14,441	9	10	$17,604	100%		0%	$2,564	$1,426
															$0	
	SHOP & FIELD EQUIPMENT (3)														$0	
1	Fully Depreciated	1965	$1,082	H	$1,082	10	52	$3,030	-42	5		100%		0%	$0	
1	Tool Set	2017	$5,550	C	$5,550	10	0	$5,550	10	10	$6,765	100%		0%	$985	$548
1	New Radio System	1989	$7,192	H	$7,192	10	28	$12,521	-18	5	$13,825	100%		0%	$2,014	$2,307
1	Steam Cleaner (Pressure Washer)	1989	$1,886	H	$1,886	10	28	$3,284	-18	5		100%		0%	$0	
1	Welder	1991	$1,515	H	$1,515	10	26	$2,535	-16	5		100%		0%	$0	
1	Backhoe	1991	$27,385	H	$27,385	20	26	$45,827	-6	5	$50,597	75%		25%	$5,528	$6,334
1	Dump Truck	1991	$26,610	H	$26,610	20	26	$44,530	-6	5	$49,164	75%		25%	$5,371	$6,154
1	Tilt-bed Trailer	1992	$4,775	H	$4,775	10	25	$7,833	-15	5	$8,648	100%		0%	$1,260	$1,443
1	Dozer	1996	$13,655	H	$13,655	5	21	$20,697	-16	5	$22,851	100%		0%	$3,329	$3,814
1	Mini Excavator	2000	$22,535	H	$22,535	20	17	$31,555	3	5	$34,839	100%		0%	$5,075	$5,815
1	IR Portable Air Compressor	2003	$7,308	H	$7,308	20	14	$9,643	6	7	$11,077	100%		0%	$1,614	$1,305
1	2008 Chevy Truck 3500 1 ton Dump Truck	2008	$26,551	H	$26,551	10	9	$31,731	1	5	$35,033	100%		0%	$5,103	$5,847
1	Clark Equip.-excavator	2010	$23,678	H	$23,678	20	7	$27,198	13	14	$35,887	100%		0%	$5,228	$2,028
1	Meters	2014	$6,687	H	$6,687	20	3	$7,096	17	18	$10,135	100%		0%	$1,476	$435
1	Ditch Witch FX30 Vac Trailer	2015	$30,886	H	$30,886	20	2	$32,134	18	19	$46,813	75%		25%	$5,114	$1,418
1	Rammer Small Compactor	2016	$4,105	H	$4,105	20	1	$4,187	19	20	$6,221	100%		0%	$906	$237
															$0	

	GENERAL PLANT (3)														$0	
1	Office Building	1976	$137,335	H	$137,335	40	41	$309,307	-1	15	$416,286	25%		75%	$15,160	$5,455
1	Chip, Seal Parking Lot	1985	$2,953	H	$2,953	10	32	$5,565	-22	1	$5,677	100%		0%	$827	$4,850
1	Yard Fence	1986	$3,088	H	$3,088	10	31	$5,704	-21	5	$6,298	100%		0%	$917	$1,051
1	Generator & Electrical	1986	$2,210	H	$2,210	20	31	$4,084	-11	5		100%		0%	$0	
1	Gas Heat/Air System	1987	$1,650	H	$1,650	20	30	$2,989	-10	5		100%		0%	$0	
1	Rheem Cooling & Heating Unit	1989	$1,751	H	$1,751	20	28	$3,048	-8	5		100%		0%	$0	
1	Metal Building	1990	$5,811	H	$5,811	20	27	$9,918	-7	5	$10,950	100%		0%	$1,595	$1,828
1	Office & Shop Privacy Fence	2004	$6,080	H	$6,080	10	13	$7,865	-3	5	$8,683	100%		0%	$1,265	$1,449
1	Hangtown Fence - Add'l Ground Fencing	2006	$4,895	H	$4,895	10	11	$6,086	-1	5	$6,720	100%		0%	$979	$1,122
1	Carpet Replacement	2007	$3,724	H	$3,724	7	10	$4,540	-3	5	$5,012	100%		0%	$730	$837
1	Partial Re-roof of Main Maintenance Building	2016	$3,088	H	$3,088	30	1	$3,149	29	30	$5,704	100%		0%	$831	$136
															$0	
	OFFICE EQUIPMENT (3)														$0	
1	Computer Network	2001	$3,254	H	$3,254	10	16	$4,468	-6	5		100%		0%	$0	
1	Canon Copier	2002	$4,795	H	$4,795	10	15	$6,454	-5	5	$7,125	100%		0%	$1,038	$1,189
1	Phone System (Equip&Software)	2002	$4,744	H	$4,744	3	15	$6,385	-12	5	$7,049	100%		0%	$1,027	$1,177
1	Dell Server &software	2005	$2,185	H	$2,185	3	12	$2,771	-9	5		100%		0%	$0	
1	5 DELL Computers	2007	$4,637	H	$4,637	5	10	$5,652	-5	5	$6,240	100%		0%	$909	$1,042
															$0	
	DISTRIBUTION (3)														$0	
38	Pressure Reducing Valves	1987	$2,455	H	$93,278	40	30	$168,960	10	10	$205,961	50%		50%	$15,001	$8,343
172	Air Relief Valves	1987	$709	H	$121,970	40	30	$220,932	10	10	$269,315	50%		50%	$19,615	$10,909
422	Isolation Valves	1987	$2,291	H	$966,816	40	30	$1,751,254	10	10	$2,134,769	25%		75%	$77,742	$43,237
247	Other Valves	1987	$2,018	H	$498,518	40	30	$902,997	10	10	$1,100,748	25%		75%	$40,086	$22,294
581	Firehydrants	1987	$3,273	H	$1,901,558	60	30	$3,444,410	30	35	$6,888,439	25%		75%	$250,858	$34,170
20	Pressure Reducing Valves	2017	$5,000	C	$100,000	40	0	$100,000	40	40	$220,804	50%		50%	$16,082	$1,856
															$0	
	Subtotal Existing Capital Assets				$45,159,718			$78,663,010			$135,559,165	26%	1%	73%	$5,118,046	$1,544,026

Capital Replacement Program **Exhibit 1I**

Georgetown Divide PUD IW

Date: 10/20/17

System Number: 910013

Service Connections: 408

Qty	Component	Year Acquired	Unit Cost (Historic, Current or Future)	Cost Type (H, C, F)	Estimated Historic Cost	Normal Estimated Life	Current Age	Estimated Current Cost	Planned Remaining Life	Estimated Remaining Life	Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
	Existing Capital Replacement Program															
	SOURCE OF SUPPLY PLANT #5100														$0	
1	Mark Edson Dam & Stumpy Meadows Res.	1962	$400,015	H	$400,015	100	55	$1,188,737	45	50	$3,199,589	10%	50%	40%	$14,980	$4,664
1	Tunnel Hill Tunnel	1962	$84,931	H	$84,931	100	55	$252,393	45	46	$627,604	25%	20%	55%	$7,346	$2,543
1	Kaiser Siphon Replacement (1)	1964	$315,852	C	$108,259	100	53	$315,852	47	46	$785,402	25%	20%	55%	$9,193	$3,183
1	Sand Trap Siphon (1)	1964	$128,375	C	$44,001	100	53	$128,375	47	48	$332,115	50%		50%	$7,775	$2,550
1	Up Country Ditch Imp (Pilot Ck Diversion to Tunnell Hill Inlet) (1)	1964	$1,598,171	C	$547,779	100	53	$1,598,171	47	56	$4,844,320	10%	50%	40%	$22,681	$6,090
															$0	
															$0	
	5200 SHARED														$0	
1	Cabin Waste Gate Replacement (1)	1972	$23,700	C	$9,548	40	45	$23,700	-5	20	$35,217	100%		0%	$1,649	$1,517
1	Bacon Creek Pipe (1)	1964	$201,549	C	$69,082	40	53	$201,549	-13	20	$299,491	50%		50%	$7,011	$6,450
1	Buckeye Conduit (1)	1964	$355,352	C	$121,798	40	53	$355,352	-13	20	$528,035	25%		75%	$6,180	$5,686
1	Up Country Ditch (Penn Stock Bypass to Shroeder Conduit) (1)	1964	$587,070	C	$201,220	40	53	$587,070	-13	5	$648,172	25%		75%	$7,587	$30,250
1	Main Ditch #1 Imp (1)	1964	$1,631,992	C	$559,371	40	53	$1,631,992	-13	5	$1,801,851	10%	50%	40%	$8,436	$33,636
1	Main Ditch #2 to ALT (1)	1964	$380,682	C	$130,480	40	53	$380,682	-13	5	$420,304	25%		75%	$4,920	$19,615
															$0	
															$0	
	5200 IRRIGATION ONLY (1)														$0	
1	Main Ditch #2 below ALT	1964	$663,376	C	$227,375	40	53	$663,376	-13	10	$808,652	25%		75%	$9,465	$18,377
1	Pilot Hill Ditch (Main)	1964	$429,126	C	$147,084	40	53	$429,126	-13	10	$523,102	50%		50%	$12,246	$23,775
1	Pilot Hill Ditch	1964	$1,070,876	C	$367,047	40	53	$1,070,876	-13	10	$1,305,392	25%		75%	$15,279	$29,665
1	Kelsey Ditch #1	1964	$571,625	C	$195,927	40	53	$571,625	-13	10	$696,808	25%		75%	$8,156	$15,835
1	Kelsey Ditch #2 Imp	1964	$1,112,565	C	$381,336	40	53	$1,112,565	-13	10	$1,356,211	25%		75%	$15,874	$30,820
1	Spanish Dry Diggins Ditch	1964	$37,375	C	$12,810	40	53	$37,375	-13	10	$45,560	100%		0%	$2,133	$4,141
1	Taylor Mine Ditch	1964	$36,563	C	$12,532	40	53	$36,563	-13	10	$44,570	100%		0%	$2,087	$4,051
															$0	
															$0	
	5300 - Lake Walton WTP														$0	
0	Lake Walton Plant Replacement (4)	1992	$0	C	$0	50	25	$0	25	25		25%		75%	$0	
0	Raw Water Bypass (1)	1974	$0	C	$0	40	43	$0	-3	19		25%		75%	$0	
0	Lake Walton Outlet Works (1)	1974	$0	C	$0	40	43	$0	-3	19		100%		0%	$0	
0	Lake Walton Dredging (1)	1974	$0	C	$0	40	25	$0	15	22		25%		75%	$0	
							43		-43						$0	
	5300 - AUBURN LAKE TRAILS PLANT														$0	
0	ALT Water Treatment Plant (4)	2018	$0	C	$0	50	-1	$0	51	59		25%		75%	$0	
															$0	
															$0	
	5400 T & D METERS & METER BOXES														$0	
0	Automated Meter Reading and Meter Replacement Project (5)	2018	$0	C	$0	20	-1	$0	21	2		25%		75%	$0	
															$0	
	T & D TREATED WATER #5400 (2)														$0	
0	Angel Camp Tank (0.5 MG)	1974	$0	C	$0	40	43	$0	-3	10		25%		75%	$0	
0	Deer Ravine Tank (0.25 MG)	1974	$0	C	$0	40	43	$0	-3	10		50%		50%	$0	
0	Pilot Hill Tank (0.47 MG)	1974	$0	C	$0	40	43	$0	-3	10		25%		75%	$0	
0	Black Ridge Road Tank (0.06 MG)	1974	$0	C	$0	40	43	$0	-3	10		75%		25%	$0	
0	Hotchkiss Hill Tank (0.06 MG)	1974	$0	C	$0	40	43	$0	-3	10		75%		25%	$0	

0	Spanish Dry Diggins Tank (0.2 MG)	1971	$0	C	$0	40	46	$0	-6	10		50%		50%	$0	
0	Black Oak Mine Tank (0.3 MG)	1974	$0	C	$0	40	43	$0	-3	10		25%		75%	$0	
0	Garden Park Tank (0.2 MG)	1974	$0	C	$0	40	43	$0	-3	10		50%		50%	$0	
0	Kelsey Tank (0.21 MG)	1974	$0	C	$0	40	43	$0	-3	10		50%		50%	$0	
0	Hotchkiss Hill Subtank (0.06 MG)	1974	$0	C	$0	40	43	$0	-3	10		75%		25%	$0	
0	Black Ridge Road Pump Station	1974	$0	C	$0	40	43	$0	-3	5		75%		25%	$0	
0	Chipmunk Trail Pump Station	1974	$0	C	$0	40	43	$0	-3	5		75%		25%	$0	
0	Reservoir Road Pump Station	1974	$0	C	$0	40	43	$0	-3	5		75%		25%	$0	
0	4-Inch Pipelines (42,130 AC, 50,771 PVC lf)	1974	$0	C	$0	60	43	$0	17	15		10%		90%	$0	
0	6-Inch Pipelines (175,142 AC, 3,981 DI, 235,640 PVC lf)	1974	$0	C	$0	60	43	$0	17	15		10%		90%	$0	
0	8-Inch Pipelines (42,068 AC, 85,394 PVC lf)	1974	$0	C	$0	60	43	$0	17	15		10%		90%	$0	
0	10-Inch Pipelines (36,484 AC, 10,359 PVC lf)	1974	$0	C	$0	60	43	$0	17	15		10%		90%	$0	
0	12-Inch Pipelines (42,346 AC lf)	1974	$0	C	$0	60	43	$0	17	15		10%		90%	$0	
															$0	
0	Highway 193/Sliger Mine Main Relocation (2)	1974	$0	C	$0	60	43	$0	17	5		50%		50%	$0	
0	Tank Telemetry Enhancements (2)	2020	$0	C	$0	15	-3	$0	18	5		100%		0%	$0	
															$0	
															$0	
	TRANSPORTATION EQUIPMENT (3)														$0	
1	Mobile Radios	1971	$668	H	$668	5	46	$1,661	-41	5		100%		0%	$0	
1	Truck	2017	$6,300	C	$6,300	15	0	$6,300	15	15	$8,479	100%		0%	$397	$500
1	Excavator	2017	$9,100	C	$9,100	15	0	$9,100	15	15	$12,247	100%		0%	$573	$723
1	Trailer for excavator	2017	$1,750	C	$1,750	20	0	$1,750	20	20		100%		0%	$0	
1	Trailer & Hookups	1991	$1,560	H	$1,560	15	26	$2,610	-11	10		100%		0%	$0	
1	1998 Ford Pickup Truck	1998	$1,703	H	$1,703	15	19	$2,481	-4	10		100%		0%	$0	
1	1999 Ford F150 Pickup	1999	$1,697	H	$1,697	15	18	$2,424	-3	10		100%		0%	$0	
1	2002 Ford F-150 4x4	2001	$1,886	H	$1,886	15	16	$2,588	-1	10		100%		0%	$0	
1	Chevy Truck - 1500	2003	$1,861	H	$1,861	15	14	$2,455	1	10		100%		0%	$0	
1	2004 Chevy 1500 Pickup	2004	$1,855	H	$1,855	15	13	$2,400	2	10		100%		0%	$0	
1	2004 Chevy 4 WD Pickup	2004	$3,034	H	$3,034	15	13	$3,925	2	10		100%		0%	$0	
1	2005 Chevy ID#1GBHK24U95E333348	2005	$2,950	H	$2,950	15	12	$3,741	3	10		100%		0%	$0	
1	2006 Chevy Colorado	2006	$1,988	H	$1,988	15	11	$2,471	4	10		100%		0%	$0	
1	2007 Chevy CK2500 Regular Cab	2007	$2,981	H	$2,981	15	10	$3,633	5	10		100%		0%	$0	
1	2008 Chevy 1500	2008	$2,385	H	$2,385	15	9	$2,850	6	10		100%		0%	$0	
1	Sundowner Trailer	2010	$756	H	$756	15	7	$868	8	10		100%		0%	$0	
1	Re-manufactured Long block Unit #32	2013	$575	H	$575	20	4	$622	16	17		100%		0%	$0	
1	2016 Ford F-150	2016	$2,332	H	$2,332	15	1	$2,379	14	10		100%		0%	$0	
															$0	
	SHOP & FIELD EQUIPMENT (3)														$0	
			~~$178~~							~~5~~		~~100%~~		0%	$0	
1	Tool Set	2017	$914	C	$914	10	0	$914	10	10		100%		0%	$0	
1	New Radio System	1989	$1,185	H	$1,185	10	28	$2,062	-18	5		100%		0%	$0	
1	Steam Cleaner (Pressure Washer)	1989	$311	H	$311	10	28	$541	-18	5		100%		0%	$0	
1	Welder	1991	$249	H	$249	10	26	$418	-16	5		100%		0%	$0	
1	Backhoe	1991	$4,511	H	$4,511	20	26	$7,548	-6	5	$8,334	75%		25%	$293	$1,167
1	Dump Truck	1991	$4,383	H	$4,383	20	26	$7,334	-6	5	$8,098	75%		25%	$284	$1,134
1	Tilt-bed Trailer	1992	$786	H	$786	15	25	$1,290	-10	5		100%		0%	$0	
1	Dozer	1996	$2,249	H	$2,249	20	21	$3,409	-1	5		100%		0%	$0	
1	Mini Excavator	2000	$3,712	H	$3,712	20	17	$5,197	3	5	$5,738	100%		0%	$269	$1,071
1	IR Portable Air Compressor	2003	$1,204	H	$1,204	20	14	$1,588	6	7		100%		0%	$0	
1	2008 Chevy Truck 3500 1 ton Dump Truck	2008	$4,373	H	$4,373	15	9	$5,226	6	5	$5,770	100%		0%	$270	$1,077
1	Clark Equip.-excavator	2010	$3,900	H	$3,900	20	7	$4,480	13	14	$5,911	100%		0%	$277	$376
1	Meters	2014	$1,101	H	$1,101	20	3	$1,169	17	18		100%		0%	$0	
1	Ditch Witch FX30 Vac Trailer	2015	$5,087	H	$5,087	20	2	$5,293	18	19	$7,710	75%		25%	$271	$264
1	Rammer Small Compactor	2016	$676	H	$676	20	1	$690	19	20		100%		0%	$0	

