



PARADISE IRRIGATION DISTRICT

6332 Clark Road, Paradise CA 95969 | Phone (530)877-4971 | Fax (530)876-0483

AGENDA

REGULAR MEETING PARADISE IRRIGATION DISTRICT BOARD OF DIRECTORS

MEETING LOCATION:
PID BOARD ROOM
6332 CLARK ROAD, PARADISE, CA 95969

WEDNESDAY, APRIL 17, 2019 – 6:30 PM

- ❖ *The Board of Directors is committed to making its meetings accessible to all citizens. Any persons requiring a special accommodation to participate, is requested to contact the District Secretary at 530-877-4971, extension 2039 at least 48 hours in advance of the meeting.*
- ❖ *The Board of Directors or its President pursuant to Government Code section 54954.3 reserves the right to impose reasonable regulations governing public participation on agenda and non-agenda items, including limiting the total amount of time allocated to public testimony on particular issues and for each individual speaker.*
- 1. **OPENING:**
 - a. Call to Order
 - b. Public & Board Members; please silence your cell phones
 - c. Invocation and Pledge of Allegiance
 - d. Roll Call
- 2. **APPOINTMENT OF DIRECTOR, DIVISION 3.** *Action may be taken.*
 - a. Consider candidates and make selection for appointment to fill the Division 3 vacancy on the Board of Directors. (The person appointed shall serve until the next general district election in November 2020, and thereafter until the person elected to fill the vacancy assumes office in December 2020).
 - b. The newly appointed Director will take the oath of office. The oath of office will be administered by the District Secretary.
- 3. **APPROVAL OF CONSENT CALENDAR:** *Action may be taken.*
 - a. Approval of Meeting Agenda Order
 - b. Approval of Minutes: Regular Meeting of March 20, 2019
- 4. **PUBLIC PARTICIPATION:**

Individuals will be given an opportunity to address the Board regarding matters not scheduled on the agenda, although the Board cannot take action on any matter not on the agenda. Comments will be limited to 5 minutes per speaker. Opportunity for public comment on agenda items will be provided at the time they are discussed by the Board with comments limited to 5 minutes per agenda item.
- 5. **PRESENTATION - PID EMPLOYEE RETIREMENT PROGRAM:** Presentation from International City County Management Association Retirement Corporation (ICMA-RC) to provide an update regarding the PID employee retirement program. *Informational item only.*
- 6. **FACILITIES STATUS REPORT UPDATE:** A verbal report regarding the status of PID facilities. *Information item only.*

7. **STAFF REPORTS:** Verbal Staff Reports for March, 2019. *Information item only.*
 - a. Staff Report Updates
 - b. Community Relations Update (Mickey Rich)
8. **TREASURER'S REPORT:** Review and acceptance of the Treasurer's Report for the period ending March 31, 2019. *Action may be taken.*
9. **APPROVAL OF CHECKS:** Approval of General Fund Check Numbers 52878 through 52983 for the month of March, 2019 totaling \$275,061.99, and authorization of a similar amount allowing or adjusting for extraordinary budget or Board approved items during the month of May. *Action may be taken.*
10. **LEGAL REPORT:** A verbal update from Legal Counsel. *Information item only.*
11. **UNFINISHED BUSINESS:** None to Report.
12. **NEW BUSINESS:**
 - a. PID WATER SYSTEM RECOVERY PLAN - DRAFT (Sami Kader, Principal – Water Works Engineers): Presentation and acceptance of the Paradise Irrigation District Water System Recovery Plan. *Action may be taken.*
 - b. Disaster Recovery Management Services Agreement – Scope of Work Amendment (Manager Phillips): Approve the change of scope of the agreement with Water Works Engineers dated March 14, 2019 for project management services. *Action may be taken.*
 - c. Memorandum of Agreement with South Feather Water & Power Agency (Manager Phillips): Approve Memorandum of Agreement between South Feather Water & Power Agency and PID, and authorize the District Manager to execute the Agreement pertaining to assistance provided under the Emergency Management Mutual Aid Plan. *Action may be taken.*
 - d. Discussion regarding Water filtration with activated charcoal systems on residential homes (Director Kellogg). *Information item only.*
 - e. PID Policy & Procedures – Chapter 12 Procurement Policy (Manager Phillips): Review and adopt proposed revision to Procurement Policy to add Chapter 12.2.2.1 – Avoidance of Acquisition of Unnecessary or Duplicative Items. *Action may be taken.*
 - f. Claim for Vehicle Damages – ACWA-JPIA Claim No. 19-0446: Formally reject claim for vehicle damages filed on behalf of the USAA Casualty Insurance Company, and approve the Letter of “Merit Rejection” for submittal to ACWA Joint Powers Insurance Authority to process and respond to the claim. *Action may be taken.*
 - g. Claim for Water Damages – ACWA-JPIA Claim No. 19-0514: Formally reject claim for water damages recorded as ACWA-JPIA Claim No. 19-0514 and approve the Letter of “Merit Rejection” for submittal to ACWA Joint Powers Insurance Authority to process and respond to the claim. *Action may be taken.*
13. **COMMITTEE REPORTS:** Informational items only.
Board oral report(s) regarding their representation on Commissions/Committees/Conferences:
 1. Paradise Lake & Recreation Committee (Directors Sulik & Kellogg – Chairperson)
14. **DIRECTORS' COMMENTS:** *Information Item Only.*

15. CLOSED SESSION:

- a. PUBLIC EMPLOYEE PERFORMANCE EVALUATION (Government Code section 57957)
Title: Management Employees

16. ANNOUNCEMENT FROM CLOSED SESSION

17. ADJOURNMENT

CONSENT CALENDAR
REGULAR MEETING
PARADISE IRRIGATION DISTRICT
BOARD OF DIRECTORS

WEDNESDAY, APRIL 17, 2019

A. APPROVAL OF MEETING AGENDA ORDER

B. APPROVAL OF MINUTES: March 20, 2019 Regular Meeting



PARADISE IRRIGATION DISTRICT

6332 Clark Road, Paradise CA 95969 | Phone (530)877-4971 | Fax (530)876-0483

To: Board of Directors

From: Kevin Phillips, District Manager
Georgeanna Borrayo, District Secretary

Date: April 10, 2019

RE: Appointment of Director, Division 3
04/17/2019 Board of Directors Meeting

On February 22, 2019 the District issued a Press Release announcing a vacancy exists in the Office of Director, Division 3, of the Paradise Irrigation District; however, no letters were received by the requested deadline of 4:00 p.m. on March 14, 2019. The notice of vacancy was redistributed extending the deadline to 4:00 p.m. on April 11, 2019. The District received letters from five candidates (please see attached). All candidates meet the following requirements:

In order to be considered for appointment, a candidate must be a registered voter in the district and a resident of Division 3 (Water Code, § 21100, subdivision (a).) The residency requirement is met if the person was domiciled in Division 3 at the time of the Camp Fire and intends to maintain such as his/her permanent residence.

The recommended form of motion would be:

"I move to appoint _____ to fill the Division 3 vacancy on the Board of Directors of the Paradise Irrigation District to serve until the next general district election in November 2020, and thereafter until the person elected to fill the vacancy assumes office in December 2020."

April 2, 2019



Board of Directors
Paradise Irrigation District
669 Palmetto Ave., Suite E
Chico, CA 95926

Dear Board of Directors,

Please accept this letter for consideration of appointment to the Division 3 vacant seat. I am a current resident within this division and reside in a standing home located at [REDACTED] Paradise, CA. In addition, I am a registered voter in the Division. My family and I have resided in this home for over 13 years but been residents of the Ridge for over 20 years. I am uniquely qualified for this vacant position for a variety of reasons.

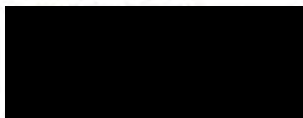
I am currently employed as the Director of the Department of Employment and Social Services for Butte County. As the Director of the largest county department, I oversee an operating budget of 143 million dollars annually and 650 employees. I have worked for Butte County for over 21 years and have had the unique opportunity to serve on many boards and committees locally as well as state wide. I hold a Bachelor's degree in Health Science-Community Health Education from CSU Chico as well as a Master's degree in Social Work from CSU Chico. During disasters I am responsible for all care and shelter for the residents of Butte County. I work in unison with the American Red Cross, Cal OES, and FEMA during and after disasters. During the multitude of disasters, I have been involved with, I have gained significant experience regarding disaster planning, response and recovery. I have a strong advocacy background which I believe will serve the residents of the Division as well as the interests of PID.

I am keenly interested in being a part of the recovery of the Town of Paradise and believe my skills will add to the strength of the current Board of Directors.

I look forward to hearing from you.

Sincerely,


Shelby Boston



Letter of Interest

Diana D. Siler
[REDACTED]

Paradise, California 95969
[REDACTED]

March 22, 2019

Board of Directors
Paradise Irrigation District
6332 Clark Road
Paradise, California 95969

Dear Board of Directors,

Please accept this Letter of Interest for the vacant role, Office of Director, Division 3, Paradise Irrigation District. I meet all the qualifications and have been very active in the community. Most importantly, over the past week, I have been in continued communication with the Purdue University team regarding, "Resilience: Citizen WATERR, Water At Taps: Citizen Engagement for Ridge Recovery" project. As you may know, the project's aim focuses on solving a complex water issue and is contingent on funding, as well as community interest. In order to further the project efforts I have shared the Letter of Intent (for participation with the project) with over 70 Paradise residents! Consequently, Dr. Andy Whelton, has invited me to meet with him next Monday, March 25!

The following information will help you know more about me:

- Qualifications as Required: Registered Voter, Current Resident of District 3 (home still stands)
- Community Skills: Community Activist, Post Camp Fire Seminar Organizer (for those with standing homes), Public Speaking, Social Media Organizer
- Expertise: Registered Nurse, Transformational Leadership, Successful Program Initiation and Development, Strong Organization Skills, Excellent Computer Skills, Certified Case Manager, Certified General Electric "Change Agent"

Here's what I envision if I were chosen for the Office of Director, Division 3: "Our water. Our Future." implies a team effort. Commendably, Paradise Irrigation District has committed to excellent problem solving by engaging Purdue University. It's a huge step in favor of ALL the key stakeholders. I will strive to achieve a safe water program for all by utilizing every single resource available—and then thinking outside of the box to solve problems in a unique way if necessary. If chosen, I will fully embrace the opportunity to serve, with great teamwork and hope, for the people of Paradise.

I will look forward to interview-like questions at the next public meeting after April 11.

Regards,



Diana D. Siler

Paradise Irrigation District,

I have been a resident of Paradise since 1971. I went to high school at Paradise High School. I continued my education locally with Butte Community College and Chico State University.

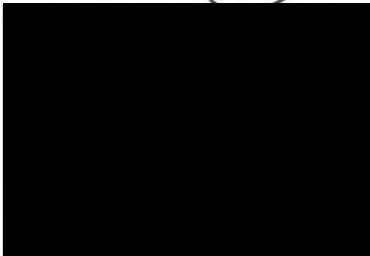
I was fortunate to know one of the council members who was involved in the incorporation of our town. The council was adamant about us remaining a small and inviting place to live. We incorporated as a township as opposed to a city. It was a positive step forward for our community.

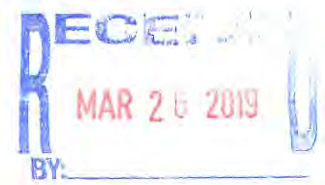
I am currently involved in the Paradise Ridge Democrat Club. Since the fire most of our membership has disbursed to other communities. Some will not move back to Paradise. I have chosen to stay and rebuild Paradise back to the strong township where we could all be proud to live. Part of the rebuilding is creating a strong utility department – Paradise Irrigation District.

Before the fire in November, I was living on the same property that I had lived while I was attending Paradise High School – [REDACTED] I work for the Work Training Center as an education products manager. I oversee assembly and distribution of school science kits. I am confident that I can be an asset and contribute my education and experience to PID. I think I can be part of finding the resolution for our water concerns for the future population of Paradise.

Therefore, I am submitting my name for consideration of the opening in office of Director Division 3 of the Paradise Irrigation District.


Debra McKey





Tim Thomason

March 26, 2019

RE: Letter of Interest - Director Vacancy Division 3

Board of Directors
Paradise Irrigation Office
3332 Clark Road
Paradise, CA 95964

Attn: Mark Sulik, President

This is to advise you that I wish to be considered for appointment to fill the existing Paradise Irrigation District Division 3 Director vacancy.

I am a permanent resident of Paradise, California. With my wife, we own our home. The residence street address is [REDACTED] in Paradise which is sited within District 3. It is our intention to continue to reside at this address. This residence was, amazingly, undamaged by the Camp Fire disaster.

I am a registered voter and understand that the person filling the Division 3 Director appointment will serve until the next general district election in November 2020.

Expected Board and Committee meeting frequency and attendance is clearly understood.

My employment background is focused within a wide business oriented spectrum. Emphasis is in banking, finance, project development and consultant to senior management of troubled companies throughout the United States and Canada. At this point in time I consider myself semi-retired.

I have served as both a member and chair of private and public 501(C)(3) organizations. Accompanying this *Letter of Interest* is my abbreviated CV. Details are certainly available.

Thank you.

Tim Thomason

Enclosure (1)

[REDACTED]
Paradise, California 95969-4339 [REDACTED]
[REDACTED]

TIMOTHY T. THOMASON

Business Professional with management, staff and contractual consulting responsibilities in the financial, manufacturing and entertainment industries. Primary business focusses include strategic planning, regulatory compliance, audit, crisis management, budgeting and business management skills.

PROFESSIONAL PROFILE

Director Commercial Services

Work Training Center, Inc 501C(3) - Chico CA
2015 - 2016

- Managed all business aspects of six seasoned for-profit entities: Wood Products, Soft goods, Landscaping, Recycling, Janitorial and Assembly services

Banking & Business

Prism Consulting / ISI Consulting
1991 - 2015

- Developed acquisition strategy and positioned financing to acquire a small three ship cruise line.
- Developed and produced business plan/capital solicitation document startup businesses
- Conducted on site intensive audit reviews covering credit quality, operations and conformation to policy for a large South American development bank.

President & CEO

Alvarado Community Bank: Richmond CA 1983 - 1991

- Organized and managed growth of the bank from \$6 million to a \$51 million in total assets.
- Produced management and financial reports for bank directors and regulators; administered investment portfolios; prepared strategic plan and annual supporting business plans with budgets.

Vice President - Manager, Electronic Banking Group

Hibernia Bank San Francisco: 1981 - 1984

- Managed high cost, high visibility, turnkey project for a fully integrated multi-bank ATM system involving all phases of design, testing, installation, marketing and operations support.

Executive Administrator

Palmetto Bay Development, San Francisco, CA - Honduras, C. A.: 1979 - 1981

- Managed planning, development and capital acquisition for a 160-acre international resort sited in Central America. Coordinated foreign government planning and permitting requirements.

Business Skills

Management & Administration - Senior levels
Project Management - Design, development, tracking, implementation
Problem Resolution - Routine and Crisis Management
Financial Planning - Budgets, project analysis, investments
Public Relations - Shareholder, press, customer

Technical Skills

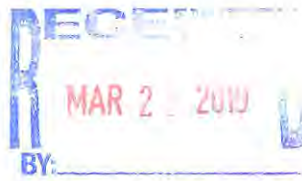
Financial Analysis - Credit, project accounting, investments
Excel, Word, QuickBooks, Power Point

Education

University of Cincinnati, B.A. Economics
Graduate School Credit & Financial Management, Dartmouth
International Banking School, San Jose State

Affiliations

Private Industry Council (CA) - Board of Directors, Vice-Chairman, Chairman
Richmond Art Center (CA) - Board of Directors, Chairman
Richmond YMCA (CA) - Board of Directors
Rotary International - Board of Directors, International Director (CA, FL, AZ and SC)



March 25, 2019

John Wulff

Paradise, CA 95969

To Whom it may concern:

My name is John Wulff. I have lived at [REDACTED] in Division 3 for the last 34 years and have lived in Paradise for 35 years. Since the Camp Fire my wife and I, like so many others, have been temporarily displaced to Chico. We are going to rebuild our home on [REDACTED] as soon as we are able.

At this time, I would like to pursue the opportunity to fill the vacancy for Division 3 PID Board Member.

I feel I am qualified for this appointment for many reasons. For the last 40 years I have been a Project Superintendent / Project Manager for large construction companies. My main area of expertise has been in Hospitals, Medical Centers and Schools. I've worked alongside PID while building the Feather River Medical Center at the edge of town and while building other projects at the Feather River Hospital's main campus. I've also worked alongside Cal-Water on many projects throughout Northern California.

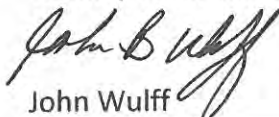
I served on the Feather River Hospital's Board of Trustees for over 8 years and other volunteer boards helping those in need in and around Paradise.

I retired from the company I was working for after the Camp Fire. Now I won't be working out of the area. I'm now working with a local construction company to rebuild Paradise.

I believe, in these trying times our town is going through, I will be able to be of true help to PID. I am fairly well known in our community, have good people skills and know what it takes to work with others.

If there is any other information you would like to know about me or my qualifications, please feel free to call or e-mail me.

Thank you for this opportunity. I look forward to hearing back from you.


John Wulff



Press Release

PARADISE IRRIGATION DISTRICT DIRECTOR VACANCY

A vacancy exists in the Office of Director, Division 3, of the Paradise Irrigation District. Pursuant to Government Code Section 1780, the remaining Directors of the District are seeking qualified applicants to serve as an appointed Director. The person appointed shall serve until the next general district election in November 2020, and thereafter until the person elected to fill the vacancy assumes office in December 2020.

Directors are expected to attend at least one evening Board meeting a month and typically attend an average of two committee meetings a month. The District will make an effort to provide board training, as it is available.

In order to be considered for appointment, a candidate must be a registered voter in the district and a resident of Division 3. (Water Code, § 21100, subdivision (a).) The residency requirement is met if the person was domiciled in Division 3 at the time of the Camp Fire and intends to maintain such as his/her permanent residence. Division 3 includes properties approximately between Bille and Skyway to Elliott and Skyway, and eastward encompassing Bille Road south to Nunneley Road to the east edge of town. A map of the boundaries of Division 3 can be viewed on the District's website at www.pidwater.com.

Persons who wish to be considered for appointment to fill the vacancy must submit a letter of interest, including their name, residence address, and a statement of qualifications to the Board of Directors, no later than 4:00 PM, ~~March 14~~ April 11, 2019.

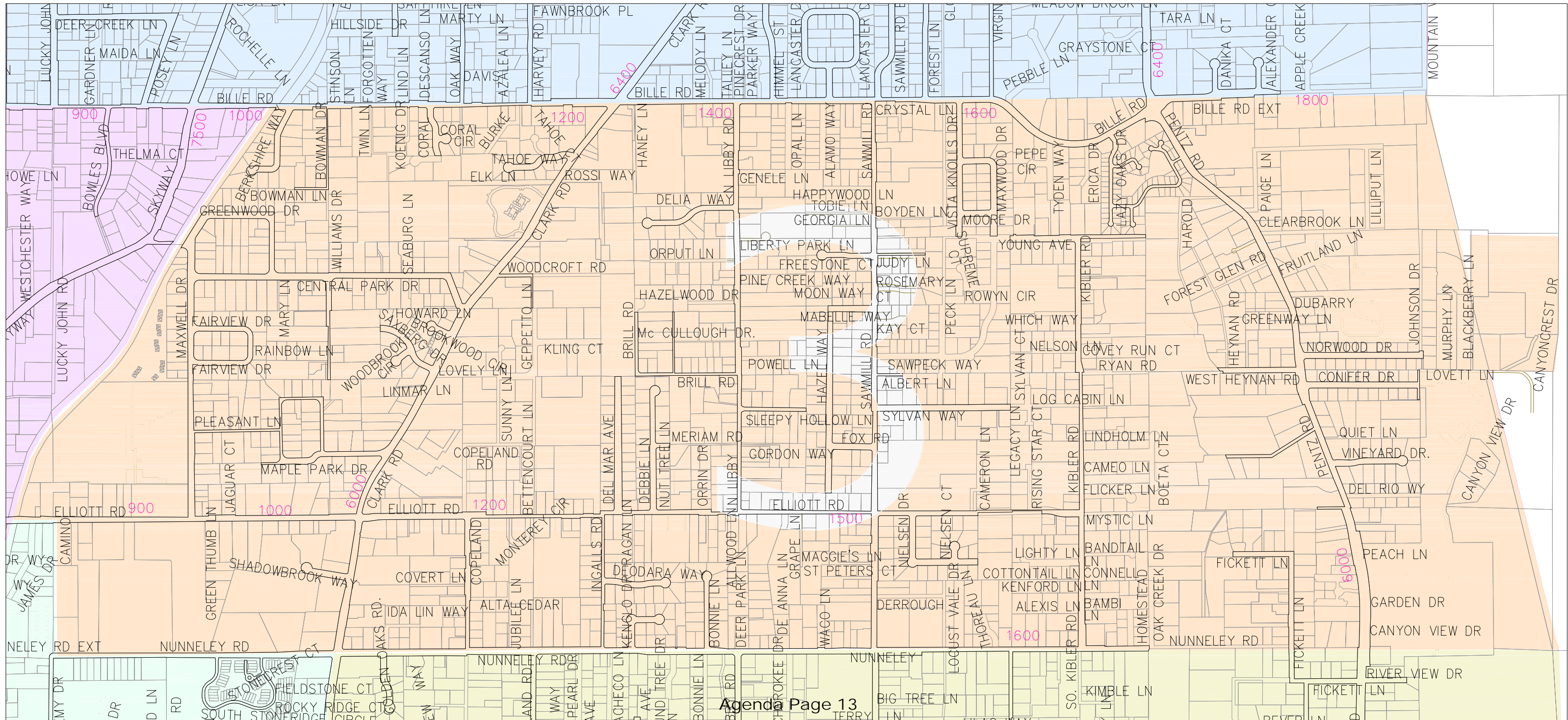
The letter of interest may be hand delivered or mailed (Postmark dates will not be acceptable) to the following address:

Board of Directors
Paradise Irrigation District
6332 Clark Road
Paradise, CA 95969

###

PARADISE IRRIGATION DISTRICT

DIVISION THREE



MINUTES

REGULAR MEETING BOARD OF DIRECTORS PARADISE IRRIGATION DISTRICT MARCH 20, 2019

The regular meeting of the Board of Directors of the Paradise Irrigation District was called to order at 6:30 p.m. by President Marc Sulik, followed by an Invocation and the Pledge of Allegiance to the Flag of the United States of America.

OPENING

BOARD MEMBERS
PRESENT: Directors Dan Hansen, President Marc Sulik, Vice-President
Bob Prevot, and Bill Kellogg

ROLL CALL

BOARD MEMBERS
ABSENT: Division 3 Director seat vacant following a letter of
resignation submitted from Anne Rice effective February 20,
2019.

STAFF PRESENT: District Manager Kevin Phillips, Information Systems
Manager Mickey Rich, Finance & Accounting Manager Ross
Gilb, and Board Secretary Georgeanna Borrayo

ALSO PRESENT: Attorney Dustin Cooper and members of the public

Board members reviewed consent calendar items as follows:

APPROVAL OF
CONSENT
CALENDAR
(Item 2.a.-2.b.)

- 2.a. Approval of Meeting Agenda Order
- 2.b. Approval of Minutes: Regular Meeting of February 20, 2019
Special Meeting of February 27, 2019

It was moved by Director Prevot and seconded by Director Hansen to approve the Consent Calendar as presented.

AYES: Directors Hansen, Prevot, Kellogg, and Sulik

NOES: None

ABSENT: Division 3 Director seat vacant

Motion passes 4-0

Public member Marty Dunlap commented on the Camp Fire Wildland Urban Interface Timber and Biomass Removal Project – Hazardous Fuels Reductions pilot project on the PID lands by the Butte County Fire Safe Council. Ms. Dunlap stated the evaluation of each tree under consideration for removal by trained arborists will mitigate further loss and destruction of our region and urged the Board to pursue this project with a conservative mindset as stewards of the PID land. Reference documents included information from the USFS for conifers, "Marking Guidelines for Fire-Injured Trees in California," May 2011 (Report # RO-11-01) and UC Davis Ag Extension for oaks, "Burned Oaks: Which Ones Will Survive?" (Publication 8445, January 2011).

PUBLIC
PARTICIPATION
(Item 3)

Ward Habriel commented on the following: 1) Welcomed PID Finance & Accounting Manager, Ross Gilb, 2) His participation as the new vice chair of the Butte County Fire Safe Council, and his representation on behalf of Paradise in the California Garden Club and Flower & Garden Show in Sacramento; 3) Donation opportunities to purchase daffodils from the Paradise Garden Club; and 4) Suggestion to request volunteer assistance to repair the fence in the back corner of the PID Demonstration Garden.

CONTINUED –
PUBLIC
PARTICIPATION

Jim Noble discussed continuing to raise an agricultural crop in the future and growing apples that the public deems safe. Community members interested in raising a garden may have similar concerns and suggested including this topic in discussions and perhaps in informational updates/communications.

FACILITIES STATUS
REPORT UPDATE
(Item 4)

Staff reported on progress toward developing a System Recovery Plan with FEMA and Cal OES to chart the best course of action to recover the water system. Items are reimbursable under certain categories as outlined in a procurement policy, which must be followed in order to be eligible to receive funding. Under FEMA requirements, damage must be shown. By testing every mainline, areas of damage can be determined and documented. Once these areas are isolated, crews will clean or replace portions of the piping system until water meets drinking water standards. The Draft Recovery Plan outlines a proposal to utilize water tanks as the infrastructure is tested in PID distribution zones A to G. PID will be hosting a community meeting on March 26 at 6:00 p.m. at the Paradise Alliance Church, 6491 Clark Road in Paradise to share more information and address questions. *Information item only; no Board action taken.*

STAFF REPORT
UPDATES
(Item 5)

Manager Phillips reported crews are working to identify leaks. The rainy weather and runoff, as well as all the surrounding debris from the fire, have made it more difficult to locate where leaks are surfacing. Crews have also been removing meters. When ready to begin meter replacement, a Request for Proposal will be issued to seek bids for this project. In reference to Community Relations, Public Information Officer Mickey Rich indicated thousands of people are viewing the District's website and the District is active on Facebook. Additionally, a water fact sheet has been developed and Manager Phillips has been speaking with various media agencies. Staff has received a lot of support from Cal OES and they will be helping with the community meeting on March 26. *Information item only; no Board action taken.*

TREASURER'S
REPORT ACCEPTED
FOR PERIOD
ENDING 02/28/2019

Manager Phillips introduced Ross Gilb who recently joined the District as Finance & Accounting Manager. Ross has been accompanying Manager Phillips in discussions with Cal OES and FEMA, and meeting with staff regarding day-to-day operations for accounts payable, utility billing, payroll, and banking.

For the period ending February 28, 2019, the District has received insurance proceeds in the amount of \$1,350,000. Additional funding of approximately \$350,000 has been received from FEMA and CalOES. Through February 28, 2019, the District has incurred debt service payments of \$548,251. The District's total outstanding debt is \$6,241,545. Manager Phillips further reported the State Revolving Fund has forgiven the District's loan for the Reservoir B Replacement Project. He is currently working with IBank regarding loan forgiveness and is also in contact with Branch Banking & Trust Co. (BB&T) regarding the \$3,361,900 Loan Agreement and potential to defer the installment of principal and interest becoming due on April 1, 2019. The outstanding debt with Capital One is also being reviewed.

It was moved by Director Prevot and seconded by Director Hansen to accept the Treasurer's Report for the period ending February 28, 2019.

AYES: Directors Hansen, Prevot, Kellogg, and Sulik

NOES: None

ABSENT: Division 3 Director seat vacant

Motion passes 4-0

APPROVAL OF
FEBRUARY 2019
CHECKS

Board members reviewed accounts payable reports for the month of February 2019. It was moved by Director Prevot and seconded by Director Hansen to approve General Fund check numbers 52789 through 52870 for the month of February 2019 totaling

\$548,632.65, and authorization of a similar amount allowing or adjusting for extraordinary budget or Board approved items during the month of March.

AYES: Directors Hansen, Prevot, Kellogg, and Sulik
NOES: None
ABSENT: Division 3 Director seat vacant

Motion passes 4-0

CONTINUED –
APPROVAL OF
CHECKS FOR THE
MONTH OF
FEBRUARY 2019
(Item 7)

Attorney Dustin Cooper discussed support for backfill funding for Paradise Irrigation District (PID). Funding for PID's infrastructure damage and fire-related water quality issues are being addressed through FEMA/OES and insurance proceeds. However, there is no current funding source to sustain PID's operational expenses given the overwhelming property losses suffered by PID's customers. Attorney Cooper added he has been working with state legislators for a one-time appropriation of \$21.6 million dollars to keep PID operating over the next three years while Paradise recovers and rebuilds from the November 2018 Camp Fire. The next stage is to seek support from the community, county, city, neighboring areas, and other water districts. Ways to show support include signing an online petition at Change.org, or by completing a template letter of support available to download on the District's website at www.pidwater.com, or at the PID office.

LEGAL REPORT
(Item 8)

Manager Phillips reported the District needs to inspect its steel storage tanks for damage due to the Camp Fire, which will be covered by insurance proceeds. The District solicited two highly qualified firms for proposals.

NEW BUSINESS:

It was moved by Director Kellogg and seconded by Director Hansen to approve and authorize the District Manager to execute an agreement with Harper & Associates Engineering, Inc. for inspection services for tanks A, C, D, & E at a cost not to exceed \$16,200.00.

ENGINEERING
SERVICES FOR
INSPECTION OF
WATER STORAGE
TANKS A,C,D,&E
AWARDED TO
HARPER & ASSOC.
(Item 9.a.)

AYES: Directors Hansen, Prevot, Kellogg, and Sulik
NOES: None
ABSENT: Division 3 Director seat vacant

Motion passes 4-0

Manager Phillips indicated the Distribution System Operator Job Description was previously approved and was unfilled. Proposed updates to the Job Description are relating to certification and timeframe for obtaining certification. A position is not being added. This position will be filled within PID and the position that is vacated will not be backfilled.

AMENDMENT TO
DISTRIBUTION
SYSTEM
OPERATOR JOB
DESCRIPTION
APPROVED
(Item 9.b.)

Requirements of Position: 1) Must possess CA Water Distribution Operator certification – Change from Grade 2 to Grade 1 or higher; 2) Must obtain CA Water Distribution Operator certification – Change from Grade 3 to Grade 2 within 18 months of employment in position; and 3) Update minimum of one year experience to two years experience as a Utility Worker 1.

It was moved by Director Prevot and seconded by Director Hansen to approve amendments to the Distribution System Operator Job Description as presented.

AYES: Directors Hansen, Prevot, Kellogg, and Sulik
NOES: None
ABSENT: Division 3 Director seat vacant

Motion passes 4-0

UPDATE –
DIRECTOR
VACANCY, DIV. 3
(Item 9.c.)

At the regular meeting of the Board of Directors on February 20, 2019, direction was given to staff to post the director vacancy in Division 3 following a letter of resignation from Director Anne Rice effective on this date. Persons interested in being considered for appointment to fill the vacancy were requested to submit a letter of interest to the Board of Directors by 4:00 p.m. on March 14, 2019. As of March 14, no letters of interest have been received from candidates meeting the residency requirement.

Time allows to continue seeking qualified candidates and consider letters of interest at the April 17, 2019 Board of Directors meeting. The deadline to submit a letter of interest has been extended to 4:00 p.m., April 11, 2019. *Information item only. No Board action taken.*

DIRECTORS'
COMMENTS
(Item 10)

Director Prevot: Thanked PID staff for their continued efforts and great work.

Director Hansen: Commented this is a challenging process and it is important for everyone to have patience. PID has an amazing staff and they're going above and beyond.

Director Sulik: Stated he appreciates the customers and staff; adding it is going to be a long road and we are going to get there by working together.

Director Kellogg: Thanked Manager Phillips for the information provided this evening.

CLOSED SESSION
(Item 11.a. & 11.b.)

President Sulik announced closed session discussion pertaining to agenda items 11.a. and 11.b. Following an opportunity for comments, the Board adjourned to closed session at 8:26 p.m. to discuss the following:

11.a. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION. Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9: One potential case.

Closed Session Announcement: Direction has been given to Legal Counsel.

11.b. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION (Paragraph (1) of subdivision (d) of Government Code Section 54956.9): Bay-Delta proceedings, including the California WaterFix, the associated environmental document and change petition pending before the State Water Resources Control Board, and the planned update to the Bay-Delta Water Quality Control Plan.

Closed Session Announcement: Direction has been given to Legal Counsel.

CLOSED SESSION
ANNOUNCEMENT

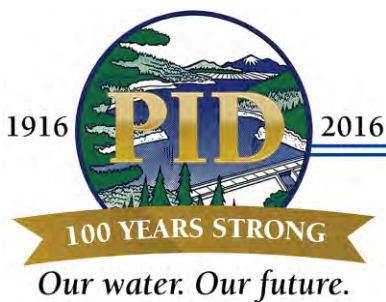
President Sulik reconvened the regular meeting at 9:15 p.m. and provided closed session announcement information regarding agenda items 11.a. and 11.b. as listed above in italicized print.

ADJOURNMENT

It was moved by President Sulik to adjourn the meeting. The regular meeting was adjourned at 9:17 p.m.

Georgeanna Borrayo, Secretary

Marc Sulik, President



PARADISE IRRIGATION DISTRICT

6332 Clark Road, Paradise CA 95969 | Phone (530)877-4971 | Fax (530)876-0483

1. **Cash position** – At 3/31/2019 the Districts total cash position was \$4,407,519.
2. **Debt Service Analysis** – Through 3/31/2019 we have incurred debt service payments of \$548,251. The total annual budgeted debt service is \$963,307. The Districts total outstanding debt is \$6,241,545.
 - a. IBank \$1,035,645
 - b. Capital One \$2,156,000
 - c. BB&T \$3,049,900
3. **Operational Issues**
 - a. 2018 – 2019 Financial Overview –
 - i. From an operational standpoint, service and consumption fees were not collected for November and December. The District is charging the readiness to serve charge of \$21.49 per month starting January 2019. The first bill will be mailed in March for January and February. We are not charging consumption fees due to the damage to the District's distribution system.
 - ii. Total Operating Expenses are still within budgeted expectations. The District cannot substantially cut their operational cost because the majority of the District's expenses are fixed.
 - b. Highlights from the Fiscal Year 2018 – 2019
 - i. The District continues to work with the FEMA and State of California to recover the District distribution system.
 1. Insurance Proceeds \$1,350,000
 2. FEMA Cal/OES 469,358
 - ii. We have made a request to the State of California for a budget allocation of \$21 million dollars to help bridge the gap for three years for the loss of revenue due to the Camp fire.