															$0	
	GENERAL PLANT (3)														$0	
1	Office Building	1976	$22,620	H	$22,620	40	41	$50,945	-1	15	$68,565	25%		75%	$803	$1,011
1	Chip, Seal Parking Lot	1985	$486	H	$486	10	32	$917	-22	1		100%		0%	$0	
1	Yard Fence	1986	$509	H	$509	10	31	$940	-21	5		100%		0%	$0	
1	Generator & Electrical	1986	$364	H	$364	20	31	$673	-11	5		100%		0%	$0	
1	Gas Heat/Air System	1987	$272	H	$272	20	30	$492	-10	5		100%		0%	$0	
1	Rheem Cooling & Heating Unit	1989	$288	H	$288	20	28	$502	-8	5		100%		0%	$0	
1	Metal Building	1990	$957	H	$957	20	27	$1,634	-7	5		100%		0%	$0	
1	Office & Shop Privacy Fence	2004	$1,001	H	$1,001	10	13	$1,295	-3	5		100%		0%	$0	
1	Hangtown Fence - Add'l Ground Fencing	2006	$806	H	$806	10	11	$1,002	-1	5		100%		0%	$0	
1	Carpet Replacement	2007	$613	H	$613	7	10	$748	-3	5		100%		0%	$0	
1	Partial Re-roof of Main Maintenance Building	2016	$509	H	$509	30	1	$519	29	30		100%		0%	$0	
															$0	
	OFFICE EQUIPMENT (3)														$0	
0	Computer Network	2001	$536	H	$0	10	16	$0	-6	5		100%		0%	$0	
1	Canon Copier	2002	$790	H	$790	10	15	$1,063	-5	5		100%		0%	$0	
1	Phone System (Equip&Software)	2002	$781	H	$781	3	15	$1,052	-12	5		100%		0%	$0	
			$360							5		100%		0%	$0	
1	5 DELL Computers	2007	$764	H	$764	5	10	$931	-5	5		100%		0%	$0	
															$0	
															$0	
	Existing Capital Replacement Program				$3,731,376			$10,749,508			$18,433,245				$166,432	$250,172

ATTACHMENT 4

Bennett Engineering Proposal

PROPOSAL

GDPUD

BEN|EN
TRUSTED ENGINEERING ADVISORS

Proposal for the
Georgetown Divide
Public Utility District

Engineering Evaluation of the Capital Replacement Program

APRIL 8, 2019

TABLE OF CONTENTS

> We were very pleased with how things went with Bennett Engineering. They were very responsive and thorough.
>
> **Paul Dietrich**
> **Project Manager**
> **Citrus Heights Water District**

TABLE OF CONTENTS

April 8, 2019

BEN|EN
TRUSTED ENGINEERING ADVISORS

Bennett Engineering Services
1082 Sunrise Avenue, Suite 100
Roseville, California 95661

T 916.783.4100
F 916.783.4110

www.ben-en.com

Steven Palmer, General Manager
Georgetown Divide Public Utility District
6425 Main Street
PO Box 4240
Georgetown, CA 95634

Re: Engineering Evaluation of the Capital Replacement Program

Dear Steven and Members of the Selection Committee:

The Georgetown Divide Public Utility District (GDPUD or District) previously commissioned Rural Community Assistance Corp (RCAC) to provide the District with a rate study. As a result of this study, a rate increase was proposed and passed. Opposition to this rate increase was voiced during a City Council meeting held in January 2019, questioning the validity of the information provided to RCAC in arriving at the recommended rates. We understand that GDPUD requires professional engineering evaluation of the District's Capital Replacement Program as part of a forensic audit, justifying the District's proposed rate increase.

With the Bennett Engineering Services (**BEN**|EN) team, the City will gain an experienced consulting team with the depth of experience to successfully complete the work outlined within your RFP. As City Engineers, **BEN**|EN has assisted the Cities of Biggs, Gridley, Oroville, and Williams in creating and maintaining CIP/CRP lists, evaluating rates, and budgeting required improvements.

We have assembled a team of highly skilled professionals to fulfill the requirements listed in your RFP. David Harden, PE will serve as project manager for this contract. Dave has more than nine years of project management and design experience with a variety of projects including pipelines, pumping stations, and other water and wastewater projects including GDPUD's own 2018 Treated Water Line and Canal Reliability and Auburn Lake Trails On-Site Wastewater Disposal Evaluation Project. Dave has a comprehensive knowledge of GDPUD standards and procedures.

Dave is supported by a highly qualified staff of in-house professional engineers with areas of expertise in water and wastewater projects. Our team also includes Stephen Wahlstrom of Wahlstrom & Associates to provide a financial analysis of annual investments needed to replace GDPUD infrastructure. Stephen is a seasoned professional with more than three decades of experience with economic and fiscal impact reporting.

As President of **BEN**|EN, I have authority to bind the firm/team. Dave will be your first point of contact and can be reached at (916) 771-6144 or dharden@ben-en.com. He is available at any time to provide additional information or answer questions you may have. We look forward to providing these services to the District under this contract.

This proposal shall remain firm for 90 days from the submittal date of April 8, 2019. A copy of our corporate resolution naming Leo Rubio as an authorized signer for the firm is included at the end of this proposal. All work will be provided from our offices located at 1082 Sunrise Avenue, Suite 100 in Roseville, CA.

Upon selection, **BEN**|EN will provide proof of insurance and indemnification as required.

Thank you for your consideration.

Sincerely,
Bennett Engineering Services, Inc.

Leo Rubio, PE
President

PROJECT TEAM

PROJECT ORGANIZATION

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

PROJECT MANAGER
David Harden, PE
BEN|EN

QUALITY CONTROL
Michael Massaro, PE
BEN|EN

CIVIL ENGINEERING SENIOR ADVISORS
Orin Bennett, PE
Steve Ainsworth

PROJECT ENGINEERS
Stacey Lynch, PE
Gabriel Rodell, PE
Kaitlyn Sethares, EIT

BEN|EN

FINANCIAL ANALYSIS
Stephen Wahlstrom
WAHLSTROM & ASSOCIATES

> "I find the quality of Bennett Engineering's work to be very good, very comprehensive. They work well with me. We collaborate on a lot of ideas, and they are able to get those ideas on paper accurately, so it's great.
>
> Ken Powers
> Associate Engineer
> Placer County Water Agency (PCWA)

Bennett Engineering Services

Project Management | Civil Engineering Design

Providing high quality civil engineering services to cities, counties, special districts, universities, private companies, and other professionals has always been the firm's focus. **BEN**|EN takes pride in finding innovative and cost-effective engineering solutions to water, wastewater, drainage, site improvement, transportation, and other important infrastructure projects.

BEN|EN is comprised of 14 highly experienced, licensed engineers, eight engineering support staff, and six administrative support staff. We believe offering dedicated staff and assuring a cohesive team from project inception to completion maximizes client confidence.

Full Resumes for all staff are included in the appendix.

Gold Run Pipeline, Phase IV – PCWA

Clover Valley Reservoir Desilting and Reservoir Supply Pipeline– PCWA

KEY STAFF

David Harden, PE Project Manager

David Harden, PE will serve as Project Manager and will be GDPUD's contact throughout the project. Dave has more than nine years of civil engineering experience in wastewater, water, and transportation projects. Dave's past wastewater projects have included a focus on effluent storage, conveyance, and land disposal. He also has experience with in-conduit hydro, micro-hydro, large-diameter water pipelines, and concrete tank projects. He is experienced in client support with public presentations, consultant management, plan review, construction management, and compliance with federal, state, and local policies. Dave was Project Manager for GDPUD's Auburn Lake Trails On-Site Wastewater Disposal Evaluation project and 2018 Treated Water Line and Canal Reliability project.

Michael Massaro, PE Quality Control

With more than 19 years of experience, Mike Massaro has managed design teams, subconsultants, budgets, and schedules. Mike's technical expertise and experience includes water, sewer, and recycled water facilities, including pump stations, interceptors, and pipelines. The pipelines have included vitrified clay pipe (VCP), reinforced concrete (RCP), polyethylene (HDPE), polyvinyl chloride (PVC), ductile iron pipe (DIP), and have ranged from 8- to 120-inches in diameter and as long as 38,000 feet. He also provides engineering services during construction, reviewing submittals and requests for information and resolving challenges in the field. Mike also has significant planning and design experience with open cut, horizontal directional drilling, tunneling, pipe jacking, and trenchless railroad and light rail crossings.

Orin Bennett, PE Senior Advisor

Orin Bennett, PE, has more than four decades of experience as Project Director, Project Manager, and Project Engineer on public and private projects with an emphasis on water resources. Orin's responsibilities have included conceptual analysis, planning, technical studies, design, and quality assurance/quality control. His range of technical capabilities includes water and wastewater pumping and pipeline systems, drainage systems studies, and design.

Steve Ainsworth Senior Advisor

Steve Ainsworth has more than four decades of experience in design and construction management of water reservoirs, pumping stations, in-conduit hydro, large-diameter water pipelines, computer control (SCADA) systems, water system modeling, and related engineering activities. Throughout his career, Steve has specialized in engineering for water systems. He has published and presented papers on pipeline size optimization to minimize cost and maximize energy.

Stacey Lynch, PE Project Engineer

Stacey Lynch has more than 15 years of experience in the civil engineering field. Her experience includes planning, design, management, and construction assistance for water resources projects. She provides in-depth knowledge of the funding and permitting for these types of projects including rate studies, rate increases (Prop 218 reg), funding applications and requirements (specifically SRF), and permitting negotiations and requirements with the Regional Water Quality Control Board (RWQCB).

Gabriel Rodell, PE Project Engineer

Gabriel Rodell has more than six years of experience in engineering consulting. Gabriel specializes in design and evaluation of drinking water systems, sewer collection networks, and wastewater treatment facilities. His experience includes design and analysis for the following: potable water systems, stormwater systems, wastewater collection systems, wastewater treatment plants, potable water tanks, and potable and raw water pump stations.

Kaitlyn Sethares, EIT Project Engineer

Kati recently graduated with honors from the University of Vermont with a Bachelor of Science in Civil Engineering and a minor in Mathematics. Kati is proficient in AutoCAD, MATLAB, Revit, MicroStation, COMSOL, and GIS. She is also proficient in conversational Spanish.

Stephen Wahlstrom Economic Advisor

Stephen has been a practicing economist working on a wide variety of land development and planning projects since 1983 and established Wahlstrom & Associates in 2007. He specializes in economic and fiscal impact analysis, economic development strategies or plans, and general and specific plan analysis.

Poplar Avenue/Park Drive Water Main Replacement – Citrus Heights Water District

> "A lot of firms will do plans the way they are used to, but Bennett Engineering said, "Tell us how you want the plans to look and we'll make them the way you want them." No one has ever asked us that! So the end product was something we were very familiar with. It looked like we did it in-house and our workers will not have any problem deciphering what the drawings mean or finding information in the future.
>
> Paul Dietrich
> Project Manager
> Citrus Heights Water District

UNDERSTANDING & INNOVATION

2018 Treated Water Line and Canal Reliability Project – Georgetown Divide Public Utility District

Project Understanding

BEN|EN understands the importance of developing and maintaining a Capital Replacement Program (CRP) for water infrastructure systems. As delivery systems age and maintenance costs rise, the need to replace critical components of the system is vital to maintain reliability in water delivery. An appropriately budgeted CRP will allow costs to be allocated through steady investment from rates, rather than deplete reserve funds when responding to emergencies.

In October 2017, the Rural Community Assistance Corporation (RCAC) created a CRP for the Georgetown Divide Public Utility District (GDPUD). The cost estimates for the CRP were calculated using data from a Water System Reliability Study dated 2002 by KASL, a Capital Facility Charge Study dated 2007 by Stantec, and GDPUD's standard depreciation schedule. Based on their analysis of this data, RCAC recommended a rate increase to cover the costs of required maintenance/ replacement of the water infrastructure system.

Opposition to the rate increase was voiced immediately, with several ratepayers questioning the validity of the information that was provided to RCAC to arrive at the recommended rates. In January 2019, the GDPUD Board passed a motion to temporarily freeze water rates at calendar year 2018 rates. The Board ordered that an evaluation be conducted by a third party to review the method of calculation used by RCAC for the rate increase and make recommendations. A forensic audit of the CRP list of projects would also be conducted during this review.

GDPUD is requesting assistance from well-qualified consultants to provide an independent engineering cost estimate, an estimate of the useful life of each piece of infrastructure, and determine the annual investment required to implement the CRP.

As City and District Engineer for several local communities, **BEN**|EN has ample experience developing, assessing, and maintaining capital improvement and replacement programs, as well as evaluating enterprise funds and rate schedules to budget for the future. As design and construction management consultants, we understand today's construction market for water infrastructure projects. This experience will allow **BEN**|EN to produce a cost-effective desktop evaluation of GDPUD's CRP and provide a recommendation for the annual investment required to implement it.

Auburn Lake Trail Wastewater Disposal Project– Georgetown Divide Public Utility District

WORK PLAN / SCOPE OF WORK

Downtown Waterline and Street Replacement Project – City of Lincoln

SCOPE OF WORK

TASK 1. PROJECT MANAGEMENT

Subtask 1.1. Project Administration

BEN|EN's Project Manager will submit monthly project status updates and invoicing, and will be responsible for contract management. **BEN**|EN will also manage the project schedule, subconsultant work, and integrate deliverables.

Subtask 1.2. Quality Control

BEN|EN's quality control program will be implemented and conducted by senior **BEN**|EN staff prior to submittal of the Draft Capital Replacement (CRP) Evaluation Report and the Final CRP Evaluation Report.

TASK 2. PROJECT INITIATION, RESEARCH, AND FIELD WORK

Subtask 2.1. Project Meetings

BEN|EN will attend a project kick-off meeting. The Project Manager will coordinate regular bi-weekly update meetings (assumes 12), either by phone or in person. **BEN**|EN will also coordinate a review meeting after the submittal of the draft report. To assist the General Manager, **BEN**|EN will attend a District Board meeting and provide a presentation of the results to the Board of Directors of the findings.

Subtask 2.2. Research

BEN|EN will visit the District office to obtain available records, data, as-built drawings, and information from District staff necessary to estimate the age, condition, and quantities of each item listed in the CRP.

Subtask 2.3. Field Work

For items in the CRP that the District does not have adequate records and data to allow for the desktop assessment, **BEN**|EN will coordinate with District staff to perform field visits and site reconnaissance to obtain available information that can be gathered by visual inspection. Up to three (3) days of field work will be performed requiring accompaniment by district staff.

TASK 3. EVALUATION OF CAPITAL REPLACEMENT PROGRAM

BEN|EN will evaluate each item on the District's CRP list and provide an estimated remaining useful life, cost to replace at the end of the useful life and the annual investment to replace each item.

Subtask 3.1. Remaining Useful Life Calculations

BEN|EN will evaluate the age of each item on the CRP and compare with industry standards to determine the useful life of that item. **BEN**|EN will gather input from District staff on item conditions that will be considered in projecting the useful life the District can expect to get out of each item.

Subtask 3.2. Cost Estimate

The cost evaluation will utilize projected cost strategic tools, such as Engineering News Record (ENR) cost indices and recent project bidding results for similar projects, as well as an assumed net present value to estimate the future cost of construction and materials.

For large capital replacement projects, the cost estimate will include industry standard percentages to estimate the cost of design, environmental services, contractor's profit, construction management services, contingency, and debt services.

For equipment, tools, and vehicle replacements, average cost found by means of internet searches will be utilized. References will be provided.

Subtask 3.3. Annual Investment Estimation

The financial analysis of replacing each infrastructure component will factor the costs of borrowing, the return on investment, anticipated inflation, and the District's current financial management practices of balancing new debt with pay as you go philosophy. The financial analysis of replacing the infrastructure improvements should be consistent with the District's current practices.

Subtask 3.4. Final Report

BEN|EN will prepare a report of our findings from the above tasks. The report will include the methods and assumptions used to prepare the estimates. The report will estimate the remaining useful life and the cost to replace each item and recommended annual investment required to implement the District's CRP.

ASSUMPTIONS:

- District Staff will be available during field work activities.

DELIVERABLES:

- Draft CRP Evaluation Report
- Final CRP Evaluation Report
- Presentation of Findings

PROJECT SCHEDULE

Cement Hill Pipeline Replacement Project – Suisun Solano Water Authority

Schedule	GDPUD Capital Replacement Program Evaluation		
Date Revised - April 8, 2019			
	Duration	Accumulated	
	Days	Duration	Date to be Completed
Notice to Proceed		0	Wednesday, May 22, 2019
Kick-off Meeting	7	7	Wednesday, May 29, 2019
Obtain Existing Information	14	21	Wednesday, June 12, 2019
Review Existing Information	7	28	Wednesday, June 19, 2019
Site Visits	14	42	Wednesday, July 3, 2019
Estimate Useful Life of CRP List Items	7	49	Wednesday, July 10, 2019
Develop Cost Estimates	14	63	Wednesday, July 24, 2019
Develop Invest Plan	14	77	Wednesday, August 7, 2019
Submit Draft CRP Evaluation Report	21	98	Wednesday, August 28, 2019
GDPUD Review of Draft Report	21	119	Wednesday, September 18, 2019
Submit Final CRP Evaluation Report	14	133	Wednesday, October 2, 2019
GDPUD Final Report Review	21	154	Wednesday, October 23, 2019
Report Findings to the Board of Directors	20	174	Tuesday, November 12, 2019

*** Duration is approximate and the schedule will be adjusted to reflect actual date comments are received**

SUBCONSULTANTS

WAHLSTROM & ASSOCIATES | ECONOMIC ANALYSIS

Wahlstrom and Associates was established in 2007 as a small, decentralized firm that provides cost effective consulting services with personalized attention given to each individual client and the client team.

Wahlstrom & Associates brings big ideas forward to more intensively use land, create jobs and revitalize communities. The firm delivers advisory services, plans, and research studies to guide ongoing economic development initiatives, and to ensure that proposed projects are economically feasible and implementable. The firm helps communities to guide land development plans and initiatives, determine project feasibility, attract and retain business enterprises, and measure the economic and fiscal impacts of proposed projects and plans.

The firm's Principal and affiliates have decades of experience with planning and implementing economic development initiatives for large cities, small towns, and regions throughout the Western United States.

KEY STAFF

Stephen Wahlstrom Principal

Stephen Wahlstrom has a land use economics and economic development consulting practice that dates back to the 1980s. His areas of expertise include the preparation of economic plans and strategies, real estate market studies, project feasibility analysis as well as economic and fiscal impact reports prepared for proposed renewable energy investments, airports and mixed-use land development projects.

During his 30-year career, Mr. Wahlstrom completed more than 150 consulting assignments for government agencies, economic development organizations, foundations, businesses, and private investors in California, and 15 other states, mostly in the western US.

Mr. Wahlstrom has led community meetings, strategic planning workshops, and has delivered many presentations to elected and appointed governmental officials and corporate boards. He served in the Gulf Coast recovery program sponsored by the International Economic Development Council (IEDC) and he is on the California Association for Local Economic Development (CALED's) annual conference steering committee. Mr. Wahlstrom also serves as a Board of Director for the Community Energy Service Corporation (CESC), a non-profit organization that provides energy efficient improvements to Bay Area low income households and commercial establishments.

WORK DONE BY OTHERS

The table below depicts the number of hours we anticipate **BEN**|EN staff, District staff, and others will need to perform on this project.

Tasks	*BEN|EN Team Hours*	*GDPUD Staff Hours*	*Description of Work Provided by GDPUD*
Task 1 - Project Management			
1.1 - Project Administration	**19**	**8**	Execute Contract, process monthly invoicing, and review monthly status reports
1.2 - Quality Control	**8**		
Total Task 1	**27**	**8**	
Task 2 - Project Initiation, Research, and Field Work			
2.1 - Project Meetings	**16**	**6**	Attend Kick- off meeting and review presentation for Board meeting
2.2 - Research	**62**	**12**	Provide BEN|EN with all available information related to the items on the CRP
2.3 - Field Work	**48**	**18**	Provide BEN|EN with an operator that has knowledge of the system during site visits in order to gather information not found in the desktop review of the provided information on the CRP items.
Total Task 2	**126**	**36**	
Task 3 - Evaluation of Capital Replacement Program			
3.1 - Remaining Useful Life Calculations	**16**	**6**	Respond to question and review cost estimates submitted in the report
3.2 - Cost Estimate	**68**	**6**	Respond to questions review economic investment strategy
3.3 - Annual Investment Estimation	**78**	**12**	Review the Draft Evaluation Report
3.4 - Final Report	**63**	**4**	Review the Final Evaluation Report
Total Task 3	**225**	**28**	
Project Total	**378**	**72**	

Engineering Support for a Rural City

6th Street Bridge

Client City of Biggs
Reference Mark Sorensen
(530) 868-0100
Mark@biggs-ca.gov
P.O. Box 307
Biggs, CA 95917
Location Biggs, CA
Completed Ongoing
Key Staff
Trin Campos, PE
Tony Ozanich, PE
Steven Ainsworth, PE
Stacey Lynch, PE
Jorge Renteria, PE
Carlton Allen, PE
David Harden, PE
Lizette Martinez, PE
Andrew Klinstiver, PLS
Services
Grant Applications
Staff Reports
Plan Checking
Infrastructure Planning and Design
Plans, Specifications, and Estimates
Utility Coordination
Bidding Support
Construction Assistance

BIGGS CITY ENGINEER

Since 2011, **BEN**|EN has provided services to the City of Biggs for all engineering-related needs. Assignments have included a sewer maintenance plan; land acquisition; water and sewer atlas; plan checking; funding acquisition (ATP and SRF); review and approval of final and parcel maps; lot-line adjustments; right-of-way and easement legal descriptions.

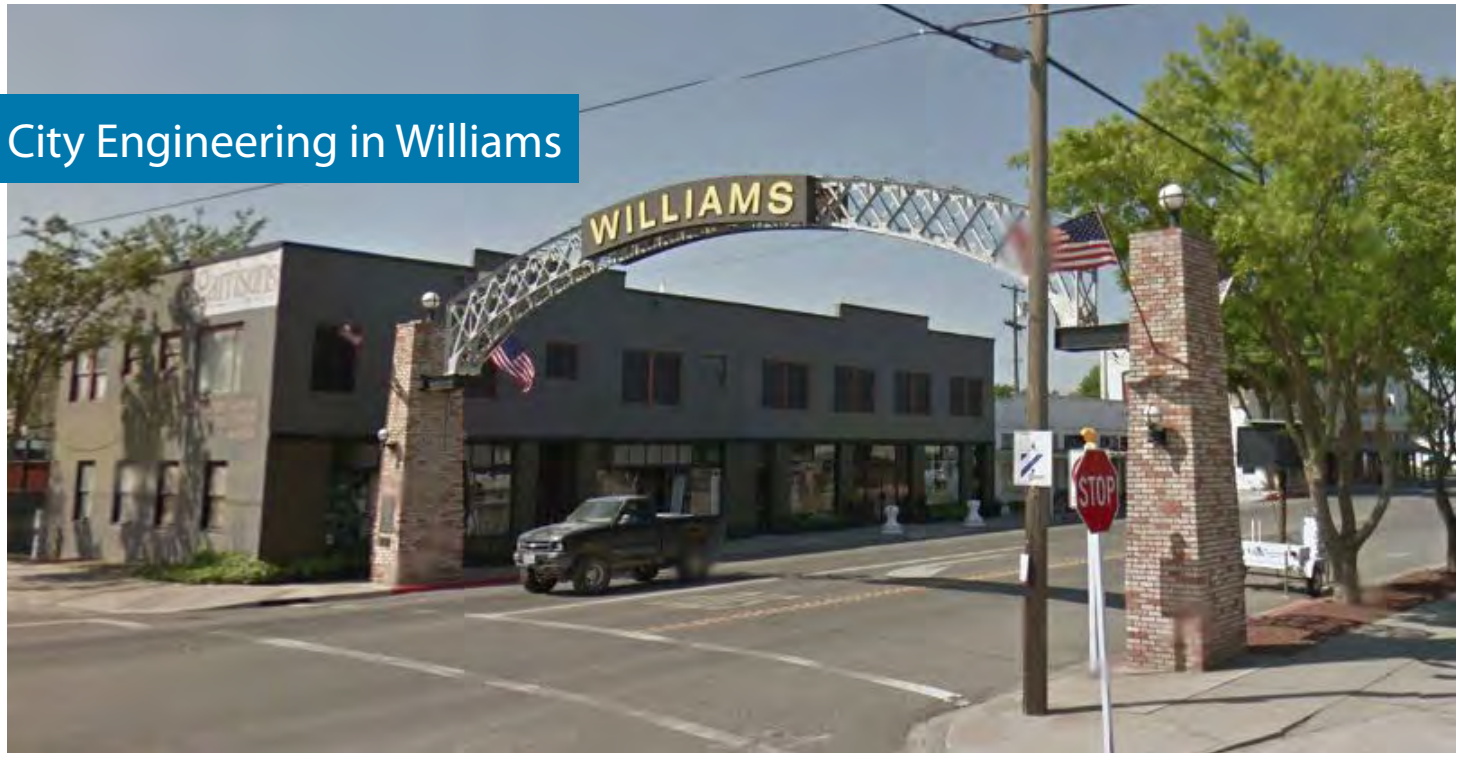
In 2014, **BEN**|EN performed a Water Rate Study for the City. Responsibilities included:

- **Coordination with the California Rural Water Association (CRWA).** CRWA was authorized by the State Water Resources Control Board to prepare a water rate study in anticipation of a loan/grant to the City to complete the installation of water meters within the City.
- **Preparation of a list of Capital Assets.** Prepared a list of existing water system assets including wells, standby power, pipelines, valves, meters, and related facilities.
- **Preparation of a list of Planned Funding Sources.**
- **Preparation of a TMF Tune-up Questionnaire.** A questionnaire of general information on the City's water system that includes 44 questions regarding the City's ability to provide proper technical, managerial, and financial capabilities for its water system.

Safe Routes to School Cycle 2

Wastewater Treatment Plant Improvements

City Engineering in Williams



Client City of Williams
Reference Frank Kennedy
City Public Works
Director/City Manager
735 7th Street
Williams, CA 95987
(530) 473-2955
fkennedy@cityofwilliams.org
Location Williams, CA
Key Staff
Trin Campos, PE
Jorge Renteria, PE
Lizette Martinez, PE
Tony Ozanich, PE
Chad Langdon, PE
Andy Klinstiver, PLS
Services
Plans, Specifications, and Estimates
Utility Coordination
Bidding Support
Construction Assistance

WILLIAMS CITY ENGINEER

As City Engineer, assignments include plan and map checking, development and management of a capital improvement program (CIP), technical evaluation of projects and programs, project management for design and construction of capital projects, oversight of consultant RFPs and construction services, initiation of all CIP projects and programs including definition of project scope, budget and locating financial resources; preparation, review and presentation of staff reports, city engineering documents and reports to ensure city compliance with all federal, state, county and local laws and regulations. A partial list of assignments is shown below:

Special City Assignments

- 2019 Street Pavement Repairs
- 2018 Street Pavement Repairs
- 2017 Street Pavement Repairs
- Venice Park Improvements
- Water Project Scoping
- Marguerite Street Business Park Specific Plan
- City Planning Services

Plan Checking

- BearNaked Produce
- Loves Travel Center
- Dollar General
- Canna-Hub
- Starbucks
- Holiday Inn Express
- O'Reilly's Store

Map Checking

- Singh Parcel Map
- Wright Parcel Map

Williams Water Treatment Plant

Canna-Hub – Conceptual Drawing

2017 Pavement Repair Project

Working as an Extension of City Staff

Client City of Gridley
Reference Paul Eckert
City Administrator
853 Laurel Street
Gridley, CA 95948
(530) 846-4675
eckert@gridley.ca.us
Location Gridley, CA
Key Staff
Trin Campos, PE
David Harden, PE
Gabriel Rodell, PE
Jorge Renteria, PE
Lizette Martinez, PE
Tony Ozanich, PE
Chelsea Gillis, PE
Andy Klinstiver, PLS
Features
Roadway Rehabilitation
Plan Review
ADA Plan
Pump Replacements
New Force Main
Funding Acquisition

GRIDLEY CITY ENGINEERING

Assignments include preparation of staff reports to City Council, Planning Commission and Public Works Committees; plan checking; funding acquisition; review and approval of Final and Parcel Maps; lot-line adjustments; right-of-way and easement legal descriptions; and assisting the department with infrastructure planning and design. In addition, with assistance of firm staff, improvement plans for various projects have been prepared, including a corp yard pump replacement, a new electrical building, planning and funding applications for a new force main, a waterline replacement, and a pump station.

BEN|EN is currently conducting a plan of study that is to be included with a planning grant application for the Feather River Force Main. Tasks to be completed will include:

- Feasibility Study for Force Main Replacement Options
- Monitoring Program Development
- Implementation for background data gathering.
- Emergency Storage Pond Assessment
- Feasibility for Emergency Storage Pond Improvements
- Preliminary Environmental Review and Document Preparation
- Cultural Review and Document
- Preliminary Design and Cost Estimates
- Define Plan of Study Deliverables and Schedule

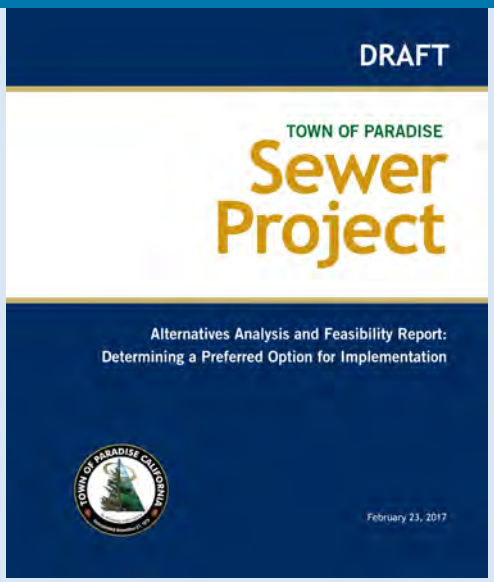
"Bennett Engineering was the unanimous selection due largely to their breadth of municipal experience service, very positive record, and strong track record of success obtaining funding from various State and Federal agencies. Bennett Engineering provides engineering services to several agencies in Butte County, including the City of Biggs. Bennett is highly regarded by area cities and the Butte County Association of Governments and by local Caltrans staff.

Paul Eckert, City Administrator
City of Gridley


ADA Ramp Plan Development

Plan Checking

Moving a Town from Septic to Sewer



Challenges & Solutions

After previous project failures because of stakeholders' concerns over cost, public acceptance is one of the largest challenges in converting the Town from septic to a sewer system. To address these concerns, the Town has scaled down the area to be included in the sewer district and the team has launched an intensive public outreach program with significant stakeholder engagement to address public questions and concerns.

Client Town of Paradise
Reference Marc Mattox
(530) 872-6291 ext. 125
mmattox@townofparadise.com
5555 Skyway
Paradise, CA 95969
Location Paradise, CA
Project Cost $325,000
Completed 2018
Key Staff
Orin Bennett, PE
Trin Campos, PE
Michael Massaro, PE
Stacey Lynch, PE
David Harden, PE
Gabriel Rodell, PE
Key Features
Alternatives Analysis
Feasibility Report
Special District Formation
Services
Funding Options Analysis
Feasibility Study
Public Outreach

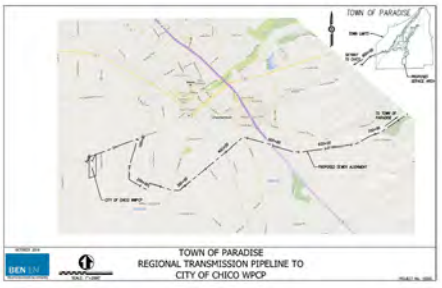
SEWER ALTERNATIVES ANALYSIS, FEASIBILITY REPORT, & SPECIAL DISTRICT FORMATION

After years of constrained business and population growth, this project intends to convert the Town's urban core from septic to a sewer system. The Town selected **BEN**|EN to provide alternatives analysis with conceptual designs, a feasibility report, and special district formation services.

BEN|EN analyzed five alternatives, including a wastewater treatment plant (WWTP) with stream/creek discharge, a WWTP with land application, WWTP with recycled water for beneficial reuse, such as at schools for field and landscaping irrigation, regional conveyance the City of Chico Wastewater Treatment Plant, or no project.

The terrain in Paradise poses potential issues for wastewater collection and pipeline construction. Located in the Sierra Foothills, Paradise has a mountainous terrain, with steep grades and a considerable amount of rock. Analysis and conceptual design for the sewer system alternatives were needed to address these geologic factors.

Deliverables included a feasibility report with alternatives analysis, final report for the preferred option with cost estimates for grant and loan funding options, and property assessment.



Locating Facilities in an Old System

Client South Placer Municipal Utility District
Reference Sam Rose, SPMUD, Superintendent
5807 Springview Drive
Rocklin, CA 95677
(916) 786-8555 ext. 210
srose@spmud.ca.gov
Location Newcastle, CA
Design Cost $50,000
Completed Ongoing
Key Staff
Stacey Lynch, PE
Michael Massaro, PE
Gabriel Rodell, PE

SEWER MASTER PLAN

The South Placer Municipal Utility District (SPMUD) annexed the Newcastle Sanitary District's (NSD) entire system several years ago. Since then, SPMUD has been working to get NSD's old system updated to meet SPMUD's standards. The old NSD system required CCTV work to locate the facilities, CAD work to map the system, an evaluation and identification of all of the facilities in the system requiring upgrades to meet SPMUD standards, ranking of importance of the repairs, budget level estimates for each repair, and identification of easements needed. A Master Plan Report was prepared to describe the findings of the analysis.