Paradise Irrigation District
March 31, 2019
Financial Summary

Description	2018/19 Actual	2018/19 Pre Fire Budget	2018/19 After Fire Budget	2019/20 Budget
<u>REVENUES:</u>				
Water Sales	3,902,953	8,046,852	4,858,748	1,800,000
Outside Water Sales	68,689	111,183	68,689	-
Other	2,440,170	363,957	2,440,170	-
Interest	19,712	20,000	19,712	20,000
Taxes - 1%	14,224	240,000	225,776	240,000
FMV Gain/Loss - Securities	-	-	-	-
Inc-Assessment Res (PID Share)	-	-	-	-
Grant Rev	-	-	-	-
Annexation	-	-	-	-
Inc-Save-A-Can/Buy-A-Fish	735	10,000	735	-
Inc-Capacity Fees	30,632	25,000	30,632	-
Revenue - PFD	63,969	120,000	120,000	-
	6,541,084	8,936,992	7,764,463	2,060,000
<u>EXPENDITURES:</u>				
Operating	3,977,803	5,298,014	5,298,014	5,428,489
Pipeline	720,492	992,489	992,489	992,489
Debt Service	548,251	963,307	963,307	963,677
Save a Can	-	8,000	8,000	-
PFD	-	200,000	200,000	-
	5,246,546	7,461,809	7,461,809	7,384,654
Increase/(Decrease) in Cash before Debt Proceeds and Capital	1,294,539	1,475,182	302,653	(5,324,654)
Debt Proceeds	-	11,000,000		-
Cash Available for Capital Projects	1,294,539	12,475,182	302,653	(5,324,654)
Capital Improvements Program	(144,452)	(12,975,000)	(144,452)	
Increase/(Decrease) in Cash	1,150,087	(499,818)	158,201	(5,324,654)
Beginning Cash Balance	3,257,432	4,407,519	3,257,432	3,415,633
Ending Cash Balance	4,407,519	3,907,701	3,415,633	(1,909,021)

Paradise Irrigation District
March 31, 2019
Revenue Summary

	FY 2015/16 Actual	FY 2016/17 Actual	FY 2017/18 Actual	FY 2018/19 Estimate	FY 2018/19 Actual
<u>General Fund/Operating</u>					
Water - Service	4,327,183	4,397,207	4,871,781	5,148,252	2,292,266
Water - Consumption	1,543,286	2,629,210	3,070,573	2,833,600	1,589,002
Water - Fees & Adjustments	42,631	43,355	49,298	65,000	21,684
Outside Water Sales	113,133	110,874	115,728	111,183	68,689
Meter Revenue	46,879	31,915	15,225	10,000	34,314
Recreation & Boating Permits	44,224	38,814	39,789	29,707	16,467
Backflow Check	10,080	10,940	10,960	15,000	4,960
Rents	9,885	17,095	15,740	22,250	7,267
Revenue - Surplus Property	74,512	24,737	17,481	10,000	9,991
Escrow Fees	-	-	-	10,000	-
Annexation	-	2,140	546	-	-
Custom Work/PFD Reimbursement	24,889	94,780	200,000	150,000	3,164
Misc	56,486	52,591	30,602	117,000	2,364,008
Interest				1,600	9,856
Total Operating Income	6,293,188	7,453,658	8,437,722	8,523,592	6,421,668
<u>Special Revenue Fund</u>					
Capital Improvement Program					
Taxes - 1%	254,125	259,213	271,960	240,000	14,224
\$1 Surcharge for Capital Projects	63,000				
Interest	34,783	34,783	11,326	18,400	9,856
FMV Gain/Loss - Securities	1,007	187	(514)	-	-
Inc-Capacity Fees	48,136	57,262	39,414	25,000	30,632
RDA Reimbursement	-	-			
Grant	-	-	-		-
Inc-Save-A-Can/Buy-A-Fish	8,539	6,622	8,351	10,000	735
Total Capital Improvement	409,589	358,067	330,538	293,400	55,447
<u>Debt Service Fund</u>					
Inc-Assessment Res (PID Share)	159,323	193,420	1,756	-	-
Interest	6,907	6,907	-	-	-
Total Debt Service	166,230	200,327	1,756	-	-
<u>PFD</u>					
Revenue - PFD	123,661	122,794	124,037	120,000	63,969
PFD - Interest Income					
Total PFD	123,661	122,794	124,037	120,000	63,969
Total Revenue	6,992,668	8,134,846	8,894,053	8,936,992	6,541,084

Paradise Irrigation District
March 31, 2019
Water Revenue

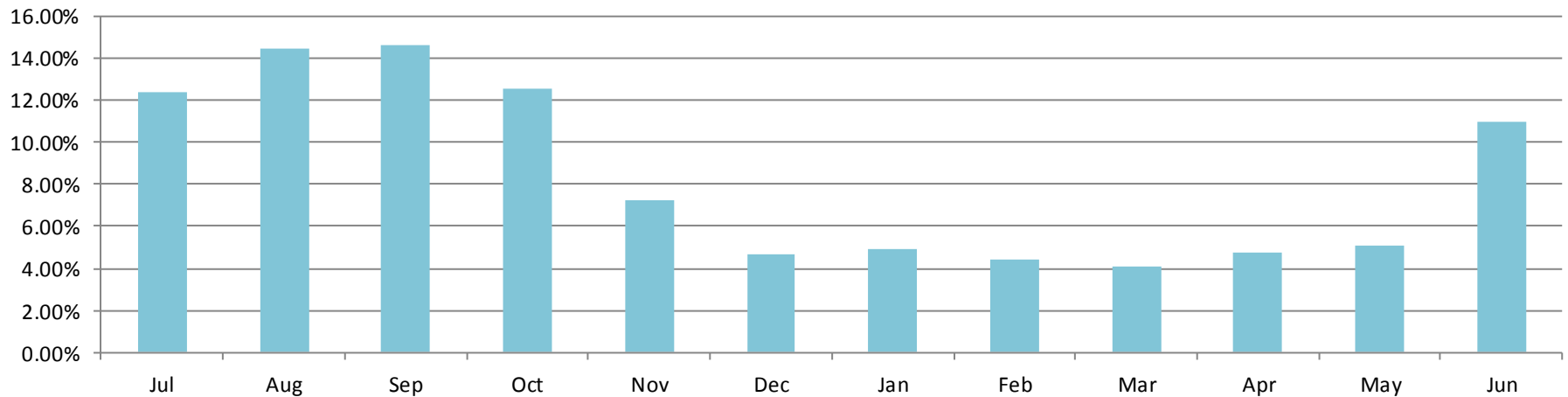
Consumption Variations

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Year to Date Totals
2018/19 Actual	374,367.10	442,495.43	421,306.50	366,184.98	359,180.71	107.87							1,963,642.59
2018/19 Budget	351,072.72	409,581.48	413,669.58	354,827.91	204,263.67	133,216.22	138,721.49	124,180.61	115,137.89	134,706.98	144,040.26	310,181.19	2,833,600.00
2017/18 Actual	359,667.07	474,793.44	432,333.28	373,575.65	303,595.80	137,963.02	148,321.64	119,874.00	140,302.00	134,383.23	157,435.81	288,146.25	3,070,391.19
2016/17 Actual	320,953.08	374,442.19	378,179.56	324,386.10	186,739.24	121,787.18	126,820.13	113,526.76	105,259.85	123,150.04	131,682.59	283,569.76	2,306,926.72

Service Charge

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Year to Date Totals
2018/19 Actual	436,392.90	436,643.38	436,273.95	436,719.47	537,251.36	-	-		410,682.19				2,693,963.25
2018/19 Budget	429,021.00	429,021.00	429,021.00	429,021.00	429,021.00	429,021.00	429,021.00	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00	2,895,105.00
2017/18 Actual	429,021.00	429,021.00	429,021.00	429,021.00	429,021.00	429,021.00	429,021.00	429,021.00	429,021.00	429,021.00	429,021.00	429,021.00	5,148,252.00
2017/18 Actual	370,414.10	371,213.98	370,772.40	371,237.20	370,130.18	371,681.00	371,421.01	436,336.33	436,122.75	436,034.97	435,797.15	435,718.87	4,776,879.94
2016/17 Actual	341,413.24	339,237.37	341,571.71	341,336.16	341,299.65	340,548.52	370,001.59	373,087.79	371,908.05	371,244.66	371,420.70	370,865.06	3,903,069.44

Percentage of Consumption Revenue Collected by Month



Paradise Irrigation District
March 31, 2019
Operational Expense Summary

	FY 2015/16 Actual	FY 2016/17 Actual	FY 2017/18 Actual	FY 2018/19 Estimate	FY 2018/19 Actual
Operational Summary					
Salary and Benefits	3,690,301	3,715,155	3,583,708	3,670,705	2,987,972
Materials and Supplies	526,662	669,902	641,180	752,500	352,035
Outside Services	340,807	358,722	442,291	455,320	352,997
Utilities	248,292	260,884	290,220	286,285	160,693
Insurance	89,972	86,488	111,642	92,155	102,415
Board	-	89,120	23,471	41,049	21,691
Total Operating Expense	4,896,033	5,180,270	5,092,511	5,298,014	3,977,803

	FY 2015/16 Actual	FY 2016/17 Actual	FY 2017/18 Actual	FY 2018/19 Estimate	FY 2018/19 Actual
Source of Supply					
Salary and Benefits	4,263	1,134	-	8,383	2,014
Materials and Supplies	30,860	58,344	55,247	55,000	29,255
Outside Services	7,294	8,387	9,138	30,070	3,726
Utilities	3,197	3,666	5,229	10,600	1,998
Insurance	775	800	492	680	-
Total Source and Supply	46,390	72,332	70,106	104,733	36,992
Security & Recreation					
Salary and Benefits	164,487	192,704	173,017	159,277	121,655
Materials and Supplies	4,901	1,237	1,494	7,900	499
Outside Services	1,635	5,450	1,427	5,800	1,906
Utilities	2,166	10,598	6,314	8,400	3,396
Insurance	2,410	2,486	1,530	3,131	-
Total Security & Recreation	175,600	212,474	183,781	184,508	127,456
Water Treatment					
Salary and Benefits	991,194	947,798	932,485	905,894	772,413
Materials and Supplies	163,669	191,014	183,223	207,900	95,253
Outside Services	35,458	22,381	23,262	63,500	25,684
Utilities	135,453	137,303	146,929	153,400	75,418
Insurance	19,168	19,773	12,168	17,740	-
Total Water Treatment	1,344,942	1,318,268	1,298,068	1,348,434	968,767
Transmission & Distribution					
Salary and Benefits	773,755	998,301	1,103,566	1,061,394	872,900
Materials and Supplies	92,977	176,836	191,972	228,200	121,096
Outside Services	25,545	23,688	21,988	29,400	205,113
Utilities	51,243	56,603	64,252	64,500	48,535
Insurance	15,557	16,048	9,876	26,778	-
Total Transmission and Distribution	959,077	1,271,476	1,391,655	1,410,272	1,247,644
Customer Service					
Salary and Benefits	422,998	448,304	453,206	430,837	346,152
Materials and Supplies	7,713	6,497	27	8,400	3,578
Outside Services	6,426	4,267	3,847	17,000	2,394
Insurance	5,808	5,991	3,687	11,936	-
Total Customer Service	442,945	465,059	460,766	468,173	352,123
Administration					
Salary and Benefits	1,333,604	1,126,914	921,433	1,104,921	872,838
Materials and Supplies	226,541	235,975	209,216	245,100	102,354
Outside Services	264,449	294,550	382,630	309,550	114,175
Utilities	56,232	52,714	67,496	49,385	31,347
Insurance	46,254	41,389	83,889	31,890	102,415
Board	-	89,120	23,471	41,049	21,691
Total Administration	1,927,080	1,840,661	1,688,136	1,781,894	1,244,820

Paradise Irrigation District
March 31, 2019
Debt

Loan Name	FY 2014/15 Actual Total Payments	FY 2015/16 Actual Total Payments	FY 2016/17 Actual Total Payments	FY 2017/18 Actual Total Payments	Estimated 2018/19	FY 2018/19 Actual Total Payments
Davis Grunsky	178,757	180,728	182,743	-	-	-
DWR	526,769	-	-	-	-	-
IBANK	134,876	130,311	130,276	130,240	130,202	130,202
Private Placement Loan	267,604	267,604	-	-	-	-
2009 COP's	617,894	616,594	614,694	538,047	-	-
2016 Private Placement (Refi)	-	-	243,426	244,874	244,325	122,237
2017 Private Placement (Refi)	-	-	-	75,192	588,780	295,811
New Debt	-	-	-	-	-	-
Total	1,725,900	1,195,238	1,171,139	988,353	963,307	548,251

Paradise Irrigation District
March 31, 2019
Capital Projects

Project Title	Total Requested	Priority 1	Priority 2	Priority 3	2018/19 Actual
Major Capital					
Water Right Permits	200,000	200,000			
Almond Street Pipeline	750,000	750,000			27,629
Process Water Recycle	100,000	100,000			
Spillway Investigation	450,000	450,000			51,094
B-Reservoir	11,000,000	11,000,000			61,709
Tank Rehab (C, D, & E)	900,000	300,000	300,000	300,000	4,020
Pentz Road Fickett to Stearns)	1,400,000	-	1,400,000		
Skyway (Clark Road to Wagstaff)	1,200,000	-	1,200,000		
Skyway (Longview Drive to Crossroad)	1,000,000	-	1,000,000		
Treatment Plant Upgrades					
Relocate 42-inch Creek Crossing	375,000		375,000		
SCADA Hardware and Software Upgrade	65,000		65,000		
Recuperate Plant Paving	225,000		225,000		
Replace Plant Generator/Transfer Switch	1,000,000		1,000,000		
Replace Washwater Eq Tank and add a 2nd	1,000,000		1,000,000		
Relocate Bleach Tanks w/ new Containment	250,000		250,000		
Minor Capital					
Treatment Plant Fork Lift	35,000	35,000	-	-	
Gator for Treatment Plant	15,000	15,000	-	-	
2018 F-150 (T & D)	35,000	35,000	-	-	
Pressure Washer	10,000	10,000	-	-	
Trencher	10,000	10,000	-	-	
IT Upgrades	70,000	70,000	-	-	
		-	-	-	
		-	-	-	
		-	-	-	
		-	-	-	
Total	20,090,000	12,975,000	6,815,000	300,000	144,452

Paradise Irrigation District
March 31, 2019
Contracts

Contracts		Total Contract Price	Total Paid	Remaining
Wagner & Bonsignore	Water Rights Engineer	Open	96,004.81	Open
De Novo Planning Group	Water Rights Engineer	306,430.00	204,558.74	101,871.26
Genterra Consultants	Spillway Investigation	360,214.00	346,099.32	14,114.68
Water Works	B-Reservior	773,964.00	739,728.26	34,235.74
Water Works	NPDES Permit	158,906.00	67,037.11	91,868.89
Water Works	Project Management Services	1,000,000.00	-	1,000,000.00
Firestorm	Arborist Services	26,880.00	-	26,880.00
TOTAL OUTSTANDING OBLIGATIONS				<u>1,268,970.57</u>



Paradise Irrigation District

Expense Approval Report By Vendor Name

Payment Dates 03/01/2019 - 03/31/2019

Payment Date	Payment Number	Description (Item)	(None)	(None)	Amount
Vendor: 02957 - Aflac					
03/08/2019	DFT0003207	Montly Aflac Invoice			276.42
03/22/2019	DFT0003215	Montly Aflac Invoice			276.42
				Vendor 02957 - Aflac Total:	552.84
Vendor: 01032 - Airgas NCN					
03/14/2019	52932	JOB #18-F1 - Welding Supplies -...			478.51
				Vendor 01032 - Airgas NCN Total:	478.51
Vendor: 02847 - American Conservation & Billing Solutions					
03/14/2019	52933	Aquahawk Alerting - 4-19			500.00
				Vendor 02847 - American Conservation & Billing Solutions Total:	500.00
Vendor: 01068 - Aramark Uniform Services					
03/08/2019	52878	JOB #18-F1 - Janitorial Supplies/...			227.08
03/08/2019	52878	JOB #18-F1 - Janitorial Supplies/...			518.83
03/08/2019	52878	JOB #18-F1 - Janitorial Supplies/...			103.25
03/08/2019	52878	JOB #18-F1 - Janitorial Supplies/...			227.08
03/08/2019	52878	JOB #18-F1 - Janitorial Supplies/...			79.17
03/08/2019	52878	JOB #18-F1 -			374.44
03/08/2019	52878	JOB #18-F1 - Janitorial Supplies/...			123.29
03/14/2019	52934	JOB #18-F1 - Janitorial/ Uniform...			186.80
03/14/2019	52934	JOB #18-F1 - Janitorial/ Uniform...			79.17
				Vendor 01068 - Aramark Uniform Services Total:	1,919.11
Vendor: 01256 - California State Disbursement Unit					
03/08/2019	52879	Garnishment			225.23
03/25/2019	52958	Garnishment			225.23
				Vendor 01256 - California State Disbursement Unit Total:	450.46
Vendor: 01285 - Chico Immediate Care					
03/08/2019	52880	Physicals - DMV - Shop			165.00
03/14/2019	52935	JOB #18-F1 - Medical Treatment			286.00
				Vendor 01285 - Chico Immediate Care Total:	451.00
Vendor: 01280 - Chico Power Equipment					
03/08/2019	52881	JOB #18-F1 - Construction & Ma...			225.36
				Vendor 01280 - Chico Power Equipment Total:	225.36
Vendor: 01302 - Clean King by DeHart					
03/14/2019	52936	JOB #18-F1 - Carpet Cleaning - ...			140.00
				Vendor 01302 - Clean King by DeHart Total:	140.00
Vendor: 01370 - Commercial Tire Warehouse					
03/14/2019	52937	JOB #18-F1 - Parts - Shop			429.58
				Vendor 01370 - Commercial Tire Warehouse Total:	429.58
Vendor: 02901 - CSMFO					
03/14/2019	52938	Membership			110.00
				Vendor 02901 - CSMFO Total:	110.00
Vendor: 01496 - Employee Relations					
03/14/2019	52939	Physicals - DMV & Preemploy...			51.35
				Vendor 01496 - Employee Relations Total:	51.35
Vendor: 01480 - Employment Development Dept.					
03/11/2019	DFT0003209	State Income Tax Withholding			4,186.64
03/11/2019	DFT0003212	State Disability Withholding			921.56
03/25/2019	DFT0003217	State Income Tax Withholding			3,704.85
03/25/2019	DFT0003220	State Disability Withholding			893.15
				Vendor 01480 - Employment Development Dept. Total:	9,706.20

Expense Approval Report

Payment Dates: 03/01/2019 - 03/31/2019

Payment Date	Payment Number	Description (Item)	(None)	(None)	Amount
Vendor: 01521 - Fastenal Co					
03/25/2019	52959	JOB #18-F1 - Construction & Ma...			83.32
				Vendor 01521 - Fastenal Co Total:	83.32
Vendor: 01527 - Ferguson Enterprises, Inc					
03/25/2019	52960	JOB #18-F1 - Construction & Ma...			352.85
				Vendor 01527 - Ferguson Enterprises, Inc Total:	352.85
Vendor: 01528 - FGL Environmental					
03/14/2019	52940	JOB #18-F1 - Water Testing			650.00
03/14/2019	52940	JOB #18-F1 - Water Testing			565.00
03/14/2019	52940	JOB #18-F1 - Water Testing			5,035.00
03/08/2019	52882	JOB #18-F1 - Water Testing			24.00
03/14/2019	52940	JOB #18-F1 - Water Testing			24.00
03/08/2019	52882	JOB #18-F1 - Water Testing			3,950.00
03/14/2019	52940	JOB #18-F1 - Water Testing			1,000.00
03/08/2019	52882	JOB #18-F1 - Water Testing			50.00
03/14/2019	52940	JOB #18-F1 - Water Testing			500.00
03/14/2019	52940	JOB #18-F1 - Water Testing			1,125.00
03/14/2019	52940	JOB #18-F1 - Water Testing			2,500.00
03/14/2019	52940	JOB #18-F1 - Water Testing			375.00
03/14/2019	52940	JOB #18-F1 - Water Testing			341.00
03/08/2019	52882	JOB #18-F1 - Water Testing			121.00
03/08/2019	52882	JOB #18-F1 - Water Testing			88.00
03/14/2019	52940	JOB #18-F1 - Water Testing			24.00
03/14/2019	52940	JOB #18-F1 - Water Testing			-565.00
03/14/2019	52940	JOB #18-F1 - Water Testing			-5,035.00
03/14/2019	52940	JOB #18-F1 - Water Testing			2,650.00
03/14/2019	52940	JOB #18-F1 - Water Testing			-424.00
03/14/2019	52940	JOB #18-F1 - Water Testing			250.00
03/14/2019	52940	JOB #18-F1 - Water Testing			475.00
				Vendor 01528 - FGL Environmental Total:	13,723.00
Vendor: 01539 - Firestorm Wildland Fire Suppression, Inc.					
03/25/2019	52961	JOB #18-F1 - Tree Removal			3,000.00
				Vendor 01539 - Firestorm Wildland Fire Suppression, Inc. Total:	3,000.00
Vendor: 01599 - Ginno's Appliance					
03/25/2019	52962	JOB #18-F1 - Refridgerator - Offi...			805.92
				Vendor 01599 - Ginno's Appliance Total:	805.92
Vendor: 01616 - Grainger Inc					
03/25/2019	52963	JOB #18-F1 - Construction & Ma...			395.87
03/25/2019	52963	JOB #18-F1 - Construction & Ma...			75.29
03/25/2019	52963	JOB #18-F1 - Construction & Ma...			395.30
03/25/2019	52963	JOB #18-F1 - Construction & Ma...			282.36
03/25/2019	52963	JOB #18-F1 - Construction & Ma...			1,072.97
03/25/2019	52963	JOB #18-F1 - Construction & Ma...			150.60
03/25/2019	52963	JOB #18-F1 - Construction & Ma...			2,936.54
03/25/2019	52963	JOB #18-F1 - Construction & Ma...			451.78
03/25/2019	52963	JOB #18-F1 - Construction & Ma...			-2,710.65
				Vendor 01616 - Grainger Inc Total:	3,050.06
Vendor: 03046 - Harris & Associates, Inc					
03/08/2019	52883	JOB #18-F1 - Emergency Disaste...			14,050.00
03/08/2019	52883	JOB #18-F1 -			8,240.00
				Vendor 03046 - Harris & Associates, Inc Total:	22,290.00
Vendor: 02889 - Health Equity, Inc.					
03/08/2019	DFT0003208	HSA Contribution			503.76
03/22/2019	DFT0003216	HSA Contribution			553.76
				Vendor 02889 - Health Equity, Inc. Total:	1,057.52
Vendor: 01673 - Herc Rentals					
03/08/2019	52884	JOB #18-F1 - Equipment Rental			410.61

Expense Approval Report

Payment Dates: 03/01/2019 - 03/31/2019

Payment Date	Payment Number	Description (Item)	(None)	(None)	Amount
03/14/2019	52942	JOB #18-F1 - Equipment Rentals...			2,089.75
Vendor 01673 - Herc Rentals Total:					2,500.36
Vendor: 01688 - Home Depot Credit Services					
03/08/2019	52885	JOB #18-F1 - Construction & Ma...			445.96
Vendor 01688 - Home Depot Credit Services Total:					445.96
Vendor: 01705 - Hunt & Sons, Inc.					
03/08/2019	52886	JOB #18-F1 - Fuel			1,536.06
03/14/2019	52943	JOB #18-F1 - Fuel			1,114.56
03/25/2019	52964	JOB #18-F1 - Fuel			606.14
03/25/2019	52964	JOB #18-F1 - Fuel			502.48
03/25/2019	52964	JOB #18-F1 - Fuel			192.25
Vendor 01705 - Hunt & Sons, Inc. Total:					3,951.49
Vendor: 01713 - I.B.E.W. Local Union 1245					
03/07/2019	52907	Union Dues			-42.00
03/07/2019	52907	Union Dues			867.95
03/25/2019	52965	Union Dues			867.95
03/25/2019	52965	Union Dues			-42.00
Vendor 01713 - I.B.E.W. Local Union 1245 Total:					1,651.90
Vendor: 01716 - ICMA Retirement Trust-401					
03/07/2019	1246	Retirement - 401(a) Match			1,993.41
03/25/2019	1248	Retirement - 401(a) Match			2,027.45
Vendor 01716 - ICMA Retirement Trust-401 Total:					4,020.86
Vendor: 01715 - ICMA Retirement Trust-457					
03/07/2019	1247	Retirement Trust - 457			1,993.41
03/07/2019	1247	Deferred Comp 457			6,328.00
03/07/2019	1247	Retirement Trust - 457			593.86
03/07/2019	1247	Retirement Trust - 457			2,122.49
03/07/2019	1247	Loan Payment			447.82
03/07/2019	1247	Loan Payment			125.00
03/07/2019	1247	Loan Payment			40.11
03/07/2019	1247	Loan Payment			184.94
03/25/2019	1249	Retirement Trust - 457			2,027.45
03/25/2019	1249	Deferred Comp 457			6,408.11
03/25/2019	1249	Retirement Trust - 457			593.86
03/25/2019	1249	Retirement Trust - 457			1,961.49
03/25/2019	1249	Loan Payment			447.82
03/25/2019	1249	Loan Payment			125.00
03/25/2019	1249	Loan Payment			40.11
03/25/2019	1249	Loan Payment			184.94
Vendor 01715 - ICMA Retirement Trust-457 Total:					23,624.41
Vendor: 01721 - Industrial Equipment					
03/07/2019	52908	JOB #18-F1 - Construction & Ma...			299.81
Vendor 01721 - Industrial Equipment Total:					299.81
Vendor: 01722 - Infinisource Cobra Compliance					
03/07/2019	52909	Flexible Benefits			80.00
03/25/2019	52966	Flexible Benefits			80.00
Vendor 01722 - Infinisource Cobra Compliance Total:					160.00
Vendor: 01720 - Inland Business Systems					
03/07/2019	52910	Office Equip. Maint. - Office			167.66
03/25/2019	52967	Office Equip. Maint. - Office			51.80
Vendor 01720 - Inland Business Systems Total:					219.46
Vendor: 01731 - Internal Revenue Service					
03/11/2019	DFT0003210	FICA Withholding			11,380.44
03/11/2019	DFT0003211	Fed Withholding			10,407.18
03/11/2019	DFT0003213	Medicare Withholding			2,661.52
03/25/2019	DFT0003218	FICA Withholding			10,972.20
03/25/2019	DFT0003219	Fed Withholding			9,621.83

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Payment Dates: 03/01/2019 - 03/31/2019

Payment Date	Payment Number	Description (Item)	(None)	(None)	Amount
03/25/2019	DFT0003221	Medicare Withholding			2,566.08
Vendor 01731 - Internal Revenue Service Total:					47,609.25
Vendor: 03057 - International Brotherhood of 137 TCWH					
03/25/2019	52968	Union Dues Teamsters			1,367.31
Vendor 03057 - International Brotherhood of 137 TCWH Total:					1,367.31
Vendor: 01742 - J C Nelson Supply Co.					
03/14/2019	52944	JOB #18-F1 -			69.35
Vendor 01742 - J C Nelson Supply Co. Total:					69.35
Vendor: 01765 - J W Wood Co., Inc					
03/07/2019	52911	JOB #18-F1 -			381.26
03/07/2019	52911	JOB #18-F1 - Construction & Ma...			645.10
Vendor 01765 - J W Wood Co., Inc Total:					1,026.36
Vendor: 01771 - Keller Supply					
03/07/2019	52912	JOB #18-F1 - Construction & Ma...			78.93
03/07/2019	52912	JOB #18-F1 - Misc. Fee			7.30
03/07/2019	52912	JOB #18-F1 - Construction & Ma...			31.67
Vendor 01771 - Keller Supply Total:					117.90
Vendor: 01844 - Lowe's Home Improvement					
03/14/2019	52945	JOB #18-F1 - Construction & Ma...			26.47
Vendor 01844 - Lowe's Home Improvement Total:					26.47
Vendor: 03032 - Mark Thomas & Company, Inc					
03/07/2019	52913	JOB #18-03 - Almond St. Water...			10,744.00
Vendor 03032 - Mark Thomas & Company, Inc Total:					10,744.00
Vendor: 01905 - Minasian, Meith, Soares, Sexton & Cooper, LLP					
03/14/2019	52946	JOB #18-F1 - Legal Fees			25,162.76
Vendor 01905 - Minasian, Meith, Soares, Sexton & Cooper, LLP Total:					25,162.76
Vendor: 03045 - N.C.G.T. SECURITY FUND					
03/07/2019	52914	Health			10,144.00
03/25/2019	52969	Health			10,144.00
Vendor 03045 - N.C.G.T. SECURITY FUND Total:					20,288.00
Vendor: 01960 - Normac					
03/07/2019	52915	JOB #18-F1 - Construction & Ma...			1,715.47
03/07/2019	52915	JOB #18-F1 - Construction & Ma...			515.60
03/14/2019	52947	JOB #18-F1 - Construction & Ma...			101.05
Vendor 01960 - Normac Total:					2,332.12
Vendor: 01977 - North Valley Barricade					
03/07/2019	52916	JOB #18-F1 - Safety Supplies - S...			217.45
Vendor 01977 - North Valley Barricade Total:					217.45
Vendor: 01980 - Northern Recycling & Waste Svcs					
03/14/2019	52948	Garbage - Lake			97.33
03/14/2019	52948	Garbage - TP			42.83
03/14/2019	52948	Garbage - Shop			150.28
03/14/2019	52948	Garbage - Office			4.15
03/14/2019	52948	Garbage			94.44
03/14/2019	52948	Garbage			94.44
03/14/2019	52948	Garbage			94.44
03/14/2019	52948	Garbage			94.44
Vendor 01980 - Northern Recycling & Waste Svcs Total:					672.35
Vendor: 01967 - Northern Safety					
03/25/2019	52970	JOB #18-F1 - Construction & Ma...			167.29
Vendor 01967 - Northern Safety Total:					167.29
Vendor: 01995 - Office Depot					
03/07/2019	52917	JOB #18-F1 - Office Supplies			288.41
03/07/2019	52917	JOB #18-F1 - Office Supplies			137.53
Vendor 01995 - Office Depot Total:					425.94

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Payment Date	Payment Number	Description (Item)	(None)	(None)	Amount
Vendor: 01538 - O'Reilly Auto Parts					
03/07/2019	52918	JOB #18-F1 - Construction & Ma...			24.21
03/07/2019	52918	JOB #18-F1 - Repairs - Unit 26			23.51
03/07/2019	52918	JOB #18-F1 - Construction & Ma...			64.62
03/07/2019	52918	JOB #18-F1 - Construction & Ma...			52.15
03/07/2019	52918	JOB #18-F1 - Repairs - Unit 54			28.13
03/07/2019	52918	JOB #18-F1 - Construction & Ma...			2.41
03/07/2019	52918	JOB #18-F1 - Repairs - Unit 54			13.02
03/07/2019	52918	JOB #18-F1 - Constuction & Mai...			3.76
03/07/2019	52918	JOB #18-F1 - Construction & Ma...			28.00
03/07/2019	52918	JOB #18-F1 - Repairs - Fork Lift			42.90
03/14/2019	52949	JOB #18-F1 - Tools - Shop			9.67
Vendor 01538 - O'Reilly Auto Parts Total:					292.38
Vendor: 02030 - Pace Supply					
03/07/2019	52919	JOB #18-F1 - Construction & Ma...			605.96
03/07/2019	52919	JOB #18-F1 - Construction & Ma...			1,377.61
03/07/2019	52919	JOB #18-F1 - Construction & Ma...			606.98
03/07/2019	52919	JOB #18-F1 - Construction & Ma...			866.58
03/07/2019	52919	JOB #18-F1 - Construction & Ma...			220.03
03/07/2019	52919	JOB #18-F1 - Construction & Ma...			3,483.65
03/07/2019	52919	JOB #18-F1 - Construction & Ma...			14,022.94
03/07/2019	52919	JOB #18-F1 - Construction & Ma...			1,198.58
03/07/2019	52919	JOB #18-F1 - Construction & Ma...			-7,011.47
03/07/2019	52919	JOB #18-F1 - Construction & Ma...			4,339.34
03/14/2019	52950	JOB #18-F1 - Construction & Ma...			1,481.87
03/14/2019	52950	JOB #18-F1 - COnstruction & Ma...			2,169.67
Vendor 02030 - Pace Supply Total:					23,361.74
Vendor: 02061 - PBM Supply & Mfg					
03/07/2019	52920	JOB #18-F1 - Construction & Ma...			120.98
Vendor 02061 - PBM Supply & Mfg Total:					120.98
Vendor: 02090 - Pitney Bowes Global Financial Services LLC					
03/14/2019	52951	Postage Meter			346.10
Vendor 02090 - Pitney Bowes Global Financial Services LLC Total:					346.10
Vendor: 03048 - Plan B Professional Answering Sewrvice					
03/14/2019	52952	JOB #18-F1 - Answering Service			232.50
Vendor 03048 - Plan B Professional Answering Sewrvice Total:					232.50
Vendor: 02098 - Pollard Water					
03/14/2019	52953	JOB #18-F1 -			348.64
Vendor 02098 - Pollard Water Total:					348.64
Vendor: 02057 - Riebes Auto Parts					
03/07/2019	52921	JOB #18-F1 - Repairs - Unit 26			11.25
03/07/2019	52921	JOB #18-F1 - Construction & Ma...			10.76
Vendor 02057 - Riebes Auto Parts Total:					22.01
Vendor: 02185 - Roberts & Brune Company					
03/25/2019	52971	Construction & Maint. Supplies -..			161.65
Vendor 02185 - Roberts & Brune Company Total:					161.65
Vendor: 02211 - Sabre Backflow, LLC.					
03/14/2019	52954	JOB #18-F1 - Construction & Ma...			199.87
Vendor 02211 - Sabre Backflow, LLC. Total:					199.87
Vendor: 03050 - Silvertree Investment Group					
03/07/2019	52922	JOB #18-F1 - Misc. Office			75.00
Vendor 03050 - Silvertree Investment Group Total:					75.00
Vendor: 02292 - Standard Insurance Company					
03/25/2019	52972	Long Term Disability			839.77
03/25/2019	52972	Long Term Disability			1,439.80
03/25/2019	52972	Long Term Disability			776.35
Vendor 02292 - Standard Insurance Company Total:					3,055.92

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Payment Date	Payment Number	Description (Item)	(None)	(None)	Amount
Vendor: 02293 - Stanley Convergent Security Solutions					
03/14/2019	52955	Building Security - TP			106.38
Vendor 02293 - Stanley Convergent Security Solutions Total:					106.38
Vendor: 02826 - Sylvir Consulting, Inc.					
03/25/2019	52973	JOB #18-F1 - Grant Writing			3,467.50
Vendor 02826 - Sylvir Consulting, Inc. Total:					3,467.50
Vendor: 02362 - Thomas Ace Hardware					
03/07/2019	52923	JOB #18-F1 - Construction & Ma...			33.61
Vendor 02362 - Thomas Ace Hardware Total:					33.61
Vendor: 02364 - Thrifty Rooter					
03/07/2019	52924	Bldg. & Grounds Maint. - 6344 C..			200.55
03/25/2019	52974	Bldg. & Grounds Maint. - 6332 C..			99.00
Vendor 02364 - Thrifty Rooter Total:					299.55
Vendor: 02964 - T-Mobile					
03/14/2019	52956	Fireflies - CS			354.30
Vendor 02964 - T-Mobile Total:					354.30
Vendor: 02394 - Tyler Technologies, Inc.					
03/07/2019	52925	Annual Maint. Financial Suite			22,618.81
03/07/2019	52925	Maintenance - 3/2019			200.00
03/25/2019	52975	Maintenance - 4/2019			200.00
Vendor 02394 - Tyler Technologies, Inc. Total:					23,018.81
Vendor: 03043 - Ultra Link Cabling Systems, Inc.					
03/14/2019	52957	JOB #18-F1 - Fiberoptic line			2,119.29
Vendor 03043 - Ultra Link Cabling Systems, Inc. Total:					2,119.29
Vendor: 02824 - US Bank Corporate Payment System					
03/25/2019	52977	JOB #18-F1 - Meals			29.35
03/25/2019	52977	JOB #18-F1 - Meals			42.40
03/25/2019	52977	JOB #18-F1 - Meals			260.08
03/25/2019	52977	JOB #18-F1 - Office Supplies			38.79
03/25/2019	52977	JOB #18-F1 - Office Supplies			24.94
03/25/2019	52977	JOB #18-F1 - Monthly Fees			12.99
03/25/2019	52977	JOB #18-F1 - Monthly Fees			19.99
03/25/2019	52977	JOB #18-F1 - Amazon			59.56
03/25/2019	52977	JOB #18-F1 - Meals			159.53
03/25/2019	52977	JOB #18-F1 - Meals			144.62
03/25/2019	52977	JOB #18-F1 - Meals			965.59
03/25/2019	52977	JOB #18-F1 - Meals			174.90
03/25/2019	52977	JOB #18-F1 - Meals			33.90
03/25/2019	52977	JOB #18-F1 - Meals			229.74
03/25/2019	52977	JOB #18-F1 - Meals			371.13
03/25/2019	52977	JOB #18-F1 - Software			192.00
03/25/2019	52977	JOB #18-F1 - Meals			112.88
03/25/2019	52977	JOB #18-F1 - Postage			110.00
03/25/2019	52977	JOB #18-F1 - Meals			251.24
03/25/2019	52977	JOB #18-F1 - Meals			90.00
03/25/2019	52977	JOB #18-F1 - Meals			96.25
03/25/2019	52977	JOB #18-F1 - Office Supplies			26.50
03/25/2019	52977	JOB #18-F1 - Meals			316.12
03/25/2019	52977	JOB #18-F1 - Meals			53.82
03/25/2019	52977	JOB #18-F1 - Meals			27.08
03/25/2019	52977	JOB #18-F1 - AWWA			277.00
03/25/2019	52977	JOB #18-F1 - Office Supplies			44.26
03/25/2019	52977	JOB #18-F1 - Monthly Fees			14.99
03/25/2019	52977	JOB #18-F1 - Meals			228.07
03/25/2019	52977	JOB #18-F1 - Meals			157.63
03/25/2019	52977	JOB #18-F1 - Meals			16.95
03/25/2019	52977	JOB #18-F1 - Monthly Fees			17.98
03/25/2019	52977	JOB #18-F1 - Monthly Fees			13.99

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Payment Dates: 03/01/2019 - 03/31/2019

Payment Date	Payment Number	Description (Item)	(None)	(None)	Amount
03/25/2019	52977	JOB #18-F1 - Meals			23.00
03/25/2019	52977	JOB #18-F1 - Meals			185.00
03/25/2019	52977	JOB #18-F1 - Elecsys			8.00
03/25/2019	52977	JOB #18-F1 - Parking			15.00
03/25/2019	52977	JOB #18-F1 - Vistaprint			23.03
03/25/2019	52977	0170601099			180.00
03/25/2019	52977	JOB #18-F1 - Office Supplies			18.77
03/25/2019	52977	JOB #18-F1 - Monthly Fees			13.99
03/25/2019	52977	JOB #18-F1 - Monthly Fees			12.98
03/25/2019	52977	JOB #18-F1 - Meals			302.14
03/25/2019	52977	JOB #18-F1 - Meals			245.69
03/25/2019	52977	JOB #18-F1 - Meals			18.66
03/25/2019	52977	JOB #18-F1 - Office Supplies			19.52
03/25/2019	52977	JOB #18-F1 - Meals			187.43
03/25/2019	52977	JOB #18-F1 - Meals			219.18
03/25/2019	52977	JOB #18-F1 - Meals			37.12
03/25/2019	52977	JOB #18-F1 - Postage			11.63
03/25/2019	52977	JOB #18-F1 - Office Supplies			137.17
03/25/2019	52977	JOB #18-F1 -			34.99
Vendor 02824 - US Bank Corporate Payment System Total:					6,307.57
Vendor: 02688 - US Bank					
03/25/2019	52976	Bank Charges			1,980.00
Vendor 02688 - US Bank Total:					1,980.00
Vendor: 02686 - USA Blue Book					
03/25/2019	52981	JOB #18-F1 - Misc. Supplies - TP			89.02
03/25/2019	52981	JOB #18-F1 - Misc. Supplies - TP			63.59
Vendor 02686 - USA Blue Book Total:					152.61
Vendor: 02703 - Verizon Wireless					
03/25/2019	52982	(16)Mobile Phones			2,269.28
Vendor 02703 - Verizon Wireless Total:					2,269.28
Vendor: 02747 - Wienhoff & Associates, Inc.					
03/25/2019	52983	Physicals - DMV & PreEmployment...			140.00
Vendor 02747 - Wienhoff & Associates, Inc. Total:					140.00
Vendor: 02787 - Zee Service Company					
03/07/2019	52926	JOB #18-F1 -			118.42
Vendor 02787 - Zee Service Company Total:					118.42
Grand Total:					275,061.99



Our water.
Our future.

Paradise Irrigation District

WATER SYSTEM RECOVERY PLAN

April 12, 2019

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Paradise Irrigation District Water System Recovery Plan Summary

Date: April 12, 2019
Prepared by: Sami Kader, P.E.
Checked by: Michael Lindquist, P.E.; Sheila Magladry, P.E.

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Background

During the Camp Fire of 2018, toxic chemicals (especially volatile organic compounds, VOCs, such as benzene) contaminated the Paradise Irrigation District (PID) distribution system. The distribution system is comprised of 172 miles (almost a million feet) of water mains. A significant number of the 10,480 individual service laterals and/or meters melted and the system partially drained. Following the Camp Fire, the distribution system was re-pressurized, leaks were repaired, and initial water quality testing began. It was discovered in the 2017 Tubbs Fire in Santa Rosa, that VOC contamination may be an issue in areas impacted by wildfire, especially coupled with depressurization of the water distribution system. The initial water quality testing discovered VOC contamination in multiple samples. Immediately, a “do not drink” advisory was initiated by PID (for more details, go to www.paradiseirrigation.com). The full extent of the contamination is not yet known, but the system needs to be confirmed to be clear of contaminants and determined safe for use in distributing drinking water. A Water System Recovery Plan has been developed to accomplish this task.

Science of Wildfire-driven VOC Contamination of a Water Distribution System

The science of wildfire-driven VOC contamination of a water distribution system is new, not completely understood, and an area of ongoing research. In order to help guide the development of the Recovery Plan, we have reviewed the available scientific information and used it to give us the highest level of confidence that testing can be completed with a method that will engender confidence in the results. There are a few basic results of the available research that have informed our decisions.

- During a wildfire, and especially in conjunction with depressurization, contaminants (especially VOCs) can get drawn into the water distribution system. It is suspected that these contaminants are drawn in as a gas.
- Some of those VOCs can end up adsorbing (soaking) into the walls of the pipe in the water distribution system. This can happen with any type of pipe but has been observed mostly in polyethylene pipe.
- Once VOCs are adsorbed in pipe walls, they take time to desorb into the water in the pipe.
- Running water through the pipe typically results in negligible desorption.
- Stagnant water in pipes allows desorption. The longer the stagnation, the more desorption occurs.
- Based on experience, laboratory and physical/chemical modeling, a stagnation time of 72 hours is an appropriate way to determine if there is any VOC contamination of a pipe. Shorter stagnation times may be adequate, but 72 hours gives a very high level of certainty that if a sample of water from a pipe has non-detect of VOCs, that there are no VOCs in the pipe walls.
- Although several VOCs have been observed in post-wildfire water distribution systems, benzene has been the most common.

A note on contaminants: The EPA establishes Maximum Contaminant Levels (MCLs) for a wide variety of constituents which have been shown to have adverse effects on human health. The MCL is the concentration at which a chemical will have an adverse health effect. There is a limit that laboratory testing can detect for each constituent, called the detection limit. The MCL for many constituents is very near the detection limit. For instance, in the case of benzene, the detection limit is 0.5 parts per billion (ppb) and the MCL is 1 ppb.

Anatomy of a Water Distribution System

In order to understand the plan to recover the water system, it is good to have a basic understanding of the anatomy of a water distribution system. Figure 1 illustrates a typical water service connection:

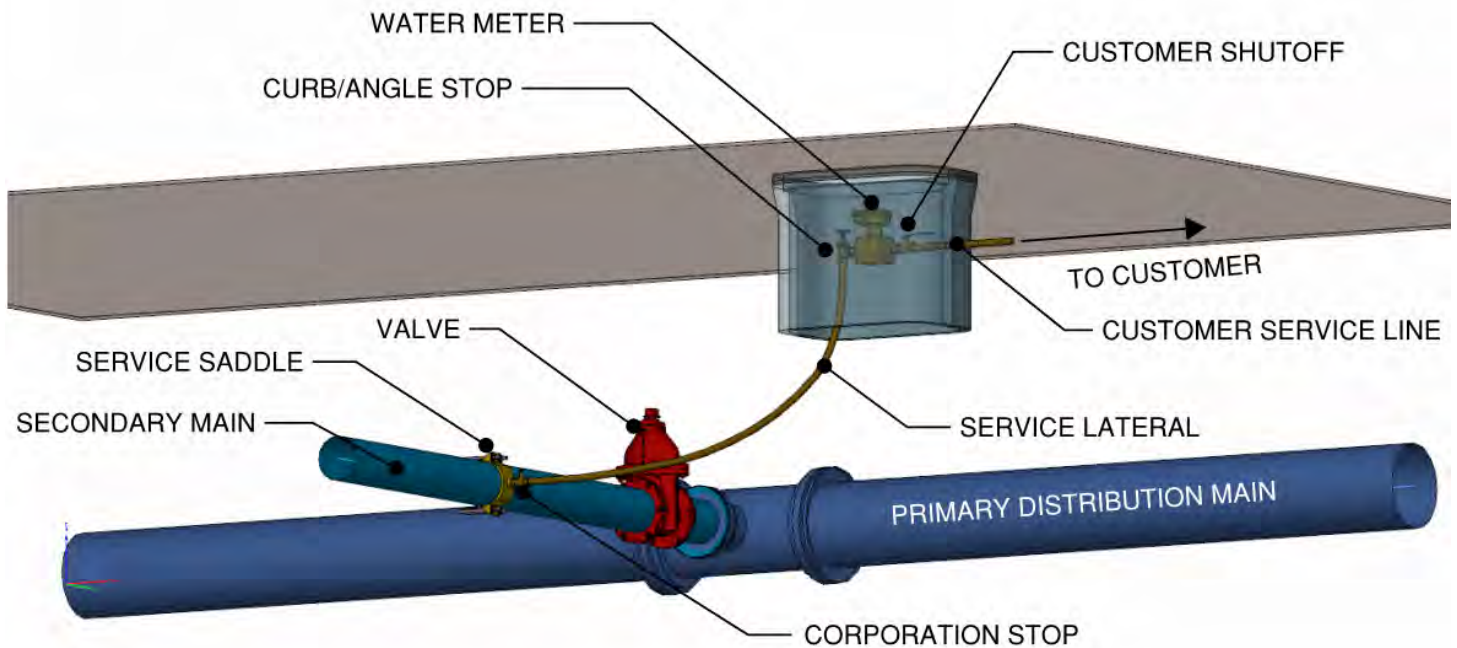


Figure 1. Water Distribution System Anatomy

1. Transmission Main – Pipes which have no services on them which feed Distribution Mains
2. Primary Distribution Main – large pipes that feed Secondary Mains (e.g. pipes on Skyway, Clark, Pentz, etc.)
3. Secondary Main – smaller pipes which primarily feed Service Laterals (e.g. pipes down local streets)
4. Service Lateral – pipe from Main to Water Meter. Made from a variety of materials, but High Density Polyethylene (HDPE) and copper are the most common
5. Service Saddle – Service Lateral connection at Main
6. Corporation Stop – valve on Service Lateral at Service Saddle
7. Curb Stop – valve between Service Lateral and Water Meter (sometimes called an angle stop)
8. Water Meter – installed near the property line – PID responsible for all piping up to and including the water meter – piping past the meter is customer's responsibility
9. Customer Shutoff – valve on Customer side of Water Meter
10. Customer Service Lateral - pipe from water meter to home/irrigation connection(s)
11. Customer Plumbing – piping within the structure
12. Valve – an open/close device for controlling water flow
13. Appurtenance – fire hydrants, blow offs, air release valves, pressure reducing valves, main valves

Water System Recovery Plan Summary

The Water System Recovery Plan consists of the following basic steps:

1. Sample all service laterals and mains in the distribution system for VOCs. This will eventually total nearly 20,000 samples
2. Replace contaminated service laterals and flush contaminated mains
3. Restore potable water service to the system

These steps will be accomplished by executing five Actions

1. Temporary Customer Supply
2. Recover Water Meters and Appurtenances
3. Sample Mains and Service Laterals
4. Repair, Replace Damaged System Components
5. Reconnect Customers to Distribution System

Each of these five Actions has been evaluated to determine the best approach from a cost, effectiveness and schedule standpoint and the preferred approach for each Action recommended. That evaluation is detailed in Justification Reports for each Action. The Water System Recovery Plan does not address potential damage to PID's five water storage tanks. The following summarizes each Action which will be executed.

Temporary Customer Supply (Action 1)

The purpose of the Temporary Customer Supply Action is two-fold.

First, it is to provide the means to continue supply of non-potable water (continuing use under the "Do Not Drink" advisory while the water system is tested. This will be done on a sample area by sample area basis in order to reduce the number of Temporary Customer Supplies that are needed and improve overall schedule performance of system restoration. These temporary sources are anticipated to be in place at a location for 1-2 weeks.

To support stagnation:

1. Where possible, Temporary Customer Supply will be above-grade pipe/hose from a service lateral outside of the Sample Area to provide normal flows to the customer during sampling.
2. In some cases, Temporary Customer Supply will be a tank and booster pump providing non-potable domestic use flows only.
3. Once sampling of stagnated water lines is completed, the temporary water supply will be removed, and the customer reconnected to the PID water system.

Second, longer-term temporary storage will provide the means to continue supply of non-potable water to individual residences which are in parts of the distribution system which may have to be isolated in the course of Plan execution. Longer-term temporary customer supply will be provided in the same way as the short-term temporary customer supply. Where tanks are supplied for these longer-term temporary customer supply systems, those tanks will be likely larger in size in order to make delivery more practical.

Recover Water Meters and Appurtenances (Action 2)

Due to the destruction, water meters and appurtenances are difficult to locate and at times are under debris. The first step in testing the system will be to recover all meters and appurtenances so that sampling can be completed in an efficient manner.

1. Locate meters.
 - a. This will involve pipe locating companies locating buried mains and service laterals, as well as field crews finding meter boxes which can be buried under debris or hidden by landscaping
2. Close the curb stop of inactive services
3. Remove all meters and replace them with sample manifolds.

Sample Mains and Service Laterals (Action 3)

Sampling is the core of the overall program. The key to this Action is to sample efficiently, effectively, and to have a sampling, validation and data management plan that will engender confidence in the results.

1. The sampling approach will use a 72-hour stagnation period.
2. Coordinate stagnation period.
 - a. In order to continue to supply water to customers during testing, system will be testing in small Sample Areas (typically a single street or cul-de-sac). Temporary Customer Supply, procured in Action 1, will be provided in order to provide continuous water service to existing occupied structures during testing.
3. Test all Samples
 - a. Test results will be made public through the geographic information system (GIS) mapping available on the PID website as soon as the data is checked and validated. GIS mapping will be made available to the public at the PID office
4. Restore Supply to Sample Area
 - a. While the samples taken are being tested and the data assessed, water supply will be restored to each Sample Area. The "Do Not Drink" advisory will remain in effect until sample results are completed and PID has lifted the "Do Not Drink" advisory for each specific property.

Repair/Replacement of Damaged System Components (Action 4)

Once test results have been received, the repair and replacement of damaged system components will take place. The following steps will be taken if any contaminant is measured over the detection limit:

1. Replace any service lateral with any contaminant over the *MCL*. Flushing for decontamination of service laterals is extremely time consuming and expensive.
2. Flush any service lateral that is over the *detection limit*, but below the *MCL*. Retest after a minimum of two flushings. If retest is not below the detection limit, replace the service lateral.
3. Flush any main over the *detection limit* and re-test. It is suspected that main contamination may be in the water only, not in the pipe walls, and even limited flushing may eliminate the contamination.
4. Replace any main with results above the *MCL*.
5. The work replacing and flushing service laterals and mains may result in system interruptions
 - a. May require short-term interruption in service (goal of < 12 hours)
 - b. May require longer term interruption in service. Temporary Customer Supply would be provided as described above

Reconnect Customers to the Distribution System (Action 5)

Following System Restoration, Paradise Irrigation District will reconnect customers to the distribution system. PID will work to lift the “Do Not Drink” order for areas which have been found to be clear of contamination or have had contaminated system components isolated or replaced. Meters will be installed for customers in those areas.

1. The lifting of the “Do Not Drink” advisory will be done area by area as testing and replacements are completed.
2. Lifting of the “Do Not Drink” advisory will be communicated to the public via the GIS mapping on the PID Website according to APN.
3. When the “Do Not Drink” advisory is lifted for an area, new meters will be installed in all active services in the area.

Plan Implementation

Detailed Implementation Plans have been prepared for all five of the Actions described above. In general, all five Actions will need to go through a procurement process, contractors and consultants hired, and the five contracts managed through execution so that the work is performed in a cascading schedule, with each Action working through the system before the next.

Cost Estimate Summary

Costs have been estimated for all of the Actions. Table 1 is a summary of the current cost estimates:

Table 1. Cost Estimate Summary

Action	Title	Preferred Alternative Cost Estimate
1	Temporary Supply	\$3,200,000
2a	Recover Meters	\$7,000,000
2b	Recover Appurtenances	\$5,700,000
3a	Sample Mains, Services, and Appurtenances	\$9,700,000
4	Repair, Replace Damaged System Components	\$20,200,000
5	Reconnect Customers	\$7,500,000
	Total	\$53,300,000

Given the costs involved, a formal procurement process will be required to implement these Actions. It will take several months to go through the procurement process to competitively procure and hire contractors and service providers to perform the work. Given this, we would expect contract work on the ground to begin in late summer 2019.

Completion of all of the steps above for the entire water distribution system will take up to 24 months with anticipated plan completion in early 2021. Although each step can be started shortly after the previous step starts, and the work performed sequentially throughout the system, the sheer volume of work required to completely characterize the system requires that amount of time to complete.

Prioritization

It is recognized that in order to support the rebuilding and revitalization of Paradise, it would be beneficial for 1) restoration of potable water service to currently standing structures be prioritized and 2) for work to progress as quickly as possible. To this end, the following steps have been taken:

1. The water distribution system was divided into over 8000 pipe segments in order to determine the relative importance of each pipe segment in providing water to existing standing structures
2. Categorization of mains. Each main was categorized based on the number of downstream standing structures it serves. Four categories were established, with subcategories.
 - a. Category 1 – Primary Distribution Mains (>100 meters serving standing structures flow through that pipe segment)
 - b. Category 2 – Secondary Mains with multiple meters serving standing structures flowing through that pipe segment
 - i. 2a: 76-100
 - ii. 2b: 51-75
 - iii. 2c: 36-50
 - iv. 2d: 21-35
 - v. 2e: 11-20
 - vi. 2f: 6-10
 - vii. 2g: 2-5
 - c. Category 3 – Secondary Mains with a single meter serving standing structures
 - d. Category 4 – Secondary Mains with no meters serving standing structures

Almost 50% of the mains in the PID distribution system are Category 4. These mains and services will be sampled and cleared last, allowing focus on the mains which serve standing structures. This will allow the restoration of potable water service to standing structures much sooner.

Work will begin with Category 1 mains, and proceed through all of Category 2, then Category 3, working on each Category from A zone through G zone. With this approach, mains in lower zones which serve multiple standing structures (Categories 1 and 2) will be tested and service restored prior to those in upper zones that serve a single standing structure (Category 3). **In this manner, potable water service will be restored to the most people the fastest.** The categorization mapping will be continuously updated, however, preliminary mapping (Figure 2) describes the initial priority pattern in testing and restoring water mains. It should be noted that this figure is very preliminary and does not represent a final prioritization of categories. It is provided only to illustrate the technique being used to prioritize the work and provide potable water to the most standing structures as fast as possible. This tool will be continuously refined and updated in order to drive decision making on where to deploy resources throughout the execution of the program.

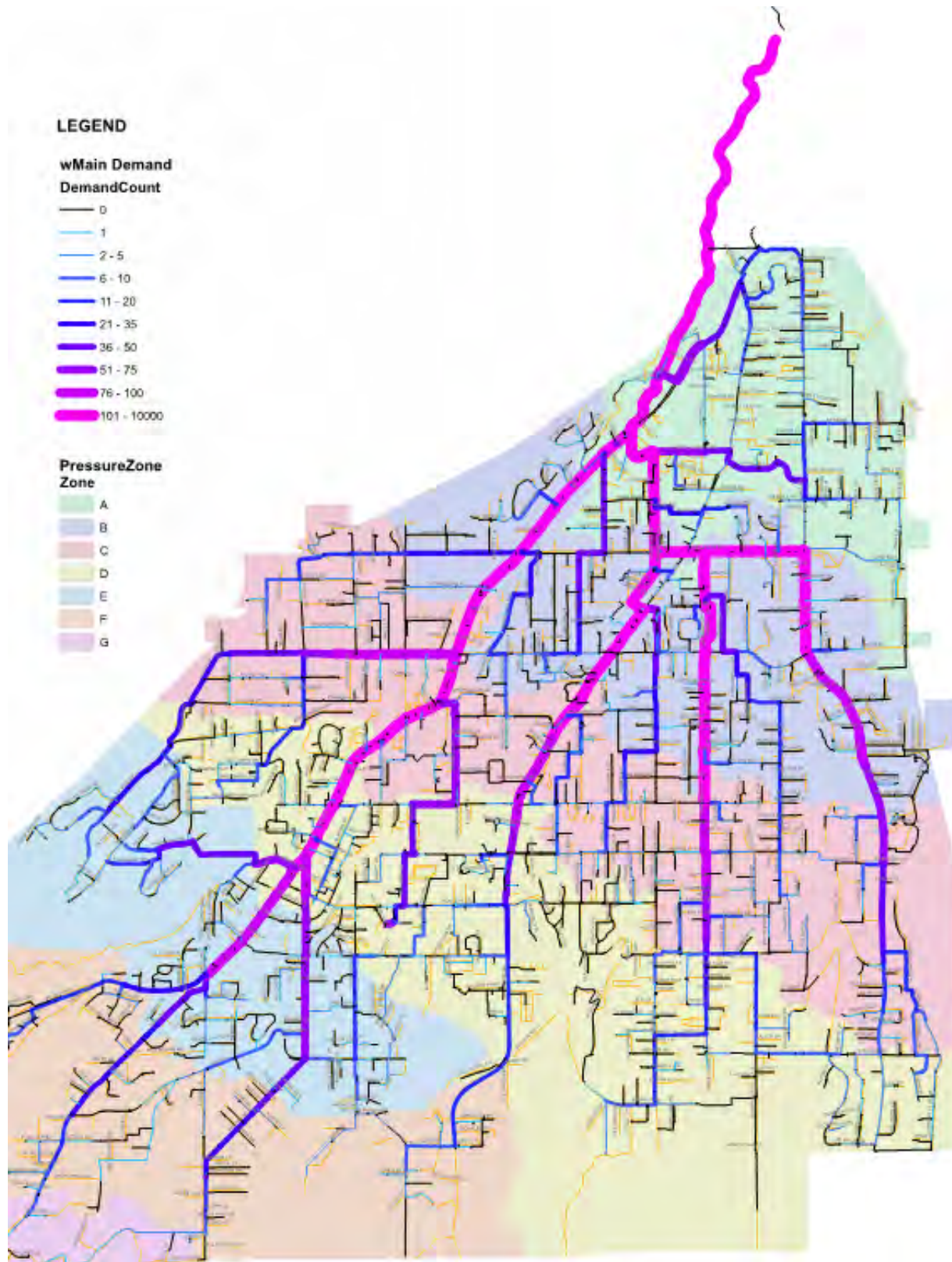


Figure 2. Water Main Categorization by Standing Structures Served

Schedule Milestones

A detailed critical path method (CPM) schedule has been developed for this plan. Using this categorization of mains and prioritization of activities, it is estimated that potable water service could be established with the preliminary target schedule milestones listed in Table 2.

Table 2. Preliminary Target Schedule Milestones

Number of Services	Approximate Standing Structures Included	Preliminary Target Schedule Milestones			
		Meters Recovered	Sampling Completed	Repair/Replacement Completed	Re-Establish Potable Water Service
1500	250	September 2019	October 2019	November 2019	November 2019
3000	450	October 2019	November 2019	January 2020	January 2020
4500	740	December 2019	January 2020	February 2020	March 2020
6000	1350 (all currently standing structures + submitted permits)	January 2020	February 2020	April 2020	June 2020
10400	All Services	June 2020	August 2020	December 2020	February 2021

It is hoped that the contamination of the system is not widespread and is generally limited to a small fraction of services laterals. Consistent clean results will make testing and clearing the system go much faster and allow this schedule to be greatly improved upon. A major goal of this program is to restore public confidence in the distribution system. To that end, Paradise Irrigation District will become one of the most, if not the most densely sampled and tested public water system of all time. As the sample data is amassed, a more clear picture of the extent of the contamination will emerge, resulting in a distribution system which can be confidently returned to potable service as quickly as possible.

Pilot Testing of Recovery Procedures

The recovery of the water distribution system is a complex process that will require coordination of the tasks summarized in this memo. In order to “shake out” that coordination, a test period is desirable. Additionally, in order to perform all of these tasks at full-scale within the preliminary target schedule milestones, consulting and contracting firms must be hired. This will require a procurement period for each task, which will last approximately 2 months (this will occur in the summer of 2019). Given these requirements, Paradise Irrigation District will begin pilot testing the procedures described for each of these tasks using District staff to perform the work as soon as possible. This pilot testing will be directed towards the Category 1 mains, with the goal of testing the main along Skyway first, in order to return potable water service in that commercial corridor as soon as possible. Lessons learned from the pilot testing will be incorporated into the execution of the contract work as consulting and contracting firms are hired and begin work. Pilot testing will continue working on all Category 1 mains and contract work will pick up from the point where PID forces leave off. Pilot testing may involve the use of mutual aid and other resources, as it is feasible to manage and implement.

Paradise Irrigation District Water System Recovery Plan Summary

Date: April 12, 2019
Prepared by: Sami Kader, P.E.
Checked by: Michael Lindquist, P.E.; Sheila Magladry, P.E.

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Background

During the Camp Fire of 2018, toxic chemicals (especially volatile organic compounds, VOCs, such as benzene) contaminated the Paradise Irrigation District (PID) distribution system. The distribution system is comprised of 172 miles (almost a million feet) of water mains. A significant number of the 10,480 individual service laterals and/or meters melted and the system partially drained. Following the Camp Fire, the distribution system was re-pressurized, leaks were repaired, and initial water quality testing began. It was discovered in the 2017 Tubbs Fire in Santa Rosa, that VOC contamination may be an issue in areas impacted by wildfire, especially coupled with depressurization of the water distribution system. The initial water quality testing discovered VOC contamination in multiple samples. Immediately, a “do not drink” advisory was initiated by PID (for more details, go to www.paradiseirrigation.com). The full extent of the contamination is not yet known, but the system needs to be confirmed to be clear of contaminants and determined safe for use in distributing drinking water. A Water System Recovery Plan has been developed to accomplish this task.

Science of Wildfire-driven VOC Contamination of a Water Distribution System

The science of wildfire-driven VOC contamination of a water distribution system is new, not completely understood, and an area of ongoing research. In order to help guide the development of the Recovery Plan, we have reviewed the available scientific information and used it to give us the highest level of confidence that testing can be completed with a method that will engender confidence in the results. There are a few basic results of the available research that have informed our decisions.

- During a wildfire, and especially in conjunction with depressurization, contaminants (especially VOCs) can get drawn into the water distribution system. It is suspected that these contaminants are drawn in as a gas.
- Some of those VOCs can end up adsorbing (soaking) into the walls of the pipe in the water distribution system. This can happen with any type of pipe but has been observed mostly in polyethylene pipe.
- Once VOCs are adsorbed in pipe walls, they take time to desorb into the water in the pipe.
- Running water through the pipe typically results in negligible desorption.
- Stagnant water in pipes allows desorption. The longer the stagnation, the more desorption occurs.
- Based on experience, laboratory and physical/chemical modeling, a stagnation time of 72 hours is an appropriate way to determine if there is any VOC contamination of a pipe. Shorter stagnation times may be adequate, but 72 hours gives a very high level of certainty that if a sample of water from a pipe has non-detect of VOCs, that there are no VOCs in the pipe walls.
- Although several VOCs have been observed in post-wildfire water distribution systems, benzene has been the most common.

A note on contaminants: The EPA establishes Maximum Contaminant Levels (MCLs) for a wide variety of constituents which have been shown to have adverse effects on human health. The MCL is the concentration at which a chemical will have an adverse health effect. There is a limit that laboratory testing can detect for each constituent, called the detection limit. The MCL for many constituents is very near the detection limit. For instance, in the case of benzene, the detection limit is 0.5 parts per billion (ppb) and the MCL is 1 ppb.

Anatomy of a Water Distribution System

In order to understand the plan to recover the water system, it is good to have a basic understanding of the anatomy of a water distribution system. Figure 1 illustrates a typical water service connection:

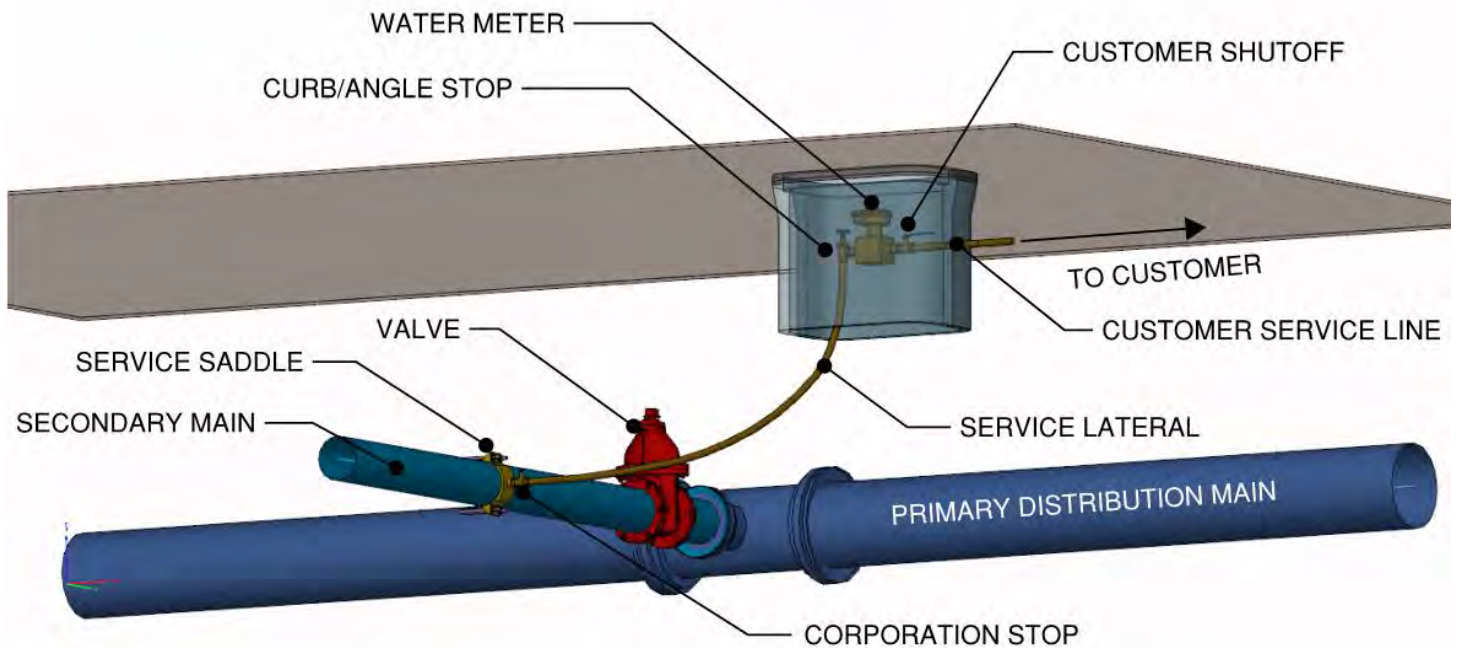


Figure 1. Water Distribution System Anatomy

1. Transmission Main – Pipes which have no services on them which feed Distribution Mains
2. Primary Distribution Main – large pipes that feed Secondary Mains (e.g. pipes on Skyway, Clark, Pentz, etc.)
3. Secondary Main – smaller pipes which primarily feed Service Laterals (e.g. pipes down local streets)
4. Service Lateral – pipe from Main to Water Meter. Made from a variety of materials, but High Density Polyethylene (HDPE) and copper are the most common
5. Service Saddle – Service Lateral connection at Main
6. Corporation Stop – valve on Service Lateral at Service Saddle
7. Curb Stop – valve between Service Lateral and Water Meter (sometimes called an angle stop)
8. Water Meter – installed near the property line – PID responsible for all piping up to and including the water meter – piping past the meter is customer's responsibility
9. Customer Shutoff – valve on Customer side of Water Meter
10. Customer Service Lateral - pipe from water meter to home/irrigation connection(s)
11. Customer Plumbing – piping within the structure
12. Valve – an open/close device for controlling water flow
13. Appurtenance – fire hydrants, blow offs, air release valves, pressure reducing valves, main valves

Water System Recovery Plan Summary

The Water System Recovery Plan consists of the following basic steps:

1. Sample all service laterals and mains in the distribution system for VOCs. This will eventually total nearly 20,000 samples
2. Replace contaminated service laterals and flush contaminated mains
3. Restore potable water service to the system

These steps will be accomplished by executing five Actions

1. Temporary Customer Supply
2. Recover Water Meters and Appurtenances
3. Sample Mains and Service Laterals
4. Repair, Replace Damaged System Components
5. Reconnect Customers to Distribution System

Each of these five Actions has been evaluated to determine the best approach from a cost, effectiveness and schedule standpoint and the preferred approach for each Action recommended. That evaluation is detailed in Justification Reports for each Action. The Water System Recovery Plan does not address potential damage to PID's five water storage tanks. The following summarizes each Action which will be executed.

Temporary Customer Supply (Action 1)

The purpose of the Temporary Customer Supply Action is two-fold.

First, it is to provide the means to continue supply of non-potable water (continuing use under the "Do Not Drink" advisory while the water system is tested. This will be done on a sample area by sample area basis in order to reduce the number of Temporary Customer Supplies that are needed and improve overall schedule performance of system restoration. These temporary sources are anticipated to be in place at a location for 1-2 weeks.

To support stagnation:

1. Where possible, Temporary Customer Supply will be above-grade pipe/hose from a service lateral outside of the Sample Area to provide normal flows to the customer during sampling.
2. In some cases, Temporary Customer Supply will be a tank and booster pump providing non-potable domestic use flows only.
3. Once sampling of stagnated water lines is completed, the temporary water supply will be removed, and the customer reconnected to the PID water system.

Second, longer-term temporary storage will provide the means to continue supply of non-potable water to individual residences which are in parts of the distribution system which may have to be isolated in the course of Plan execution. Longer-term temporary customer supply will be provided in the same way as the short-term temporary customer supply. Where tanks are supplied for these longer-term temporary customer supply systems, those tanks will be likely larger in size in order to make delivery more practical.

Recover Water Meters and Appurtenances (Action 2)

Due to the destruction, water meters and appurtenances are difficult to locate and at times are under debris. The first step in testing the system will be to recover all meters and appurtenances so that sampling can be completed in an efficient manner.

1. Locate meters.
 - a. This will involve pipe locating companies locating buried mains and service laterals, as well as field crews finding meter boxes which can be buried under debris or hidden by landscaping
2. Close the curb stop of inactive services
3. Remove all meters and replace them with sample manifolds.

Sample Mains and Service Laterals (Action 3)

Sampling is the core of the overall program. The key to this Action is to sample efficiently, effectively, and to have a sampling, validation and data management plan that will engender confidence in the results.

1. The sampling approach will use a 72-hour stagnation period.
2. Coordinate stagnation period.
 - a. In order to continue to supply water to customers during testing, system will be testing in small Sample Areas (typically a single street or cul-de-sac). Temporary Customer Supply, procured in Action 1, will be provided in order to provide continuous water service to existing occupied structures during testing.
3. Test all Samples
 - a. Test results will be made public through the geographic information system (GIS) mapping available on the PID website as soon as the data is checked and validated. GIS mapping will be made available to the public at the PID office
4. Restore Supply to Sample Area
 - a. While the samples taken are being tested and the data assessed, water supply will be restored to each Sample Area. The "Do Not Drink" advisory will remain in effect until sample results are completed and PID has lifted the "Do Not Drink" advisory for each specific property.

Repair/Replacement of Damaged System Components (Action 4)

Once test results have been received, the repair and replacement of damaged system components will take place. The following steps will be taken if any contaminant is measured over the detection limit:

1. Replace any service lateral with any contaminant over the *MCL*. Flushing for decontamination of service laterals is extremely time consuming and expensive.
2. Flush any service lateral that is over the detection limit, but below the MCL. Retest after a minimum of two flushings. If retest is not below the detection limit, replace the service lateral.
3. Flush any main over the *detection limit* and re-test. It is suspected that main contamination may be in the water only, not in the pipe walls, and even limited flushing may eliminate the contamination.
4. Replace any main with results above the MCL.
5. The work replacing and flushing service laterals and mains may result in system interruptions
 - a. May require short-term interruption in service (goal of < 12 hours)
 - b. May require longer term interruption in service. Temporary Customer Supply would be provided as described above

Reconnect Customers to the Distribution System (Action 5)

Following System Restoration, Paradise Irrigation District will reconnect customers to the distribution system. PID will work to lift the “Do Not Drink” order for areas which have been found to be clear of contamination or have had contaminated system components isolated or replaced. Meters will be installed for customers in those areas.