Challenges & Solutions

Identifying all of the components of this portion of the system was challenging. A process of elimination was used to identify each parcel's service lateral location as the project progressed to ensure that all locations were identified within the service boundary.

Consolidation of various information including old improvement plans, the District GIS data, hand sketches form the District's operations staff, parcel information, and aerial photography. The design team reviewed map areas systematically and made case-by-case decisions to determine which data was correct.

Identification of parcels needing easements was a bit challenging, requiring a close look at the ROW and alignment as well as the District's position as to when an easement should be in place. The design team went through systematically and made case-by-case decisions regarding when an easement would be acquired.

UNANIMOUS WRITTEN CONSENT OF
THE BOARD OF DIRECTORS OF
BENNETT ENGINEERING SERVICES INC,
A CALIFORNIA CORPORATION,
IN LIEU OF ANNUAL MEETING

We, the undersigned, being all of the members of the Board of Directors (the "Board") of Bennett Engineering Services Inc, a California corporation ("Corporation"), by this writing in lieu of the annual meeting, approve the following resolutions and consent to their adoption effective as of December 31, 2017:

1. Election of Officers.

RESOLVED, that the following persons are hereby elected to the offices set forth opposite their respective names, to serve until their successors are duly elected and qualified, or until their earlier resignation or removal:

Leo Rubio	President
Stacey Lynch	First Vice President and Secretary
Trin Campos	Second Vice President
Jennifer Goodwin	Chief Financial Officer

2. Approval of Certain Transactions.

RESOLVED, that the transactions summarized on **Exhibit A** attached hereto, together with such other transactions of the Corporation and actions of the Corporation's officers taken in connection with the operation of the Corporation's business, including the execution of all documents for and on behalf of the Corporation, since the last actions of the Board, taken at a meeting or by written consent, are hereby ratified and confirmed so long as such actions were performed in good faith and in the best interests of the Corporation.

3. Enabling Resolution.

RESOLVED, that the Board hereby authorizes the appropriate officers of the Corporation to execute all agreements and other instruments, and to take all actions as may be necessary, appropriate or convenient to effect the purposes of the foregoing resolutions.

This Unanimous Written Consent is executed in accordance with California Corporations Code Section 307(b) and may be executed in one or more counterparts (by facsimile signature or otherwise), all of which when taken together shall constitute one and the same writing. This consent shall be filed with the minutes of the proceedings of the Board.

ORIN N. BENNETT

STACEY LYNCH

LEO RUBIO

TRIN CAMPOS

DAVID P. HARDEN, PE

David Harden, PE, has more than nine years of civil engineering experience in wastewater, water, and transportation projects. Dave takes pride in providing excellent communication with clients and has a passion for client satisfaction. He excels at producing innovative solutions to challenging projects that meet his clients' needs. Dave's past wastewater projects have included a focus on effluent storage, conveyance, and land disposal. He also has experience with in-conduit hydro, micro-hydro, large-diameter water pipelines, and concrete tank projects.

As a project engineer, Dave has experience with the production of plans, specifications, and cost estimates, alternative analysis, and feasibility studies. As a project manager, he is experienced in client support with public presentations, consultant management, plan review, construction management, and compliance with federal, state, and local policies.

PROJECT EXPERIENCE

Sewer Alternatives Analysis, Feasibility Report, and Special District Formation, Town of Paradise. This project included alternatives analysis, feasibility report and Special District formation to create the Town's first sewer system. Tasks included public outreach, recommended options, and funding services analysis. As Project Engineer, assisted with public outreach, alternatives analysis, draft feasibility report and funding analysis and options.

City Engineering, City of Gridley. Assignments include engineering management and assessment of the City's infrastructure including roads, water, wastewater, and electricity. Additional assignments include creating and maintaining the Capital Improvement Program, acquiring funding for repairs to aging infrastructure, developing the infrastructure management plans, and land development plan reviews. With assistance of firm staff, improvement plans for various projects have been prepared, including an ADA plan, sewer lift station pump replacements, sewer main replacement projects, and electric department operation building expansion. As Project Engineer and Assistant City Engineer, responsible for identifying and developing budgets for water and wastewater capital improvement projects, worked closely with operations staff to identify priority projects for repairs, maintenance, and upgrades, provided project design and estimates, bid assistance for small city projects, and technical support with regulatory agency compliance and reporting.

Auburn Lake Trails Community Disposal System, Georgetown Divide Public Utility District. GDPUD required an evaluation of leachfield capacity for the Auburn Lake Trails Community Disposal System after receiving a Notice of Violation for exceeding maximum flows during the months of February and March 2017. An inflow and infiltration (I/I) Study, review of current records, leachfield soil investigation, project management, and correspondence with the Regional Water Quality Control Board (RWQCB) was performed. Additionally, a leachfield capacity and water balance report, was performed. As Project Manager, responsible for coordination of subconsultants, leachfield capacity analysis and evaluation, I/I study analysis, and acting as liaison for GDPUD to the RWQCB.

Castle City WDR Compliance, Caritas Acquisitions I, LLC. In April 2017, Castle City Mobile Home Park received a Notice of Violation (NOV) from the Central Valley Regional Water Quality Control Board on their Waste Discharge Requirements (WDR). BENIEN was selected to author a Water Balance Report assessing potential sources of inflows and infiltration, 100-year annual precipitation flow estimates, and assessment of the Wastewater Treatment Facility's (WWTF) capacity to handle projected flows without overflow. Additionally, the pond capacity and overflow event was re-calculated and the WWTF as-builts and monitoring data was analyzed. If the WWTF requires improvements, BENIEN will investigate funding options for Castle City Mobile Home Park. As Project Engineer, developed approach to site assessment, spill volume calculations, water balance for a pond train system, and lead report writing effort. Analyzed the system to provide an operational playbook to ensure the pond system would have capacity in the future under the design conditions provided in the permit. Dave played a key role in communications with Regional Water Quality Control Board staff, the operator, and the owner of the facility.

PROJECT ROLE
Project Manager

EDUCATION
Bachelor of Science Civil Engineering, California State University, Sacramento, 2012

REGISTRATION
Civil Engineer, CA 84216

PROFESSIONAL AFFILIATIONS
American Society of Civil Engineers
California Water Environment Association
Water Environmental Federation
Mountain Counties Water Resources Association
Association of California Water Agencies

CONTACT
1082 Sunrise Ave, Suite 100
Roseville, California 95762
Office 916.783.4100
Direct 916.771.6144
dharden@ben-en.com

Big Creek Pipeline Repair, Big Creek Hydro. This project involved a pipeline feasibility report for the design and construction of a pipeline repair and replacement following a landslide at the site. As Project Manager and Project Engineer, assisted with coordination between the client and geotechnical engineer to perform a site assessment and preliminary design support for a high pressure 42-inch steel water pipe for hydrogeneration, constructed longitudinally in an active landslide.

On-Call District Engineering Consulting Services, Markleeville Public Utility District. As District Engineer and interim General Manager, provides engineering oversight and evaluation of the District's wastewater collection and treatment system. Dave is also responsible for the review of proposed new connection and system analysis to ensure the District operates within their permit, manages operations and maintenance, monitoring and reporting for water quality compliance, and reports to the District Board of Directors at quarterly meetings.

Wastewater Treatment Plant Headworks Improvements, City of Grass Valley. Equipment selection evaluation and recommendation for Waste Water Treatment Plant headworks in Grass Valley. Project scope includes analysis of design parameters, recommendation of equipment, plans and specifications for new equipment install, and construction assistance. This project consisted of equipment selection, improvement options analysis and the development of plans and specifications for the replacement of headworks equipment. As Project Manager and Engineer, assessed headworks equipment in need of replacement, researched replacement equipment, provided a feasibility assessment, and assisted the City with the selection process. Managed consultants and the design team to provide plans and specifications for the project, and provided construction assistance by reviewing submittals, making design changes during construction, and project milestone inspections.

Slate Creek Engineering Review, Enel Green Power North America. This engineering review evaluated the feasibilty of intake system modification for a four megawatt power generation facility. Several Coanda style screen intake designs were evaluated to provide great diversion capacity to the existing penstock. The designs had to meet intake flow requirements of 100cfs, while providing the required fish passage. As Project Manager and Lead Designer, provided conceptual designs and hydraulic analysis to be included in the feasibility study for modifications to the existing intake system.

Downtown Waterline and Street Replacement, City of Lincoln. Replacement of approximately 4,200 LF of existing water mains and full depth roadway replacement on multiple streets in Lincoln. The firm provided utility coordination, right-of-way mapping, and drainage design. As Project Engineer, provided engineering design support and review of plans, specifications, and estimate.

Intertie and Zone 4 Transfer Pump Stations, City of Roseville. This project responded to low water levels in Folsom Lake and curtailed surface water deliveries. The City has multiple ASR wells in their Zone 4 area, which is at a lower hydraulic grade line than Zone 1, with Zone 1 serviced by surface water. The design provided two factory-manufactured pump stations complete with building and associated yard piping to connect to the existing infrastructure. Each station consists of three identical pumps that will provide additional water to Zone 1 customers from well production. As a Project Manager, responsible for design team coordination, client communication, construction management, and project delivery. Lead designer for the project, responsible for the design of two package pump stations.

Greeley Canal Improvements, Placer County Water Agency. Designed a canal and pipe structure allowing PCWA to modernize its water delivery system with an automated Rubicon Tilting Weir Gate and pressure sustaining pipe valve. Delivered designs, plans, specifications, and CADD support. As Project Manager, responsible for client communication, project design, and project delivery.

Clover Valley Reservoir Desilting and Reservoir Supply Pipeline, Placer County Water Agency. This project involved the design of a raw water intake structure that provided easy access manual trash removal, the design of a supply pipeline alignment with a railroad crossing, and a permanent bypass pipeline alignment over a state jurisdictional dam. The project also included alternative evaluations for repair of eroded canal sections, and reservoir silt removal to reclaim storage capacity. As Project Manager and Lead Designer, provided design direction, consultant coordination, client communication, permitting assistance, and project delivery. Provided hydraulic analysis, identifying constructability constraints, and providing solutions suitable to client's needs.

Gold Run Pipeline Replacement, Phase IV, Placer County Water Agency. This project includes 5,000 feet of 36-inch ductile iron pipe (DIP) to extend and replace existing pipeline over challenging terrain within Union Pacific Railroad right-of-way. Services included alignment analysis, design, cost analysis, grant application assistance, and permitting assistance. The project eliminated pipe failures, significantly reduced bluff erosion, and improved maintenance access. As Project Engineer, assisted with construction management, including review of shop drawings and material submittals for quality assurance.

MICHAEL MASSARO, PE

With more than 19 years of experience, Mike Massaro has managed design teams, subconsultants, budgets, and schedules. Mike is the current City Engineer for the City of Oroville. His projects have required the production of plans, specifications, cost estimates, public outreach, utility coordination and coordination for environmental permitting.

Mike's technical expertise and experience includes water, sewer, and recycled water facilities, including pump stations, interceptors, and pipelines. The pipelines have included vitrified clay pipe (VCP), reinforced concrete (RCP), polyethylene (HDPE), polyvinyl chloride (PVC), ductile iron pipe (DIP), and have ranged from 8- to 120-inches in diameter and as long as 38,000 feet. He also provides engineering services during construction, reviewing submittals and requests for information and resolving challenges in the field. Mike also has significant planning and design experience with open cut, horizontal directional drilling, tunneling, pipe jacking, and trenchless railroad and light rail crossings.

PROJECT EXPERIENCE

Sewer Alternatives Analysis, Feasibility Report, and Special District Formation, Town of Paradise. This project includes alternatives analysis, feasibility report and Special District formation to create the Town's first sewer system. Tasks include public outreach, recommended options, and funding services analysis. As Project Manager, led the alternatives development and evaluation an supported public outreach efforts with presentations for stakeholder groups and public workshops, engaging with the public and explaining the project's benefits. Technical duties include feasibility level conveyance and wastewater treatment design and cost estimating.

Castle City WDR Compliance, Caritas Acquisitions I, LLC. In April 2017, Castle City Mobile Home Park received a Notice of Violation (NOV) from the Central Valley Regional Water Quality Control Board on their Waste Discharge Requirements (WDR). BENIEN was selected to author a Water Balance Report assessing potential sources of inflows and infiltration, 100-year annual precipitation flow estimates, and assessment of the Wastewater Treatment Facility's (WWTF) capacity to handle projected flows without overflow. Additionally, the pond capacity and overflow event was re-calculated and the WWTF as-builts and monitoring data was analyzed. If the WWTF requires improvements, BENIEN will investigate funding options for Castle City Mobile Home Park.

Newcastle Sewer Master Plan, South Placer Municipal Utility District. The South Placer Municipal Utility District (SPMUD) annexed the Newcastle Sanitary District's (NSD) entire system several years ago. The old NSD system required CCTV work to locate facilities, CAD work to map the system, an evaluation and identification of all the facilities in the system requiring upgrades to meet SPMUD standards, ranking of importance of the repairs, budget level estimates for each repair, and identification of easements needed. A Master Plan Report was prepared to describe the findings of the analysis. As Senior Engineer, assisted with project management, review of existing data and district standards, and identifying improvements.

City Engineer, City of Oroville. Assignments include transportation, water, wastewater, plan review, and funding acquisition projects. With assistance of firm staff, improvement plans for various projects have been prepared, including a sewer design, RSTP (Regional Surface Transportation Program) street rehabilitation, and sidewalk repair projects. City Engineer.

New Cement Hill Pipeline, Suisun-Solano Water Authority. This project will provide a second pipeline, consisting of 20-inch diameter PVC, from the Cement Hill Water Treatment Plant (CHWTP) to the site of the existing Tank 2A and future Tank 2B. Tasks include project management, plans, specifications, and estimate, flow meter installation, assistance with acquisition of an encroachment permit for construction within the Putah Canal right-of-way with the US Bureau of Reclamation, assuring

PROJECT ROLE

Quality Control/Quality Assurance

EDUCATION

Master of Science Environmental Engineering, University of Arizona, 2000

Bachelor of Science Civil Engineering, University of Arizona, 1997

REGISTRATION

Civil Engineering, CA 64733

Civil Engineering, WA 45753

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

Water Environmental Federation

California Water Environment Association

American Public Works Association

CONTACT

1082 Sunrise Ave, Suite 100
Roseville, California 95762
Office 916.783.4100
Direct 916.771.6163
mmassaro@ben-en.com

environmental compliance, permitting, preparation of a Storm Water Pollution Prevention Plan (SWPPP), public outreach, and design support during construction. As Project Manager, prepared the Preliminary Design Report, performed quality control, coordination of subconsultants, and acts as a liaison between multiple agencies.

Downtown Waterline and Street Replacement, City of Lincoln. Replacement of approximately 4,200 LF of existing water mains and full depth roadway replacement on multiple streets in Lincoln. The firm provided utility coordination, right-of-way mapping, and drainage design. As Quality Assurance, provided quality control and quality assurance support during design.

C Street Well, City of Biggs. This project includes a condition assessment of a well, investigation of water storage reservoir options, and preparation of a funding application. As Project Manager, assessed existing well water quality, analyzed alternatives for well replacement, as well as a long term solution to include new storage and system integration for improved water reliability during emergency shutdowns or fire flow scenarios.

Highway 50 Pipeline Crossing, California American Water. This project includes design, permitting, bidding, and construction assistance services for 450 LF of 16-inch main to cross Route 50 via jack-and-bore and approximately 600 LF of 12-inch main to be installed via open cut on the North side of the highway. On the South side of the highway, approximately 300 LF of 12-inch main is to be installed via open cut. As Project Manager, provided technical solutions, scope, schedule, and budget as well as assisting CAW with property access, preliminary and final design of the bore and jack Highway 50 crossing. When completed the project will equalize pressure zones within a key service area.

Poplar Avenue Waterline Replacement, Phase 2, Citrus Heights Water District (CHWD). This project included surveying, design and permitting for a water main replacement project located in a residential neighborhood. As Project Manager, led pipeline connection design and support easement acquisition for the final phase of the water main rehabilitation and upsizing.

Verdera North Tank #3, City of Lincoln. This project involved construction of a new, 10-million-gallon, pre-stressed concrete water storage tank, associated tank piping, yard piping, valves and appurtenances; more than 5,000 LF of 36-inch pipeline connecting the new tank to the existing water system in Twelve Bridges Drive, a higher pressure 16-inch pipeline to connect to their upper zone, and a 36-inch pipeline connecting to a new PCWA metering station. As Senior Engineer, led the pipeline design portion of the work. Designed a connection to the new water tank and metering station and a connection to the existing conveyance system for the City. The project will bid ductile iron pipe and cement mortar lined steel pipe as options to choose the most competitive cost for the City.

Natoma Alley Sewer Rehabilitation, City of Folsom. This project included evaluation and preparation of an alternatives analysis for re-alignment of sewer mains, and preparation of improvement plans for the selected alternative. Our firm also provided public outreach to affected neighbors and business owners. As Senior Engineer, provided quality control and quality assurance support during design.

Wastewater Treatment Plant Improvements, City of Biggs. The project involved preparation of a design to convert the City's existing Wastewater Treatment Plant (WWTP) from a surface water discharge facility to a land application discharge facility and return the City to compliance with RWQCB. Phase 1 of the conversion consisted of plant upgrades with rehabilitation of existing facilities while land acquisition and environmental processes were completed. Design consisted of a new influent pump station, a new influent screen to remove large debris and plastics, improvements to the rock filters, improvements to the chlorine distribution system, updated electrical power and controls, and updates to the operations/laboratory building. Phase 2 included the acquisition of approximately 150 acres of land for irrigation, grading and drainage improvements to the crop fields and storage pond, field irrigation piping design, a pump station to transport water to the storage pond, and updates to the electrical system and controls. In addition, the team provided funding acquisition and management through the SRF and coordination with RWQCB for the changes to the permit. As Project Engineer, provided quality review.

South Jefferson Street Improvements, City of Dixon. Street rehabilitation and sewer upgrade project, incorporating full depth reclamation (FDR) repaving. Analyzed road conditions and recommended repaving strategy; upgraded sidewalks, ADA ramps, curbs, and gutters; evaluated sewer line degradation and proposed options for repair and replacement; coordinated with utility companies for utility relocation and adjustments to grading; Conducted public outreach to local residents. As Project Manager, led the sewer replacement, laterals, and utility coordination portion of the project. Rehabilitation will be accomplished with a dig and replace approach and temporary bypass pumping.

Sewer Mains and Manholes Repair, City of Grass Valley. This project included plans, specifications, engineering cost estimates and schedules for the lining and repair of sewer main lines and manholes throughout the City of Grass Valley. The evaluation included approximately 10,000 LF of 6-inch, 3,000 LF of 8-inch, and 3,000 LF of 10 to 24-inch sewer pipeline, the plans included trenchless repairs for areas of cracking and infiltration and open trench construction. As Quality Assurance, performed quality review and assisted with preparation of the specifications.

ORIN N. BENNETT, PE

Orin Bennett, PE, has more than four decades of experience as Project Director, Project Manager, and Project Engineer on public and private projects with an emphasis on water resources.

He is a member of the Industrial Advisory Board of California State University, Sacramento, and he has served as president of many Sacramento area engineering organizations, including the American Public Works Association, American Council of Engineering Companies, and the California Society of Professional Engineers. Orin is a recipient of the Sacramento Area Engineering Council 1995 Outstanding Service to the Profession Award and the Sacramento State Civil Engineering Alumni Honors Award.

Orin's responsibilities have included conceptual analysis, planning, technical studies, design, and quality assurance/quality control. His range of technical capabilities includes roadway design, water and wastewater pumping and pipeline systems, drainage systems studies, and design. Orin served 22 years as consulting District Engineer for Sierra Lakes County Water District, 14 years as Executive Director of the Placer Nevada Wastewater Authority, was District Engineer for Newcastle Sanitary District, and provides engineering counsel Markleeville Public Utility District.

PROJECT EXPERIENCE

Sewer Alternatives Analysis, Feasibility Report, and Special District Formation, Town of Paradise. This project includes alternatives analysis, feasibility report and Special District formation to create the Town's first sewer system. Tasks include public outreach, recommended options, and funding services analysis. Senior Advisor.

Newcastle Sewer Master Plan, South Placer Municipal Utility District. The South Placer Municipal Utility District (SPMUD) annexed the Newcastle Sanitary District's (NSD) entire system several years ago. The old NSD system required CCTV work to locate facilities, CAD work to map the system, an evaluation and identification of all the facilities in the system requiring upgrades to meet SPMUD standards, ranking of importance of the repairs, budget level estimates for each repair, and identification of easements needed. A Master Plan Report was prepared to describe the findings of the analysis. Senior Advisor.

Infiltration and Inflow Study, Newcastle Sanitary District. This study included an updated, detailed system map for the District, existing records research, identified reaches of concern based on data records, and interviews with District personnel. Field data was collected using flow measuring devices and video inspection. The report identified deficiencies, issues, provided recommendations, and prioritized a list of repairs. Principal Engineer.

City Engineering, City of Gridley. Assignments include transportation, water, wastewater, plan review, and funding acquisition projects. With assistance of firm staff, improvement plans for various projects have been prepared, including an ADA plan, corps yard pump replacements and a new electrical building. Senior Advisor.

City Engineering Services, City of Williams. Assignments include transportation, water, wastewater, plan review, and funding acquisition projects. With assistance of firm staff, improvement plans for various projects have been prepared, including sidewalk and street repair, pavement repair, plan review, and park improvements. Senior Advisor.

District Engineering Services, Kirkwood Meadows Public Utility District. District Engineering services include management of sanitary sewer collection, treatment, and disposal, and water supply treatment and distribution for the community of Kirkwood, California. This includes preparation of groundwater monitoring reports and wastewater reporting to the Regional Water Quality Control Board. Includes analysis of data collected from the district's systems, wastewater treatment plant, effluent disposal area, and groundwater monitoring wells. Principal Engineer.

PROJECT ROLE
Senior Advisor

PROFESSIONAL REGISTRATION
Civil Engineer, CA 25169
Civil Engineer, OR 10404

EDUCATION
Bachelor of Science Civil Engineering, CSU Sacramento
Graduate Studies Environmental Engineering, CSU Sacramento

PROFESSIONAL AFFILIATIONS
American Water Works Association
American Society of Civil Engineers
American Public Works Association
Civil Engineers and Land Surveyors of California
CSUS Industry Advisory Board

CONTACT
1082 Sunrise Ave, Suite 100
Roseville, California 95762
Office (916) 783-4100
Direct (916) 771-6151
obennett@ben-en.com

Master Services Agreement, Olivehurst Public Utility District. On-call water and wastewater special assignments for water treatment and delivery and sewer collection, treatment, and disposal. Principal Engineer.

On-Call District Engineering Consulting Services, Markleeville Public Utility District.

City Engineer, City of Biggs. Firm responsibilities include advisory services including, but not limited to: preparing staff reports for engineering and public works items on Planning and Parks Commissions, Traffic Safety Committee, and City Council. Tasks also include review, approval and direction concerning permits and certificates; budgeting, needs assessment and 5-year CIP; funding investigation and application preparation. Principal Engineer.

General Engineering Services, City of Lincoln. Bennett Engineering Services provides extension of staff services for the City of Lincoln. Principal Engineer.

Collection System Repairs, Newcastle Sanitary District. Services included preparation of construction documents for various repairs to the collection system including cleaning, cure-in-place pipe (CIPP) lining, pipe replacement and manhole repair and replacement. In addition the project team managed the bid process and provided construction management services during construction of the system repairs. Principal Engineer.

Regional Wastewater Master Plan Review and Evaluation, City of Roseville. Assisted the City of Roseville staff in managing an update to the Regional Sewer Master Plan. Prepared a scope of work and Request for Proposals, assisted in evaluation of proposal submittals, and assisted City staff in review and management of the preparation of the update to the Wastewater Master Plan. Principal Engineer.

Spray Field Technical Memo, City of St. Helena. The City of St. Helena received a notice of violation from the Regional Water Quality Control Board for excessive discharge from their wastewater treatment facility to the Napa River. The existing irrigation system needed to be rehabilitated and spray head capacities increased. Bennett Engineering Services provided a technical memorandum evaluating the existing layout and planned flow for the spray field irrigation system, prepared plans and specifications, and provided engineering support during construction.

Big Creek Pipeline Repair, Big Creek Hydro. This project involved a pipeline feasibility report for the design and construction of a pipeline repair and replacement following a landslide at the site. Senior Advisor.

Water System Management and Optimization Plan, City of Folsom. This project included conducting an analysis of the City's water system management plans and procedures, and providing recommendations for resource optimization within the five water divisions: Engineering, Utility Maintenance, Water Quality, Water Meters, and Water Conservation. The Water System Management and Optimization Study Report was used by City management and operations staff to project labor and equipment needs and associated budget figures for fiscal year planning. The project included 1) prioritizing water system program goals and requirements and 2) analyzing City resources and needs to meet water system program goals. Principal Engineer.

Placer County/City of Lincoln Regional Sewer Transmission Facility, Placer County Department of Facility Services. This project included responsibility for setting-up and facilitating meetings with the City of Auburn, Newcastle, and Placer County for the regional sewer pipeline. The team provided assistance with the design which included four miles of 48-inch and 42-inch concrete and VCP gravity pipeline. As Executive Director of the Placer Nevada Wastewater Authority, Orin managed this effort.

Auburn Lake Trails Community Disposal System, Georgetown Divide Public Utility District. GDPUD required an evaluation of leachfield capacity for the Auburn Lake Trails Community Disposal System after receiving a Notice of Violation for exceeding maximum flows during the months of February and March 2017. An inflow and infiltration (I/I) Study, review of current records, leachfield soil investigation, project management, and correspondence with the Regional Water Quality Control Board (RWQCB) was performed. Additionally, a leachfield capacity and water balance report, was performed. Senior Advisor.

Intertie and Zone 4 Transfer Pump Stations, City of Roseville. This project responded to low water levels in Folsom Lake and curtailed surface water deliveries. The City has multiple ASR wells in their Zone 4 area, which is at a lower hydraulic grade line than Zone 1, with Zone 1 serviced by surface water. The design provided two factory-manufactured pump stations complete with building and associated yard piping to connect to the existing infrastructure. Each station consists of three identical pumps that will provide additional water to Zone 1 customers from well production. Principal Engineer.

Sewer Mains and Manholes Repair, City of Grass Valley. This project included plans, specifications, engineering cost estimates and schedules for the lining and repair of sewer main lines and manholes throughout the City of Grass Valley. The evaluation included approximately 10,000 LF of 6-inch, 3,000 LF of 8-inch, and 3,000 LF of 10 to 24-inch sewer pipeline, the plans included trenchless repairs for areas of cracking and infiltration and open trench construction. Principal Engineer.

STEVE AINSWORTH, PE

Steve Ainsworth has more than four decades of experience in design and construction management of water reservoirs, pumping stations, in-conduit hydro, large-diameter water pipelines, computer control (SCADA) systems, water system modeling, and related engineering activities. Throughout his career, Steve has specialized in engineering for water systems. He has published and presented papers on pipeline size optimization to minimize cost and maximize energy.

Steve is also experienced with public presentations, agency negotiations, cost estimating, and consultant management. Steve has developed a project improvement system to make each project better than the last. After project completion Steve meets with the Owner, Contractor, and Inspector to discuss what could have been done better. The knowledge gained is utilized for the next project.

PROJECT EXPERIENCE

Auburn Lake Trails Community Disposal System, Georgetown Divide Public Utility District. GDPUD required an evaluation of leachfield capacity for the Auburn Lake Trails Community Disposal System after receiving a Notice of Violation for exceeding maximum flows during the months of February and March 2017. An inflow and infiltration (I/I) Study, review of current records, leachfield soil investigation, project management, and correspondence with the Regional Water Quality Control Board (RWQCB) will be performed. Additionally, a leachfield capacity and water balance report, work plan identifying system deficiencies and describing improvements, feasibility design, and funding assistance will be performed. Senior Advisor.

Highway 50 Pipeline Crossing, California American Water. This project includes design, permitting, bidding, and construction assistance services for 450 LF of 16-inch main to cross Route 50 via jack-and-bore and approximately 600 LF of 12-inch main to be installed via open cut on the North side of the highway. On the South side of the highway, approximately 300 LF of 12-inch main is to be installed via open cut. Senior Advisor.

In-Conduit Hydro Feasibility Study, Sacramento Suburban Water District. This project consisted of data analysis of six sites and a technical report on the feasibility of installing in-conduit hydroelectric generators. The report included analysis of one year of SCADA data, multiple runs of the SSWD water model, and a presentation of the cost and benefits of in-conduit hydro at selected sites. This cost-benefit analysis included estimates for turbine cost, installation cost, permitting costs, maintenance costs, and projected revenue. As Project Manager, provided a technical report on the analysis of six sites for the feasibility of installing in-conduit hydroelectric generators. The report included analysis of one year of SCADA data, multiple runs of the SSWD water model, and a presentation of the cost and benefits of in-conduit hydro at selected sites. This cost-benefit analysis included estimates for turbine cost, installation cost, permitting costs, maintenance costs, and projected revenue.

Roseville Zone 4 PRV Station Settings Analysis, City of Roseville. All water for Zone 4 is provided from pressure Zone 1 by way of five pressure reducing valve (PRV) stations; three stations are 12-inch and two are much smaller. The two smaller stations were experiencing cavitation and the city requested a pressure setting review of all five stations and recommendations to provide flows within the manufacturers recommended limits. A fire flow analysis with the new settings was run to verify adequacy. Engineering Manager for a study that included potential revenue from in-conduit hydro units installed at existing PRV stations. The City was also interested in evaluating potential revenue from power rates if the energy consumed by the PRVs was used to produce electricity with an in-conduit hydro unit. The analysis was completed using SCADA data for calibration of existing conditions and the water model for projecting build-out flow conditions.

PROJECT ROLE
Senior Engineer and Advisor

EDUCATION
Bachelor of Science Physics, University of Nevada, Las Vegas,

Master of Science Engineering Physics, University of Nevada, Las Vegas,

REGISTRATION
Civil Engineer, NV 4920

PROFESSIONAL AFFILIATIONS
American Society of Civil Engineers

National Society of Professional Engineers

American Public Works Association

Engineers Without Borders

CONTACT
1082 Sunrise Ave, Suite 100
Roseville, California 95762
Office 916.783.4100
Direct 916.771.6154
sainsworth@ben-en.com

C Street Well, City of Biggs. This project includes a condition assessment of a well, investigation of water storage reservoir options, and preparation of a funding application. Technical Lead who prepared the project report. **Clover Valley Reservoir Desilting and Reservoir Supply Pipeline, Placer County Water Agency.** This project involved the design of a raw water intake structure that provided easy access manual trash removal, the design of a supply pipeline alignment with a railroad crossing, and a permanent bypass pipeline alignment over a state jurisdictional dam. The project also included alternative evaluations for repair of eroded canal sections, and reservoir silt removal to reclaim storage capacity. Project Manager.

Greeley Canal Improvements, Placer County Water Agency. Designed a canal and pipe structure allowing PCWA to modernize its water delivery system with an automated Rubicon Tilting Weir Gate and pressure sustaining pipe valve. Delivered designs, plans, specifications, and CADD support. As Project Manager, provided technical design assistance, nano-hydro power supply design, technical specification writing, and agency coordination.

Infiltration and Inflow Study, Newcastle Sanitary District. This study included an updated, detailed system map for the District, existing records research, identified reaches of concern based on data records, and interviews with District personnel. Field data was collected using flow measuring devices and video inspection. The report identified deficiencies, issues, provided recommendations, and prioritized a list of repairs. Senior Engineer.

Bickford Ranch Water Model, Placer County Water Agency. The Bickford project required modeling and analysis of the Bickford Ranch system to determine the appropriate method to provide service to the project with four pressure zones, including one closed zone with no gravity storage. Engineering Manager for the computer modeling for the design of the Bickford Ranch 2,000-acre, 1,980 unit residential development water supply and distribution system.

Downtown Waterline and Street Replacement, City of Lincoln. Replacement of approximately 4,200 LF of existing water mains and full depth roadway replacement on multiple streets in Lincoln. The firm provided utility coordination, right-of-way mapping, and drainage design. Senior Advisor.

Verdera North Tank #3, City of Lincoln. This project involved construction of a new, 10-million-gallon, pre-stressed concrete water storage tank, associated tank piping, yard piping, valves and appurtenances; more than 5,000 LF of 36-inch pipeline connecting the new tank to the existing water system in Twelve Bridges Drive, a higher pressure 16-inch pipeline to connect to their upper zone, and a 36-inch pipeline connecting to a new PCWA metering station. As overall project director, provided liaison with City staff, technical expertise, and general coordination. This project was essentially a Design-Assist with DN Tanks providing detailed structural tank design. Steve's innovation provided a $1.2 million savings over a previous design.

Siphon Lane Pump Station Design-Build, Nevada Irrigation District

Teamed with Gateway Pacific Contractors on this project using the design-build delivery method. Design included analysis and selection of three, three-stage vertical turbine pumps and the selection of three, 500HP diesel-driven engines. Developed an innovative solution that used a flow control valve on the supply pipe that allowed the station to be simplified both in design (three identical pumps) and provided operational flexibility. As Project Manager, provided pump design and selection to allow the use of three identical pumps in lieu of two sets of two pumps, one set for each condition. Provided conceptual design for an innovative power supply using alternators on the diesel engines with battery banks.

Banner Taylor Tank Design-Build Reservoir Replacement, Nevada Irrigation District. This was a Design-Build replacement of two hypalon-lined and covered reservoirs with pre-stressed concrete structures within the existing reservoir site. The Design-Build process provided two new prestressed concrete tanks, totaling 10.5 MG storage with space for a future third tank. The complete design included 30-inch yard piping and bypass piping for connection to the District's water system. Technical Lead for the Type I DN-style storage tanks. Developed an innovative weir style overflow to allow for greater useful water storage volume without increasing the tank size.

Intertie and Zone 4 Transfer Pump Stations, City of Roseville. This project responded to low water levels in Folsom Lake and curtailed surface water deliveries. The City has multiple ASR wells in their Zone 4 area, which is at a lower hydraulic grade line than Zone 1, with Zone 1 serviced by surface water. The design provided two factory-manufactured pump stations complete with building and associated yard piping to connect to the existing infrastructure. Each station consists of three identical pumps that will provide additional water to Zone 1 customers from well production. As Project Manager, provided water modeling expertise to determine optimum pressure settings for five PRV stations serving the same pressure zone. The purpose of the analysis was to determine PRV pressure settings that would meet the following operational criteria: 1. Meet the City pressure standard; 2. Meet fire flow requirements and 3. Limit PRV flows to within manufacturers recommendations.