1. The lifting of the “Do Not Drink” advisory will be done area by area as testing and replacements are completed.
2. Lifting of the “Do Not Drink” advisory will be communicated to the public via the GIS mapping on the PID Website according to APN.
3. When the “Do Not Drink” advisory is lifted for an area, new meters will be installed in all active services in the area.

Plan Implementation

Detailed Implementation Plans have been prepared for all five of the Actions described above. In general, all five Actions will need to go through a procurement process, contractors and consultants hired, and the five contracts managed through execution so that the work is performed in a cascading schedule, with each Action working through the system before the next.

Cost Estimate Summary

Costs have been estimated for all of the Actions. Table 1 is a summary of the current cost estimates:

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Action	Title	Preferred Alternative Cost Estimate
1	Temporary Supply	\$3,200,000
2a	Recover Meters	\$7,000,000
2b	Recover Appurtenances	\$5,700,000
3a	Sample Mains, Services, and Appurtenances	\$8,100,000
4	Repair, Replace Damaged System Components	\$18,200,000
5	Reconnect Customers	\$7,500,000
	Total	\$49,700,000

Given the costs involved, a formal procurement process will be required to implement these Actions. It will take several months to go through the procurement process to competitively procure and hire contractors and service providers to perform the work. Given this, we would expect contract work on the ground to begin in late summer 2019.

Completion of all of the steps above for the entire water distribution system will take up to 24 months with anticipated plan completion in early 2021. Although each step can be started shortly after the previous step starts, and the work performed sequentially throughout the system, the sheer volume of work required to completely characterize the system requires that amount of time to complete.

Prioritization

It is recognized that in order to support the rebuilding and revitalization of Paradise, it would be beneficial for 1) restoration of potable water service to currently standing structures be prioritized and 2) for work to progress as quickly as possible. To this end, the following steps have been taken:

1. The water distribution system was divided into over 8000 pipe segments in order to determine the relative importance of each pipe segment in providing water to existing standing structures
2. Categorization of mains. Each main was categorized based on the number of downstream standing structures it serves. Four categories were established, with subcategories.
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 - c. Category 3 – Secondary Mains with a single meter serving standing structures
 - d. Category 4 – Secondary Mains with no meters serving standing structures

Almost 50% of the mains in the PID distribution system are Category 4. These mains and services will be sampled and cleared last, allowing focus on the mains which serve standing structures. This will allow the restoration of potable water service to standing structures much sooner.

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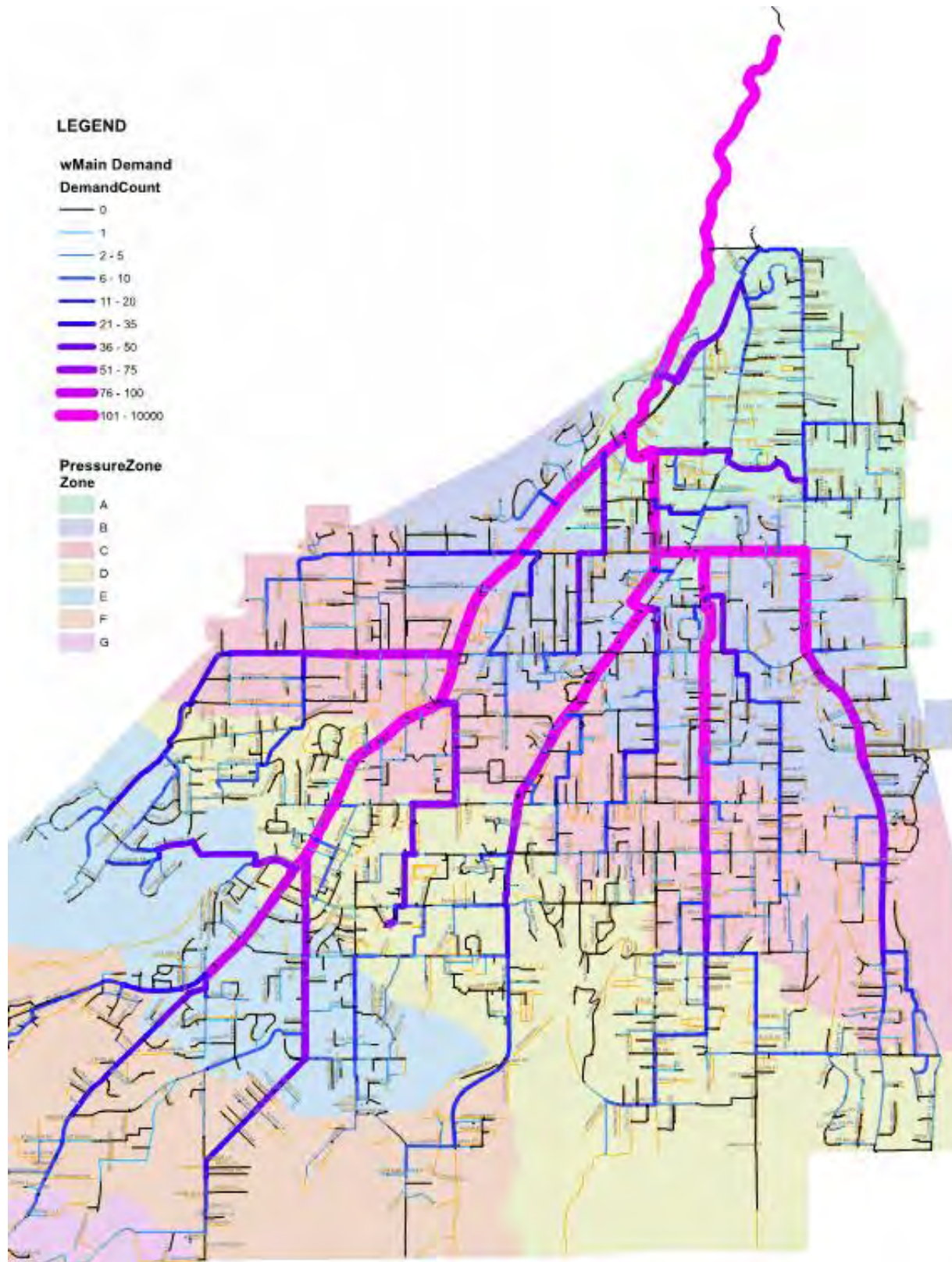


Figure 2. Water Main Categorization by Standing Structures Served

Schedule Milestones

A detailed critical path method (CPM) schedule has been developed for this plan. Using this categorization of mains and prioritization of activities, it is estimated that potable water service could be established with the preliminary target schedule milestones listed in Table 2.

Table 2. Preliminary Target Schedule Milestones

Number of Services	Approximate Standing Structures Included	Preliminary Target Schedule Milestones			
		Meters Recovered	Sampling Completed	Repair/Replacement Completed	Re-Establish Potable Water Service
1500	250	September 2019	October 2019	November 2019	November 2019
3000	450	October 2019	November 2019	January 2020	January 2020
4500	740	December 2019	January 2020	February 2020	March 2020
6000	1350 (all currently standing structures + submitted permits)	January 2020	February 2020	April 2020	June 2020
10400	All Services	June 2020	August 2020	December 2020	February 2021

It is hoped that the contamination of the system is not widespread and is generally limited to a small fraction of services laterals. Consistent clean results will make testing and clearing the system go much faster and allow this schedule to be greatly improved upon. A major goal of this program is to restore public confidence in the distribution system. To that end, Paradise Irrigation District will become one of the most, if not the most densely sampled and tested public water system of all time. As the sample data is amassed, a more clear picture of the extent of the contamination will emerge, resulting in a distribution system which can be confidently returned to potable service as quickly as possible.

Pilot Testing of Recovery Procedures

The recovery of the water distribution system is a complex process that will require coordination of the tasks summarized in this memo. In order to “shake out” that coordination, a test period is desirable. Additionally, in order to perform all of these tasks at full-scale within the preliminary target schedule milestones, consulting and contracting firms must be hired. This will require a procurement period for each task, which will last approximately 2 months (this will occur in the summer of 2019). Given these requirements, Paradise Irrigation District will begin pilot testing the procedures described for each of these tasks using District staff to perform the work as soon as possible. This pilot testing will be directed towards the Category 1 mains, with the goal of testing the main along Skyway first, in order to return potable water service in that commercial corridor as soon as possible. Lessons learned from the pilot testing will be incorporated into the execution of the contract work as consulting and contracting firms are hired and begin work. Pilot testing will continue working on all Category 1 mains and contract work will pick up from the point where PID forces leave off. Pilot testing may involve the use of mutual aid and other resources, as it is feasible to manage and implement.

Paradise Irrigation District Water System Recovery Plan Temporary Customer Supply – Justification Report

Date: April 12, 2019
 Prepared by: Sheila Magladry, P.E.
 Checked by: Michael Lindquist, P.E.

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Damage Description

The Camp Fire of 2018, the deadliest and most destructive wildfire in California history to date, destroyed approximately 87% of buildings in Paradise, CA. PID estimates there are approximately 1300 remaining standing structures: 1045 standing residential buildings and 267 standing businesses. The pre-fire service count was 10,480.

The extent of damage to the water system is unknown. Preliminary sampling efforts showed positive contamination results in numerous water services. The extent of contamination is unknown. PID is providing non-potable water to services via the damaged distribution system. PID has issued a limited-contact order for all water service locations.

Purpose of Action

A system-wide sampling action will be implemented to determine the extent of contamination. A 72-hour stagnation period is required before the sampling so the pipes can be accurately tested for contamination. The Temporary Customer Supply will provide potable or non-potable water to the PID customers while the distribution system is undergoing sampling and repair activities.

The supply action will include water delivery, storage and pressurization abilities. The temporary supply must be provided in a time efficient manner so the sampling and repair activities can commence. The temporary supply must meet water quality standards that are concurrent with or exceed the current quality standards provided by PID.

For the purpose of estimation, it is assumed all occupiable structures will be provided temporary water supply.

Action Alternatives

Alternative 1: System Wide Temporary Water Supply

Scope

The system wide alternative prioritizes removing customers from PID supply entirely so the system can be prepared for sampling. The assumed number of occupiable structures is 13% of the entire system; this is the number of remaining structures plus 20% growth. This temporary supply would provide potable water to all occupiable structures for an extended period required to complete the temporary supply implementation and sampling and repair programs. The on-site storage volume will account for indoor and outdoor use patterns. Each occupiable structure would be supplied with a temporary water supply equipment package including:

1. Storage tank for a week's worth of single service supply (2000-gallons)
2. Booster pump pressurize water from storage to service
3. Pressure tank for reliable pressure supply to customer

The installation and maintenance requirements for this alternative include:

1. Connect plumbing from supply to service
2. Connect pump station to house electrical service panel
3. Provide potable water delivery on a weekly delivery schedule
4. System Maintenance and water quality inspections
5. Removal and salvage of equipment following action completion

Estimated Cost

The estimated cost to implement this alternative includes equipment acquisition, installation and maintenance for a 1-year timeframe. This timeframe is an absolute minimum required to complete temporary supply installation and system sampling and repair activities.

Estimated Schedule

The temporary supply schedule assumes the equipment would be provided to each service location at a rate of 3 crews installing temporary supply for 4 customers per day. However, it could take a few months to even acquire the equipment for all residential services.

Alternative 2: Sequential Temporary Water Supply

Scope

The sequential supply alternative prioritizes customer location and main sampling and recovery in conjunction with temporary supply. This strategy reduces the total number of supply packages required as only customers whose supply mains and service laterals are undergoing sampling and/or repair activities will be provided temporary supply. This temporary supply alternative would provide non-potable water to customers for approximately a week while sampling and/or repair activities are being implemented. Storage volume would account for indoor use patterns only. The customers will be asked to limit outdoor use patterns for the week they are under temporary supply. This supply equipment package would include:

1. Storage tank for a week's worth of single service supply (1000-gallons)
2. Booster pump pressurize water from storage to service
3. Pressure tank for reliable pressure supply to customer
4. Trailer mounted design for delivery and relocation

The installation and maintenance requirements for this alternative include:

1. Connect plumbing from supply to service
2. Connect pump station to house electrical service panel
3. Removal and salvage of equipment following sequence completion.

Estimated Cost

The estimated cost to implement this alternative includes equipment acquisition, installation and maintenance for a single week to complete portions of sampling and repair activities. The temporary storage will be provided to match the sampling rates, approximately 100 services per week.

Estimated Schedule

The temporary supply would be provided to match the rate of sampling activities, assumed to be a 1-week period. Installation will be phased to match the sampling sequence with 3 crews installing 4 tanks per day. The sampling procedures will be scheduled to follow the temporary installations.

Alternative 3: Adjacent Customer Supply

Scope

Adjacent Customer Supply will connect temporary supply hoses from the service requiring supply to adjacent service laterals supplied by adjacent mains which are not undergoing sampling activities. This method will only be feasible in locations where the service location is relatively close (a couple hundred feet) to another service lateral which is viable for connection. This alternative does not require onsite storage or pressurization. This alternative will be implemented similar to alternative 2 where it will proceed the sampling activity schedule. This alternative will also supply non-potable water.

Estimated Cost

Cost for this alternative was calculated assuming a sequence would supply 100 customers. Once the sampling or repair sequence is completed, the materials would be relocated to the next sequence.

Estimated Schedule

Once the hose material is procured, temporary connections can be installed in a manner of hours per connection. Installations can be completed at a rate of 7 installations a day with 10 crews. Supply from an adjacent service lateral can be for as short or as long a period as desired, and there is no additional maintenance, operation, or refilling of the supply required.

Alternative 4: Combination of Alternatives 2 and 3

It is likely Alternative 3 cannot be incorporated at all occupiable structures undergoing sampling activities, so Alternative 4 combines 80% of hose over connections in Alternative 3 with 20% of the temporary supply packages from Alternative 2 for 100 total temporary supplied customers within a sequence. The temporary supply packages will be supplied based on the need of individual customers not meeting the requirements for Adjacent Supply and will only be provided while that main section is undergoing sampling. The storage volume for the supply package will be determined by the service location and schedule for repair. The short-term temporary supply does not require PID to provide potable water to all customers as it is assumed those customer's water supply will be repaired and potable in a reasonable amount of time.

Estimated Cost

The cost estimate for the short-term temporary supply is estimated according to the sampling schedule. The sampling schedule aims to complete the sampling of occupiable structures within 12 weeks, so therefore roughly 100 temporary supplies will be required at one time.

Estimated Schedule

The installation will be coordinated with sampling and will be staffed so it can be completed in a time efficient manner.

Alternative Selection

The alternatives were assessed based on the ease with which they meet the action goals. Providing temporary supply to 13% of the system before beginning sampling and repair activities does not meet the goal of readily repairing the system. This may be the fastest alternative to providing potable water, but it hinders the completion of the system repair action, and it is not preferred from a water quality standpoint as each temporary supply location will require maintenance and water quality testing to assume the supply is potable. It is also the most costly and time-consuming method to provide an individual with potable water. By sequencing the temporary supply, portions of the system will be “cleared” of contamination or repaired following the sampling efforts. Customers will be provided permanent potable water by the distribution system more efficiently and will not have to rely on temporary storage for an extended period of time.

Table 1: Alternative Comparison

Alternative	Alt 1: System-Wide Supply	Alt 2: Sequential Supply	Alt 3: Adjacent Supply	Alt 4: Combination of 2 and 3
Estimated Cost	\$35 Million	\$4 Million	\$0.8 Million	\$1.8 Million
Implementation Schedule	8 months	8 days	2 days	3 days
Installation Crew	3 crews with 2 installations per day	3 crews with 4 installations per day	10 crews with 7 installations per day	Combination of both 2 and 3
Time Under Temporary Supply	One year	One week	One week, or as needed	One week, or as needed
Potable or Non-Potable	Potable	Non-Potable	Non-Potable	Non-Potable
Effect on Sampling and Repair Activities	Delays sampling and repair activities until all occupiable structures have a temporary supply	Improves the timeline on sampling and repair activities as temporary supply is implemented in sequence with sampling	Fastest timeframe for acquiring materials and installation. Not inhibited by storage volume requirements.	Combination of 2 and 3

Customers in Locations with Low Sampling Priority

The selected temporary customer supply method will generally precede the sampling schedule. However, there is the potential need to isolate mains which serve individual residences in the course of Plan execution. In the situation where an occupiable structure is supplied by an isolated main, this customer will be provided temporary non-potable supply. Longer-term temporary customer supply will be provided in the same way as the short-term temporary customer supply. Where tanks are supplied for these longer-term temporary customer supply systems, those tanks will be likely larger in size in order to make delivery more practical.

Paradise Irrigation District Water System Recovery Plan Temporary Customer Supply – Implementation Plan

Date: April 12, 2019
Prepared by: Sheila Magladry, P.E.
Checked by: Michael Lindquist, P.E.

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Action Description

The temporary customer supply action will include potable water delivery, storage and pressurization abilities. The temporary supply must be provided in a time efficient manner so the sampling and repair activities can commence. The temporary supply must meet water quality standards that are concurrent with or exceed the current quality standards provided by PID.

The action justification report recommended providing non-potable temporary supply to customers in conjunction with the sampling action plan. The temporary supply will be a combination of hose-over connections from nearby mains and services, and for those who cannot be supplied in that manner temporary on-site storage and booster pump skids. Those customers whose mains have been isolated will be provided with temporary non-potable water supply using onsite storage tanks and booster pump skids.

Sequential Temporary Water Supply

The sequential supply alternative prioritizes customer location, recovery and sampling in conjunction with temporary supply.

Hose-Over Connection

Customers in nearby proximity to service laterals supplied by mains not undergoing a sampling activity will have a hose-over connection for temporary supply. The hose over supply will connect to the sample manifold connection installed as part of the meter recovery process. This supply will be pressurized by the distribution system. The hose will run above grade to the sample manifold connection at the customer's service line. This method has potential for vandalism and contamination due to the length of exposed line. The hose distance will be minimized, and the customer will be advised to make daily observations of the hose over line. The temporary supply will be non-potable water and have the same restrictions as PID's existing supply.

Installation

The installation and maintenance requirements include:

1. Complete meter recovery at the temporary supply location
2. Sample temporary supply source service lateral
 - a. A negative sample result will allow for temporary supply connection
3. Install hose over line between service and supply connection
 - a. Primary connection made at sample manifold assembly
 - b. Secondary connection points to customer will be considered
 - c. Install backflow preventing check valve on hose-over connection
4. Install orange construction fencing along the length of the line so construction and debris removal crews are aware of its location.
5. Notify customer of installation pathway and advise them to be cognizant of its status
6. Remove and salvage equipment following sampling sequence completion
7. Reconnect customer to original service connection by opening customer isolation valve.

Procurement

PID will purchase about 3000 feet of NSF61 certified hose material, which accounts for 100 300' segments. The use of NSF61 material makes the hoses available for future use for hose over connections for potable supply. A general contractor will be hired to manage the installation of the hose connections and will also provide daily observation of the hose status. If a hose connection is damaged, the customer will be notified, the supply will be terminated, and the connection will be replaced. The contractor will be responsible for managing the installations, disconnection, and maintenance of the hose-over connections.

On-Site Temporary Supply

Those customers not able to be supplied by an adjacent lateral will be provided with on-site temporary supply. Storage volume on-site accounts for indoor use patterns only, as the duration of the temporary supply is limited to the sampling timeframe - estimated to be one week. The supply equipment package as shown in Figure 1 includes:

- storage tank for a week's worth of single service supply (1000 gallons)
 - customers on isolated mains will have a larger storage capacity (approximately 3,000 gal) and the tanks will be ground mounted
- booster pump to pressurize water from storage to service
- pressure tank for reliable pressure supply to customer.

The package will be delivered in an enclosed flatbed trailer to deter vandalism. The pump discharge will be connected to the sample manifold connection point provided in the meter recovery process. The power supply will be provided by the customer's local electrical panel. The temporary water supply will be non-potable water with the limited contact order.

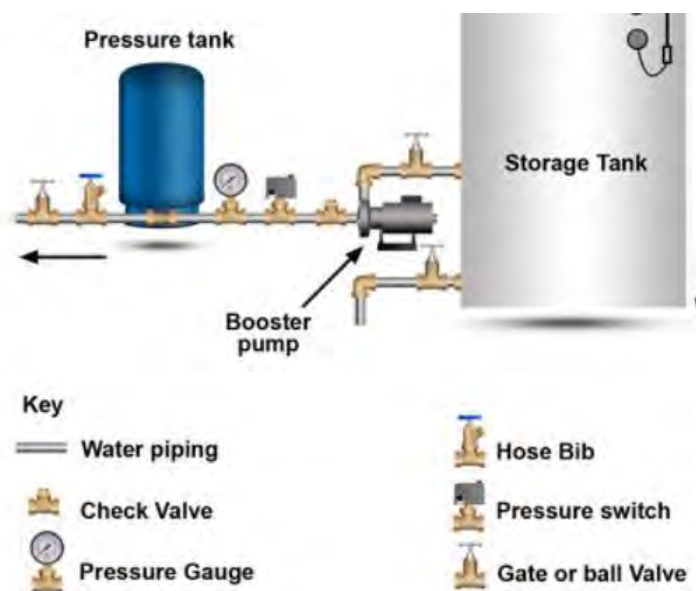


Figure 1: Temporary Supply Package

Installation

The installation and maintenance requirements include:

1. Complete meter recovery at temporary supply location
2. Deliver temporary supply package
3. Connect pump discharge from supply to service
 - a. Connection will include backflow prevention
4. Connect pump station to customer electrical service panel
5. Startup system
6. Remove and salvage equipment following sampling sequence completion
7. Reconnect customer to original service connection by opening customer isolation valve.

Procurement

PID will provide a booster pump skid package design. A general contractor will be hired to source the equipment and build the temporary pump skids, manage the implementation, maintenance, removal and transfer of the temporary packages. PID will determine which services which will be provided temporary supply packages in accordance with recovery and sampling efforts and main isolation.

Meetings/Reports

Contractor shall attend weekly meetings with PID staff and other action leaders to update PID on the progress of temporary supply installations and discuss other action issues and solutions. Additionally, the Contractor shall provide daily and weekly reports of progress and issues encountered. The reports shall include, but not be limited to, progress report, overall action schedule, problems encountered, and conflicts with other actions.

Paradise Irrigation District Water System Recovery Plan Water Meter Recovery – Justification Report

Date: April 12, 2019
Prepared by: Sheila Magladry, P.E.
Checked by: Michael Lindquist, P.E.

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Damage Description

Many of PID's services and appurtenances were destroyed by the Camp Fire and/or fire-fighting activities, whether by melting caused by excessive heat or damage by physical impacts related to debris removal or traffic. Some assemblies may be obviously damaged: the meter housing may appear melted or broken to the naked eye. Others may appear to be undamaged, but only upon further testing can it be determined the interior function of the meter is operable and uncontaminated. A complete understanding of service and meter status throughout the town must be made clear to facilitate system repair.

Action Purpose

The scope of this action will be to locate and evaluate damage to all meter boxes and meter assemblies in the system. Those items which are destroyed or damaged must be identified for repair or replacement. This entire process must be meticulously recorded and reported.

Meter box types include concrete and plastic boxes, and steel, concrete, and plastic lids. Each meter box will be evaluated and identified as damaged or serviceable as part of the recovery action. Meter box replacement/repair description and costs are covered in a different action.

The original PID meters were primarily plastic body Badger Recordall positive displacement meters with Datamatic System automatic meter readers (AMR). The AMR infrastructure is made up of collectors, enhanced repeaters, and repeaters. The meters are equipped with a Meter Interface Unit (MIU). The MIU consists of an electronic component that collects data from the meter register and transmits that data to the repeater and collection components. The MIU body is made of plastic and houses the electronic circuitry as well as two lithium batteries. At the time of the fire, PID was in the process of transitioning to Zenner PPD brass meters with the Zenner Stealth automatic reader system. Approximately 75% of the system is still the Badger meter style. It is likely the Badger meters were more susceptible to damage during the fire than the Zenner meters as the plastic body could have melted or introduced contaminants into the service. The MUI components were likely damaged as well as the housing for that instrument was also plastic. The Zenner meters are on average 50% the cost of a new Badger meter. The Zenner meter is the preferred replacement item as it is less prone to damage due to the housing material and is less costly to replace. The replacement costs will be assumed using the Zenner replacement alternative.

The presented alternatives will compare the costs to inspect, repair, and/or replace meters. For consideration, the average cost to inspect, repair, or replace a meter are included in Table 1.

Table 1: Average Unit Costs

Unit Cost to Inspect	Unit Cost to Repair ¹	Unit Cost to Replace ²
\$45	\$80	\$95

¹ Repair costs assume repairing with Badger repair parts

² Replacement costs assume Zenner meter type replacements

The initial estimates shown are for providing inspection, repair/replacement for 13% of the system (the current number of occupiable structures plus 20% rebuild). This data point addresses the decrease in services in the system driven by the mass ex-migration. No undamaged meters will be labeled for reinstallation in this initial 13% phase. Cost estimates assume all meters in this initial batch will either be replaced or repaired. All undamaged meters can be saved for future reinstallation at other locations.

For the final alternative comparison, it is assumed 100% of the meters in the system must be recovered and inspected for damage or contamination in order to be cleared for reinstallation. The cost of repair/replacement varies depending on how many of the meters are determined damaged. A sensitivity analysis is presented to show how this total cost varies according to percent system damage.

Alternative 1: Recover, Inspect, and Repair/Replace

Scope

This alternative involves locating, removing, and inspecting every meter assembly for functionality and contamination. If a meter assembly is acceptable, it can be labeled for reinstallation. If it is damaged but repairable, the unit can be repaired and labeled for reinstallation. If the unit is damaged and unrepairable, it will be labeled and sorted for disposal. If the unit is contaminated, it will be labeled damaged and sorted for disposal. All damaged meters beyond repair will be replaced with Zenner meters. Repaired meters will be repaired with Badger repair parts.

Alternative 2: Recover, Inspect, and Replace Damaged

Scope

This alternative also involves locating, removing, and testing every meter assembly for functionality and contamination. If a meter assembly is acceptable, it can be labeled for reinstallation. If it is damaged or contaminated, whether repairable or not, the unit will be labeled as damaged and sorted for disposal. All damaged meters will be replaced with Zenner meters.

Alternative 3: Recover and Replace All

Scope

It may be more cost effective and time efficient to collect and replace all meter assemblies, regardless of functionality or contamination. Alternative 3 will locate, record visual status of the meter assembly, and remove all meters. Costs will be assumed for 100% system replacement with Zenner meters. All existing meter assemblies will be disposed.

Recover Process

13% System Recovery

The alternatives are presented to compare estimated costs and implementation time to recover and investigate 13% of the system. The cost of alternative 3 is 20% the cost of alternatives 1 and 2 and provides the quickest recovery period. Initially, it is most time and cost efficient to collect and replace meters without inspection or repair.

Table 2: 13% System Recovery

Alternative	Estimated Cost	Estimated Schedule
Alt 1: Inspect, Repair/Replace ³	\$1,100,000	92 days
Alt 2: Inspect, Replace	\$1,150,000	88 days
Alt 3: Replace All	\$910,000 (20% savings)	20 days
<i>Assumptions</i>		
Recovery and Reinstallation Crew	10	People
Inspection and Repair Crew	5	People
Number of Supervisors	4	People
Overhead	20%	percent

100% System Recovery

Without thorough recovery and inspection efforts, it is impossible to know the extent of contamination and damage to the system. A sensitivity analysis was performed to show the cost and schedule increase related to percent of system damaged. The same assumptions apply to the 100% system recovery as applied to the 13% system recovery.

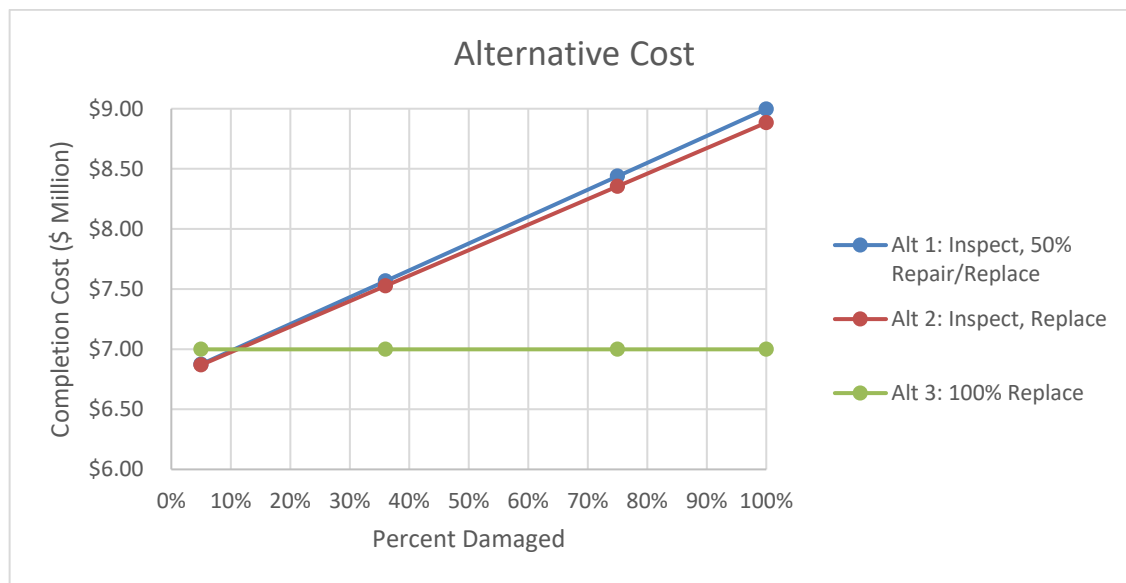


Figure 1: Sensitivity Analysis for Alternative Cost

³ Estimate assumes 50% of damaged meters can be repaired and 50% require replacement

Figure 1 shows the relationship between cost and percent damaged for each alternative. Alternative 3 is approximately the same cost as the other two alternatives at 12% damage. However, as the percent damage increases, the other two alternative costs increase due to the volume of repair or replacement costs coupled with inspection costs. Once 3% of the system is determined damaged (340 meters), it is most cost efficient to continue with a full system replacement. This will cap the action cost at \$7 Million. The time estimated to complete the 100% system recovery with 3% inspections is 172 days.

Selected Alternative

The selected alternative is a combination of the presented alternatives. As the meter recovery process begins, the meters will be inspected and tested for damage. Once a damage threshold is reached (recommended threshold is 340 meters) no more meters will be inspected, and the district will proceed with replacing the remaining meters. This will allow for an initial assessment of meter damage but will contain the action cost if the number of damaged meters is excessive (more than 3% damage).

Paradise Irrigation District Water System Recovery Plan Appurtenance Recovery – Justification Report

Date: April 9, 2019
Prepared by: Sheila Magladry, P.E.
Checked by: Michael Lindquist, P.E.

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Damage Description

The extent of damage to the water system due to the Camp Fire is unknown. It has been discovered that many of the services and appurtenances were destroyed by the fire and/or fire-fighting activities, whether through excessive heat causing melting or damage by physical impacts related to debris removal or traffic. A complete understanding of appurtenance status is required to ensure PID can safely and reliably provide potable water.

Appurtenances include:

1. Fire Hydrants
2. Blow Off Assemblies
3. Air and/or Vacuum Release Valves
4. Pressure Reducing or Regulating Valves
5. Other Service and Control Valves

Action Purpose

The scope of this action will be to locate and assess damage to all appurtenances in the system. Those items which are destroyed or damaged must be identified for repair or replacement. This entire process must be meticulously tracked.

Alternative 1: Recover, Inspect, Test and Replace

Scope

It is likely many appurtenances were obviously damaged, and they may have already received repair or replacement. Other items may appear to be operable but may contain contaminants. The only way to ensure all appurtenances are safe to operate within the system is to locate, inspect, test, and if required repair each appurtenance in the system. Alternative 1 method of completion is:

1. Locate and identify every appurtenance that existed in the system prior to the fire
2. Note the status of the appurtenance
3. Inspect for damage
 - a. Visual damage inspection
 - b. Some appurtenances may require bench-top inspection for operation
 - c. Sample appurtenance for contamination
 - i. Sampling will be completed as part of the Sampling Action
4. Reinstall undamaged appurtenance as required
5. Replace damaged appurtenances
6. Dispose of damaged appurtenances

Estimated Cost

Preliminary estimates assume approximately 30% of appurtenances are damaged.

Estimated Schedule

The schedule to locate, inspect, and test every appurtenance in the system was created using 10 crews of 5 inspectors.

Alternative 2: Recover and Replace

Scope

For discussion purposes, a full system replacement without testing and repair was considered. This scope still requires locating and identifying all appurtenances, but inspection and testing for contamination is not required as all appurtenances assume replacement.

Estimated Cost

Preliminary estimates assume 100% appurtenance replacement.

Estimated Schedule

The schedule to locate and replace every appurtenance in the system was created using 10 crews of 5 inspectors.

Alternative Selection

Table 1 summarizes the two alternatives and their associated cost and schedule estimates. Alternative 1 is much more favorable in both categories, so it is the recommended solution. The appurtenances will all be inspected before they are labeled for repair/replacement or reinstallation.

Table 1: Alternative Comparison

Alternative	Alt 1: Recover, Inspect, Test, and Replace	Alt 2: Recover and Replace
Estimated Cost	\$5.7 Million	\$17 Million
Estimated Schedule	6 months	11 months

Paradise Irrigation District Water System Recovery Plan Asset Recovery – Implementation Plan

Date: April 12, 2019
Prepared by: Sheila Magladry, P.E.
Checked by: Michael Lindquist, P.E.

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List of Acronyms

Acronym	Description
ARA	Asset Recovery Application
ID	Identification Number
PID	Paradise Irrigation District
PRV	Pressure Regulating Valve
RA	Recovery Artist

Action Description

The scope of this action will be to locate and evaluate damage to all meter assemblies and appurtenances in the system. All appurtenances must be inspected for damage and contamination and identified for repair or replacement as required. The meters must be inspected for damage, either operational or contamination, up to a total of 340 meters (or another number as determined by the district). At this point the remaining meters will be replaced. Is it more cost effective for the action to continue with meter replacement after this portion of the system is confirmed damaged, than to continue with inspections.

The entire recovery process must be meticulously recorded and reported. Every asset, meter or appurtenance, will be assigned a unique identification number. The number will be logged in the GIS application, and will also be physically attached to the asset using a metal tag. All data gathered during the recovery process will be logged in a GIS database. The data will be collected in a collector application (app) database which will be referenced for presentation on the GIS map.

Debris removal crews require water for dust control, so they cannot be onsite while the service is being stagnated for sampling. Additionally, they may damage the sample manifold, as it will likely protrude above grade. The recovery action will attempt to follow the debris removal crews as best as possible.

Collector Application

The Asset Recovery App (ARA) will include the following data entries:

1. Asset selection
 - a. Meter
 - i. Meter
 - ii. Curb stop
 - iii. Customer shut-off valve
 - iv. Meter box
 - b. Appurtenance
 - i. Fire Hydrants
 - ii. Blow Off Assemblies
 - iii. Air and/or Vacuum Release Valves
 - iv. Pressure Reducing or Regulating Valves
 - v. Other Service and Control Valves
2. Asset location (as currently identified in PID system database)
 - a. If the mapped location differs from the actual location, the recovery artist will be able to confirm the location by “pinning” his location while standing at the asset.
 - b. The asset location information will be assigned to the specific PID identification number associated to that asset.
3. Photo verification of asset and related items
 - a. The app will allow for multiple photo entries.
 - b. If the asset or related assembly items are excessively damaged, multiple photos may be necessary to record the damage.

4. Notes
 - a. If the recovery artist notes any additional useful information this portion of the app will track that information
5. Sample Ready
 - a. Yes or No
 - b. If No, notes why
6. Damage Assessment
 - a. Visual Damage
 - b. Mechanical Damage
 - i. Will be determined for appurtenances following testing
 - c. Contamination
 - i. Will be determined for appurtenances following testing
7. Repaired (Y/N)
8. Replaced (Y/N)
9. Reinstalled (Y/N)

Asset Recovery

Prior to meter recovery, there will be efforts made to locate all meters. PID will attempt to locate and mark all meter locations. The mains and (where practical) service connections to the mains will be located using Underground Service Alert (USA).