STACEY LYNCH, PE

Stacey Lynch has more than 15 years of experience in the civil engineering field. Her experience includes planning, design, management, and construction assistance for water resources projects. Stacey's experience includes hydraulic analysis and design of water and wastewater systems including tanks, pump/lift stations, pipelines, treatment systems, intake structures, and hydroelectric facilities. Responsibilities include research, conceptual analysis, planning, funding assistance, permitting (RWQCB), design calculations, and technical studies.

In addition, Stacey leads the firms alternative delivery efforts including design-build and design-assist project delivery. Her design-build projects include the Nevada Irrigation District Banner-Taylor Reservoir Replacement, Nevada Irrigation District Siphon Lane Pump Station, Santa Cruz Bay Street Reservoir Replacement, Los Angeles County In-Conduit Hydro Project and West Sacramento Rivers Tank and Pump Station Project.

PROJECT ROLE
Project Engineer

PROFESSIONAL REGISTRATION
Civil Engineering, CA 81860

EDUCATION
Bachelor of Science Civil Engineering, California State University, Sacramento

PROFESSIONAL AFFILIATIONS
American Public Works Association
American Society of Civil Engineers

CONTACT
1082 Sunrise Ave, Suite 100
Roseville, California 95762
Office (916) 783-4100
Direct (916) 771-6153
sbennett@ben-en.com

PROJECT EXPERIENCE

City Engineering, City of Gridley. Assignments include transportation, water, wastewater, plan review, and funding acquisition projects. With assistance of firm staff, improvement plans for various projects have been prepared, including an ADA plan, corps yard pump replacements and a new electrical building. As Assistant City Engineer, provided assistance with funding, planning, and design.

City Engineer, City of Biggs. Firm responsibilities include advisory services including, but not limited to: preparing staff reports for engineering and public works items on Planning and Parks Commissions, Traffic Safety Committee, and City Council. Tasks also include review, approval and direction concerning permits and certificates; budgeting, needs assessment and 5-year CIP; funding investigation and application preparation. As Assistant City Engineer, provided oversight for all water and wastewater projects.

Specification for Water Meters, City of Folsom. The City required data collection and analysis of current meter specification criteria to cover both commercial and residential meters in Folsom. The firm interviewed City staff to refine the interface requirements for the Zenner AMR system so that appropriate specifications could be integrated into existing infrastructure. The firm assisted with bid challenges and vendor questions during the bid phase and produced a final meter specification for the City.

Potable Water Distribution Flushing Analysis, City of Folsom. The City of Folsom required engineering services for potable water distribution flushing analysis of the City's water distribution system. Services provided: review of existing processes and procedures, coordination with City staff to gather required data, review of unidirectional flushing standards from other agencies to determine industry standards, development of a training program for City staff and implementation of that training.

Newcastle Sewer Master Plan, South Placer Municipal Utility District. The South Placer Municipal Utility District (SPMUD) annexed the Newcastle Sanitary District's (NSD) entire system several years ago. The old NSD system required CCTV work to locate facilities, CAD work to map the system, an evaluation and identification of all the facilities in the system requiring upgrades to meet SPMUD standards, ranking of importance of the repairs, budget level estimates for each repair, and identification of easements needed. A Master Plan Report was prepared to describe the findings of the analysis. As Project Manager, responsible for collection of data and preparation of the system map, identification and ranking of repairs, and preparation of the Master Plan Report.

Sewer Alternatives Analysis, Feasibility Report, and Special District Formation, Town of Paradise. This project includes alternatives analysis, feasibility report and Special District formation to create the Town's first sewer system. Tasks include public outreach, recommended options, and funding services analysis. As Project

Engineer, responsible for researching and providing a recommendation for funding the Town's sewer project. Possible funding sources included assessment district formation, SWRCB -SRF, USDA, Cal OES, DWR, IRWM, CA Urban Rivers, CDBG, and RCAC.

Water System Management and Optimization Plan, City of Folsom. This project included conducting an analysis of the City's water system management plans and procedures, and providing recommendations for resource optimization within the five water divisions: Engineering, Utility Maintenance, Water Quality, Water Meters, and Water Conservation. The Water System Management and Optimization Study Report was used by City management and operations staff to project labor and equipment needs and associated budget figures for fiscal year planning. The project included 1) prioritizing water system program goals and requirements and 2) analyzing City resources and needs to meet water system program goals. As Project Manager, responsible for coordination of the meetings with City staff in each department and delivery of the report.

Zone 2 Dual Purpose Pump Station Evaluation, City of Roseville. The City had been experiencing operational problems with the control of the station which included two VFD pumps. The team met with City operations and maintenance staff, reviewed record drawings, pump curves, and the control strategy, and developed a three level procedure to resolve the problem. The team identified the problem and the determined the optimal remedy. As Assistant Engineer, analyzed flow data and different scenarios to help solve the City's problems.

In-Conduit Hydro Feasibility Study, Sacramento Suburban Water District. This project consisted of data analysis of six sites and a technical report on the feasibility of installing in-conduit hydroelectric generators. The report included analysis of one year of SCADA data, multiple runs of the SSWD water model, and a presentation of the cost and benefits of in-conduit hydro at selected sites. This cost-benefit analysis included estimates for turbine cost, installation cost, permitting costs, maintenance costs, and projected revenue. As Project Engineer, assisted with the technical report and data analysis.

Surface and Well Water Blending Study, City of Roseville. The team provided water modeling and water system operational expertise for developing a range of options for blending water from Roseville's aquifer storage and recovery (ASR) wells with surface water. Roseville groundwater has total dissolved solids (TDS) four to eight times greater than the surface water. The City experiences customer complaints in areas where groundwater completely replaces surface water when ASR wells are running. The project included evaluation of different things the City could do to blend the groundwater with surface water to decrease the concentration of groundwater. In addition the team hosted two public taste testing experiments to analyze customers' preferred taste of water. The team prepared three options with varying levels of cost, together with a report and presentation to City staff. As Project Engineer, performed water modeling analysis of blending scenarios for groundwater and surface water sources.

Natoma Alley Sewer Rehabilitation, City of Folsom. This project included evaluation and preparation of an alternatives analysis for re-alignment of sewer mains, and preparation of improvement plans for the selected alternative. Provided public outreach to affected neighbors and business owners. As Project Manager, responsible for alternatives analysis and preparation of improvement plans.

New Cement Hill Pipeline, Suisun-Solano Water Authority. This project will provide a second pipeline, consisting of 20-inch diameter PVC, from the Cement Hill Water Treatment Plant (CHWTP) to the site of the existing Tank 2A and future Tank 2B. The scope of work included design for updating the connection to the tank with an above ground manifold, double-ball flexible expansion joint, motor-operated valve, and chlorine sampling points. Tasks include project management, plans, specifications, and estimate, flow meter installation, assistance with acquisition of an encroachment permit for construction within the Putah Canal right-of-way with the US Bureau of Reclamation, assuring environmental compliance, permitting, preparation of a Storm Water Pollution Prevention Plan (SWPPP), public outreach, and design support during construction.

Downtown Waterline and Street Replacement, City of Lincoln. Replaced 4,200 LF of existing water mains and provided full-depth roadway replacement on multiple residential streets. Team provided utility coordination, right-of-way mapping, and drainage design. As Project Manager, provided overall project management and design for the waterline replacement portion of the project.

Gold Run Pipeline Replacement Phase V, Placer County Water Agency. This phase included the second section of ductile iron pipe (DIP) to extend and replace an existing pipeline over challenging terrain within Union Pacific Railroad right-of-way. Services included alignment analysis, design, cost analysis, grant application assistance, permitting assistance, and construction assistance. The project eliminated pipe failures, significantly reduced bluff erosion, and improved maintenance access. As Project Engineer, assisted the design team with preparation of improvement plans and construction management.

GABRIEL RODELL, PE

Gabriel Rodell has more than five years of experience in engineering consulting. His experience includes design and analysis for the following: potable water systems, stormwater systems, wastewater collection systems, wastewater treatment plants, potable water tanks, and potable and raw water pump stations. Gabriel also has experience in groundwater compliance monitoring and reporting, water system operations and resource optimization, water modeling using H2OMap Water, capital improvement plan recommendations, CAD plan and detail work, funding assistance through SRF and Caltrans, district and city engineering services, and negotiations with state and regional water quality control boards for wastewater permits.

Gabriel specializes in design and evaluation of drinking water systems, sewer collection networks, and wastewater treatment facilities. He has coordinated with Regional and State Water Boards for permitting, regulations, and funding. He is familiar with groundwater quality regulations for well systems. He has performed calculations, drafted plans, and designed water pump stations and an effluent wastewater pump station. He has also assisted in evaluations which included alternatives analyses, and provided recommendations for water system operations programs, wastewater treatment plant improvements, and sewer system pipe rehabilitation/replacement.

PROJECT ROLE
Project Engineer

EDUCATION
Bachelor of Science Civil Engineering, University of California, Davis

REGISTRATION
Civil Engineer, CA C86446

PROFESSIONAL AFFILIATIONS
California Water Environment Association
Water For People

CONTACT
1082 Sunrise Ave, Suite 100
Roseville, California 95762
Office 916.783.4100
Direct 916.771.6150
grodell@ben-en.com

PROJECT EXPERIENCE

Auburn Lake Trails Community Disposal System, Georgetown Divide Public Utility District. GDPUD required an evaluation of leachfield capacity for the Auburn Lake Trails Community Disposal System after receiving a Notice of Violation for exceeding maximum flows during the months of February and March 2017. An inflow and infiltration (I/I) Study, review of current records, leachfield soil investigation, project management, and correspondence with the Regional Water Quality Control Board (RWQCB) was performed. Additionally, a leachfield capacity and water balance report, was performed. As Project Engineer, assisted in providing water balance calculations, performing a leachfield analysis, and summarizing findings to GDPUD and RWQCB

Specification for Water Meters, City of Folsom. The City required data collection and analysis of current meter specification criteria to cover both commercial and residential meters in Folsom. The firm interviewed City staff to refine the interface requirements for the Zenner AMR system so that appropriate specifications could be integrated into existing infrastructure. The firm assisted with bid challenges and vendor questions during the bid phase and produced a final meter specification for the City. As Project Engineer, responsible for interviewing City staff for meter coverage, collecting current meter industry information, and developing a draft meter specification.

Potable Water Distribution Flushing Analysis, City of Folsom. The City of Folsom required engineering services for potable water distribution flushing analysis of the City's water distribution system. Services provided: review of existing processes and procedures, coordination with City staff to gather required data, review of unidirectional flushing standards from other agencies to determine industry standards, development of a training program for City staff and implementation of that training. As Project Engineer, reviewed existing processes and procedures, met with City staff about resources and capabilities, reviewed Unidirection of Flushing Standards, and developed a Unidirectional Flushing Program.

Water System Management and Optimization Plan, City of Folsom. This project included conducting an analysis of the City's water system management plans and procedures, and providing recommendations for resource optimization within the five water divisions: Engineering, Utility Maintenance, Water Quality, Water Meters, and

Water Conservation. The Water System Management and Optimization Study Report was used by City management and operations staff to project labor and equipment needs and associated budget figures for fiscal year planning. The project included 1) prioritizing water system program goals and requirements and 2) analyzing City resources and needs to meet water system program goals. Project Engineer for analysis of staffing and operational needs within the City's water divisions, preparation of City of Folsom staff interview questions, prioritization of water system program goals and requirements, review of water system permit, AWWA standards, Water Master Plan, Urban Water Management Plan, and other relevant documents to make appropriate recommendations regarding system optimization.

Waste Discharge Requirements Quarterly and Annual Reports, Kirkwood Meadows Public Utility District. District Engineering services for the Kirkwood Meadows Public Utilities District (KMPUD/District), which provides sanitary sewer collection, treatment, and disposal. Services included preparation of quarterly Groundwater Monitoring Reports and the Annual Wastewater Report. Included analysis of data collected from the district's collection system, wastewater treatment plant, effluent disposal area, and groundwater monitoring wells. As Project Engineer, ensured that all laboratory and field groundwater and wastewater effluent quality data was compliant with the District's Monitoring and Reporting program requirements and waste discharge requirements. Produced figures and tables within each report highlighting results and providing an adequate narrative.

Sewer Collection System Evaluation and Capital Improvement Program, Kirkwood Meadows Public Utility District. This project included updates and revisions compliant with each system's waste discharge requirements, monitoring and reporting program, and performance of self-audits for each sewer system management plan (SSMP). As Project Engineer, reviewed State Water Resources Control Board requirements of establishing and implementing an SSMP, and produced a comprehensive SSMP for the District. Incorporated analysis of the District's sewer-related operational and management practices into the SSMP.

Plumas Lake Water Treatment Plant Piping Upgrade, Olivehurst Public Utility District. Olivehurst PUD selected our firm to improve piping and valves at the Plumas Lake Water Treatment Plant to bypass existing filters to meet flow demands during an emergency condition. Provided a technical memorandum detailing valve arrangement, selection, and operational alternatives; controls, monitoring, and flow metering discussion and options; and chemical injection options and recommendations. Also provided construction drawings the proposed improvements and held meetings with District staff.

Wastewater Treatment Facilities Evaluation Update, City of St. Helena. This project included review of available planning and evaluation documents and preparation of an updated memorandum for treatment capacity and effluent quality improvements necessary to meet the current projections for flows and loads. Specific discussion items in the memorandum included design flows and loads for current projections within available planning horizon, modifications or improvements to address capacity and effluent quality, algae reduction options, and disinfection system improvement options and recommendations. As Project Engineer, reviewed previous recommendations, performed hydraulic retention time calculations, prepared evaluation figures, and drafted report language.

Spray Field Technical Memo, City of St. Helena. The City of St. Helena received a notice of violation from the Regional Water Quality Control Board for excessive discharge from their wastewater treatment facility to the Napa River. The existing irrigation system needed to be rehabilitated and spray head capacities increased. Bennett Engineering Services provided a technical memorandum evaluating the existing layout and planned flow for the spray field irrigation system, prepared plans and specifications, and provided engineering support during construction. As Project Engineer, prepared plans, specifications, and estimate and provided engineering support during construction.

Newcastle Sewer Master Plan, South Placer Municipal Utility District. The South Placer Municipal Utility District (SPMUD) annexed the Newcastle Sanitary District's (NSD) entire system several years ago. The old NSD system required CCTV work to locate facilities, CAD work to map the system, an evaluation and identification of all the facilities in the system requiring upgrades to meet SPMUD standards, ranking of importance of the repairs, budget level estimates for each repair, and identification of easements needed. A Master Plan Report was prepared to describe the findings of the analysis. As Project Engineer, assisted with the Master Plan, identification of improvements and review of existing data and District standards.

Green Hill Estates Evaluation, BMGH, LLC. This project included an evaluation of infrastructure systems (e.g. fire protection systems, utilities), review of conditions, covenants, and restrictions (CC&Rs), and recommendations for modifications to reduce operating and maintenance costs. Project Manager for fire suppression system hydraulic analysis, performance of life cycle cost analysis and budget alternatives analysis and preparation of technical and financial report.

KAITLYN SETHARES, EIT

Kati joined Bennett Engineering Services in September 2018. She recently graduated with honors from the University of Vermont with a Bachelor of Science in Civil Engineering and a minor in Mathematics. She served an internship at Fitzgerald Environmental Associates, assisting with CAD drawings and plans, and an internship with the Vermont Agency of Transportation, where she documented and assessed the condition of Vermont's historic trusses, reviewed plans, scoped bridges and culverts in need of repair or replacement, and designed improvements for both new and rehabilitated structures. Extracurricular activities have included volunteering with the U.S. Green Building Council Conference and assisting with projects and fundraising with Engineers Without Borders. Kati is proficient in AutoCAD, MATLAB, Revit, MicroStation, COMSOL, and GIS. She is also proficient in conversational Spanish.

PROJECT ROLE
Staff Engineer

PROFESSIONAL REGISTRATION
CA Engineer in Training,

EDUCATION
Bachelor of Science Civil Engineering, University of Vermont

CONTACT
1082 Sunrise Ave, Suite 100
Roseville, California 95762
Office (916) 783-4100
Direct (916) 771-6169
ksethares@ben-en.com

PROJECT EXPERIENCE

New Cement Hill Pipeline, Suisun-Solano Water Authority. This project will provide a second pipeline, consisting of 20-inch diameter PVC, from the Cement Hill Water Treatment Plant (CHWTP) to the site of the existing Tank 2A and future Tank 2B. Tasks include project management, plans, specifications, and estimate, flow meter installation, assistance with acquisition of an encroachment permit for construction within the Putah Canal right-of-way with the US Bureau of Reclamation, assuring environmental compliance, permitting, preparation of a Storm Water Pollution Prevention Plan (SWPPP), public outreach, and design support during construction. As Project Engineer, assisted with construction document preparation, including preparing the specifications and assisting with the plans and cost estimate.