Every asset, meter and appurtenance in the system must be located, identified, and recorded by a recovery artist. The recovery artist (RA) will follow this process:

1. Be provided an asset recovery map provided by the Asset Recovery Artist Supervisor identifying recovery location and appurtenance ID numbers
2. Asset location
 - a. RA will locate the asset using the ARA
 - b. RA will update the location information if necessary
3. Asset identification
 - a. Every asset will be assigned a unique identifier number. In cases where the existing asset number (meter ID for example) can be associated with a location or address, this will be used as the unique number. If an asset ID number does not already exist, one will be created and attached to the asset account.
 - b. A tag with the unique asset ID number will be physically attached to the asset (only for appurtenances) and the field connection location.
4. Asset documentation
 - a. Photos
 - b. Additional notes as required
 - c. If applicable, complete damage assessment. This will only be completed by the RA if visual damage is apparent.
5. Asset removal

- a. Appurtenance
 - i. Appurtenance Removal will be determined by PID staff. This must be closely monitored to not disrupt service or cause safety issues.
 - b. Meter - All meters will be removed
 - i. Close the curb stop.
 - ii. Close the customer supply valve
 - iii. Remove the meter assembly
 - iv. Install sample manifold assembly
 - v. Reinitiate non-potable water service as determined by PID
 - 1. Non-potable service will not be metered.
 - vi. Cap Sample manifold, or close valves as appropriate for all other locations
6. Flushing of service lateral
- a. AR shall bleed all air out of the service lateral and flush a minimum of 2 volumes of water (typically about 3 gallons) from the pipe through the larger sample port on the sample manifold.
 - b. The flushing water will be collected and disposed in a specified location
7. Asset marking
- a. Install the unique asset ID tag
 - b. Mark the location with a 1"-2" dot of yellow paint to provide a visual indication that the asset has been completed

Every meter will be replaced with a sample manifold to prepare the site for sampling. In some locations, excavations of the meter box may be required to complete the plumbing of the sample manifold.

Procurement

The speed of the recovery program will be limited by the density of resources used for the action. There will be a team of approximately 20 recovery artists (RA) working full time with a recovery rate of 4 assets per day per RA to complete the recovery process for every asset in the system. PID will provide directions and priorities to the recovery artist team. The meter recovery artists will be either PID staff, inter-agency volunteers, or a contracted entity. Appurtenances will be recovered by PID operations staff as taking these items offline has a greater impact on the system compared to meter recovery. Lab technicians will include PID staff as available, interagency volunteers and additional contractors.

Meetings/Reports

Contractor shall attend weekly meetings with PID staff and other action leaders to update on the progress of recovery operations and discuss other action issues and solutions. Additionally, the Contractor shall provide daily and weekly reports of progress and issues encountered. The reports shall include, but not be limited to, progress report, overall action schedule, problems encountered, and conflicts with other actions.

Recovery Specifics

Sample Manifold for Meter Recovery

The sample manifold will be installed in lieu of the meter assembly until the replacement meter can be installed. The sample manifold installed will depend on the status of the structure the meter serves. The sample manifold will have two pipe connections: one for sampling with a $\frac{1}{4}$ " sample tap and a $\frac{1}{2}$ " flushing connection, and a $\frac{3}{4}$ " connection for temporary supply. The connection sizes vary between $\frac{5}{8}$ " and 2", so the sample manifolds will be custom fabricated from galvanized steel pipe with brass fittings depending on the connection size. See the diagram in Figure 1.

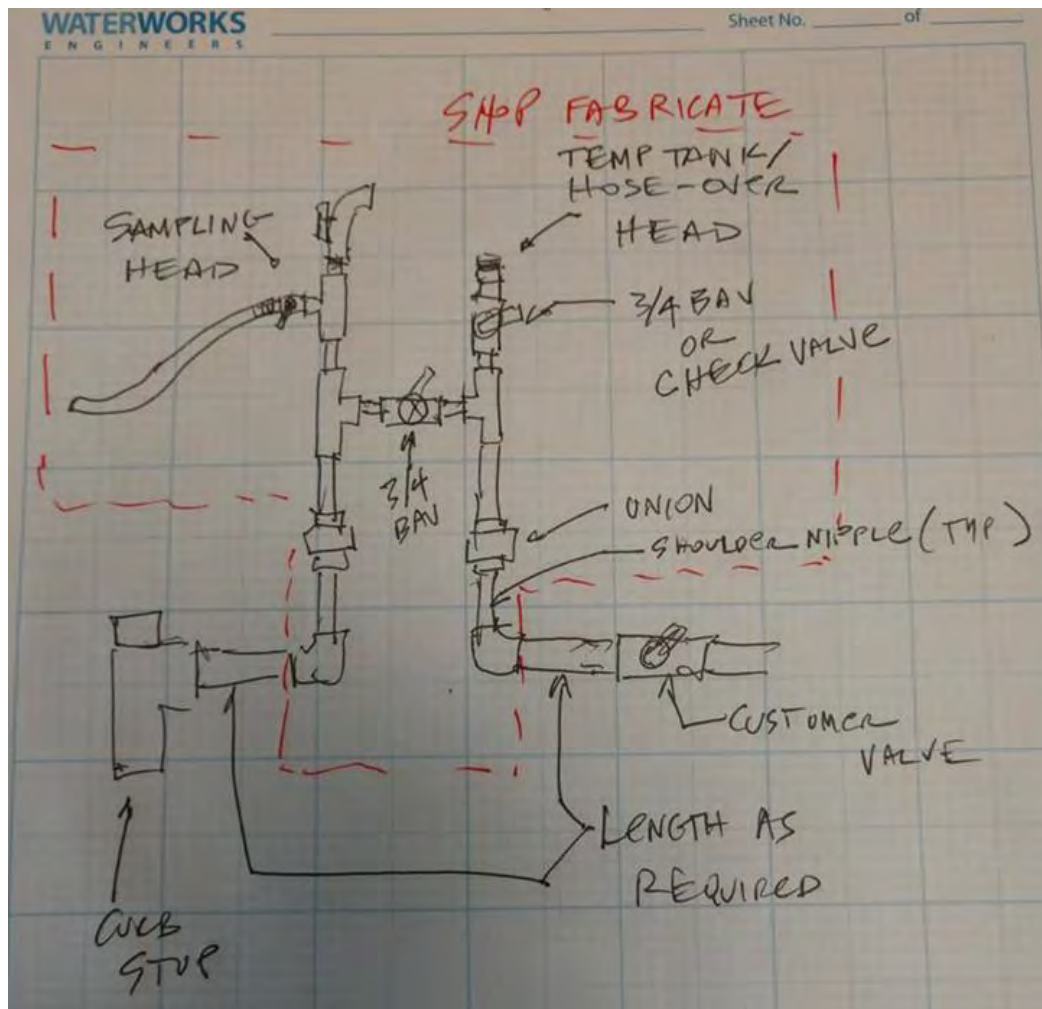


Figure 1: Sample Manifold Detail

Functionality Testing

The recovered assets require functional bench testing. There are integral mechanical items within the assets that cannot be proven to be functioning properly in the field. All valves including stops will be visually tested for leakage in the field.

Contamination Testing

All assets must be sampled and tested for contamination. Hydrants will be field sampled. Other assets will be sampled in the field or laboratory (the type of test will be determined by the physical condition of the asset, and the likelihood of contamination). For lab testing, the asset will be submerged in potable water for 72 hours, and a representative sample will be taken from the submergence water following the submergence period. If the sample result is positive, the associated asset will be marked for disposal.

Disposal

All discarded assets will be strategically sorted for disposal. The meters and lithium ion batteries are considered electronic waste. The meter housing must be separated from the battery prior to disposal. The discarded appurtenances will be sorted by material. Plastic and metal materials can be recycled. Other materials may be repurposed for use in non-potable applications.

Table 1: Typical Disposal Costs

Item	Cost
Meter Housing	\$0.25/lb
Lithium Ion Batteries	\$12/lb
Plastic and Metal	Possible salvage value

Asset Repair

The action justification report concluded it is more cost effective and time efficient to replace all damaged meters assuming 3% of system damage. Damaged meters will not be repaired. Damaged appurtenances will be repaired where possible. The repair will either be conducted by PID staff or sent to repair shops.

Data Mapping

The collected data, including asset recovery and sampling results, will be stored and presented on the GIS map.

Paradise Irrigation District Water System Recovery Plan Sample Mains, Services, and Appurtenances – Justification Report

Date: April 12, 2019
Prepared by: Michael Lindquist, P.E.
Checked by: Sheila Magladry, P.E.

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Selected Alternative	4

Damage Description

Preliminary sampling efforts of the distribution system following the Camp Fire indicate benzene and other organic contaminants are present at levels above drinking water standards in numerous water services and water mains. Currently, PID is providing non-potable water to services via the damaged distribution system and PID has issued a limited-contact order for all water service locations.

Purpose and Goals of Action

Previous sampling has proven that some components in the system are contaminated with volatile organic compounds (VOCs). The purpose of sampling the system components is to determine conclusively and provide evidence of damage to system components and optimize repairs and replacements.

Sampling results will be used to reduce the potential of cross contamination to currently unimpacted portions of the water distribution system. Sample collection and data analysis will provide the information required to properly isolate unimpacted portions of the distribution system from contaminated components and portions of the system.

The action must be able to readily be contracted out to facilitate the commencement of the sampling action and data collection. All system components must be accurately and completely characterized. All occupiable residential structures and essential service facilities must be sampled within 12 weeks, and the rest of system shall be completed within 36 weeks. All samples must be collected and processed consistent with State and Federal requirements.

Scope of Action

This action is intended to sample service laterals, water mains, and appurtenances (hydrants, blow-offs, air release valves, and pressure regulating valves). It does NOT sample customer service lines or a structure's plumbing.

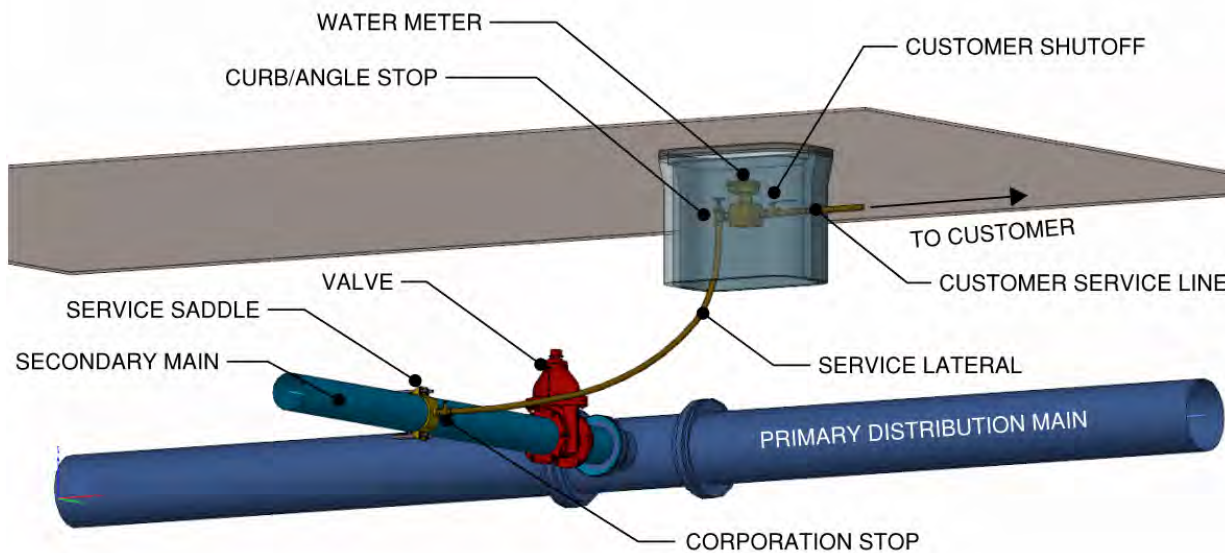


Figure 1: Schematic of Customer Connection to Distribution Main

Action Alternatives

Alternative 1: Entire System Sampling

Scope

The Entire System Sampling Alternative will sample approximately at approximately 16,000 individual points throughout the system. The points include water mains (3600 points), service laterals (10,600 points), and appurtenances (hydrants, blow offs, pressure relief valves, and air release valves – 1800 points). Because of retesting and verifications, the total amount of samples/test for this action will be approximately 20,000.

The sampling includes drawing a water sample from each service lateral and sampling the main primarily through a second water draw on selected service laterals. The samples will be collected, organized and tested. The samples will be tested for the full suite of VOCs. The results will be compiled in a GIS database.

The sampling staff will utilize a tablet-based application to input location, condition, and sample meta-data (date/time, lateral/main, and any relevant notes).

Retesting at select points will be performed to verify results and verify that contamination does not reoccur in the system.

Estimated Cost

Initial sampling of entire system (approximately 20,000 samples)	\$8,300,000
For 16 additional months of sample/testing (3200 samples)	\$1,400,000
Total for initial and 16 months additional testing	\$9,700,000

Estimated Schedule

The goal is to sample/test approximately 4000 points which include all occupiable residential structure service lines and water mains/appurtenances serving occupied areas within 12 weeks of the notice to proceed (NTP); The remaining points sampled/tested within 36 weeks of the NTP. Monthly monitoring is expected to continue for an additional 16-20 months.

Alternative 2: Benzene Only Testing

Scope

Fundamentally the same as Alternative 1, except Alternative 2 will test for only benzene. Currently, there is no conclusive evidence that benzene is an accurate surrogate for other contaminants within the system¹.

Estimated Cost

Initial sampling of system (approximately 20,000 samples)	\$5,500,000
For 16 additional months of sample/testing (3200 samples)	\$1,000,000
Total for initial and 16 months additional testing	\$6,500,000

Estimated Schedule

The goal is to sample/test approximately 4000 points which include all occupiable residential structure service lines and water mains/appurtenances serving occupied areas within 12 weeks of the notice to proceed (NTP); The remaining points sampled/tested within 36 weeks of the NTP. Monthly monitoring is expected to continue for an additional 16-20 months.

Alternative 3: Partial System Sampling

Scope

Fundamentally the same as Alternative 1, except this action would sample selected components (mains, service lines, and appurtenances) with the intent of extrapolating the results to the entire system. The system may be characterized by choosing approximately 3000 points to sample (16% of the system). Based on the results, the action would more thoroughly sample areas returned positive contamination results. This alternative estimates 50% of the system components would be sampled (approximately 9000 points) upon action completion.

¹ Onsite Visit Response and Recovery Observations Presented to PID February 13, 2019, Andrew J. Whelton, Ph.D., et. al., February 2019

If this alternative is selected, the only method to conclude that all components are not damaged is through extrapolation. It does not provide testing of all service laterals.

Estimated Cost

If approximately 9000 points in the system components are sampled:

Initial sampling of system (approximately 9,000 points)	\$4,100,000
For 16 additional months of sample/testing (3200 samples)	\$1,400,000
Total for initial and 16 months additional testing	\$5,500,000

Estimated Schedule

The goal would be to complete all initial sampling within 24 weeks of the notice to proceed. Monthly monitoring is expected to continue for an additional 16-20 months.

Action Goals

The alternatives meet the following action goals:

Goal	Alternative 1 Entire System Sampling	Alternative 2 Benzene Only Testing	Alternative 3 Partial System Sampling
Readily Initiated	Yes	Yes	Yes
Complete characterization of system	Yes	No	No
Sample occupiable residential, mains serving occupied areas, and essential services structures within 12 weeks	Yes	Yes	Yes
Sample all components within 36 weeks months	Yes	Yes	Yes
Sampling and Testing consistent with CA DDW and US EPA	Yes	Maybe	Yes
Estimated Cost	\$9.7M	\$6.5M	\$5.5M

Selected Alternative

The preferred alternative is Alternative 1: Entire System Sampling. Testing for the full suite of VOCs at all lateral services, water mains, and appurtenances will provide the most conclusive evidence that the system can meet potable water standards and customers can confidently reconnect and receive potable water. It also provides the most accurate assessment of damage so repairs and replacements can be optimized.

Alternative 2 was not chosen because benzene is not an accurate surrogate for all the contaminants in the system. Testing for benzene only does not allow a final determination that the system meets potable water requirements.

Alternative 3 was not chosen because partial sampling makes it extremely difficult to declare the entire system ready for serving potable water to customers and it does not provide an accurate assessment of damaged components that need to be repaired or replaced.

Paradise Irrigation District Water System Recovery Plan Sample Mains, Services, and Appurtenances – Implementation Plan

Date: April 12, 2019
Prepared by: Michael Lindquist, P.E.
Checked by: Sheila Magladry, P.E.

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Action Description

The scope of this action will be to sample and test approximately 18,000 points throughout the PID system. This entire process must be meticulously tracked and recorded. The recovery process will use GIS mapping to log the sample and test results data. The sample data will be collected in a collector application (app) database which will be referenced for presentation on the GIS map.

Recommended Action

The action will sample approximately 18,200 individual points throughout the system. The points include water mains (3600 points), customer service lines (10,600 points), and appurtenances (hydrants, blow offs, pressure relief valves, and air release valves – 4,000 points). Some points will be sampled multiple times to verify results and confirm areas have not remain free of contamination over time.

The action will be responsible for:

Sampling and Analysis Plan (SAP) – PID will provide the Contractor with priorities of sampling, such as occupiable residential structures and essential service facilities first, followed by unoccupied areas. The Contractor shall create an efficient Sampling and Analysis Plan (SAP). The SAP will include a Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP). The FSP shall be used for daily and weekly dispatching of sample staff and organization of samples and testing. The QAPP will include quality control of both field and laboratory work. The QAP shall specify MDL/RL requirements, QA duplicate sample policy, and provisions for retesting because of suspect results (e.g. verifying/correcting potentially errant results). The SAP will be reevaluated at 1 week, 1 month, and bi-monthly for the remainder of the Action. The revaluation shall make modifications to increase efficiency and correct common errors.

On-call sampling – During the action duration, the contractor shall be available to sample specific single points (not to exceed 10 on any given weekday) that are not part of the sampling plan as directed by PID. On-call sampling shall not interfere with the Sampling Plan provided by the Contractor. On-call samples shall be sampled within 2 working days of the request.

Monthly Monitoring – After the sampling of the approximately 18,200 points, the Contractor shall be available to sample up to 300 points per month (maximum of 14 per day) for an additional 12-18 months.

Standard Operating Procedures (SOP) – Contractor shall develop SOPs for dispatching staff, collecting samples, transporting samples, and data entry into the program database. SOPs shall include a section for “what to do” for exceptions that are not covered in the SOP (e.g. a sample cannot be collected because a service was not properly recovered).

Sampling – Sampling shall be accomplished by qualified staff following proper protocols. Samples will include chain of custody. A majority of tests will be for a full volatile organic compound (VOC) suite to provide confidence that the system components meets all potable requirements related to VOCs. Benzene only tests may be used for some system components if it is determined that full VOC is not needed (based on conclusive data that benzene is an accurate surrogate). The type of tests may be modified as more

data is collected and analyzed. Every service lateral will be tested. Mains will generally be tested through service laterals. Service laterals will have been prepared for sampling and flushing during the Asset Recovery Action.

Organize and Transport Samples - Samples shall be organized for delivery to specific labs. To meet milestones, multiple labs will need to be utilized. To ensure accountability of maintaining testing schedules, the Contractor shall be responsible for transportation of samples to laboratories.

Coordinate with Other Actions – Sampling must be coordinated with PID system operations and other recovery actions. A component cannot be sampled until it is recovered by the Asset Recovery. System operations will affect movement of the water in the system and must be accounted for in the sampling of some components. Coordination with the Temporary Customer Supply Action is required for occupiable structures so that the temporary water supply is in-place 72-hours prior to the sampling event to achieve the “stagnation period.” Resampling of areas and components may be required after repairs/replacements have been completed.

Populate the GIS database – The GIS database will be the central depository of data for all actions. The Contractor shall be responsible for populating the database with sampling and results data. The Contractor shall ensure that laboratories adhere to the database Electronic Data Delivery (EDD) requirements (to be established by PID)

Reporting – The Contractor shall provide daily and weekly reports of progress and issues encountered. The reports shall include, but not be limited to, number of samples taken, percent complete, summary of test results, sampling/testing problems encountered, conflicts with other actions, and lab testing turn-around times.

Worker Safety – The sampling will occur in rural areas that may have fire-related debris; extensive construction projects are occurring throughout the area. Workers shall have training regarding recognizing hazards and protecting themselves. Additionally, all sample staff shall be Hazardous Waste Operations and Emergency Response (HAZWOPER) certified (appropriate level for the hazards expected). Contractor is responsible for providing personal training and protective equipment (PPE) for their staff. Minimum PPE is Class 2 high visibility vest, closed toe shoes, ANSI Z87.1 safety glasses, and nitrile surgical-style gloves for sample handling.

Equipment and Supplies – Transportation, personal protective equipment (PPE), staff management, and all other items needed for the successful completion of the scope of services shall be provided by the Contractor. PID anticipates it will provide a half-time staff liaison to coordinate the Contractor’s work and PID Operations.

Sample Water Flushing – Contractor shall comply with State and Federal water-discharge requirements when sampling. Any water not collected in sampling containers must be captured and deposited in at the Flushing Water Collection Site (likely a central depository tank located at Reservoir B Site). Water containing contaminants will be treated and disposed of properly.

Laboratory Contracts - An important constraint on the sampling/testing is the capacity of regional laboratories. Based on PID pre-action contact with laboratories in Northern California, if five testing laboratories are used concurrently, approximately 120 samples per day can be tested (5 days per week). The Contractor shall be responsible for maximizing the use of available laboratory capacity and minimizing testing costs. Additionally, establishing formatting of results data for seamless integration into the program database tool(s) is important. Organizing the particular sampling methods and equipment for each laboratory shall be the responsibility of the Sampling Contractor.

Temporary Facilities - The Sample Contractor shall provide their own temporary office and storage space for the duration of the action. PID can accommodate up to one 8x32 foot trailer with electric, water, and sewer hookup at the PID main office or water plant site.

Collector Application - Each Sample Team shall be equipped with a tablet containing the Collector App (sampling data collection software application). The application will seamlessly upload the data to the program database when connected via wi-fi or cellular. The application will be developed as part of a separate action. The Collector App will be in addition to any other necessary data recordation necessary by DDW or a particular laboratory.

Sample and Analysis Progression

PID shall develop the priority of sampling locations. The sampling locations will be determined and coordinated using the GIS database. The first sampling priority will be mains serving areas that contain active meters and service laterals at occupiable structures. Sampling will generally move from Zone A down the system to Zone G. After occupiable structures are sampled, the action will move to remaining services and mains.

The SAP will be reevaluated at 1 week, 1 month, and bi monthly for the remainder of the action. The revaluation shall make modifications to increase efficiency and correct common errors.

Sampling Service Laterals and Mains

Samples of the service lateral shall accurately characterize the water quality within the service lateral pipe. Samples shall be taken by purging water until a sample is obtained that is between the meter and the mid-point of the service lateral (mid-point is midway between the water meter and the water main). The purge volume prior to sample is a function of the length and diameter of the service lateral. Generally, approximately 16 ounces of water shall be gently purged prior to taking the sample.

Air-purging prior to sampling may be required. Any water purged during air-purging is part of the purge volume.

Samples of the water main taken through a service lateral pipe shall include flushing the service lateral, so the sample accurately reflects the water in the main. Flushing velocity through the service lateral shall be at least 3 feet per second and greater than 2 volumes of the service lateral pip. The goal is to vigorously flush the water through the service lateral to ensure that sample accurately characterizes the main. Generally, the flushing volume will be at least 5 gallons of water in 2 minutes or less.

Samples shall have a chain of custody to ensure accuracy.

Sampling shall be consistent with each testing laboratory's specific instructions.

After sampling, each site shall be tagged with a waterproof wire tag to provide physical evidence that the point has been sampled. The tag shall include the sample location number, type of sample (lateral or main) and date and time of sample. Example tag.



Figure 1: Sample Tag Example

Sampling Appurtenances

Sampling fire hydrants and blow offs requires additional field work because the sample point will not be prepped for sampling. Sample staff shall receive special instruction for sampling appurtenances.

Generally, fire hydrant samples are intended to characterize the water within the hydrant itself. Sample discharge should not exceed the volume of the hydrant (typically less than 3 gallons).

If mains are sampled through a hydrant, sufficient water must be flushed through the hydrant and 6-inch service pipe.

Generally, blow-off samples are meant to characterize the water within the blow-off assembly but may also be used to characterize the main.

Action Coordination

The sampling shall generally follow the Asset Recovery Action which will have prepped the service lateral sampling sites.

The service lateral must be stagnant for a minimum of 72-hours prior to being sampled. It is the responsibility of the Sample Contractor to schedule sampling that allows for adequate stagnation time. The date/time of a service lateral's recovery, and hence availability for sampling, will be available in the GIS database.

Stagnation time for each service lateral shall be reported (the difference between service recovery date/time and sample date/time) and recorded in the results database.

Special Coordination for Occupiable Structures

It is the intent of the Temporary Customer Supply to minimize the disruption to connected customers. When occupied structures are tested, the structure shall be equipped with a temporary water source, either a hose-over or a temporary tank.

Hose-overs will temporarily connect a nearby service lateral connection to the occupied structures service line downstream of the meter. Prior to connection, the temporary service lateral must be tested and the results

indicate it is free of contamination. The sampling and testing must be scheduled well in advance to allow completion prior to preparing the occupied structure for testing - likely a minimum of 15 working days earlier.

Once the test of the temporary connection service lateral shows no contamination, the Sample Contractor shall communicate an “intent to sample an occupied structure” to the Temporary Customer Supply team at least 6 working days in advance of sampling. The lead time allows the Temporary Customer Supply Team to disconnect the structure from the PID system and connect to a temporary water source at least 72-hours prior to the sampling to provide adequate stagnation time of the service lateral pipe. Once the sample is taken, the Temporary Customer Supply Team shall be notified so they can reconnect the structure to the PID system and remove the temporary water source (if appropriate). This should be completed within a one-week timeframe.

Sample Teams

Sample Teams shall consist of one or more staff members (at the discretion of the Sample Contractor).

The Sampling Contractor shall designate at least one team that is available for special-request sampling as needed.

Sample teams shall be equipped with a vehicle, personal protective equipment (PPE), and sampling equipment.

Sample Water Management

Water purged/flushed from pipes may contain contaminants. Water shall be captured, stored, and properly disposed. Generally, water can be discharged into buckets and transported in the sampling vehicle.

When the volume exceeds 15 gallons, the water shall be flushed to a water storage truck.

Flushing water shall be transferred to the storage/treatment system located at Reservoir B site within 8 hours of being collected (e.g. at least once per work day).

Treatment and disposal will be the responsibility of another action.

Schedule

Sampling Contractor shall provide adequate labor, management, and equipment to meet or exceed the sampling goals shown in the following table:

Week #	Number of Samples		
	per day	per week	Cumulative
1	20	100	100
2	40	200	300
3	60	300	600
4	80	400	1,000
5	110	550	1,550
6	110	550	2,100
Continues every week			
36	110	550	18,600

To prevent the Sampling Action from exceeding the capacity of the Asset Recovery and Temporary Customer Supply Actions, the goals should not be exceeded by more than 20%.

The Sampling Contractor shall remain engaged for follow-up/monitoring sampling for an additional 16 months and be capable of up to 300 samples/tests per month (max 14 per day).

Meetings/Reports

Sample Contractor shall attend weekly meetings with PID staff and other action leaders to update on the progress of sampling and discuss inter-action issues and solutions. Additionally, the Contractor shall provide daily and weekly reports of progress and issues encountered. The reports shall include, but not be limited to, number of samples taken, summary of test results, sampling/testing problems encountered, conflicts with other actions, and lab testing turn-around times.

Typical Schedule

An example schedule of the sampling staff is shown in the following table.

Example schedule for Sample Day Activities (times are working days from sample day)

Day	Supervisor Tasks	Field Tasks
Sample Day (S) minus 7 days	Prepare sampling routes	-
S -6 days	Notify Temporary Water Team of intent to sample occupied structure	-
S -2 days	-	Verify Temporary water is in place
S -1 day	Finalize sampling routes	-
Sample Day	Sample Teams briefed and deployed	Sample points Organize samples for delivery Deliver samples to lab
S +11 days (or less)	Results returned from Laboratory Quality Control of results Populate program database with results	-

Paradise Irrigation District Water System Recovery Plan Repair and Replace Damaged System Components – Justification Report

Date: April 9, 2019
 Prepared by: Sheila Magladry, P.E.
 Checked by: Michael Lindquist, P.E.

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Action Purpose

Extensive recovery and sampling efforts are being implemented to determine the extent of damage to system infrastructure. The recovery action categorizes the system assets which are damaged. The sampling action determines which service laterals and main sections are contaminated and require repair or replacement. The repair and replacement of damaged system components will use the results of the previous two actions to determine the extent of repair or replacement work required to ensure a functional potable water system. Preliminary sampling efforts have returned contamination results of 36% positive, so for estimating purposes, it is assumed 36% of the system networking requires repair or replacement.

Activity 1: Repair or Replace Service Laterals

There are approximately 10,500 service connections in the PID water system consisting of domestic and fire service connections. Service lateral material consists of copper tubing, copper and brass pipe, galvanized and steel pipe, HDPE pipe/tubing and polybutylene (PB) pipe/tubing. Table 1 shows the approximate distribution of service materials throughout the system. The service laterals range in diameter from 5/8" to 2", with 80% of the system having the 5/8" connection, 15% with 1" connection, and the remaining 4% distributed through the 3/4", 1 1/2" and 2" connection sizes.

Table 1: Existing Service Line Materials

Pipe Material	Number of Services
Polybutylene Piping	200
PVC	180
HDPE Tubing	3200
Copper Tubing	2300
Steel Pipe	4700

Alternative 1: Repair Damaged Service Laterals

Flushing is a method of "repairing" contaminated service laterals. The report titled "Considerations for Decontaminating HDPE service lines by Flushing" estimates the time and flushing volume required to flush contamination from HDPE pipe. The report is specifically geared towards flushing 1" diameter, 50-foot long HDPE service mains to remove up to 100 ppb benzene contamination. It should be noted that this material is not the standard within PID's system, and benzene concentrations have been measured at greater than 100 ppb, and benzene is not the only contaminant. The conclusions of the report are shown in Figure 1.

Table 1. Time in Days Needed PER SERVICE LINE to Decontaminate by Water Flushing, based on the concentration of benzene measured before flushing begins. Flushing is with 2.03 GPM of benzene-free (0.0 ppb) water.

Initial measurement concentration (C ₂)	Goal A (never above 0.5 ppb)		Goal B (only exceed 0.5 ppb after 72 hours of stagnation)	
	Continuous	Intermittent (once/72 hrs)	Continuous	Intermittent (once/72 hrs)
100 ppb	286	312	195	240
50 ppb	246	270	156	198
20 ppb	195	213	104	141
10 ppb	155	171	66	99
5 ppb	116	129	33	60
2 ppb	64	74	8	20

Table 2. Volume of Water Flushed in Gallons PER SERVICE LINE to Decontaminate by Water Flushing, based on the concentration of benzene measured before flushing begins. Flushing is with 2.03 GPM of benzene-free (0.0 ppb) water.

Initial measurement concentration (C ₂)	Goal A (never above 0.5 ppb)		Goal B (only exceed 0.5 ppb after 72 hours of stagnation)	
	Continuous	Intermittent (once/72 hrs)	Continuous	Intermittent (once/72 hrs)
100 ppb	836,264	206	570,180	158
50 ppb	719,304	178	456,144	131
20 ppb	570,180	141	304,096	93
10 ppb	453,220	113	192,984	65
5 ppb	339,184	85	96,492	40
2 ppb	187,136	49	23,392	13

Figure 1: Flushing Volume Calculations

The median benzene concentration measured to date is 33.1 ppb. Assume the flushing method can be used to repair the 36% of the HDPE services in the system with a concentration of 33.1 ppb, the flushing period for a single service line is **2 years**. This is an impractical length of time for PID to manage flushing sequences throughout the community. It is also an impractical timeframe for users to be without potable water. Additionally, the flushing data is inconclusive for other service lateral materials.

The total estimated cost to provide flushing labor, collection and treatment for 36% of the system is \$12.8 Million. This alternative does not address these major factors:

- Benzene concentrations above 100 ppb
- Service laterals that are not HDPE material
- Service laterals that are not 1" or 50' long
- Residual benzene contamination in the flushing water
- Other contaminants embedded in the service lateral pipe wall

As this alternative cannot be applied as a remedy to the entire system, there are major factors that the alternative does not address, and the exorbitant timeframe required to complete this alternative, this alternative is not recommended.

Alternative 2: Replace Damaged Service Laterals

An alternative to flushing the services for repair is to replace the contaminated services. Table 2 estimates the repair costs and schedule for replacing 36% of the entire system with HDPE versus copper service material and compares it to the flushing costs and schedule from Alternative 1.

Table 2: Replacement Alternative Comparison

Alternative	1. Flush Service Lateral	1: Replace Service Lateral	
Service Material	Existing	HDPE	Copper
Probable Construction Cost	\$12.8 Million	\$11.9 Million	\$13.9 Million
Estimated Schedule	flushing each service once every 3 days 2 years	10 crews at 3 services per day 5 months	
Comments	Does not ensure contamination free service lateral upon completion.	New materials are NSF61 certified and contamination free	

Disposal of Damaged Services

The service materials collect from the replacement efforts must be disposed of properly. The materials (plastic and metal) are recyclable materials. The materials may have salvage value. The salvage value for the replaced services are estimated to be about \$200,000.

Activity 1: Alternative Selection

The recommended alternative is to replace the damaged service laterals with HDPE piping. This material is relatively simple to install compared to copper and provides the lowest estimated cost. The damaged service laterals likely have salvage value.

Activity 2: Repair and Replace Mains

Water Mains include transmission and distribution mains consisting of many types of material and size. Type of materials for water mains include C-900 PVC, C-905 PVC, Schedule 40 and 80 PVC, Concrete Mortar Lined (CML), Asbestos Cement (ACP), Steel (STL), Cast Iron (CIP), Ductile Iron (DIP) and Galvanized (GALV). Table 3 describes the majority main diameter, material, and length statistics.

Table 3: Majority Main Material and Diameter

Diameter (in)	Miles	Material
2	15	Copper
4	17	Asbestos-Cement Pipe
6	63	
8	38	
12	23	
Remainder (1" – 42")	27	Varies

It is assumed that only 5% of the distribution piping in the system is contaminated. This assumption is supported by preliminary sampling data showing very few main samples with contamination. The cost estimates for main repair or replacement will use the 5% damage assumption.

Alternative 1: Main Flushing

Main flushing will be used as a “litmus test” for positive contamination results. If a main sample result is positive, before that section of main is replaced, the line will be flushed and resampled. Main replacement is a large undertaking; to embark on a replacement action based on one sample result is not recommended.

Assuming 5% of each of the lines identified in Table 3 are contaminated, the total flushing volume required is 900,000 gallons. Where practical, the flushing sequences will be broken up into lengths of 500 feet. Ten trucks will be required to capture the water from the 500’ length of 12” diameter pipe flushing. The total number of days required to complete this flushing process is 98. All the flushing water must be collected and treated. Assuming the same collection and treatment costs as Activity 1: Alternative 1, the flushing operation will cost approximately \$1.7 Million.

Once flushing is complete, the main segment will be stagnated for 48-hours and sampled again at 250-foot intervals. If the re-sample result is positive, then main will be scheduled for replacement. Temporary supply may be required during this retesting period.

Alternative 2: Main and Appurtenance Replacement

If the sample results following the flushing activity are positive, the contaminated main section will be replaced. Assume half of the mains return positive results on the second sample; this will result in 4-miles of main replacement. The replacement materials will likely be Schedule 80 PVC for small diameter pipe, and PVC C900 or ductile iron for large diameter pipe. The repair estimate for this action is \$6.6 Million. The replacement timeline for this portion of the action is 21 weeks.

Summary

The following costs and schedule estimates for the recommended repair action are included in Table 4.