City Engineering, City of Oroville. Assignments include transportation, water, wastewater, plan review, and funding acquisition projects. With assistance of firm staff, improvement plans for various projects have been prepared, including a sewer design, RSTP (Regional Surface Transportation Program) street rehabilitation, and sidewalk repair projects. As Project Engineer, assisted with the Fogg Avenue Drainage, Lower Wyandotte Culvert, and Highway 162 Manhole Raise Projects. Prepared cost estimates and exhibits for all three projects, and additionally prepared an encroachment permit for the manhole raise.

Feather River Force Main Planning Grant Assistance, City of Gridley. As Project Engineer, assisted with construction document preparation for the installation of a new flow meter along the Feather River Force Main. Prepared a preliminary plan set and cost estimate.

Biggs Water Storage Tank and Pump Station, City of Biggs. This project involved design and SRF funding coordination for the storage tank and pump station project for the City of Biggs. As Project Engineer, assisted with construction document preparation for the installation of a new water storage tank and pump station. Sized new pipes and developed plans for the tank and pump station, as well as compiling a preliminary cost estimate.

Wastewater Treatment Plant Improvements, Phase 2, City of Biggs. The project involved preparation of a design to convert the City's existing Wastewater Treatment Plant (WWTP) from a surface water discharge facility to a land application discharge facility and return the City to compliance with RWQCB. Phase 2 included the acquisition of approximately 150 acres of land for irrigation, grading and drainage improvements to the crop fields and storage pond, field irrigation piping design, a pump station to transport water to the storage pond, and updates to the electrical system and controls. In addition, the team provided funding acquisition and management through the SRF and coordination with RWQCB for the changes to the permit. As Project Engineer, assisted with construction document preparation and permit applications for the treatment plant discharge. Compiled information for the Report of Waste Discharge and assisted with plan edits for the final set.

Stephen Wahlstrom
Principal

Stephen Wahlstrom has been a practicing economist working on a wide variety of land development and planning projects throughout the Western United States since 1983. Mr. Wahlstrom started his first consulting firm in 1985. He established Wahlstrom & Associates in March 2007, after separating from a 20-year partnership.

Effective consulting requires multidisciplinary skills in order to bring business into a firm and manage projects to a successful conclusion. The ability to manage consulting projects requires leadership; people management skills; and the ability to analyze data, prepare written communications, and present information to business and governmental leaders. Mr. Wahlstrom has demonstrated his leadership abilities in a variety of settings and communities. He has led community meeting and strategic planning workshops, and delivered many presentations to elected and appointed governmental officials and corporate boards.

Examples of Consulting Assignments

Stephen Wahlstrom's portfolio of consulting assignments can be sorted into the five project categories listed below.

Economic Development Strategies or Plans

- El Centro Economic Development Strategy
- Dixon Economic Development Strategy and Northeast Quadrant Action Plan
- Imperial Valley Enterprise Zone Marketing Plan
- Copperopolis Market Study
- Tangipahoa (Louisiana) Economic Development Opportunities Report
- Western Nevada County Economic Development Study
- San Francisco Economic Development Strategy
- Coachella Business Attraction Feasibility Study
- Malibu Economic Plan
- Del Norte County Economic Development Strategy
- Maricopa County (Arizona) Economic Development Implementation Plan
- Hidalgo County (New Mexico) Economic Development Strategy
- West Wendover (Nevada) Economic Development Strategy
- Truckee Economic Development Strategy
- Hoopa Valley Economic Development Strategy
- Marina Economic Development Plan
- North Richmond Revitalization Plan
- Morro Bay's Economic Development Opportunities
- Battle Mountain (Nevada) Business Attraction Study
- Monterey Bay Area Science and Technology Center (MBEST) Market Niche Study

Market Absorption and Downtown Revitalization

- West El Monte Way Corridor Market Study (Dinuba)
- Orinda Retail Leakage Study
- King City Downtown Revitalization Plan
- North Watt Corridor Market Study
- Hetch Hetchy Retail Market Study
- Southeast Bakersfield Revitalization Study
- Alameda Retail Study
- Delano Downtown Business Improvement District
  Feasibility Study
- Marysville Downtown Plan
- Fallon (Nevada) Downtown Revitalization Plan
- Hughson Downtown Improvement Plan
- Richmond Downtown Revitalization Plan
- Fill Downtown Marketing and Promotion Plan
- Newman Downtown Revitalization Study
- El Centro Downtown Revitalization Plan
- Soledad Retail Recruitment Program
- Gustine Downtown Retail Study
- West Fresno County Retail Market Analysis
- Placerville Retail Expansion Study
- Oroville Downtown Market Study
- Natomas Station Commercial Market Study
- Gridley Industry and Business Assessment

Real Estate Market Feasibility Studies

- Copperopolis Market Study
- Glenbrook Basin Infill Study (Grass Valley)
- Chico West Airport Industrial Feasibility Study
- Coachella Industrial Park Feasibility Study
- Riverbank Theater Reuse Study
- Three Springs Master Plan Market Study (Durango, Colorado)
- Niles Master Plan Market Study (Fremont)
- El Centro Industrial Improvement Plan
- Avenal Industrial Development Feasibility Study
- Eureka (Nevada) Airport Feasibility Study
- Brawley Airport Area Marketing Plan
- Arcata Environmental Lodging Feasibility Study

General and Specific Plan Analysis

- El Centro General Plan Economic Development Element
- Richmond General Plan Economic Development
  Opportunity Analysis
- North Hemet Specific Plan Market Analysis
- Union City General Plan Economic Development Element
- East F Street Specific Plan Retail Study (Oakdale)
- Waterford General Plan Background Report

Economic and Fiscal Impact Analysis

- Rancho Los Lagos Impact Study
- 101 Ranch Impact Study
- Arkansas Solar Farm Impact Study
- Churchill County (Nevada) Geothermal Power Plant Impact Study
- Medical Center of America Impact Analysis (El Paso, Texas)
- Mono County Geothermal Power Plant Impact Study
- High Speed Rail Impact Study
- Soledad Economic Impact Peer Review
- Half Moon Bay Agricultural Conversion Impact Analysis
- Grass Valley Annexation Economic and Fiscal Impact Study
- Mills Piers Impact Analysis (San Francisco)
- Paradise Big Box Economic Impact Study
- Higgins Marketplace Jobs/Housing Balance and Fiscal Impact Study
- Lodi Wal-Mart Economic Impact Study
- Willows Wal-Mart Economic Impact Study
- Red Bluff Wal-Mart Economic Impact Study
- Alameda County Recycling Industry Economic Impact Analysis
- Weaverville Bypass Economic Impact Analysis

Summary of Professional Experience

2007	Wahlstrom & Associates, *Principal Owner*
2005 – 2007	Seifel Consulting, *Managing Consultant*
1985 - 2005	Applied Development Economics, *Managing Principal*
1981 - 1985	TEM Associates, *Economic Development Consultant*
1981	City of Oakland, Office of Economic Development and Employment, *Planning Intern*
1980 - 1981	National Economic Development Law Center, *Research Assistant*
1980	University of California, Berkeley, Department of Geography, *Research Assistant*
1978 - 1979	Neighborhood House (Seattle WA), *Community Development Associate*
1976 - 1978	*Economist,* US Peace Corps, Philippines

Associations and Professional Activities

Participated in a variety of national and state professional support organizations, including the California Association for Local Economic Development (CALED), the California Redevelopment Association (CRA), the International Economic Development Council (IEDC), and the California Enterprise Zone Association

Education

1981	University of California, Berkeley, Department of City and Regional Planning, *Master of City Planning*
1976	University of Washington, Seattle, Washington, *BA in Economics*

ATTACHMENT 5

Budget Amendment

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT
Administrative Directive 2019-02
Budget Change Request Form
Fiscal Year 2019-20

Date: 9/5/2019

To: Steven Palmer, PE, General Manager

From: Steven Palmer, PE, General Manager

Source of Funds or Transfer from:

Account Description	Account Number	Current Budget	Amount Budget Change	Amended Budget
		-		-
		-		-
		-		-
		-		-
		-		-
				-
			Total: $	-

New Appropriation or Transfer to:

Account Description	Account Number	Current Budget	Amount Budget Change	Amended Budget
Outside Services	10-5600-5080	$ 146,080	61,996	208,076
				-
				-
				-
				-
				-
			Total: $	61,996

Reason for change:

Board directed Engineering Evaluation of Capital Replacement Program - September 10, 2019 Board Meeting

Requested by: _____ Date: _____
Steven Palmer, PE, General Manager

General Manager: _____ Date: _____
Steven Palmer, PE, General Manager

Recommended: Yes: [x] No: [ ]

Approved: Yes: [ ] No: [ ]

ATTACHMENT 6

Professional Services Agreement

PROFESSIONAL SERVICES AGREEMENT

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is made and entered into this 10th day of September 2019, (the "Effective Date") by and between the Georgetown Divide Public Utilities District, a California Public Utilities District ("District"), and Bennett Engineering Services, Inc. ("Consultant"). District and Consultant may herein be referred to individually as a "Party" and collectively as the "Parties". There are no other parties to this Agreement.

RECITALS

A. District has determined that consultant services are required for non-audit services to assist the District in reviewing and updating finance and accounting policies and procedures (the "Project").

B. Consultant has submitted a proposal to District that includes a scope of proposed consultant services, attached hereto and described more fully in **Exhibit A** ("Services").

C. Consultant represents that it is qualified, willing and able to provide the Services to District, and that it will perform Services related to the Project according to the rate schedule included in the scope of proposed consultant services attached hereto as **Exhibit B** (the "Rates").

NOW, THEREFORE, in consideration of the promises and covenants set forth below, the Parties agree as follows:

AGREEMENT

1. Recitals. The recitals set forth above ("Recitals") are true and correct and are hereby incorporated into and made part of this Agreement by this reference. In the event of any inconsistency between the Recitals and Sections 1 through 20 of this Agreement, Section 1 through 20 shall prevail.

2. Consulting Services. Consultant agrees, during the term of this Agreement, to perform the Services for District in connection with the Project. Any request for services in addition to the Services described in **Exhibit A** will be considered a request for additional consulting services and not compensated unless the Parties otherwise agree in writing. No subcontract shall be awarded or an outside consultant engaged by Consultant unless prior written approval is obtained from District.

3. Compensation. District shall pay Consultant according to the fee schedule set forth in **Exhibit B** for a time and materials cost not to exceed $61,996 as full remuneration for the performance of the Services. Consultant agrees to maintain a log of time spent in connection with performing the Services. On a monthly basis, Consultant shall provide District, in reasonable and understandable detail, a description of the services rendered pursuant to the Services and in accordance with the Rates. If the work is satisfactorily completed, District shall pay such invoice

within thirty (30) days of its receipt. If District disputes any portion of any invoice, District shall pay the undisputed portion within the time stated above, and at the same time advise Consultant in writing of the disputed portion.

5. Term. This Agreement shall become effective on the Effective Date and will continue in effect until the Services provided herein have been completed, unless terminated earlier as provided in Section 6 or 7 below (the "Term").

6. Termination. District may terminate this Agreement prior to the expiration of the Term ("Termination"), without cause or reason, by notifying Consultant in writing of District's desire to terminate this Agreement (the "Termination Notice"). Upon receipt of a Termination Notice, Consultant shall immediately cease performing the Services. Consultant will be entitled to compensation, as of the date Consultant receives the Termination Notice, only for Services actually performed.

7. Termination for Cause. Notwithstanding Section 6 above, this Agreement may be terminated by District for cause based on the loss or suspension of any licenses, permits or registrations required for the continued provision of the Services, or Consultant's malfeasance. Termination of the Agreement for cause as set forth in this Section shall relieve District from compensating Consultant.

8. Confidential Information. Consultant understands and agrees that, in the performance of Services under this Agreement or in the contemplation thereof, Consultant may have access to private or confidential information that may be owned or controlled by District and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to District ("Confidential Information").

Consultant shall not, either during or after the Term, disclose to any third party any Confidential Information without the prior written consent of District. If District gives Consultant written authorization to make any such disclosure, Consultant shall do so only within the limits and to the extent of that authorization. Such authorization does not guarantee that the District will grant any further disclosure of Confidential Information. Consultant may be directed or advised by the District's General Counsel on various matters relating to the performance of the Services on the Project or on other matters pertaining to the Project, and in such event, Consultant agrees that it will treat all communications between itself, its employees and its subcontractors as being communications which are within the attorney-client privilege.

9. Performance by Key Employee. Consultant has represented to District that David Harden will be the person primarily responsible for the performance of the Services and all communications related to the Services. District has entered into this Agreement in reliance on that representation by Consultant.

10. Property of District. The following will be considered and will remain the property of District:

A. Documents. All reports, drawings, graphics, working papers and Confidential Information furnished by District in connection with the Services ("Documents"). Nothing herein shall be interpreted as prohibiting or limiting District's right to assign all or some of District's interests in the Documents.

B. Data. All data collected by Consultant and produced in connection with the Services including, but not limited to, drawings, plans, specifications, models, flow diagrams, visual aids, calculations, and other materials ("Data"). Nothing herein shall be interpreted as prohibiting or limiting District's right to assign all or some of District's interests in the Data.

C. Delivery of Documents and Data. Consultant agrees, at its expense and in a timely manner, to return to District all Documents and Data upon the conclusion of the Term or in the event of Termination.

11. Duties of District. In order to permit Consultant to render the services required hereunder, District shall, at its expense and in a timely manner:

A. Provide such information as Consultant may reasonably require to undertake or perform the Services;

B. Promptly review any and all documents and materials submitted to District by Consultant in order to avoid unreasonable delays in Consultant's performance of the Services; and

C. Promptly notify Consultant of any fault or defect in the performance of Consultant's services hereunder.

12. Representations of Consultant. District relies upon the following representations by Consultant in entering into this Agreement:

A. Qualifications. Consultant represents that it is qualified to perform the Services and that it possesses the necessary licenses, permits and registrations required to perform the Services or will obtain such licenses or permits prior to the time such licenses or permits are required. Consultant represents and warrants to District that Consultant shall, at Consultant's sole cost and expense, keep in effect or obtain at all times during the Term of this Agreement, any licenses, permits, and registrations that are legally required for Consultant to practice Consultant's profession at the time the Services are rendered.

B. Consultant Performance. Consultant represents and warrants that all Services under this Agreement shall be performed in a professional manner and shall conform to the customs and standards of practice observed on similar, successfully completed projects by specialists in the Services to be provided. Consultant shall adhere to accepted professional standards as set forth by relevant professional associations and shall perform all Services required

under this Agreement in a manner consistent with generally accepted professional customs, procedures and standards for such Services. All work or products completed by Consultant shall be completed using the best practices available for the profession and shall be free from any defects. Consultant agrees that, if a Service is not so performed, in addition to all of its obligations under this Agreement and at law, Consultant shall re-perform or replace unsatisfactory Service at no additional expense to District.

13. Compliance with Laws and Standards. Consultant shall insure compliance with all applicable federal, state, and local laws, ordinances, regulations and permits, including but not limited to federal, state, and county safety and health regulations. Consultant shall perform all work according to generally accepted standards within the industry. Consultant shall comply with all ordinances, laws, orders, rules, and regulations, including the administrative policies and guidelines of District pertaining to the work.

14. Independent Contractor; Subcontracting. Consultant will employ, at its own expense, all personnel reasonably necessary to perform the Services. All acts of Consultant, its agents, officers, employees and all others acting on behalf of Consultant relating to this Agreement will be performed as independent contractors. Consultant, its agents and employees will represent and conduct themselves as independent contractors and not as employees of District. Consultant has no authority to bind or incur any obligation on behalf of District. Except as District may specify in writing, Consultant shall have no authority, express or implied, to act on behalf of District in any capacity whatsoever as an agent. Consultant shall have no authority, express or implied, pursuant to this Agreement to bind District to any obligation whatsoever. Consultant is prohibited from subcontracting this Agreement or any part of it unless such subcontracting is expressly approved by District in writing.

15. Insurance. Consultant and all of Consultant's contractors and subcontractors shall obtain and maintain insurance of the types and in the amounts described in this paragraph and its subparagraphs with carriers reasonably satisfactory to District.

A. General Liability Insurance. Consultant shall maintain occurrence version commercial general liability insurance or an equivalent form with a limit of not less than Two Million Dollars ($2,000,000) per claim and Two Million Dollars ($2,000,000) for each occurrence.

B. Workers' Compensation Insurance. Consultant shall carry workers' compensation insurance as required by the State of California under the Labor Code. Consultant shall also carry employer's liability insurance in the amount of One Million Dollars ($1,000,000.00) per accident, with a One Million Dollar ($1,000,000.00) policy limit for bodily injury by disease, and a One Million Dollar ($1,000,000.00) limit for each employee's bodily injury by disease.

C. Automobile Insurance. Consultant shall carry automobile insurance for the vehicle(s) Consultant uses in connection with the performance of this Agreement in the amount of One Million Dollars ($1,000,000.00) per occurance for bodily injury and property damage.

D. Errors and Omissions Liability. Consultant shall carry errors and omissions liability insurance in the amount of no less than One Million Dollars ($1,000,000.00) per occurrence or greater if appropriate for the Consultant's profession. Architects and engineers' coverage is to be endorsed to include contractual liability. Any deductibles or self-insured retentions must be declared to and approved by the District. At the option of the District, either the insurer shall reduce or eliminate such deductibles or self-insured retentions with respect to the District, elected and appointed councils, commissions, directors, officers, employees, agents, and representatives ("District's Agents"); or the Consultant shall provide a financial guarantee satisfactory to the District guaranteeing payment of losses and related investigations, claims administration and defense expenses.