Table 4: Repair Summary

Activity	Estimated Cost	Estimated Schedule
Replace Service Laterals	\$11.9 Million	40 weeks
Flush Contaminated Mains	\$1.7 Million	20 weeks
Repair Contaminated Mains	\$6.6 Million	21 weeks
<i>Total</i>	<i>\$20.2 Million</i>	<i>81 weeks or 1.5 years</i>

Paradise Irrigation District Water System Recovery Plan Repair and Replace Damaged System Components – Implementation Plan

Date: April 12, 2019
Prepared by: Sheila Magladry, P.E.
Checked by: Michael Lindquist, P.E.

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Action Summary

The sampling action determines which parts of the distribution system are damaged or contaminated. “Damaged” will be the term used throughout the replace or repair action to indicate physical damage or a level of contamination. When a main sample result shows a contaminant is over the MCL, the main is considered damaged. It is suspected that main contamination may be in the water only, not in the pipe walls, and even limited flushing may eliminate the contamination. Service laterals will be considered damaged if the sample test results are above the detection limit. It is cheaper to replace than to flush service laterals.

Each category of replacement has the following definition for damage:

1. Service Lateral Replacement
 - a. Not Damaged – sample test results are non-detect, no physical damage to pipe
 - b. Damaged – sample test results are NOT non-detect or physical damage to pipe is observed which makes the asset inoperable
2. Main Flushing and Replacement
 - a. Not Damaged – sample test results are below the MCL
 - b. Damaged – sample test results are above the MCL or physical damage to pipe is observed which makes the asset inoperable

Service Lateral Replacement

Service laterals with test results above the MCL will be replaced without any attempt at flushing. Service laterals with sample test results above the detection limit will be flushed twice and retested. All service laterals which return a second sample with results above non-detect will be replaced.

The action justification report determined it would be most cost effective to replace all damaged service laterals with HDPE service laterals. The highest priority is to repair and replace contaminated service laterals serving occupiable structures. The repair action will follow the same categorizing method as described in the sampling plan.

Installation

The service lateral repair will be accomplished in the following steps:

1. Close the sample manifold isolation valve
2. Excavate to the service saddle at the main connection
3. Replace the service saddle and corporation stop connected to the damaged service.
4. Close the corporation stops on the service lateral
5. Install the new service lateral
 - a. Couple the new service lateral to the existing lateral just upstream of the curb stop.
 - b. Pull the new lateral into place using the damaged lateral
6. Connect the new lateral to the corporation stop
7. Perform leak test
8. Open corporation stop
9. Backfill and repair paving and sidewalk

Temporary supply will not be needed during the service lateral replacement. The replacement should be completed within 8 hours maximum. It is acceptable for a customer to be without service for one 8-hour period.

Procurement

The service lateral replacement action will be completed by a general contractor. The replacement schedule will be provided by PID. PID will provide specifications and drawings as contract documents.

Main Flushing and Replacement

The action justification identified two parts to complete main repair: flushing with resampling and replacement.

Main Flushing

All mains which return a result above the MCL will be flushed with 10 times their volume at a minimum velocity of 1 fps. The flushing will be coordinated in sequences of 500-foot lengths of pipe. The sampling intervals are at 250-feet of pipe, so the 500-foot length will center the contaminated area in the 500-foot length to be sure the length of the contaminated area is flushed out. The flushing water will be collected in water tenders and transferred to a treatment site. The recommended treatment site is the Reservoir B site. This site is PID property and has 3 million gallons of storage volume in the off-line reservoir and ample space to locate a truck coordination and treatment system. Treated flushing water will be recycled for construction water or disposed of by land application.

Following the flush, the main section will be stagnated for a 72-hour period and resampled. Services off mains undergoing flushing and sampling activities will have temporary supply. If the sample result is again returned above the MCL, the 500-foot main segment will be replaced. If the sample is returned below the MCL, the main segment will be considered for clearance.

Mains with sample results above the detection limit will be flushed one time following the same protocol as described above.

The clearance of the distribution system will be determined as part of the reconnection action.

Procurement

The flushing procedure will be performed by PID staff. PID staff are familiar with the flushing methods, requirements, and regulatory standards. A general contractor will be hired to provide the collection and treatment of the flushing water. PID will store the treated water in tanks at various places in town to be recycled for construction water. All excess water will be disposed of by the contractor with land application.

Main Replacement

Mains with second sample results higher than the MCL will be scheduled for repair. The repair materials will likely be fusible High Density Polyethylene (HDPE), Polyvinyl chloride (PVC) C900, or ductile iron pipe (DIP). The materials selected will depend on the bury depth of the pipe and the length of replaced segment. Shallow trenched mains will likely be replaced with PVC C900 or DIP. Deeper mains will be replaced with fusible HDPE.

The appurtenances which were damaged or contaminated will also be replaced during this phase.

Temporary supply will be provided to customers served by the main undergoing replacement for the duration of the replacement action.

Procurement

A geotechnical report will be completed to determine specific installation details required for the action. PID will provide plans and specifications for the main segments requiring replacement. Replacement details will include appurtenance installation details and specifications and tie-in connection details to existing mains. A general contractor will be hired to complete the main replacement action. The schedule of main repair will be provided by PID. The schedule will likely follow the pattern used for the sampling action.

Flushing Water Collection and Treatment

The flushing water generated by the main and service lateral flushing, and the lesser volume generated through sampling efforts, must be collected and treated prior to disposal. The contractor responsible for the repair and replacement action will provide the collection tanks and the treatment system. The treatment site will likely be located at Reservoir B. The off-line reservoir volume can be used for collection and storage. Additional collection or recycled water storage can be located onsite. The treatment system (likely a mobile treatment package, typical supplier is Rain for Rent) can be located at this site as well. Flushing water will be treated for the removal of VOCs to comply with recycled water and land application regulations. The treatment method will likely be a pressurized media filter. Treated water disposal will be coordinated with PID. Some portion of the recycled water will be available for construction water use. The contractor must provide the filling services for these construction water supply stations in accordance with PID needs. The contractor will be responsible for disposing all excess treated water via land application. The disposal methods must adhere to all regulatory requirements.

Meetings/Reports

Contractor shall attend weekly meetings with PID staff and other action leaders to update on the progress of the flushing and replacement action and discuss other action issues and solutions. Additionally, the Contractor shall provide daily and weekly reports of progress and issues encountered. The reports shall include, but not be limited to, progress report, overall action schedule, problems encountered, and conflicts with other actions.

Paradise Irrigation District Water System Recovery Plan Reconnect Customers – Justification Report

Date: April 12, 2019
Prepared by: Michael Lindquist, P.E.
Checked by: Sheila Magladry, P.E.

Contents

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Damage Description

The actions associated with the Water System Recovery Plan have identified the parts of the system which were damaged or contaminated during the Camp Fire. The Repair and Replace Damaged System Components Action has repaired or removed all damage and contaminants in the system. The Reconnect Customers Action will connect all existing and new customers to the repaired system.

Purpose of Action

The action will reconnect customers to the distribution system providing potable water. Potable water is a requirement to obtain a Certificate of Occupancy (COO) from the Authority Having Jurisdiction (AHJ) – Butte County or the City of Paradise depending on the accessor's parcel number (APN). Reconnection to the system allows residents to move back into existing or replacement structures. The action will dovetail the other recovery plan actions. Expedience is important because the economic vitality of the community relies upon residents moving back.

Customer reconnection to the system is defined as: legally receiving potable water from PID. It includes installation of a water meter and being activated in the PID Financial System.

Reconnection includes the following steps:

1. **Sampling of service lateral***
2. **Testing sample***
3. **Installation of meter box****
4. **Installation of water meter****
5. **Verification of home water testing**
6. **Verification of backflow preventer**
7. **Update PID Financial System user data**
8. **Coordinate with Other Actions**

* - All service laterals will have been sampled/tested as part of the Sampling Action. Additional sampling/testing may be conducted if warranted. For cost estimating, it was assumed that 10% of services laterals would be sampled/tested.

** - These tasks differ in the subsequent alternatives.

New buildings will be built to current code requirements which include indoor fire sprinklers. Fire sprinklers likely increase the demand for a single customer. It is possible the minimum service size will be $\frac{3}{4}$ ". Currently 80% of the customers have a $\frac{5}{8}$ " connection. These services will likely need to be upsized. This can be accomplished as part of the customer's rebuilding project, and will need to be coordinated with building department requirements.

There may be some special circumstances where it is beneficial to change the location of the service lateral or water meter location. These will be handled on a case specific basis.

Action Alternatives

Alternative 1: Reconnect “As Soon as Practical”

Scope

The action prepares every service lateral for reconnection as soon as practical following the completion of the sampling and/or the repair and replace damaged system components actions. It is intended to prepare the PID owned equipment in order to reconnect customers at the time of request for potable water service.

“As Soon as Practical” is defined as completing sample manifold tube removal (remnant from the Asset Recovery Action), meter box installation, and verification all components are functioning as expected completed as soon as possible, and installing a water meter when a customer requests reconnection.

This effort must be coordinated with the PID records keeping office.

Setbacks to this alternative include... (loss of FEMA funding for replacements of meters and boxes... anything else?)

Estimated Cost

Aggregated total \$7,600,000

Estimated Schedule

It is estimated that approximately 1300 customers will request reconnection within the first 6 months of the Action; that amount represents a majority of the occupiable structures and 20% new construction. Reconnections after the initial amount are likely to average between 20-100 per month for many years.

Alternative 2: Install All Meter Boxes and Meters Immediately

Scope

This alternative proposes to install all water meters as soon as possible following the completion of the other recovery actions. It would result in approximately 9,000 of installed water meters being dormant. Although this alternative ensures the cost of the meter installation is covered within the FEMA funding allocations, it has a host of other issues. Theft of water meters (for their salvage value) becomes a challenge. Also, it might be many years before a water meter is needed at a location, creating additional work to verify the condition of the meter at the time of reconnection (meter would be removed, tested, repaired if necessary, and reinstalled). It is NOT industry practice to leave meters dormant for long periods of time.

Estimated Cost

Additional cost this alternative adds \$1,100,000 to Alternative 1’s cost

Aggregated total \$8,700,000

Estimated Schedule

Installation of the meter boxes and meters could likely be accomplished within 36 months (if the installation generally follows the clearing of the distribution system).

Alternative 3: Reinstall Both Meter Box and Meter as Requested

Scope

This alternative proposes to install the meter box and water meter once reconnection is requested by the customer. It would be similar to Alternative 1 during the initial action period because of the large number of requests but delay installation of meter boxes and meters for until a customer requests service.

This alternative would not take advantage of the economies of scale when installing new meter boxes, which increase this alternative's cost per installation approximately 20% more per unit.

Estimated Cost

Aggregated total \$8,100,000

Estimated Schedule

It is estimated that approximately 1300 customers will request reconnection within the first 6 months of the action; that amount represents a majority of the occupiable structures and 20% of new construction. Reconnections after the initial amount are likely to average between 20-100 per month for many years.

Action Goals

The alternatives meet the following action goals:

Goal	Alternative 1 Recover "As Soon as Practical"	Alternative 2 Install All Meter Boxes and Meters Immediately	Alternative 3 Reinstall Both Meter Box and Meter as Requested
Readily Initiated	Yes	Yes	Yes
Allows customers to reconnect when requested	Yes	Yes	Yes
Minimizes disruption to District Operations	Yes	No	No
Estimated Cost	\$7.6M	\$8.7M	\$8.1M

Selected Alternative

Alternative 1 of install all meter boxes as soon as practical and water meters as customer's request reconnection is the preferred alternative because it has the lowest cost and follows industry practices of water meter installations.

Alternative 2 was not chosen because installation of water meters before they are needed is not the industry standard and causes additional work and costs to verify meters after they have been dormant.

Alternative 3 was not chosen because the higher per unit cost of delaying meter box installation is not as cost effective as Alternative 1.

Paradise Irrigation District Water System Recovery Plan Reconnect Customers - Implementation Plan

Date: April 12, 2019
 Prepared by: Michael Lindquist, P.E.
 Checked by: Sheila Magladry, P.E.

Contents

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Action Summary

Once the distribution system is cleared for serving potable water, customers can be reconnected. The justification report determined the most cost-efficient method for reconnection is to repair/replace meter boxes as soon as practical and install meters at the time of customer request. Reconnection will include:

Sampling and Testing

All service laterals will have been sampled/tested as part of the Sampling Action. Additional sampling/testing may be conducted if warranted and will include:

Sampling of Service Lateral

If the service lateral was not replaced as part of a previous action, the service lateral shall be sampled within 30 calendar days of anticipated reconnection date to verify it is not contaminated. This test may be in addition to previous tests in other actions.

Testing Sample

Service laterals shall be tested for benzene at a minimum. More thorough testing may be required depending upon information determined during previous actions. Subsequent tasks will not be done until acceptable test results are received.

Installation of Equipment

Installation of Meter Box

Previous actions will have identified meter box damage. A meter box may be located in its original location or relocated based on external needs. The new meter box materials and construction shall meet PID Standard Specifications and Drawings. Surface improvements around the meter box shall be completed as part of the reconnection action to prevent damage to the meter box due to other construction. The meter box would be installed when a customer requests reconnection or as "soon-as-practical" (whichever is sooner). It is likely that approximately 60% of meter boxes are damaged and will require replacement. For service lateral pipes being replaced, the meter box would be reinstalled/replaced at the same time.

Installation of Water Meter

The water meter shall be installed in the meter box when a customer requests reconnection and their portion of the distribution system has been cleared for reconnection.

Administrative Tasks

Verification of Home Water Testing

For structures that have plumbing that existed prior to when the distribution system is determined to be free of contamination there is a possibility that the customer plumbing, including the pipe from the meter box to the structure, is contaminated. Connecting the customer to the PID system creates the possibility of contaminating the distribution system from the customer's plumbing. Testing customer plumbing is the jurisdiction of the property owner and Butte County. Prior to reconnection, PID shall verify that the customer plumbing has been tested according to Butte County requirements and was determined not to be contaminated. If PID is unable to

verify, a backflow preventer may be required to be installed prior to reconnection to the system. Location of the backflow preventer will be determined by PID and will depend on the hazard potential posed by the customer's plumbing.

Verification of Backflow Preventer

If a backflow preventer is required, the PID shall verify that it is operating correctly prior to connection to the system (use annual testing requirement as an example).

Update PID Financial System User Data

Reconnections will require updating the PID financial system which tracks user data such as: water use, water meter number, customer billing information, and date of connection. Additionally, the Automated Meter Infrastructure (AMI) system requires updated meter information to allow the system to register the meter in the system and recognize/properly identify received data. This task is made more complicated because it is likely that many properties are likely to change ownership as reconnections are occurring. Careful coordination between field work and database input is necessary.

Coordinate with Other Actions

Reconnecting customers is expected to begin almost immediately, will be accomplished concurrently with other actions, and continue for years after the other actions are completed. When a customer requests reconnection, it should increase the priority of completing the other actions, i.e. sampling/testing and repairs at the property. It is anticipated that a particular reconnection will not be finalized until the distribution system supplying the service lateral has been cleared.

Special circumstances

In special circumstances, a customer will request reconnection and potable water will not be available in the nearby water main within a reasonable time period. It may be possible to supply the customer from a temporary tank, another nearby main with temporary piping (pipe or hose), or new permanent piping. Each case will be evaluated, and a determination made about the possibility of reconnection.

New buildings will be built to current code requirements, including indoor fire sprinklers. That significantly increases the potential customer flow rate demand. Each structure's sprinkler needs will be determined by a licensed professional and approved as part of the building permit process.

Procurement

The action will be accomplished through a combination of contract and PID forces.



PARADISE IRRIGATION DISTRICT

TO: Board of Directors

FROM: Kevin Phillips

DATE: 4/12/2019

RE: Water Works Scope of Work Amendment
04/17/19 Board of Directors Meeting

The District awarded a professional services contract to Water Works Engineering for project management for the disaster recovery. The scope of work was based on what they assumed would be necessary to execute the contract. As they have worked on the recovery plan and have been part of numerous meetings, they have revised their scope of work to reflect the actual services necessary to execute the recovery plan.

The recommended form of motion is:

"I move to approve the change of scope of the Water Works Engineering contract dated March 14, 2019 for project management services."

EXHIBIT A- SCOPE OF WORK

The following services will be provided by ENGINEER for this project:

SUBTASK 1 – PROGRAM MANAGEMENT

Under this subtask, ENGINEER will provide the following services:

SUBTASK 1.1 – PROJECT MANAGEMENT 2019

Because the extent of Program Management needs for 2020 and 2021 are as of yet undetermined, this scope of work covers Program Management for 2019 (March through December). As 2019 is completed, we will assess upcoming Program Management needs for 2020 and 2021 and budget for those under future tasks.

1.1.1 Meetings 2019

ENGINEER will attend program kickoff meeting, planning meetings, meetings with regulators, Board of Directors meetings and public meetings as required to support PID in the recovery process and manage the various contractors and service providers required to accomplish the work. Assumes an average of 1 on-site meeting/week for 10 months (40 meetings) with 2 people (PM and Deputy PM) in attendance.

1.1.2 Communication 2019

ENGINEER will work with CLIENT to provide support in communicating the recovery plan to all project stakeholders and to the public. This will include producing communication materials, leading public information workshops, providing input on District website updates, etc.

1.1.3 Scheduling 2019

ENGINEER will develop and maintain an overall Program CPM Schedule which will track all Program activities. Schedule will be maintained and updated on a bi-weekly basis and shared with the CLIENT.

1.1.4 Cost Tracking 2019

ENGINEER will develop and maintain an overall Program Cost Estimate and maintain updates to the costs as the Program is executed.

1.1.5 Oversight of Recovery Program Management Team 2019

ENGINEER will provide oversight of all members of the Recovery Program Management Team, including ENGINEER staff and subconsultants to coordinate and orchestrate all project activities.

1.1.6 Documentation and Reporting 2019

ENGINEER will keep and maintain all records and documentation required by FEMA and CalOES. A monthly report of activities will be provided with each invoice.

Meeting	<ul style="list-style-type: none">• Program Kickoff Meeting, Project Meetings with FEMA, CalOES, DDW, RWQCB, Board Meetings, etc. (total of 40 meetings, 2 people)
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Deliverables	<ul style="list-style-type: none"> • Project Schedule with Bi-Weekly Schedule Updates
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SUBTASK 1.2 – GIS DEVELOPMENT AND MAINTENANCE

Water Works Engineers will engage Websoft Developers (Websoft) to develop and maintain a GIS system for use in planning, executing and communicating progress on the Recovery Plan developed in Subtask 2. No hardware (tablets) or software costs have been included in this scope – the GIS system will be hosted by Websoft Developers and all project stakeholders will have access (including weekly updates to the CLIENT website). The GIS system will encompass the following:

1.2.1 - ArcGIS Portal

In this task, Websoft will create an ESRI ArcGIS Portal site that will aid in the gathering and dissemination of information with all stakeholders. ArcGIS Portal is a method to host GIS data on our servers and use off-the-shelf web-map tools to view GIS information. It also allows raw GIS data to be shared via feature services. These services can be used by authorized users to view, query, and edit both the geometry and attributes of the underlying features. Initially, this site will be used as the basis for the MobileMMS field application and the distribution of the information described in Task 2 below. This task will require the following steps.

1. Create an ArcGIS Portal site with the following layers initially
 - a. Pipes – Created as described below. Attributes will indicate filled status and filled date.
 - b. Appurtenances– Differentiated between control and isolation valves, blow offs, and hydrants
 - c. Meters – Attributes will indicate water status (None, Requested, Delivered) and date
 - d. Service laterals
 - e. Parcels – Attributes will indicate water status (None, Requested, Delivered) and date
 - f. Occupiable structures – Information derived from CalFire, parcel information
 - g. Pipes with demand – Pipes generated via task 2 below
 - h. Cleared lots – information as available from FEMA
2. Authorize users to access site based on permission categories (e.g., Viewer, Editor)
3. Update MobileMMS map with Portal map service

1.2.2 – Categorization of Mains and Service Laterals

In this task, Websoft will create a pipe model that indicates how many active customers are attached to that pipe. These pipes will follow these Categories:

1. Transmission Lines: Pipes that have few or no service laterals. The transmission lines currently in the system may be excluded from this class if the system lines have more than LateralThreshold number of services.
2. Category 1: Primary Distribution Mains: These will be defined as pipes that are not transmission mains with more than 1 secondary Main attached to them and may have StructureThreshold or more active structures
3. Category 2: Secondary Mains with multiple occupied structures. Pipes with more than StructureThreshold number of active structures attached (initial setting of 2).

4. Category 3: Secondary Mains with less than or equal to StructureThreshold number of active structures attached.
5. Category 4: Secondary Mains with no active structures attached.

The variables LateralThreshold and StructureThreshold can be dynamically assigned to achieve the desired results.

We will use the following process to complete this task:

1. Develop geometric network from the existing CAD information: These pipes have already been converted into GIS files during the previous conversion when building the MobileMMS application GIS data. These pipes will be segmented at pipe intersections and hydrant laterals. Nodes will be placed at these intersection points. We will create the geometric model from these pipes and nodes.
2. Assign status and date to meters: Meters will be assigned one of 3 different states
 - a. None: No water request
 - b. Requested: Water requested and not delivered. Includes Request Date
 - c. Delivered: Meter turned on. Includes Request Date
3. Pipe Demand. Each pipe will inherit 1 point for every meter attached that has a status other than None from its associated meter.
4. Pipe demand propagation: Connected pipes will increase their point value by the value of demand from associated pipes. This propagation will continue until a transmission main is touched. Secondary pipes cannot inherit demand from primary pipes.
5. Migration to ArcGIS Portal: The conclusion of the demand propagation task will be published to the ArcGIS Portal where it can be viewed in the MobileMMS application, directly from the ArcGIS Portal, or placed in an ArcGIS Desktop map.
6. Information presentation: We will determine, with CLIENT input, how the information will be themed and how the data will be presented.

The tasks above are dynamic in nature. At each step, we will provide CLIENT with the opportunity to provide feedback on the output.

1.2.3 Data Input Management

ENGINEER will work develop data input and management tools in order to accept data from Recovery Project Teams and update the GIS system on a continuous basis, as data is received. Data input tool will be an ArcGIS Collector tool which will allow data input in the field, both with and without cell coverage. Data collected will include:

1. Isolation valve position
2. Temporary Customer Supply Deployment
3. Recovery activities for mains and appurtenances
4. Sample data
5. Rehabilitation or Replacement Status
6. Reconnection to Potable Service
7. Other data as determined necessary for the Recovery effort

Meetings	<ul style="list-style-type: none"> • GIS Kickoff Meeting (internal to Program Management Team)
Deliverables	<ul style="list-style-type: none"> • ArcGIS Portal • ArcGIS Collector Tool

SUBTASK 1.3 – DISTRIBUTION SYSTEM MODELING

A steady-state potable water distribution system model will be created using Innovyze’s InfoWater model, a GIS-based platform. This model will be built using the MMS Mobile GIS database developed under Subtask 1.2. No software costs have been included in this scope – ENGINEER will run the model on ENGINEER’s copy of InfoWater. Scenarios will be modeled with the goal of determining how the District can serve water flow, pressure and quality (as measured by water age) to return to pre-fire conditions.

1.3.1 - Data Collection and Review

Available information from the District including existing water models, GIS models, water production data, unaccounted for water, pump data, water meter billing data, as built information, currently connected services, and distribution system settings. Information will be gathered by meeting at the District office and determining what is available with the assistance of the District.

1.3.2 - Hydraulic Model Creation

- Pipes. The model pipelines will be based on GIS data from MMS Mobile. The GIS data includes the transmission and distribution system pipelines’ diameter and material. The pipelines’ data will be back checked against District as-builts as needed to confirm model set-up in preparation for updating loading demands.
- Nodes. Nodes will be placed at pipeline intersections. The node elevations will be created from topographic data using an assumed depth of cover.
- Other Features. The WTP, Pump Station 2, Reservoirs A-E, pressure reducing stations and altitude valves will be added to the model as well as interties.

1.3.3 - Water Demands and Supply

If available, historic meter data will be used to develop water use factors for residential and commercial land uses. If not, water demand factors will be used from the 2015 Urban Water Management Plan (UWMP) for residential and commercial land uses. Each parcel will be assigned a residential or commercial use per land-use data from <https://www.townofparadisemapping.com> and parcel GIS data from MMS Mobile. The water demand per parcel will be allocated to the model nodes. The projected water use will be checked against historic water production data for validity.

1.3.4 - Base Model Scenarios

The following scenarios will be analyzed in a steady state model. This projected amount of water used will be compared against actual water use records from the District, if available.

- Pre-Fire Average Day Demand. Non-vacant parcels using info from <https://www.townofparadisemapping.com> will be used to populate the water demands for this scenario. This will establish baseline modeling behavior of the system and can be validated using historic data.

- b. Post-Fire Average Day Demand. Parcels that have had a water service turned on per MMS Mobile GIS data will be used to populate the water demands for this scenario.

Once these two base scenarios have been created, then the scenarios will be operated in an Extended Period Simulation to model water age throughout the system by node. Where significantly longer water ages are observed in the post-fire model as compared to the pre-fire model, physical system improvements or changes to water operation procedures will be explored in the model and recommended to maintain the pre-fire water age at maximum during average day demand. A PID Distribution System Hydraulic Model Memorandum (draft and final) will be prepared to document the model creation and the results of the two base scenarios.

Meetings	<ul style="list-style-type: none">• Hydraulic Model Data Collection Meeting• PID Distribution System Hydraulic Model Memorandum Review Meeting
Deliverables	<ul style="list-style-type: none">• Draft and Final PID Distribution System Hydraulic Model Memorandum• InfoWater model files and .pdf documentation (not modeling software)

SUBTASK 2 – RECOVERY PLANNING

ENGINEER will work with CLIENT and all project stakeholders to develop a Recovery Plan which to the greatest extent possible achieves the following initial goals:

1. Allows for continued provision of Fire Protection water during the recovery period
2. Provides for thorough testing and restoration of the entire water distributions system
3. Provides for testing and restoration of service to services with customers as a priority – gets water to the most customers possible as fast as possible
4. Is sensitive to community needs for irrigation water, construction water, etc. during the recovery process to the greatest extent possible

These initial goals will be vetted and modified as required and other goals will be developed and adhered to as the Recovery Plan is completed in conjunction with PID staff and other project stakeholders.

SUBTASK 2.1 – RECOVERY PLAN DEVELOPMENT

The recovery plan will consist of five chapters, each regarding one Project in the Recovery Program:

1. Temporary Customer Supply
2. Recover Water Mains and Appurtenances
3. Sample Water Mains and Service Laterals
4. Repair, Replace Damaged System Components
5. Reconnect Customers to Distribution System

For each of these chapters, two subchapters will be produced:

1. Project Justification Report – Documenting the need for the project, comparing different solutions considered (including cost comparison), recommending a project alternative and explaining the rationale behind selecting the recommended alternative.

2. Project Implementation Plan – Explaining the plan for procurement and execution of the project. Includes estimated cost and duration of project activities. Plan will include procurement method planned as well as execution management requirements and plan.

Meetings	<ul style="list-style-type: none"> Recovery Plan Review Workshop
Deliverables	<ul style="list-style-type: none"> Draft Recovery Plan Final Recovery Plan

SUBTASK 2.2 – SAMPLING AND ANALYSIS PLAN (SAP) DEVELOPMENT

A core part of the work to be done in this Program is a significant (>25,000 sample) sampling program. In order to keep that sampling program organized and make the data as reliable as possible, ENGINEER will develop a Sampling and Analysis Plan (SAP). The SAP will be site-specific and produced in accordance with the guidelines of EPA Region IX. This plan will document the procedural and analytical requirements the sampling project to characterize areas of potential environmental contamination and will include the following:

1. Quality Assurance Program Plan (QAPP) –
 - a. The QAPP will establish policies that define and document the type and quality of data needed for program level environmental decisions and to describe the methods required for collecting, analyzing, and assessing data to support those decisions. The QAPP will include the establishment of Data Quality Objectives (DQOs).
2. Field Sampling Plan (FSP) -
 - a. The FSP establishes sample collection and field monitoring methods and procedures to be followed to ensure that sampling and investigatory activities in the Paradise irrigation District are conducted in a consistent manner in accordance with technically acceptable protocols. The objective of the FSP is to facilitate the collection of environmental monitoring data that meets the DQOs established in the QAPP.

Meetings	<ul style="list-style-type: none"> SAP Review Meeting
Deliverables	<ul style="list-style-type: none"> SAP (includes QAPP and FSP)

SUBTASK 3 – RECOVERY PROJECT PROCUREMENT

Following the completion of the Recovery Plan, each Project identified in the Recovery Plan will be procured. Procurement methods and resources used will vary depending on the nature of each Project, but could include inter-governmental agreements, informal public bid (for Projects <\$250,000), or formal public bid (for projects >\$250,000). Management of the Projects is not included in this subtask, only procurement. Procurement will include the development of the procurement documents, advertising for bids, assessing bids and recommending the selection of a service provider for each Project for approval by PID Board. This subtask is divided into a subtask for each Project in order to provide detailed cost tracking. For each subtask, the following meetings and deliverables will be provided (these will be combined as much as possible):

Meetings	<ul style="list-style-type: none"> • Procurement Document Review Meeting • Pre-Bid Meeting • Bid Opening
Deliverables	<ul style="list-style-type: none"> • Procurement Document • Bid Summary and Recommendation for Selection

- SUBTASK 3.1 TEMPORARY CUSTOMER SUPPLY***
- SUBTASK 3.2 RECOVER WATER MAINS AND APPURTENANCES***
- SUBTASK 3.3 SAMPLE WATER MAINS AND SERVICE LATERALS***
- SUBTASK 3.4 REPAIR, REPLACE DAMAGED SYSTEM COMPONENTS***
- SUBTASK 3.5 RECONNECT CUSTOMERS TO DISTRIBUTION SYSTEM***

PROJECT SCHEDULE

Program Management, as defined in Subtask 1, will be ongoing throughout the first 10-months of the 36-month project (through December 31, 2019). Recovery Plan Development will be completed by April 15, 2019. Recovery Project Procurement will be complete by June 15, 2019.

EXHIBIT B- FEE

ENGINEERING FEE

Payment for Subtasks 1 through 3 will be on a Time and Expense basis and invoiced in accordance with the Hourly Wage Rates in the following table.

Classification	Title	Hourly
AA	Administrative	\$102
T1	CADD Tech 1	\$85
T2	CADD Tech 2	\$115
T3	CADD Tech 3	\$141
I1	Field Inspector	\$137
I2	Senior Inspector	\$152
I3	Supervising Inspector	\$170
E1	Staff Engineer	\$127
E2	Associate Engineer	\$155
E3	Project / Structural Engineer	\$175
E4	Senior Project Engineer / Manager	\$203
E5	Principal Engineer	\$235

Notes:

1. A markup of 10% will be applied to all project related Direct Costs and Expenses.
2. An additional premium of 25% will be added to the above rates for Expert Witness and Testimony Services.
3. Rate effective through December 31, 2019. A 3% increase will be added for any services performed in each year thereafter.

Total Budget for each task will be as follows:

Subtask	Title	Budget
1	Program Management	\$731,000
2	Recovery Planning	\$144,000
3	Recovery Project Procurement	\$125,000
	Project Total	\$1,000,000

A detailed breakdown of the engineering costs summarized above is presented on the following page.

Water Works Engineers Fee Estimate

Client: Paadise Irrigation District
 Project: Disaster Recovery Program Management
 Task Order No: 1
 Prepared by: Kader
 Date: 3/31/2019



			Hours and Fee																		
			Subtask 1.1		Subtask 1.2		Subtask 1.3		Subtask 2.1		Subtask 2.2		Subtask 3.1		Subtask 3.2		Subtask 3.3		Subtask 3.4		Subtask 3.5
			2019		2019		2019		2019		2019		2019		2019		2019		2019		
Year			Project Management 2019		GIS Development and Maintenance		Distribution System Modeling		Recovery Plan Development		Sampling and Analysis Plan		Temporary Customer Supply Procurement		Recover Water Mains and Appurtenances Procurement		Sample Mains and Service Laterals Procurement		Repair, Replace Damaged System Components Procurement		Reconr to Distr Prc
Water Works Engineers			2019		hrs		fee		hrs		fee		hrs		fee		hrs		fee		hrs
Classification	Title	Hourly Rate																			
AA	Administrative	\$102	100	\$10,200									32	\$3,264	32	\$3,264	32	\$3,264	32	\$3,264	32
T1	Drafter/Jr. Technician	\$85																			
T2	Designer/Sr. Technican	\$115																			
T3	Senior Designer	\$141																			
I1	Field Inspector	\$137																			
I2	Senior Inspector	\$152																			
I3	Supervising Inspector	\$170																			
E1	Staff Engineer	\$127																			
E2	Associate Engineer	\$155			12	\$1,860	320	\$49,600	240	\$37,200			80	\$12,400	80	\$12,400			80	\$12,400	80
E3	Project Engineer	\$175																			
E4	Senior Project Engineer	\$203	1000	\$203,000	16	\$3,248	200	\$40,600	160	\$32,480			40	\$8,120	40	\$8,120	72	\$14,616	40	\$8,120	40
E5	Principal Engineer	\$235	1120	\$263,200	124	\$29,140	40	\$9,400	100	\$23,500											
Expenses																					
WWE Expenses					\$8,575	\$836	\$364	\$2,200			\$1,105	\$1,105			\$473	\$1,105					
Subconsultants																					
Websoft Developers							\$100,000			\$4,000	\$40,000					\$6,000					
Remedy Engineering																					
Subconsultant/Expense Markup			10%	\$857	\$10,084	\$36	\$620	\$4,000	\$111	\$111			\$647	\$111							
Annual Increase for WWE rates of			3%																		
Subtask Totals			2220	\$485,832	152	\$145,168	560	\$100,000	500	\$100,000	0	\$44,000	152	\$25,000	152	\$25,000	104	\$25,000	152	\$25,000	152

Project Total	
Hours	Fee
3992	\$1,000,000

AGREEMENT

THIS AGREEMENT is made and entered into this 14 day of March, 2019, by and between Paradise Irrigation District, an irrigation district formed and existing under Division 11 of the California Water Code ("District"), and **Water Works Engineers, LLC** ("Consultant"). District and Consultant are collectively referred to as "parties" or either individually as "party".

WITNESSETH:

- A. District desires to retain the professional services of a consultant to provide Disaster Recovery Management Services for restoration of water services to the Paradise Irrigation District Service Area.
- B. The duration of service for this contract is for 3 years from the date the Agreement is entered into, unless terminated earlier.
- C. The purpose of this project is for the Consultant to provide Program Management Services in the support of the development and implementation of a strategic plan to restore water services to the District following the 2018 Camp Fire Disaster.
- D. The initial work to be performed by Consultant is further described in the Scope of Work attached hereto as Exhibit "A" and incorporated herein by this reference and is collectively referred to as the "Project". As the needs of the project develop, additional scope will be added by change order to this contract.
- E. Consultant desires to undertake the Project pursuant to the terms and conditions set forth herein.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby stipulated, the parties agree as follows:

I. SCOPE OF WORK

The Consultant shall be responsible for timely and satisfactorily completing work on the Project as defined in this Agreement and Exhibit "A".

II. SCHEDULE

The Project will be completed upon a mutually agreed schedule after execution of this Agreement and Consultant's receipt of written Notice to Proceed on the Project from the District. The parties agree to establish this schedule within five (5) days of receipt of written Notice to Proceed. Failure to do so shall result in termination of agreement without cost to District. Time is of the essence in completing the work contemplated herein.

III. RESPONSIBILITIES

A. District. The District's duties and rights in connection with this Project are as follows:

- 1) The District shall make staff available to the Consultant for purposes of conference discussion, reviewing submissions from the Consultant, providing background or other available factual information and/or suggestions relating to the work in a manner such that the Consultant may meet the Project completion schedule.
- 2) The District shall provide access to all District facilities upon request by the Consultant at a time and in the manner mutually agreed upon as required to accommodate the work of Consultant.
- 3) District shall tender payment in accordance with the provisions of Section VI(B).

B. Consultant. Consultant's duties and rights in connection with this Project are as follows:

- 1) Consultants shall be solely responsible for satisfactorily completing the Project, including those tasks described in Exhibit "A". Consultant shall supervise and direct the work and give all attention for such proper supervision and direction;
- 2) If Consultant furnishes labor or materials, or if Consultant incurs any expense on behalf of District, Consultant shall provide and pay for all labor, materials, equipment (including tools, construction equipment and machinery), utilities, transportation, and all other facilities and services necessary for the completion of the work on the Project;
- 3) If this Agreement or any of the Exhibits hereto are ambiguous or at variance with each other, Consultant shall notify District promptly upon discovery of any such ambiguity or variance. District may reply in writing resolving the ambiguity or variance and Consultant agrees to comply with District's written interpretation. No claims or demands of Consultant for extra compensation as a result of changes in the work shall be authorized unless done in conformance with section VIII, below.
- 4) Consultant covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement.

- 5) All work performed by Consultant for District pursuant to this Agreement shall be performed by qualified persons, and shall be performed in accordance with standards of performance generally applicable to experts and licensed professionals in the field for which Consultants services are retained. The standard of care and performance shall be equal to or greater than the standard of care and performance of other consultants engaging in the same or similar work.
- 6) Consultant shall be entitled to rely upon the accuracy of data and information provided by authorized staff of the District in writing; provided such reliance is consistent with professional standard of care.
- 7) Consultant agrees that it will conduct its work on the Project and perform its services in compliance with all applicable Federal, State and local laws, regulations and ordinances.

IV. WORK PRODUCT

The District, or its designee, shall at all times have access to the work product of the Consultant while Project is under preparation or in progress. Upon completion or termination of the Project, all drawings, documents, files and notes both in written and electronic format shall become property of the District, including without limitation all renderings, slides, sketches, plans, specifications, drafts, records, documents and other correspondence generated for or relied upon in connection with the Project. Any reuse of Consultant prepared documents, except for the specific purpose intended hereunder, will be at District's sole risk and without liability or legal exposure to Consultant or its subconsultants.

V. DESIGNATED REPRESENTATIVES

The Project shall be under direct control of **Sami Kader**, Consultant's Project Manager, to whom all questions may be directed. The District's representative will be its District Manager, **Kevin Phillips**, or his designee who will facilitate communication between the District's staff and Consultant.

VI. COMPENSATION

- A. Payment: Consultant will be paid on a time and materials basis in an amount "not to exceed" **\$1,000,000** for the Project and work to be performed in Exhibit "A". No work in addition to the work described in this Agreement, including Exhibits, shall be performed by Consultant without prior written authorization by District as provided for in section VIII, below. Progress payments shall be made monthly for work completed based upon the billing rates contained in the Schedule of Rates/Fees attached hereto as Exhibit "B" and incorporated herein by this reference.

- B. Time of Payment: District shall make payment to Consultant within thirty (30) days from the date of receipt of Consultant's invoice for undisputed amounts. Claims for payment of disputed amounts shall be handled in accordance with sections VIII and IXX, below. Consultant shall continue with work on the Project notwithstanding disputes as to payment. Acceptance of the Project, or some portion thereof, or payment to Consultant by District does not in any manner relieve Consultant of its obligations under this Agreement.

VII. TERM AND TIME FOR COMPLETION

This Agreement shall become effective on the date first written above and shall remain in effect until the Project has been satisfactorily completed unless sooner terminated in accordance with Article XI - Termination. Consultant will begin work upon receipt of written Notice to Proceed and will work diligently and continuously until satisfactory completion.

VIII. TIME OF THE ESSENCE

Time is of the essence with respect to all provisions of this Agreement.

X. INDEMNIFICATION

Consultant agrees to indemnify, defend, and hold harmless the District, its officers, agents, employees and volunteers from and against any and all claims, demands, actions, losses, damages, injuries, and liability, direct or indirect (including any and all costs and expenses in connection therein) (collectively "Claims") to the extent arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of the Consultant, excepting such injury or harm caused by District's sole or active negligence or willful misconduct, to the extent caused thereby. Consultant's indemnity obligation shall extend to Claims occurring after completion of the Project, as well as during the Project's progress.

Consultant specifically agrees that this indemnification agreement provides indemnity to District for any claims, damages or liability for injuries (including death) incurred or sustained by Consultant's own employees and those of Consultant's subconsultants.

Neither the termination of this Agreement, nor the completion or ending of the Project shall release Consultant from its obligations to indemnify as set forth above. Consultant's obligation to indemnify and its obligation to maintain liability and other insurance are separate and distinct. Consultant's obligation to indemnify is not restricted to insurance proceeds, if any, received by District or its directors, officers, employees, or authorized representatives.

XI. INSURANCE

- A. Consultant agrees to provide insurance coverage as set forth in Exhibit "C".

XII. TERMINATION

- A. TERMINATION FOR CONVENIENCE. District may terminate this Agreement with Consultant at any time without cause. District shall so notify Consultant in writing. Upon written notification, this Agreement shall be terminated and the Consultant shall immediately stop the Consultant's work on the Project, follow all District instructions, and mitigate all costs and damages. Provided Consultant is not in breach, District shall be responsible for all costs incurred by Consultant up to the date of termination without cause.
- B. TERMINATION FOR CAUSE: CONSULTANT PERFORMANCE AND THE BREACH THEREOF. The District may terminate this agreement and is relieved of the payment of any consideration to Consultant should Consultant fail to perform the covenants herein contained at the time and in the manner herein provided. Consultant shall be notified in a timely manner of default and provided 30 days in which to remedy the default. If, at the end of the 30 days, remedy is not made or does not satisfy the default, the District shall notify the Consultant of the breach and thereby the termination of this contract. In the event of such termination, the District may proceed with the work in any manner deemed proper by the District. The cost to the District shall be deducted from any sum due the Consultant under this agreement and the balance, if any, shall be retained by the District.

XIII. ENTIRE AGREEMENT

This writing, including Exhibits "A", "B", and "C" constitutes the entire Agreement between the parties relative to the services specified herein, and no modifications hereof shall be effective unless and until such modification is evidenced by a writing signed by both parties to this Agreement.

There are no understandings, agreements, conditions, representations, warranties or promises with respect to the subject matter of this Agreement except those contained in or referred to in this writing.

XIV. INDEPENDENT CONSULTANT

It is expressly understood and agreed by the parties that Consultant's relationship to District is that of an independent contractor. All persons hired by Consultant and performing the work shall be Consultant's employees or agents. District shall not be obligated in any way to pay any wages or other claims by any such employees or agents or any other person by reason of this Agreement. Consultant shall be solely

liable to such employees and agents for losses, costs, damage or injuries by said employees or agents during the course of the work.

XV. SUCCESSORS AND ASSIGNMENT

This Agreement shall be binding on the heirs, successors, executors, administrator and assigns of the parties; however, Consultant agrees that it will not assign, transfer, convey or otherwise dispose of this Agreement or any part thereof, or its rights, title or interest therein, or its power to execute the same without the prior written consent of District which may be withheld for any reason, in District's sole discretion.

XVI. REMEDIES NOT EXCLUSIVE

The use by either party of any remedy specified herein for the enforcement of this Agreement is not exclusive and shall not deprive the party using such remedy of, or limit the application of any other remedy provided by law.

XVII. NOTICES

All notices, statements, reports, approvals or requests or other communications that are required either expressly or by implication to be given by either party to the other under this Agreement shall be in writing and signed for each party by such officers as each may, from time to time, authorize in writing to so act. All such notices shall be deemed to have been received on the date of delivery if delivery personally or three (3) days after mailing if enclosed in a properly addressed and stamped envelope and deposited in the U.S. post office for delivery. Unless and until formally notified otherwise, all notices shall be addressed to the parties at their addresses shown below:

Paradise Irrigation District
Attention: **Kevin Phillips**
6332 Clark Road
Paradise, CA 95969

CONSULTANT
Attention: **Sami Kader**
760 Cypress Ave., Suite 201
Redding, CA 96001

XVIII. SUBCONSULTANTS

Except for the subconsultants listed in Exhibit "A", no other subcontract shall be awarded or another outside consultant engaged by Consultant unless prior written approval is obtained from District, which may be withheld for any reason, in District's sole discretion. Payment to Consultant as provided in Exhibit "B" includes full payment for services to sub-consultants.

IXX. INTERPRETATION

Unless the context otherwise clearly requires, the terms in the body of this Agreement shall prevail over any inconsistent terms that may be found in the Exhibits hereto.

The parties have had a full and fair opportunity to negotiate and review the terms of this agreement with their respective legal counsel and, as a result, the normal rule of interpreting ambiguities against the drafting party shall not apply.

XX. DISPUTE RESOLUTION; JURISDICTION AND VENUE

In the event of dispute regarding interpretation or implementation of this Agreement, including without limitation disputes concerning payment, a District representative and Consultant representative shall endeavor to resolve the dispute by meeting in person within 30 days after the request of either party. If the dispute remains unresolved and unless the parties otherwise agree, the dispute may be resolved by litigation and any party may at its option pursue any available legal remedy. This Agreement shall be governed by and construed under the laws of the State of California. Jurisdiction and venue for any action brought to enforce or interpret the terms of this Agreement shall be in the Superior Court of the State of California in and for the County of Butte.

XXI. HAZARDOUS MATERIALS

In the event the Consultant or the District discover Hazardous Materials in any form at District's facilities, the Consultant and the District shall promptly confer with each other of the discovery, and the District and Consultant shall employ reasonable actions ensuring public, employee, and third party safety.

As used herein, Hazardous Materials means any hazardous or toxic substance, material, or waste, the storage, use, or disposition of which is or becomes regulated by any local governmental authority, the State of California, or the United States government.

XXII. FEMA REQUIREMENTS

A. Equal Employment Opportunity.

- 1) The Consultant will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Consultant will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action will include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- 2) The Consultant will, in all solicitations or advertisements for employees placed by or on behalf of the Consultant, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- 3) The Consultant will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Consultant's commitments under this section, and will post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4) The Consultant will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- 5) The Consultant will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- 6) In the event of the Consultant's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Consultant may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

The Consultant will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Consultant will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the Consultant becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Consultant may request the United States to enter into such litigation to protect the interests of the United States.

XXIII. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT 40 U.S.C.
3701-3708

- A. Overtime requirements. No contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- B. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section Consultant and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Consultant and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
- C. Withholding for unpaid wages and liquidated damages. The District shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Consultant or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- D. Subcontracts. The Consultant or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Consultant shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (5) of this section.

XXIV. CLEAN AIR ACT AND THE FEDERAL WATER POLLUTION CONTROL ACT

The Consultant and the District agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251–1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

A. Clean Air Act

- 1) The Consultant shall comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- 2) The Consultant shall report each violation to District and understands and agrees that District will, in turn, report each violation as required to assure notification to the Cal OES, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- 3) The Consultant shall include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FEMA.

B. Federal Water Pollution Control Act

- 1) The Consultant shall comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- 2) The Consultant shall report each violation to District and understands and agrees that District will, in turn, report each violation as required to assure notification to the Cal OES, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- 3) The Consultant agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

C. Energy Efficiency

Consultant will comply with all standards and policies relating to energy efficacy which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201).

- 1) This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the Consultant is required to verify that none of the Consultant, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- 2) The Consultant must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- 3) This certification is a material representation of fact relied upon by the District. If it is later determined that the Consultant did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the District, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- 4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any Contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions."

XXV. CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements (To be submitted with each bid or offer exceeding \$100,000) the Consultant will execute the following certification:

The undersigned Consultant certifies, to the best of his or her knowledge, that:

- A. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- B. If any funds other than Federal appropriated funds have been paid or will be paid to any person 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 this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

- C. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

- D. Consultant certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, Consultant understands and agrees that the provisions of 31 U.S.C. § 3801 et seq., apply to this certification and disclosure, if any.

Signature of Consultant's Authorized Official:



Name and Title of Consultant's Authorized Official:

Sami Kader, Principal

Date:

3/14/19

XXVI. PROCUREMENT OF RECOVERED MATERIALS

If applicable in the performance of this Contract, the Consultant shall make maximum use of products containing recovered materials that are EPA designated items unless the product cannot be acquired-

- (i) Competitively within a timeframe providing for compliance with the contract performance schedule;
- (ii) Meeting contract performance requirements; or
- (iii) At a reasonable price.

Information about this requirement is available at EPA's Comprehensive Procurement Guidelines web site, <http://www.epa.gov/cpg/>. The list of EPA-designate items is available at <http://www.epa.gov/cpg/products.htm>.

XVII. ACCESS TO RECORDS

- A. The Consultant shall provide CalOES, the District, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Consultant which are directly pertinent to this Contract for the purposes of making audits, examinations, excerpts, and transcriptions.
- B. The Consultant shall permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- C. The Consultant shall provide the FEMA Administrator or his authorized representatives' access to construction or other work sites pertaining to the work being completed under the Contract.

XXVIII. DEPARTMENT OF HOMELAND SECURITY (DHS) SEAL, LOGO AND FLAGS

Consultant shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre approval.

XXIX. COMPLIANCE WITH FEDERAL LAW, REGULATIONS, AND EXECUTIVE ORDERS

Consultant acknowledges that FEMA financial assistance will be used to fund the Contract only. The Consultant will comply with all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

XXX. NO OBLIGATION BY FEDERAL GOVERNMENT

The Federal Government is not a party to this Contract and is not subject to any obligations or liabilities to the non-Federal entity, Consultant, or any other party pertaining to any matter resulting from the Contract.

XXXI. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

The Consultant acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Consultant's actions pertaining to this Contract.

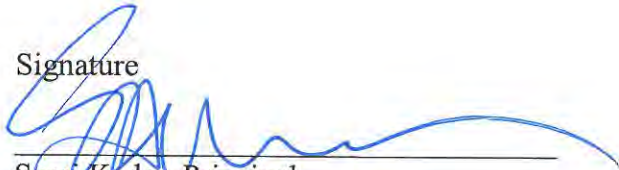
XXXII. SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, LABOR AREA SURPLUS FIRMS

Consultant shall take all necessary affirmative steps to assure that small and minority businesses, women's business enterprises and labor area surplus firms are used when possible, as set forth in 2 C.F.R. §200.321.

By execution of this CONTRACT the Consultant certifies that compliance with all the stated regulatory requirements as stipulated and where action is appropriate and required as a means of compliance, shall endeavor in good faith to conform to regulations and in no way are they connected to any federal, state or local debarment proceedings.

IN WITNESS WHEREOF the parties execute this Agreement on the day and year first herein above written.

Signature



Sami Kader, Principal

ATTEST:

Printed Name and Title

TAXPAYER ID 20-3148271

Business Type:

Corporation ☐ Yes ☐ No

Other: LLC

(Complete W-9 enclosed)

PARADISE IRRIGATION DISTRICT

ATTEST:



Georgeanna Borrayo, District Secretary

Kevin Phillips, District Manager

Attachments:

Exhibit A - Consultant's Scope of Work

Exhibit B - Consultant's Schedule of Fees

Exhibit C - Insurance Requirements

EXHIBIT A

Scope of Work to be performed by the Consultant

EXHIBIT A - SCOPE OF WORK

The following services will be provided by ENGINEER for this project:

SUBTASK 1 – PROGRAM MANAGEMENT

Under this subtask, ENGINEER will work with Paradise Irrigation District to define the key goals of the program. Goal setting will be done in a collaborative workshop manner with District Staff, Management and Board at a Program Kickoff Meeting. Following the kickoff meeting, within the framework of those goals, ENGINEER will lay out a step-wise approach to define program needs and identify the most pragmatic, effective and cost-efficient project approaches to addressing those needs. This will be documented in a Program Implementation Plan which will be written and submitted to PID for discussion and refinement. Using the Program Implementation Plan, ENGINEER will identify appropriate grant funding opportunities working in conjunction with the appropriate partners from FEMA, CalOES, SWRCB, etc. to ensure that projects are grant eligible and properly structured to be grant fundable. Based on the available funding and the requirements of that funding, projects will be planned and implemented. Project implementation will include grant coordination and administration as required as well as identification of the most appropriate procurement method for each project, procurement management for each project, and execution and close-out of each project which makes up the program. ENGINEER will conduct quarterly program review meetings in order to periodically revisit program goals to make sure we are on track with the expectations of all stakeholders.

Also under this subtask will be close support of PID Staff and Management by both the Program Manager and Grants Coordinator from the project team. For the purposes of budgeting for this proposal, it is assumed that both will attend weekly meetings in Paradise for the first 6 months of the project, then monthly for the remaining 30 months of the defined project timeframe. As the program develops, this level of effort can be adjusted as appropriate.

The third part of this task will be the engagement of our team of technical experts, including Brian Crane and the technical experts from Ramboll. We will establish technical advisory panels in consultation with Paradise Irrigation District as project needs arise. Those panels will meet via teleconference. The fee reflects up to ten 2-hour technical advisory panel teleconferences.

The Water Works Engineers Program Manager will also direct the efforts of the Project Engineering team, subconsultants, etc. We will bring the needed resources to bear on the project when they are needed.

Meetings	<ul style="list-style-type: none">• Program Kickoff Meeting• Weekly Recovery Team Meetings (6 months)• Monthly Recovery Team Meetings (30 months)• Quarterly Program Review Meetings (12 ea)• Technical Advisory Panel Teleconferences (10 ea)
Deliverables	<ul style="list-style-type: none">• Program Implementation Plan• Monthly Progress Reports

SUBTASK 2 – DISTRIBUTION SYSTEM MODELING

A steady-state potable water distribution system model will be created using Innovyze's InfoWater model, a GIS-based platform. This model will be built using the MMS Mobile GIS database currently being developed by WebSoft Developers in conjunction with PID staff. Scenarios will be modeled with the goal of determining how the District can serve water flow, pressure and quality (as measured by water age) to return to pre-fire conditions.

1. Data Collection and Review

Available information from the District including existing water models, GIS models, water production data, unaccounted for water, pump data, water meter billing data, as built information, currently connected services, and distribution system settings. Information will be gathered by meeting at the District office and determining what is available with the assistance of the District.

2. Hydraulic Model Creation

- a. **Pipes.** The model pipelines will be based on GIS data from MMS Mobile. The GIS data includes the transmission and distribution system pipelines' diameter and material. The pipelines' data will be back checked against District as-builts as needed to confirm model set-up in preparation for updating loading demands.
- b. **Nodes.** Nodes will be placed at pipeline intersections. The node elevations will be created from topographic data using an assumed depth of cover.
- c. **Other Features.** The WTP, Pump Station 2, Reservoirs A-E, pressure reducing stations and altitude valves will be added to the model as well as interties.

3. Water Demands and Supply

If available, historic meter data will be used to develop water use factors for residential and commercial land uses. If not, water demand factors will be used from the 2015 Urban Water Management Plan (UWMP) for residential and commercial land uses. Each parcel will be assigned a residential or commercial use per land-use data from <https://www.townofparadisemapping.com> and parcel GIS data from MMS Mobile. The water demand per parcel will be allocated to the model nodes. The projected water use will be checked against historic water production data for validity.

4. Base Model Scenarios

The following scenarios will be analyzed in a steady state model. This projected amount of water used will be compared against actual water use records from the District, if available.

- a. **Pre-Fire Average Day Demand.** Non-vacant parcels using info from <https://www.townofparadisemapping.com> will be used to populate the water demands for this scenario. This will establish baseline modeling behavior of the system and can be validated using historic data.
- b. **Post-Fire Average Day Demand.** Parcels that have had a water service turned on per MMS Mobile GIS data will be used to populate the water demands for this scenario.

Once these two base scenarios have been created, then the scenarios will be operated in an Extended Period Simulation to model water age throughout the system by node. Where significantly longer water ages are observed in the post-fire model as compared to the pre-fire model, physical system improvements or changes to water operation procedures will be explored in the model and recommended to maintain the pre-fire water age at maximum during average day demand. A PID Distribution System Hydraulic Model Memorandum (draft and final) will be prepared to document the model creation and the results of the two base scenarios.

Meetings	<ul style="list-style-type: none"> Hydraulic Model Data Collection Meeting PID Distribution System Hydraulic Model Memorandum Review Meeting
Deliverables	<ul style="list-style-type: none"> Draft and Final PID Distribution System Hydraulic Model Memorandum InfoWater model files and .pdf documentation (not modeling software)

SUBTASK 3 – VOC TESTING

Based on observations made and testing that has already been done by PID and SWRCB Division of Drinking Water, ENGINEER will develop a high density VOC data collection plan. This plan will be developed first in a workshop, then in a written plan. Following agreement on the VOC Data Collection Plan, ENGINEER will collect VOC data from the areas of concern identified. Up to 60 samples/10-hr day can be processed, at a total cost of \$60-80/sample. This initial scope is based on a four week mobilization to the site, with a total of up to 1200 samples in order to provide high density testing. We are assuming that PID staff will take the samples and deliver them to the testing van during this sampling period.

Meetings	<ul style="list-style-type: none"> High Density VOC Data Collection Workshop
Deliverables	<ul style="list-style-type: none"> VOC Data Collection Plan VOC Data Mapping Report

PROJECT SCHEDULE

Program Management, as defined in Subtask 1, will be ongoing throughout the 36-month project schedule. Assuming timely support from PID Staff, Baseline Modeling and VOC Testing as defined in Subtask 2 and 3, will be completed within 90 days of Notice to Proceed.

EXHIBIT B

Compensation is based on the following schedule of rates and fees

EXHIBIT B - FEE

ENGINEERING FEE

Payment for Subtasks 1 through 3 will be on a Time and Expense basis and invoiced in accordance with the Hourly Wage Rates in the following table.

Classification	Title	Hourly
AA	Administrative	\$102
T1	CADD Tech 1	\$85
T2	CADD Tech 2	\$115
T3	CADD Tech 3	\$141
I1	Field Inspector	\$137
I2	Senior Inspector	\$152
I3	Supervising Inspector	\$170
E1	Staff Engineer	\$127
E2	Associate Engineer	\$155
E3	Project / Structural Engineer	\$175
E4	Senior Project Engineer / Manager	\$203
E5	Principal Engineer	\$235

Notes:

1. A markup of 10% will be applied to all project related Direct Costs and Expenses.
2. An additional premium of 25% will be added to the above rates for Expert Witness and Testimony Services.
3. Rate effective through December 31, 2019. A 3% increase will be added for any services performed in each year thereafter.

Total Budget for each task will be as follows:

Subtask	Title	Budget
1	Program Management	\$819,840
2	Distribution System Modeling	\$99,960
3	VOC Testing	\$80,200
	Project Total	\$1,000,000

A detailed breakdown of the engineering costs summarized above is presented on the following page.

			Hours and Fee					
			Subtask 1		Subtask 2		Subtask 3	
			Program Management		Distribution System Modeling		VOC Testing	
			hrs	fee	hrs	fee	hrs	fee
<i>Water Works Engineers</i>								
Classification	Title	2019 Hourly Rate						
AA	Administrative	\$102	480	\$48,960				
T1	Drafter/Jr. Technician	\$85						
T2	Designer/Sr. Technician	\$115						
T3	Senior Designer	\$141						
I1	Field Inspector	\$137						
I2	Senior Inspector	\$152						
I3	Supervising Inspector	\$170						
E1	Staff Engineer	\$127						
E2	Associate Engineer	\$155			320	\$49,600		
E3	Project Engineer	\$175			120	\$21,000		
E4	Senior Engineer	\$203	1560	\$316,680	120	\$24,360	40	\$8,120
E5	Principal	\$235	1680	\$394,800	18	\$4,230	24	\$5,640
Subconsultants and Expenses								
	WWE Expenses			\$16,000		\$700		\$400
	Brian Crane			\$8,000				
	Ramboll			\$30,000				
	Entanglement Technologies							\$60,000
Subconsultant/Expense Markup	10%	\$5,400				\$70		\$6,040
Subtask Totals			3720	\$819,840	578	\$99,960	64	\$80,200

Total Not to Exceed Fee (Subtasks 1-3)	
Hours	Fee
4,362	\$1,000,000

EXHIBIT "C"

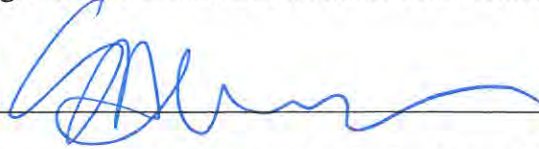
INSURANCE REQUIREMENTS

Consultant agrees with the Paradise Irrigation District that:

- a) By his/her signature hereunder, Consultant certifies that he/she is aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing the performance of the work of this agreement. Consultant and subconsultants will keep workers' compensation insurance for their employees in effect during all work covered by this agreement.
- b) Consultant will file with the Paradise Irrigation District before beginning work, certificates of insurance and policy endorsements satisfactory to the Paradise Irrigation District evidencing general liability coverage, of not less than \$1,000,000 per occurrence (\$2,000,000 general and products-completed operations aggregate (if used)) for bodily injury, personal injury and property damage; auto liability of at least \$1,000,000 for bodily injury and property damage each accident limit; workers' compensation (statutory limits) and employer's liability (\$1,000,000) (if applicable); requiring 30 days (10 days for non-payment of premium) notice of cancellation to the Paradise Irrigation District. Such insurance shall be primary and any insurance, self-insurance or other coverage maintained by the Paradise Irrigation District, its directors, officers, employees, or authorized volunteers shall not contribute to it. The general liability coverage shall give the Paradise Irrigation District, its directors, officers, employees, and authorized volunteers insured status using ISO endorsement CG2010, CG2033, or equivalent. Coverage is to be placed with a carrier with an A.M. Best rating of no less than A-:VII, or equivalent, or as otherwise approved by the Paradise Irrigation District. In the event that the Consultant employs other consultants (sub-consultants) as part of the work covered by this agreement, it shall be the Consultant's responsibility to require and confirm that each sub-consultant meets the minimum insurance requirements specified above. Consultant agrees to waive subrogation which any insurer may acquire by virtue of payment of any loss. Consultant shall obtain any endorsement necessary to affect this waiver of subrogation.
- c) Consultant shall maintain errors and omissions liability insurance appropriate to the Consultant's profession of no less than \$1,000,000 per claim and aggregate for this project.
- d) Insurance must be maintained for at least five years after completion of contract work.

If any of the required coverages expire during the term of this agreement, the Consultant shall deliver the renewal certificate(s) including the general liability additional insured endorsement to the Paradise Irrigation District at least ten (10) days prior to the expiration date.

Signature of Consultant's Authorized Official:

A handwritten signature in blue ink, consisting of a stylized 'S' followed by a series of loops and a long horizontal stroke, written over a horizontal line.

Name and Title of Consultant's Authorized Official:

Sami Kader, Principal

Date: 3/14/19

PRE/POST-EVENT AGREEMENT

Camp Fire, Butte County, California

MEMORANDUM OF AGREEMENT (MOA) BETWEEN SOUTH FEATHER WATER AND POWER AGENCY AND THE PARADISE IRRIGATION DISTRICT PERTAINING TO ASSISTANCE PROVIDED UNDER THE EMERGENCY MANAGEMENT MUTUAL AID (EMMA) PLAN

WHEREAS, this event and associated conditions will collectively be referred to as the Camp Fire; and

WHEREAS, on November 8, 2018, this declared emergency event consists of catastrophic wildfire and

WHEREAS, the following extreme conditions exist: On November 8, 2018, the Camp Fire ignited and became the most destructive wildfire in California history, with over 18,000 structures destroyed and over 500 structures damaged (of which approximately 14,500 were homes and businesses) in the Town of Paradise and in unincorporated areas within Butte County. Parched vegetation, high winds, low humidity and very steep terrain aiding fires that swept through the region; and

WHEREAS, on November 12, 2018 a Presidential Declaration of Emergency (FEMA-5278-DR) was issued; and

WHEREAS, The Butte County Emergency Command Center is the Office of Emergency Services Operational Area mutual aid coordination center for Butte County.

WHEREAS, Butte County Emergency Command Center establishes responsibility for coordinating all of the fire mutual aid requests for all jurisdictions within Butte County

WHEREAS, the Emergency Management Mutual Aid Plan delineates the current state policy concerning Emergency Management Mutual Aid; and

WHEREAS, the Emergency Management Mutual Aid Plan describes the standard procedures used to acquire emergency management mutual aid resources and the method to ensure coordination of emergency management mutual aid planning and readiness; and

WHEREAS, the county emergency manager is the Operational Area Emergency Management Mutual Aid Coordinator; and

WHEREAS, Emergency Management Mutual Aid Plan provides, in pertinent part, "When an emergency develops or appears to be developing which cannot be resolved by emergency management resources within an Operational Area, it is the responsibility of the Operational Area Mutual Aid Coordinator to provide assistance and coordination to control the problem;" and

WHEREAS, the Emergency Management Mutual Aid Plan provides, in pertinent part, "A request for emergency management mutual aid requires the approval of an authorized official of the requesting jurisdiction;" and

WHEREAS, the Paradise Irrigation District of the County of Butte requested the mutual aid assistance of South Feather Water and Power Agency, pursuant to the Emergency Management Mutual Aid Plan to provide emergency management support in connection with the Camp Fire; and

WHEREAS, South Feather Water and Power Agency provided emergency management mutual aid consisting of emergency management personnel, equipment, and/or materials from November 8, 2018 to November 8, 2019 to assist with emergency management services in connection with the Camp Fire; and

WHEREAS, South Feather Water and Power Agency agrees to document all of its mutual aid assistance costs related to the Camp fire as attachments to this MOA and submit to the Paradise Irrigation District of the County of Butte as soon as practicable;

NOW, THEREFORE, IT IS HEREBY AGREED by and between the Paradise Irrigation District of the County of Butte and South Feather Water and Power Agency that the Paradise Irrigation District of the County of Butte shall reimburse all reasonable costs associated with South Feather Water and Power Agency emergency management mutual aid assistance during the Camp Fire.

Providing Jurisdiction

By _____
(Signature)
Name: Rath Moseley
Title: District Manager
Agency: South Feather Water and Power
Date:

Providing Agency *(If different from Providing Jurisdiction)*

By _____
(Signature)
Name:
Title:
Agency:
Date:

Requesting Jurisdiction

By _____
(Signature)
Name: Kevin Phillips
Title: District Manager
Agency: Paradise Irrigation District
Date:

DEFINITIONS

Authorized Official: A person with expressed authority by a legal governing body to request resources, authorize purchases, and/or enter into contracts on behalf of a Requesting or Providing Jurisdiction during an emergency.

EMMA Resource: A person with a combination of training, experience and credentials that would serve in an ICS position, either in the field or an EOC, or as a technical specialist during an emergency response.

Operational Area (OA): An intermediate level of the state emergency services organization consisting of a county and all political subdivisions within the county area.

Providing Agency/Jurisdiction: The government entity providing EMMA resources. The different levels of providing jurisdictions include providing local jurisdiction, providing OA and providing region.

Requesting Jurisdiction: The government entity requesting EMMA resources. The different levels of requesting jurisdictions include requesting local jurisdiction, requesting OA and requesting region.

CHAPTER 12 PROCUREMENT POLICY

12.1 GENERAL PROVISIONS

12.1.1 Scope –

This chapter shall, except where otherwise noted, govern the purchase of supplies, services, construction, real or personal property, and the disposal of property, whether real or personal, by the District. This policy shall apply to every expenditure of public funds irrespective of the source of the funds. No purchases shall be made and no encumbrances shall be incurred for the benefit of the District except as provided in this chapter.

12.1.2 Budget Expenditures – Board of Directors Approval –

No purchase shall be made and no encumbrance shall be incurred unless funds sufficient to cover the purchase or encumbrance have been budgeted and are available within the approved budget or unless the purchase or encumbrance is approved by the Board.

12.1.3 Responsibility For Budgetary Compliance –

The District Manager is the authorized officer charged with the responsibility of staying within the District's budgets and authorizing no expenditures in excess of the budgets as required by the California Public Contract Code and the California Water Code.

12.1.4 State Code Provisions –

Expenditures shall comply with any applicable federal and state requirement and law, and regulation, including the California Public Contract Code and Irrigation District Law embodied in the Water Code, particularly Division 11, Section 20500 of the Water Code, and with terms and conditions of any grant, gift or bequest consistent with law.

12.1.5 Public Procurement Mission –

Public policy dictates that the fundamental mission of a public procurement function is to promote economy, efficiency, and effectiveness in the acquisition of goods and services and expenditure of public funds. The District to accomplish this mission must at least:

A. Provide for public confidence.

- B. Use fair and equitable treatment to all concerned.
- C. Employ effective broad-based free and open competition.
- D. Strive for maximum value for District expenditures.
- E. Provide for work to be performed in a thoroughly professional and ethical manner, with honesty and integrity within applicable laws and regulations adopted by the District.
- F. Provide safeguards for maintaining a procurement system of quality and integrity, including prohibition against conflicts of interest and gratuities.
- G. Allow sufficient flexibility to maintain safe, reliable water service to the community and meet emergency needs.

12.1.6 Prohibited Acts –

It is a violation of District policy:

- A. For any bidder or prospective bidder, including its employee(s) or officer(s), in connection with a purchase by the District, to engage in any act or inaction, which is a restraint of trade, anti-competitive, or price-fixing, and not in accordance with Fair Political Practices guidelines.
- B. For any person to offer or to give to any employee of the District or any member of his immediate family, any gift whose value is greater than \$50 in a given year, whether in the form of money, services, loan, travel, entertainment, hospitality, promise, or other form or for any District employee to directly or indirectly solicit or directly or indirectly accept any such gift for such purpose as provided in the California Government Code and the California code of Regulations.
- C. For any District employee, officer, or Director to disclose, in advance of the opening of the bids, the content of any bid invited through the formal or informal competitive bidding procedure.
- D. For any District employee, officer, or Director to actively participate in the awarding of a contract from which he will directly benefit.
- E. For any District employee, officer, Director, or other person to misappropriate for personal use any item of public property.

Any District employee or officer committing any of the foregoing acts is subject to discipline.

12.1.7 Voidable Contracts –

The following contracts are voidable at the discretion of the District:

- A. Contracts that result from a conflict of interest under this policy or other applicable law.
- B. Contracts awarded to a person or firm that tried to influence the award of such contract by offering something of value to any District employee, officer, or Director.
- C. Contracts awarded by an official or employee circumventing the requirements of this chapter or other applicable statute.
- D. A contract, which was bid or awarded under circumstances prohibited under Section 12.1.6.

The Board hereby declares its intent that such contracts would not have been entered into on behalf of the District if the misconduct had been discovered prior to the execution of the contract. The Board further states that no District officer or employee has authority, either actual, apparent, or implied, to negotiate or execute any such contract, and that such contract shall, at the discretion of the Board, be voidable, unless the action of the District officers and employees in executing the contract is ratified by affirmative action of the Board after the misconduct was discovered and made known to the Board.

All persons or firms responsible for any misconduct prohibited by this chapter shall be liable for any losses incurred by the District as a result of the misconduct.

12.2 PURCHASE OF GOODS AND SERVICES

12.2.1 Scope –

This part shall apply to the purchase of goods and services, except as otherwise specified in Parts 3 and 4.

12.2.2 Competitive Process –

Whenever the total price of a contract or purchase exceeds \$1,000, the contract shall be awarded through a competitive bidding or proposal process. Contracts may not always be awarded to the lowest bidder, as the bid price shall not be the sole determining factor when awarding contracts. At a minimum, the District shall give consideration to a bidder's ability to provide the required service(s), reference checks, history of prior or similar services, local community impact, and a history of prior services to the District. Effort will be made in all purchases for goods or services to source Paradise vendors whenever possible.

Competitive bids shall be secured and documented under the following conditions:

- A. For purchases totaling between \$1,000 and \$3,000, bids may be obtained verbally and recorded on a verbal quotation sheet. This verbal quotation sheet shall be available for review if requested by any director during board meetings.
- B. For purchases totaling between \$3,001 and \$5,000, bids shall be secured in writing and recorded.
- C. Authorization amounts without prior Board approval are as follows:

Approval of Management Staff	Up to \$1,000 for any item
Approval of District Manager	Up to \$5,000 for any item and up to \$25,000 for any expense necessary in the operation and maintenance of the water treatment and distribution system.

- D. For purchases in excess of \$5,000, written bids, prices, proposals or agreements shall be secured, and the Board shall award such contracts.
- E. The Manager is authorized to approve purchases in excess of \$5,000 in the case of an emergency that poses a threat to the public health, welfare, or safety. The Manager shall report these purchases at the next scheduled Board meeting.
- F. The Manager is authorized to approve purchases in excess of \$5,000 for equipment or facility repairs or materials that require immediate action to continue the daily operation of District business. The Manager shall report these purchases at the next scheduled Board Meeting.
- G. Prior to a Board meeting at which an award is to be considered by the Board, staff shall provide a summarized analysis of bids received, including some or all of the following information:
 - 1. A list of bidders
 - 2. Compliance with the work statement(s) and/or specifications
 - 3. Compliance with the schedule
 - 4. Compliance with stated terms and conditions and other administrative contract requirements

5. Compliance with risk management policy
6. Consideration of any alternative that may be offered
7. Cost
8. Any other pertinent data

12.2.2.1

AVOIDANCE OF ACQUISITION OF UNNECESSARY OR DUPLICATIVE ITEMS.