E. Other Insurance Requirements. Within five (5) days of the Effective Date, Consultant shall provide District with certificates of insurance for all of the policies required under this Agreement ("Certificates"), excluding the required worker's compensation insurance. Such Certificates shall be kept current for the Term of the Agreement and Consultant shall be responsible for providing updated copies and notifying District if a policy is cancelled, suspended, reduced, or voided. With the exception of the worker's compensation insurance, all of the insurance policies required in this Agreement shall: (a) provide that the policy will not be cancelled, allowed to expire, or materially reduced in coverage without at least thirty (30) days' prior written notice to District of such cancellation, expiration, or reduction and each policy shall be endorsed to state such; (b) name District, and District's Agents as additional insureds with respect to liability arising out of Services, work or operations performed by or on behalf of the Consultant; products and completed operations of the Consultant; premises owned, occupied, or used by the Consultant, or automobiles owned, leased, or hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the District; (c) be primary with respect to any insurance or self-insurance programs covering District or District's Agents and any insurance or self-insurance maintained by District or District's Agents shall be in excess of Consultant's insurance and shall not contribute to it; (d) contain standard separation of insured provisions; and (e) state that any failure to comply with reporting or other provisions of the policy including breaches of warranties shall not affect the coverage provided to the District.

16. Indemnification. Consultant hereby agrees to indemnify and hold harmless District, its agents, officers, employees and volunteers, against all liability, obligations, claims, loss, and expense (a) caused or created by Consultant, its subcontractors, or the agents or employees of either, whether negligent or not, pertaining to or related to acts or omissions of Consultant in connection with the Services, or (b) arising out of injuries suffered or allegedly suffered by employees of Consultant or its subcontractors (i) in the course of their employment, (ii) in the performance of work hereunder, or (iii) upon premises owned or controlled by District. Consultant's obligation to defend, indemnify and hold District and its agents, officers, employees and volunteers harmless is not terminated by any requirement in this Agreement for Consultant to procure and maintain a policy of insurance.

17. Consequential Damages. Notwithstanding any other provision of this Agreement, in no event shall District be liable, regardless of whether any claim is based on contract or tort, for any special, consequential, indirect or incidental damages, including, but not limited to, lost profits

or revenue, arising out of or in connection with this Agreement or the Services performed in connection with this Agreement.

18. Litigation. In the event that either Party brings an action under this Agreement for the breach or enforcement hereof, or must incur any collection expenses for any amounts due hereunder the prevailing Party in such action shall be entitled to its costs including reasonable attorney's fees, whether or not such action is prosecuted to judgment.

19. Notices. Any notice or communication required hereunder between District or Consultant must be in writing, and may be given either personally, by registered or certified mail (return receipt requested), or by Federal Express, UPS or other similar couriers providing overnight delivery. If personally delivered, a notice shall be deemed to have been given when delivered to the Party to whom it is addressed. Notices given by registered or certified mail shall be deemed to have been given and received on the first to occur of (a) actual receipt by any of the addressees designated below as the party to whom notices are to be sent, (b) on the date delivered as shown on a receipt issued by the courier, or (c) five (5) days after a registered or certified letter containing such notice, properly addressed, with postage prepaid, is deposited in the United States mail. If given by Federal Express or similar courier, a notice or communication shall be deemed to have been given and received on the date delivered as shown on a receipt issued by the courier. Any Party hereto may at any time, by giving ten (10) days written notice to the other Party hereto, designate any other address in substitution of the address to which such notice or communication shall be given. Such notices or communications shall be given to the Parties at the addresses in this paragraph set forth below:

If to District:	Georgetown Divide Public Utility District P.O. Box 4240 6425 Main Street Georgetown, CA 95634 Attention: General Manager
With courtesy copies to:	Churchwell White LLP 1414 K Street, 3rd Floor Sacramento, California 95814 Attention: Barbara A. Brenner, Esq.
If to Consultant:	Bennett Engineering Services, Inc. Attention: David Harden 1082 Sunrise Avenue, Suite 100 Roseville, California 95661

20. General Provisions.

A. Modification. No alteration, modification, or termination of this Agreement shall be valid unless made in writing and executed by all Parties.

B. Waiver. The waiver by any Party of a breach of any provision hereof shall be in writing and shall not operate or be construed as a waiver of any other or subsequent breach hereof unless specifically stated in writing.

C. Assignment. No Party shall assign, transfer, or otherwise dispose of this Agreement in whole or in part to any individual, firm, or corporation without the prior written consent of the other Party. Subject to the forgoing provisions, this Agreement shall be binding upon, and inure to the benefit of, the respective successors and assigns of the Parties.

D. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state of California.

E. Venue. Venue for all legal proceedings shall be in the Superior Court of California for the County of El Dorado.

F. Partial Invalidity. If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any way.

G. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall constitute an original and all of which shall be deemed a single agreement.

H. Severability. If any term, covenant, or condition of this Agreement is held by a court of competent jurisdiction to be invalid, the remainder of this Agreement shall remain in effect.

I. Audit. District shall have access at all reasonable times to all reports, contract records, contract documents, contract files, and personnel necessary to audit and verify Consultant's charges to District under this Agreement.

J. Entire Agreement. This Agreement sets forth the entire understanding between the Parties as to the subject matter of this Agreement and merges all prior discussions, negotiations, proposal letters or other promises, whether oral or in writing.

K. Headings Not Controlling. Headings used in this Agreement are for reference purposes only and shall not be considered in construing this Agreement.

L. Time is of the Essence. Time is of the essence in this Agreement for each covenant and term of a condition herein.

M. Drafting and Ambiguities. Any rule of construction that ambiguities are to be resolved against the drafting party does not apply in interpreting this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the last day and date below written.

DISTRICT:

GEORGETOWN DIVIDE PUBLIC UTILITIES DISTRICT, a California Public Utilities District

By: _____
Steven V. Palmer, General Manager

Date: _____

Approved as to Form:

_____
Barbara A. Brenner, General Counsel

CONSULTANT:

By: _____

Name: _____

Date: _____

EXHIBIT A

Services

TASK 1. PROJECT MANAGEMENT

Subtask 1.1. Project Administration

BEN|EN's Project Manager will submit monthly project status updates and invoicing, and will be responsible for contract management. BEN|EN will also manage the project schedule, subconsultant work, and integrate deliverables.

Subtask 1.2. Quality Control

BEN|EN's quality control program will be implemented and conducted by senior BEN|EN staff prior to submittal of the Draft Capital Replacement (CRP) Evaluation Report and the Final CRP Evaluation Report.

TASK 2. PROJECT INITIATION, RESEARCH, AND FIELD WORK

Subtask 2.1. Project Meetings

BEN|EN will attend a project kick-off meeting. The Project Manager will coordinate regular bi-weekly update meetings (assumes 12), either by phone or in person. BEN|EN will also coordinate a review meeting after the submittal of the draft report. To assist the General Manager, BEN|EN will attend a District Board meeting and provide a presentation of the results to the Board of Directors of the findings.

Subtask 2.2. Research

BEN|EN will visit the District office to obtain available records, data, as-built drawings, and information from District staff necessary to estimate the age, condition, and quantities of each item listed in the CRP.

Subtask 2.3. Field Work

For items in the CRP that the District does not have adequate records and data to allow for the desktop assessment, BEN|EN will coordinate with District staff to perform field visits and site reconnaissance to obtain available information that can be gathered by visual inspection. Up to three (3) days of field work will be performed requiring accompaniment by district staff.

TASK 3. EVALUATION OF CAPITAL REPLACEMENT PROGRAM

BEN|EN will evaluate each item on the District's CRP list and provide an estimated remaining useful life, cost to replace at the end of the useful life and the annual investment to replace each item.

Subtask 3.1. Remaining Useful Life Calculations

BEN|EN will evaluate the age of each item on the CRP and compare with industry standards to determine the useful life of that item. BEN|EN will gather input from District staff on item conditions that will be considered in projecting the useful life the District can expect to get out of each item.

Subtask 3.2. Cost Estimate

The cost evaluation will utilize projected cost strategic tools, such as Engineering News Record (ENR) cost indices and recent project bidding results for similar projects, as well as an assumed net present value to estimate the future cost of construction and materials.

For large capital replacement projects, the cost estimate will include industry standard percentages to estimate the cost of design, environmental services, contractor's profit, construction management services, contingency, and debt services.

For equipment, tools, and vehicle replacements, average cost found by means of internet searches will be utilized. References will be provided.

Subtask 3.3. Annual Investment Estimation

The financial analysis of replacing each infrastructure component will factor the costs of borrowing, the return on investment, anticipated inflation, and the District's current financial management practices of balancing new debt with pay as you go philosophy. The financial analysis of replacing the infrastructure improvements should be consistent with the District's current practices.

Subtask 3.4. Final Report

BEN|EN will prepare a report of our findings from the above tasks. The report will include the methods and assumptions used to prepare the estimates. The report will estimate the remaining useful life and the cost to replace each item and recommended annual investment required to implement the District's CRP.

DELIVERABLES:

- Draft CRP Evaluation Report
- Final CRP Evaluation Report
- Presentation of Findings

Fee Estimate

Client: Georgetown DIVide Public Utility District

Consultant: Bennett Engineering Services Inc

Project: Evaluation of Capital Replacement

Date: April 8, 2019

Fee Estimate	Principal Engineer 247 $/hr		Project Manager III 191 $/hr		Engineer V 201 $/hr		Engineer I 150 $/hr		Engineering Tech I 110 $/hr		Administrative 80 $/hr		BEN|EN Subtotal		MISC EXPENSES	Webstrom & Associates	TOTAL
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost		Contract	
Task 1 Project Management																	
1.1 - Project Administration	1 hrs	$247	8 hrs	$1,528	hrs	$0	hrs	$0	hrs	$0	10 hrs	$800	19 hrs	$2,575	$130	$0	$2,705
1.2 - Quality Control	2 hrs	$494	2 hrs	$382	4 hrs	$804	hrs	$0	hrs	$0	hrs	$0	8 hrs	$1,680	$80	$0	$1,760
Subtotal	3 hrs	$741	10 hrs	$1,910	4 hrs	$804	hrs	$0	hrs	$0	10 hrs	$800	27 hrs	$4,255	$210	$0	$4,465
Task 2 Project Initiation, Research, and Field Work																	
2.1 - Project Meetings	hrs	$0	12 hrs	$2,292	hrs	$0	4 hrs	$600	hrs	$0	hrs	$0	16 hrs	$2,892	$140	$0	$3,032
2.2 - Research	hrs	$0	12 hrs	$2,292	hrs	$0	20 hrs	$3,000	30 hrs	$3,300	hrs	$0	62 hrs	$8,592	$430	$0	$9,022
2.3 - Field Work	hrs	$0	24 hrs	$4,584	hrs	$0	hrs	$0	24 hrs	$2,640	hrs	$0	48 hrs	$7,224	$360	$0	$7,584
Subtotal	hrs	$0	48 hrs	$9,168	hrs	$0	24 hrs	$3,600	54 hrs	$5,940	hrs	$0	126 hrs	$18,708	$930	$0	$19,638
Task 3 Evaluation of CRP																	
3.1 - Remaining Useful Life Calculation	hrs	$0	6 hrs	$1,146	2 hrs	$402	8 hrs	$1,200	hrs	$0	hrs	$0	16 hrs	$2,748	$140	$0	$2,888
3.2 - Cost Estimate	hrs	$0	20 hrs	$3,820	4 hrs	$804	24 hrs	$3,600	20 hrs	$2,200	hrs	$0	68 hrs	$10,424	$520	$0	$10,944
3.3 - Annual Investment Estimation	2 hrs	$494	4 hrs	$764	2 hrs	$402	10 hrs	$1,500	hrs	$0	hrs	$0	18 hrs	$3,160	$160	$10,350	$13,670
3.4 - Final Report	1 hrs	$247	20 hrs	$3,820	4 hrs	$804	28 hrs	$4,200	hrs	$0	10 hrs	$800	63 hrs	$9,871	$490	$0	$10,361
Subtotal	3 hrs	$741	50 hrs	$9,550	12 hrs	$2,412	70 hrs	$10,500	20 hrs	$2,200	10 hrs	$800	165 hrs	$26,203	$1,310	$10,350	$37,863
PROJECT TOTAL	6 hrs	$1,482	108 hrs	$20,628	16 hrs	$3,216	94 hrs	$14,100	74 hrs	$8,140	20 hrs	$1,600	318 hrs	$49,166	$2,450	$10,350	$61,966

Additional Fee Information

- This fee estimate is valid for 90 days.
- This fee estimate contains an abbreviated list of staff classifications and does not restrict BEN|EN to those classifications. The Standard Rate Schedule with a full list of staff classifications is available upon request.
- Standard hourly rates do not apply to a demand to perform work during an overtime period. Work required to be performed during an overtime period (as mandated by California law) may be charged at a 50% premium. Work mandated by Prevailing Wage laws may be charged at a 25% premium.
- Hourly rates include all compensation for wages, salary-related benefits, overhead, general office administration, and profit. Direct project administrative hours will be billed at the rate shown above.
- Classifications may be added or removed as needed without notice.
- Changes in the requested scope of work or projected schedule may result in the revision of the proposed fees and amendment to the total contract amount.
- Rates are subject to change annually effective July 1st.

INITIALS:

_____

_____

EXHIBIT B

Rates

ATTACHMENT 7

Resolution

RESOLUTION NO. 2019-

OF THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT AUTHORIZING THE GENERAL MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT FOR ENGINEERING SERVICES FOR THE ENGINEERING EVALUATION OF THE CAPITAL REPLACEMENT PROGRAM WITH BENNETT ENGINEERING SERVICES, INC. FOR AN AMOUNT NOT TO EXCEED $61,996

WHEREAS, the District issued a Request for Proposal on March 2019 and July 17, 2019, to select a qualified consultant to provide Engineering Services for the Engineering Evaluation of the Capital Replacement Program; and

WHEREAS, one proposal received on April 8, 2019 from Bennett Engineering Services, Inc. was reviewed by the General Manager and determined to meet the requirements of the District; and

WHEREAS, the contracted cost is not to exceed $61,996; and

WHEREAS, this expenditure was not included the Fiscal Year 2019/2020 Operating Budget, and a budget increase is required.

NOW, THEREFORE, IT IS HEREBY RESOLVED BY THE BOARD OF DIRECTORS OF THE GEORGETOWN PUBLIC UTILITY DISTRICT THAT:

1. The professional services contract is awarded to Bennett Engineering Services, Inc.; and
2. The General Manager is authorized to execute a professional services contract with Bennet Engineering Services, Inc. in the amount not to exceed $61,996 for Engineering Evaluation of the Capital Replacement Program; and
3. A budget increase in the amount of $61,996 to department 5600 Administration account 5080 Outside Service, thereby reducing the July 31, 2020 projected balance of the water general fund (Fund 10) from $1,554,445 to $1,492,449 is approved.

PASSED AND ADOPTED by the Board of Directors of the Georgetown Divide Public Utility District at a meeting of said Board held on the 10th day of September 2019, by the following vote:

AYES:

NOES:

ABSENT/ABSTAIN:

_____
Dane Wadle, President, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

Attest:

_____
Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

CERTIFICATION

I hereby certify that the foregoing is a full, true and correct copy of Resolution 2019- duly and regularly adopted by the Board of Directors of the Georgetown Divide Public Utility District, County of El Dorado, State of California, on this 10th day of September 2019.

_____
Steven Palmer, Clerk and Ex officio
Secretary, Board of Directors
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

REPORT TO THE BOARD OF DIRECTORS
BOARD MEETING OF SEPTEMBER 10, 2019
AGENDA ITEM NO. 7G.

GDPUD

AGENDA SECTION: **NEW BUSINESS**

SUBJECT: **PROVIDE DIRECTION ON NAME OF THE NEW AUBURN LAKE TRAILS WATER TREATMENT PLANT**

PREPARED BY: Steven Palmer, PE, General Manager

APPROVED BY: Steven Palmer, PE, General Manager

BACKGROUND

On various occasions in the past, the Board and individual Directors have raised the question of renaming the new water treatment plant. Most recently, Board President Wadle has raised the question of whether the new plant could be renamed.

Staff has recently initiated a new permit application that will affect both treatment plants. This is an appropriate time for the District to select a name for the treatment plant without incurring additional cost.

DISCUSSION

The District's current treatment plants are named Auburn Lake Trails Water Treatment Plant and Walton Lake Water Treatment Plant.

There are no mandatory guidelines for the District to follow when establishing a name for the water treatment plants. Typically, government agencies name facilities based on the following or similar criteria:

A. Neighborhood, geographic or common usage identification.
B. Building or property's purpose.
C. A natural or geological feature.
D. A historical figure or place.
E. An individual, living or deceased, who has made a significant land, building, or monetary contribution for the building or property being named.
F. An individual, living or deceased, who has contributed outstanding civic service to the District, and, if deceased, has been so for a period of at least one year.

Staff is requesting direction on whether the Board wishes to pursue a new name for the new water treatment plant, and the Board may propose and discuss a new name at this time.

FISCAL IMPACT

This item will not affect the operating or capital project budgets.

CEQA ASSESSMENT

This action is not a CEQA project.

RECOMMENDED ACTION

Staff recommends that the Board provide direction regarding naming the new water treatment plant.