To the extent authorized by law, consideration will be given to consolidating or breaking out procurements to obtain a more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.

12.2.3 Budget Line Item –

Funds designated for the purchase of goods or services under a particular budget line item may not be used for the purchase of goods or services under a different budget line item without the prior approval of the Manager.

12.2.4 Designated Department Funds –

Funds designated for a particular department's use within a budget line item may be utilized by a different department with the approval of the Manager.

12.2.5 Reports –

All expenses shall be reported to the Board within thirty (30) days following the end of the month of the date of expenditure by providing a complete listing of all general fund checks as described in Section 13.3(A)(1).

12.2.6 Petty Cash Account –

Petty cash in an amount determined by the Manager may be established for the purposes of providing cash for miscellaneous cash purchases, front counter customer service transactions, and for Paradise Lake permit fee sales. Access to petty cash shall be limited to the Office Manager, an Accounting Technician, and a Utility Billing Technician. Petty cash funds may be used to purchase supplies, materials, equipment, and other services when the cost does not exceed \$100 and when written documentation of the purchase is maintained. Supplies, materials, equipment, and other services regularly purchased and available to the District through regular purchasing channels shall not be purchased using petty cash

funds. Employees shall not be allowed to cash personal or payroll checks through petty cash.

12.2.7 Purchases Without Competition –

The Manager may purchase supplies, goods, or services, and the District may enter into construction contracts without the receipt or review of competitive bids or proposals, if any of the following occur:

- A. In the case of an emergency that poses a threat to the public health, welfare, or safety, or as determined by the Manager.
- B. When there is a sole source of supply as declared in writing by a staff member and acknowledged by the Manager.
- C. When the purchase or work is a continuation of previous purchases or work, and there exists a clear, potential economic benefit to the District to negotiate a contract directly with the firm that supplied the initial purchase or work.
- D. When the District does not receive a response to its announcements, requests, or invitations for bids or proposals.
- E. In the case of a small purchase or contract (less than \$1,000).
- F. When the Board determines that it is not in the best interest of the District to change legal, financial, or software services as described in Section 12.4.
- G. When the award to a specific supplier, service provider, or contractor is a condition of a contribution that will fund the full cost of the supply, service, or construction item.

12.3 CONSTRUCTION AND CAPITAL IMPROVEMENT CONTRACTS

12.3.1 Procedure –

Whenever the total price of a construction or capital improvement contract is for \$5,000 or less, the contract shall be handled as provided for under Section 12.2. If the contract exceeds \$5,000, the contract shall be awarded through a competitive bidding or proposal process.

12.3.2 Contract Formation –

- A. Subject to the limitations of this section, any type of contract that will promote the best interests of the District may be used, provided that the use of a cost-plus-a- percentage-of-cost contract is prohibited. A cost-reimbursement contract may be used only when a determination is made in writing that such

contract is likely to be less costly to the District than any other type or that it is impracticable to obtain the supplies, services, or construction required except under such a contract.

- B. Except with respect to firm fixed-price contracts, no contract shall be used unless it has been determined by the Manager, or waived, that:
 - 1. The proposed contractor's accounting system will permit timely development of all necessary cost data in the form required by the specific contract type contemplated.
 - 2. The proposed contractor's accounting system is adequate to allocate costs in accordance with generally accepted accounting principles.

12.3.3 Bid Security –

- A. When the District Manager determines the need for bid security, such bid security in an amount equal to at least 10% of the amount of the bid shall be required. Bid security shall be a bond provided by a surety company authorized to do business in the State of California, the equivalent in cash or certified cashier's check, or any other form satisfactory to the District.
- B. When a bidder fails to comply with the requirement for bid security set forth in the invitation for bids, the bid shall be rejected unless, pursuant to Federal, State, or District rules, it is determined by the Board that the failure to comply with the security requirements is non-substantial.
- C. After the bids are opened, they shall be irrevocable for the period specified in the invitation for bids. If a bidder is permitted to withdraw a bid before award, no action shall be taken against the bidder or the bid security.

12.3.4 Bonds –

- A. When a construction contract is awarded under this chapter, the contractor to whom the contract is awarded shall deliver the following bonds or security to the District, which shall become binding on the parties upon the execution of the contract, except when deemed unnecessary for the protection of the District by the Board:
 - 1. A performance bond satisfactory to the District that is in an amount equal to 100% of the total contract amount specified in the contract and is executed by a surety company authorized to do business in the State of California, or other form satisfactory to the District.
 - 2. A payment bond satisfactory to the District that is in an amount equal to 100% of the total contract amount specified in the contract and is

executed by a surety company authorized to do business in the State of California, or any other form satisfactory to the District, which is for the protection of each person supplying labor, service, equipment, or material for the performance of the work provided for in the contract.

- B. A performance bond and/or a payment bond may not be required under Section 12.3.4.A if the construction does not exceed \$10,000 when awarded.

12.3.5 Capital Expenses Constructed By District Personnel –

A line item budget may be approved by the Board for capital projects constructed by District personnel in lieu of presenting each item over \$5,000 for approval.

12.3.6 Other Capital Fund Expenditures –

- A. The District shall negotiate all contracts in excess of \$5,000 in a format approved by legal counsel. The contract shall be approved and signed by the Manager as the District's representative.
- B. Capital projects or expenditures, which are up to \$5,000, may be authorized by the Manager. All capital projects and expenditures in excess of \$5,000 shall be submitted to the Board for approval.
- C. Construction "change orders" representing the lesser of \$10,000 or 10% of the contract amount, may be approved by bearing both the Manager and Treasurer's signature. Each such approval shall be reported to the Board for ratification at its next regular Board meeting.
- D. "Change orders" for more than \$10,000 or more than 10% of the contract amount shall be submitted to the Board for approval.
- E. Upon completion of each project, a final summary of costs shall be submitted to the Board for review.

12.4 PROCUREMENT OF PROFESSIONAL SERVICES POLICY

12.4.1 Objective –

It is the policy of the District to:

- A. Openly discuss and report all requests for professional services to the Board.
- B. Negotiate contracts for professional services on the basis of demonstrated competence and qualifications for the type of service required.

- C. Negotiate contracts for professional services at fair and reasonable prices.

12.4.2 Definitions –

“Professional Services” include:

- A. Architectural and engineering services.
- B. Legal services.
- C. Financial advice and/or bond underwriting services (“Financial Services”).
- D. Auditing services.
- E. Consulting services, including software/hardware support, as needed and identified from time to time by the Board.

12.4.3 Proposals/Notification Process For Qualified Candidates –

A. Architectural and Engineering Services –

When the District requires these types of professional services, requests for proposals or requests for a Statement of Qualifications (SOQ) shall be prepared requesting firms to submit to the District a proposed SOQ and/or a SOQ update. The request will state the types of professional work anticipated by the District and contain a statement that selection of consultants and professional services will be made in accordance with District policy.

B. Legal Services –

As a matter of practice, the District will retain the services of its existing outside counsel unless the Board determines otherwise. Prior to retaining an alternative law firm, the Board shall evaluate whether the District should consider a law firm different than that currently being used. Factors to consider are:

1. Lapse of time between projects
2. Adequacy of performance on prior projects
3. The proposed law firm’s areas of expertise
4. Investigation of capabilities and client recommendations
5. Comparisons between the District’s then current law firm’s quotes for legal services with market quotations as determined by an informal telephonic survey.

In the event the Board determines it is in the best interest of the District to consider additional services or a change in services, proposals shall be prepared requesting firms to submit a SOQ to the District. In addition, a copy of the announcement will be mailed to professional firms who have, in writing, expressed an interest in providing professional services to the District. The proposal will state that the selection of legal services will be made in accordance with District policy. The District desires to maintain continuity in the provision of legal services so long as the quality and cost of such services are maintained at a level acceptable to the District.

C. Financial Services –

The District will retain a financial advisor on a continuing basis to provide on-going advice pertaining to proposed and existing bond issues, investment of District funds, and related matters. The District's financial advisor shall be prepared to provide certain services that shall include, but will not necessarily be limited to, the preparation and presentation of information to rating agencies and bond insurance companies, bond issue structuring, official statement preparation, recommendations pertaining to the selection of underwriter(s), coordination of the particulars of issuing bonds, interface with bond counsel, investment of reserves and funds, and related matters. The District desires to maintain continuity in the provision of financial services so long as the quality and cost of such services are maintained at a level acceptable to the District.

D. Auditing Services –

Every three years as required under Section **13.2** (B), the District shall prepare requests for proposals requesting a SOQ for performing the District's annual financial audit and/or such other audits as designated by the Board. The proposal will state that the selection of consultants and professional services will be made in accordance with District policy.

E. All Other Professional Services –

Each time the District undertakes a project wherein the District anticipates the cost of other professional services will exceed \$10,000, including software and hardware requirements, the Manager shall determine whether competing professional service firms are available for use by the District. In the event the Manager determines they are available, the District shall issue a request for proposal to firms to provide professional services to the District. In addition, a copy of the proposal will be mailed to professional firms who have, in writing, expressed a desire to furnish the District the requested professional services. The request for proposal shall contain a short description of the project and a

statement that selection of consultants and professional services will be made in accordance with District policy.

12.4.4 Statement of Qualifications – Content –

The District will request the following information to be included in “Statements of Qualifications”:

- A. Name of the firm, location of all offices, and specifically the location of the principal place of business in California.
- B. Age of the firm and the average number of employees over the past five years in the California office.
- C. Education, training, qualifications and availability of key employees of the firm, specifically those in the California office, pertaining to the types of work anticipated by the District.
- D. Experience, special technical capabilities and expertise of the firm, and available equipment necessary or useful in pertinent types of professional work.
- E. References from at least five clients and previous projects, including two from the preceding twelve-month period.
- F. Any other relevant information as determined from time to time by the District.

12.4.5 Proposal For Professional Services –

Proposals for professional services shall include the following:

- A. The information contained in an SOQ.
- B. Description of the project.
- C. Work plan for accomplishing the project, including descriptions of the tasks to be performed.
- D. Schedule for completing the tasks.
- E. Description and estimate of direct and reimbursable costs to be paid by the District.

12.4.6 Selection Committees –

A selection committee shall review and rank submitted proposals. Each committee shall include at least the Manager and one other staff member. The review process may include an additional review by at least two Board members from one of the existing Board designated committees or a designated ad-hoc committee.

12.4.7 Selection Methods –

A. Architectural and Engineering Services –

The selection committee shall select and rank at least three firms from the SOQs. Requests for proposals shall be sent to the selected firms. After receipt of the proposals, the selection committee shall review the proposals and may request interviews and/or samples of previous work. The selection committee shall then rank the firms and present its recommendations to the Board.

B. Legal Services –

The Manager will rank the professional firm(s) based on their SOQs. The Manager and selection committee may request an interview with the ranked firm(s). When a particular need for legal services occurs, the Board, in consultation with the Manager, shall select the law firm to perform such particular legal services.

C. Auditing Services –

The Manager and Treasurer shall rank the firms based on their proposals and interviews, if any, held by the District. The selection committee will present its recommendations to the Board. Notwithstanding the foregoing, the same auditor shall not perform the District's annual financial audit for more than six (6) consecutive years.

D. All Other Professional Services –

The Manager may or may not interview the prospective consultants. The Manager and staff member shall rank the firms based on the proposals received from the firms and interviews, if any, conducted by the District. The selection committee will present its recommendations to the Board.

12.4.8 Selection Criteria –

The criteria for selection to be applied to all SOQs and proposals are:

- A. Appropriate level of training, experience, expertise, and availability of key project personnel.
- B. Ability to perform the work, with respect to personnel availability, adequacy, present workload, available equipment and facilities.
- C. Firm resources and expertise available to the project.
- D. Quality of work plan and project schedule, if required.
- E. Past performance on similar projects for other parties and for the District in particular.
- F. Local office, local firm presence, and availability of project personnel for meetings and communications with District personnel.
- G. Estimated costs of the professional firm.
- H. Other special requirements for the projects, as determined by the District.

12.4.9 Contract Negotiations –

- A. The Manager shall present the ranking and recommendations of the proposals to the Board. After finding that the process has complied with policy, the Board shall approve the Firm recommended by the Manager, or the Board may select a Firm other than the recommendation and shall report its reasons for doing so.
- B. The District shall commence negotiations for a contract with the consultant approved or selected by the Board.
- C. The contract shall be negotiated for fair and reasonable prices. Legal counsel shall review the contract.
- D. If negotiations fail with the approved consultant, the District shall terminate negotiations and may begin negotiations with the next highest ranked consultant approved by the Board.

12.4.10 Small Contract Method –

If the estimated professional fees do not exceed \$5,000, the Manager shall select the firm, determine the scope of work, and authorize contract negotiations.

The selection committee under this method shall be the Manager and at least one staff member. The selection committee shall review any required SOQs or a list of potential consultants. The Manager shall approve the selection and scope of work and authorize any required contract negotiations. The firm shall submit a

proposal, including a fee proposal. The District will prepare a contract for legal counsel review.

12.5 DISPOSAL OF SURPLUS PROPERTY

12.5.1 Reporting Surplus Property –

Any surplus property shall be reported to the Board. Surplus property may be sold to employees after the Board has authorized the sale of surplus property and the bidding process has formally taken place.

12.5.2 Authorization –

After the Board is properly notified of surplus property, the Board shall then declare the property as surplus and authorize staff to dispose of it. After disposing of the surplus equipment and machinery, a description of the surplus equipment and machinery, together with a statement that reflects any consideration received for the surplus property, shall be provided to the Secretary and Treasurer.

12.6 FIXED ASSETS AND DEPRECIATION

12.6.1 Fixed Assets and Depreciation –

Single item purchases with at least an anticipated useful life of three years and exceeding \$10,000 each shall be capitalized as a fixed asset and depreciated over the asset's estimated useful life.



PARADISE IRRIGATION DISTRICT

TO: Board of Directors
FROM: Georgeanna Borrayo, District Secretary
DATE: April 11, 2019
RE: Letter of "Merit Rejection"
4/17/19 Board of Directors Meeting

The District received a claim for vehicle damages filed on behalf of a USAA policyholder on March 5, 2019 relating to a non-injury vehicle incident in the upper parking lot of the Paradise Irrigation District office on January 9, 2019 between the USAA policyholder and a District vehicle driven by a PID employee. Clerkin, Sinclair & Mahfouz, LLP has been retained by USAA Casualty Insurance Company to pursue their subrogation interest.

The District, as a public entity, is bound by certain Government Code regulations relating to claims. This claim will be forwarded to ACWA Joint Powers Insurance Authority for processing; however, the JPIA cannot process the claim unless the District has formally "rejected" the claim at its level. Following is a rejection letter that will be sent to the claimant upon Board authorization as a formality to meet the legal requirement.

The recommended form of motion is:

"I move to reject the claim for vehicle damages filed on behalf of the USAA Casualty Insurance Company, and approve the letter of merit rejection for submittal to ACWA Joint Powers Insurance Authority to process and respond to the Claim (ACWA-JPIA Claim No. 19-0446)."



PARADISE IRRIGATION DISTRICT

6332 Clark Road, Paradise CA 95969 | Phone (530)877-4971 | Fax (530)876-0483

April 18, 2019

USAA Claims Department
P.O. Box 33490
San Antonio, TX 78265

RE: USAA Claim Number: 013644776-023
ACWA-JPIA Claim Number: 19-0446

Dear USAA Claims Department:

Notice is hereby given that the claim which you presented to the Board of Directors of the Paradise Irrigation District on March 5, 2019 was rejected on April 17, 2019.

WARNING

Subject to certain exceptions, you have only six (6) months from the date this notice was personally delivered or deposited in the mail to file a State Court Action on this claim. See California Government Code §945.6. Your time for filing an action in federal court may be less than this six months.

You may seek the advice of an attorney of your choice in connection with this matter. If you desire to consult an attorney, you should do so immediately.

In providing this notice, or by any other action it has taken on this claim, Paradise Irrigation District does not intend to relinquish or waive any of its legal claims requirements or any rights or defenses potentially available to Paradise Irrigation District or its officers, directors, employees or agents.

Should you file a lawsuit in this matter which is determined to be in bad faith and without reasonable cause, please be advised that Paradise Irrigation District will attempt to recover all of its defense costs from you as allowed by California Code of Civil Procedure § 128.5, § 128.7 and §1038.

If you have any questions about your claim, or this letter, please contact our claims administrator, Heidi Sander, Association of California Water Agencies (ACWA/JPIA) at 1-800-535-7899, extension 3154.

Sincerely,

Kevin M. Phillips
District Manager

cc: Heidi Sander, ACWA-JPIA
Clerkin, Sinclair & Mahfouz, LLP
USAA Policyholder



CLERKIN, SINCLAIR & MAHFOUZ, LLP

ATTORNEYS AT LAW



VIA CERTIFIED MAIL

USPS Tracking No.: 7018 1830 0000 8364 1686

Dear Sir or Madam:

Our firm has been retained by USAA Casualty Insurance Company to pursue their subrogation interest. Enclosed, please find a fully executed claim form and supporting documents. The disc labeled "Exhibit B" includes photos of the damage to the insured vehicle. Should you require any additional information, or wish to discuss the matter further, please contact Kristopher Dougherty at (972) 905-6389 or kdougherty@clerkinlaw.com. Please reference matter number 13644776-23 in all correspondence with our office.

Thank you for your assistance. If you are not the proper entity to provide notice of our claim, please contact our office to provide information on the proper entity.

Kind regards,

Clerkin, Sinclair & Mahfouz, LLP

530 B STREET, 8TH FLOOR
SAN DIEGO, CA 92101
(619) 308-6550

WWW.CLERKINLAW.COM

Claim Form

(A claim shall be presented by the claimant or by a person acting on his behalf.)

NAME OF DISTRICT: Paradise Irrigation District

1

Claimant name, address (mailing address if different), phone number, social security number, e-mail address, and date of birth.

Effective January 1, 2010, the Medicare Secondary Payer Act (Federal Law) requires the District/Agency to report all claims involving payments for bodily injury and/or medical treatments to Medicare. As such, if you are seeking **medical damages**, we **MUST** have both your Social Security Number and your date of birth.

Name: USAA Casualty Insurance Company a/s/o [REDACTED] Phone Number: (972) 905-6389

Address(es): c/o Clerkin, Sinclair & Mahfouz, LLP Social Security No.: N/A

530 B Street, 8th Floor Date of Birth: N/A

San Diego, CA 92101 E-mail: kdougherty@clerkinlaw.com

2

List name, address, and phone number of any witnesses.

Name: N/A

Address:

Phone Number: ()

3

List the **date, time, place, and other circumstances** of the occurrence or transaction, which gave rise to the claim asserted.

Date: 1/09/2019 Time: 2:20 P.M. Place: 5589 Mallan Lane in Paradise, California

Tell What Happened (give complete information):

On January 9, 2019, USAA's insured was traveling near 5589 Mallan Lane in Paradise, California, when their vehicle was struck on the right front corner by a Paradise Irrigation District vehicle (Ford F-150, California license plate number: 1251927), resulting in property damage.

NOTE: Attach any photographs you may have regarding this claim.

4

Give a general description of the indebtedness, obligation, injury, damage, or loss incurred so far as it may be known at the time of presentation of the claim.

2016 Chevrolet Sonic; California license plate number: [REDACTED] Damage to the right front corner;
Please see attached estimates and photos.

5

Give the name or names of the public employee or employees causing the injury, damage, or loss, if known.

Unknown.

6

The amount claimed if it totals less than ten thousand dollars (\$10,000) as of the date of presentation of the claim, including the estimated amount of any prospective injury, damage or loss, insofar as it may be known at the time of the presentation of the claim, together with the basis of computation of the amount claimed. If the amount claimed exceeds ten thousand dollars (\$10,000), no dollar amount shall be included in the claim. However, it shall indicate whether the claim would be a limited civil case.

\$3,412.22 (Please see attached estimates and payments).

Date: 3/5/19

Time: 10:00 am

Signature: [Signature]

Joseph Duque on behalf of USAA Casualty
Insurance Company a/s/o [REDACTED]

ANSWER ALL QUESTIONS. OMITTING INFORMATION COULD MAKE YOUR CLAIM LEGALLY INSUFFICIENT!

White --JPIA Office Copy / Yellow--District Office Copy / Pink--Claimant Copy

Revised -- October 2015



















PARADISE IRRIGATION DISTRICT

6332 Clark Road, Paradise CA 95969 | Phone (530)877-4971 | Fax (530)876-0483

PARADISE IRRIGATION DISTRICT

REPORT OF ACCIDENT

(ACWA-JPIA CLAIM NO. 19-0446)



PARADISE IRRIGATION DISTRICT

6332 Clark Road, Paradise CA 95969 | Phone (530)877-4971 | Fax (530)876-0483

January 9, 2019

To: ACWA/JPIA
P.O. Box 619082
Roseville CA 95661-9802

From: Jim Ladrini
Assistant Field Superintendent
Paradise Irrigation District

Subject: Report of vehicle accident.

I received a call from Paradise Irrigation District employee [REDACTED] Mr. [REDACTED] indicated that he had just been in a vehicle accident. Upon questioning I learned Mr. [REDACTED] and the party involved were in the upper parking lot of the Paradise Irrigation District office located at 6332 Clark Road, Paradise California.

Upon arrival I witnessed two vehicles in the parking lot near the location of the collision. I immediately assessed the situation and asked if either party was in need of medical attention. They both answered in the negative.

I photo documented the damage to both vehicles, exchanged insurance information and made a verbal report to the District Manager.

Mr. [REDACTED] indicated that he was leaving the District Corporation Yard and as he was exiting Miss [REDACTED] failed to yield and collided with the side of the vehicle he was driving. He further indicated that he did not see Miss [REDACTED] as he was passing the intersection of the parking lot.

Miss [REDACTED] indicated that she was exiting the driveway leading from the lower to upper parking lot after picking up water from the District drinking water distribution station.

In my opinion, upon investigating the incident, it appears that Miss [REDACTED] entered the upper parking lot while Mr. [REDACTED] was already passing through the intersection. Damage to both vehicles and the placement of each indicates that Miss [REDACTED] vehicle struck the District vehicle from the side at an oblique angle indicating that Mr. [REDACTED] was perpendicular to, and slightly forward of Miss [REDACTED] vehicle as they were both in forward motion.

Sincerely,

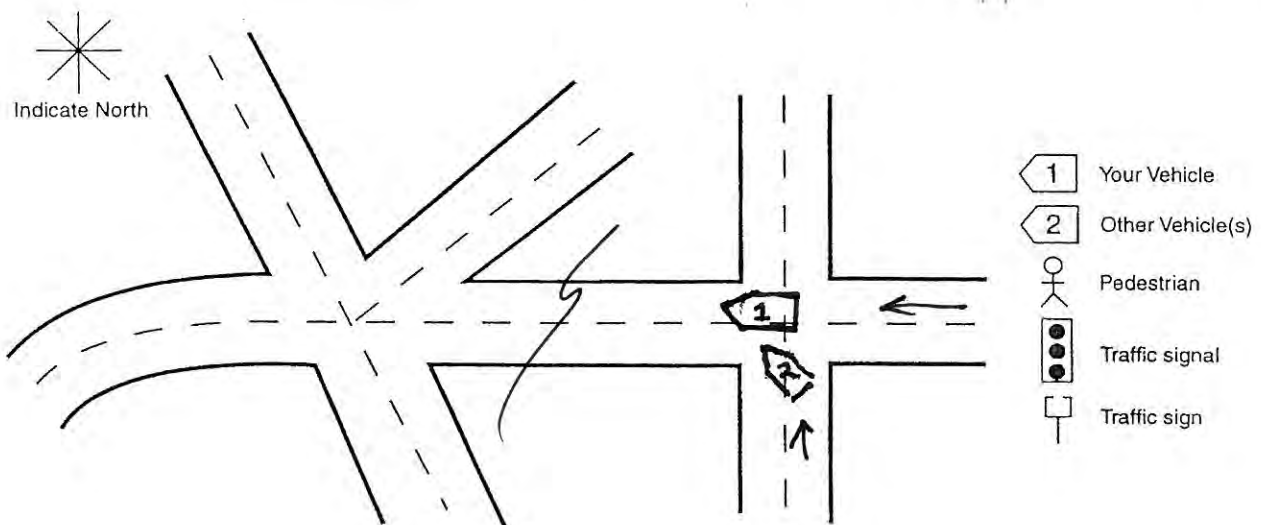
Jim Ladrini

DRIVER'S REPORT OF ACCIDENT

Agency Name: PARADISE IRRIGATION DISTRICT			
Location of Accident: 6332 CLARK RD. PARADISE		Accident Date: 1.9.19	Time: 2:00 <input checked="" type="radio"/> AM <input type="radio"/> PM
Road Conditions: DAMP BUT NO RUNNING STORM WATER		Weather Conditions: OVERCAST/LIGHT RAIN	
Direction of Travel of Your Vehicle: WEST		Speed: < 5 MPH	
Direction of Travel of Other Vehicle: NORTH & SLIGHTLY WEST		Speed: < 5 MPH	
Police Report Taken? Yes <input type="radio"/> No <input checked="" type="radio"/> Police Department:			Report No.:
Name of Police Officer:			Badge No.:
YOUR VEHICLE (VEHICLE #1)			
Year, Make, Model: 2007 FORD F.150			
Vehicle ID Number (VIN): 1FTRX14W37NA71021		License Plate No.: 12S1927	
Driver: [REDACTED]		Driver License No.: [REDACTED]	
Address, City, State: [REDACTED]		Home Phone No.: [REDACTED]	
Department: CUSTOMER SERVICE	Job Title: METER SERVICE	Supervisor: JIM LAORINI	
Damage to your Vehicle: DRIVER SIDE DOOR			
OTHER VEHICLE (VEHICLE #2)			
Driver: [REDACTED]		Driver License No.: NOT IN POSSESSION	
Address, City, State: [REDACTED]		Home Phone No.: [REDACTED]	
Year, Make, Model: 2016, CHEVROLET, COUPE			
License Plate No.: [REDACTED]		State: CA	
Insurance Company: NOT IN POSSESSION		Policy Number: UNK	
Insurance Broker Name:		Phone No.:	
Damage to Other Vehicle: FRONT QUARTER PANEL PASSENGER SIDE			
Owner Name:		Phone No.:	
Address, City, State:			
OTHER VEHICLE (VEHICLE #3)			
Driver:		Driver License No.:	
Address, City, State:		Home Phone No.:	
Year, Make, Model:			
License Plate No.:		State:	
Insurance Company:		Policy Number:	
Insurance Broker Name:		Phone No.:	
Damage to Other Vehicle:			
Owner Name:		Phone No.:	
Address, City, State:			

INJURED PERSONS NONE IDENTIFIED, MEDICAL DECLINED	
Name:	Phone No.:
Address, City, State:	
Extent of Injury:	Driver / Passenger / Veh. #
Name:	Phone No.:
Address, City, State:	
Extent of Injury:	Driver / Passenger / Veh. #
Name:	Phone No.:
Address, City, State:	
Extent of Injury:	Driver / Passenger / Veh. #
NARRATIVE REPORT: Briefly describe the accident. Add pertinent information not addressed above.	
VEHICLE 1 TRAVELING WEST THROUGH PARKING LOT INTERSECTION @ 6332 CLARK ROAD WAS STRUCK BY VEHICLE 2 ON DRIVERS SIDE OF VEHICLE 1 BY FRONT PASSENGER SIDE VEHICLE 2	
Completed by:	Date Submitted:
JIM LAORINI	1-10-19

DIAGRAM: Show the position of each vehicle at the time of the accident and number them according to the numbers listed above. Indicate the direction of travel using arrows. Indicate traffic signs or signals. Show stationary objects.



Indicate North.











PID REPAIR ESTIMATE FOR 2007 FORD F150

Date: 2/ 6/19 03:55 PM
 Estimate ID: 3269010056
 Estimate Version: 0
 Committed
 Profile ID: PDA CA
 Quote ID: 42859740

Property Damage Appraisers (PDA Chico)

P.O. Box 3883, Chico, CA 95927
 (530) 899-2959
 Fax: (530) 899-2623
 Email: pdachico@pdaorg.net

Not An Authorization For repair
 Read disclaimers following appraisal calculations.

Damage Assessed By: Daniel Funk
 Classification: Field

Appraised For: Heidi Sander

Condition Code: Good
 Date of Loss: 1/ 9/19
 Deductible: 0.00
 File Number: 3269010056
 Policy No: MOPC

Type of Loss: Collision

Claim Number: 19-0446

Insured: PARADISE IRRIGATION DISTRICT
 Owner: PARADISE IRRIGATION DISTRICT
 Address: 6332 CLARK RD, PARADISE, CA 95969

Mitchell Service: 910158

Description: 2007 Ford Pickup F150 XL
 Body Style: 4D PkUpXCb 7' Bed 145" WB
 VIN: 1FTRX14W37NA71021
 Mileage: 68,811
 OEM/ALT: A
 Parts Profile: Chico
 Color: WHITE
 Options: PASSENGER AIRBAG, POWER STEERING, AIR CONDITION, TILT STEERING COLUMN
 AM/FM STEREO, DRIVER AIRBAG, ANTI-LOCK BRAKE SYS.
 TIRE INFLATION/PRESSURE MONITOR, VINYL SEAT, 4 WHEEL DRIVE

Vehicle Production Date: 5/07
 Drive Train: 4.6L Inj 8 Cyl 4WD
 License: 1251927 CA

Parts Profile Version: 2

Line Item	Entry Number	Labor Type	Operation	Line Item Description	Part Type/ Part Number	Dollar Amount	Labor Units
1	004949	BDY	REMOVE/INSTALL	Frt Bumper Assy			1.2 #
2	002558	BDY	CHECK/ADJUST	Headlamps			0.4
3	002560	BDY	REMOVE/INSTALL	L Front Combination Lamp			INC
4	002562	REF	REFINISH	L Fender Outside			C 2.2
5	005086	BDY	REMOVE/INSTALL	L Fender Stone Shield	Existing		0.1 r
6	000222	BDY	REMOVE/REPLACE	L Fender Adhesive Nameplate	5L3Z 16720 A	34.78	0.2
7	003631	BDY	REMOVE/REPLACE	L Frt Door Shell	Qual Recycled Part	350.00	* 5.0 #r
8	AUTO	REF	REFINISH	L Frt Door Outside			C 2.4
9	AUTO	REF	REFINISH	L Frt Add For Jambs & Interior			C 1.0
10	002745	BDY	REMOVE/INSTALL	L Rear Otr Door Belt Moulding			0.2
11	900500	BDY*	ADD'L LABOR OP	REMOVE VINYL DECALS	Existing		0.5*
12	900500	BDY*	REMOVE/REPLACE	NEW VINYL DECALS	Sublet	0.00	* 0.0*
13				ACTUAL PRICE PER INVOICE			
14	007141	BDY	REMOVE/INSTALL	L Rear Wind Deflector			0.2
15	004807	BDY	REPAIR	L Rear Adhesive Bonded Door Repair Panel	Existing		3.0*#
16	AUTO	REF	REFINISH	L Rear Door Outside			C 1.7
17	007763	BDY	REMOVE/INSTALL	L Rear Door Handle			0.3
18	AUTO	REF	ADD'L OPR	Clear Coat			1.9
19	933003	BDY*	ADD'L OPR	Tint Color			0.5*
20	933018	BDY*	ADD'L OPR	Mask For Overspray		5.00	* 0.2*
21	AUTO		ADD'L COST	Paint/Materials		368.00	*
22	AUTO		ADD'L COST	Hazardous Waste Disposal		3.00	*

ESTIMATE RECALL NUMBER: 02/06/2019 15:55:16 3269010056

Mitchell Data Version: OEM: JAN_19_V

Alternate Parts: 02/06/2019 15:50:13

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Software Version: 7.1.234

Page 1 of 4

Date: 2/ 6/19 03:55 PM
Estimate ID: 3269010056
Estimate Version: 0
Committed
Profile ID: PDA CA
Quote ID: 42859740

* - Judgment Item
- Labor Note Applies
C - Included in Clear Coat Calc
r - CEG R&R Time Used For This Labor Operation

Date: 2/ 6/19 03:55 PM
 Estimate ID: 3269010056
 Estimate Version: 0
 Committed
 Profile ID: PDA CA
 Quote ID: 42859740

Recycler Information Section:

All Car and Truck Recycling - SCADA
 19555 Olinnda Rd.
 Anderson CA 96007
 800-959-2552;530-365-4436

7 2007 Ford FORD F150 PICKUP W/O KEYLESS ENTRY PAD VA 350.00
 Part Number: 181106
 Description: IQ,LH,SLV,PU,MW,MM,7/07, LEFT FRONT DOOR

Disclaimer: Recycled part pricing may represent either actual pricing
 (the price at which the recycler is willing to sell the part for in its
 existing condition) or undamaged pricing (the price at which the recycler
 would sell the part if it was in undamaged condition).
 If you are unsure, please contact the automotive recycler.

Estimate Totals

		Units	Rate	Add'l Labor Amount	Sublet Amount	Totals			Amount
I. Labor Subtotals							II. Part Replacement Summary		
Body		11.8	75.00	5.00	0.00	890.00	Taxable Parts		384.78
Refinish		9.2	75.00	0.00	0.00	690.00	Parts Adjustments		87.50
							Sales Tax @ 7.250%		34.24
	Non-Taxable Labor					1,580.00	Total Replacement Parts Amount		506.52
Labor Summary	21.0					1,580.00			
III. Additional Costs						Amount	IV. Adjustments		Amount
Taxable Costs						371.00	Insurance Deductible		0.00
Sales Tax	@ 7.250%					26.90	Customer Responsibility		0.00
Total Additional Costs						397.90			
Paint Material Method: Rates Init Rate = 40.00 , Init Max Hours = 99.9, Addl Rate = 0.00							I. Total Labor:		1,580.00
							II. Total Replacement Parts:		506.52
							III. Total Additional Costs:		397.90
							Gross Total:		2,484.42
							IV. Total Adjustments:		0.00
							Net Total:		2,484.42

Point(s) of Impact

9 Left Side (P)

Insurance Co: ACWA/JPIA
 Address: 2100 PROFESSIONAL DR
 ROSEVILLE, CA 95661
 Work Phone: (916) 786-5742

Inspection Site: PID
 Address: 6332 CLARK RD
 PARADISE, CA 95969
 Inspection Date: 2/ 6/19

ESTIMATE RECALL NUMBER: 02/06/2019 15:55:16 3269010056
 Mitchell Data Version: OEM: JAN_19_V Alternate Parts: 02/06/2019 15:50:13
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Page 3 of 4

Date: 2/ 6/19 03:55 PM
Estimate ID: 3269010056
Estimate Version: 0
Committed
Profile ID: PDA CA
Quote ID: 42859740

*****Notice*****

This is not an authorization for repair. All costs of repairs are the sole responsibility of the vehicle owner, who must authorize all repairs. Failure to deliver a copy of this appraisal to the repair shop by the vehicle owner may result in out of pocket expense to the vehicle owner. Providing a copy of this appraisal is not an acceptance of coverage or liability and all issues of coverage or liability are to be determined by the insurance carrier.

*****Notice*****

Deductibles may or may not be addressed or included in this appraisal.

If applicable, the repairer should collect the deductible from the vehicle owner prior to the release of the repaired vehicle.

*****Supplement Procedure Notice*****

It is the repairer's responsibility to send notification of the supplement via fax or email to PDA, including a statement whether the repairs have been halted on the vehicle. PDA will respond to your request within 24 hours. Please allow 48 hours to complete supplement processing from the date of request to ensure timely release of the vehicle.

*****Notice*****

This appraisal is subject to the complete review and approval by the assigning insurance company to assure accuracy, cost effectiveness, and that accepted industry repair standards are met. The insurance company listed has the right to accept or reject any part or all of this appraisal or make any changes they feel necessary.

Pursuant to California Code of Regulations, Title 10, Chapter 5, Subchapter 7.5, Section 2695.8 the insurer warrants that any Non-original Equipment Manufacturer parts specified in this estimate are at least equal to the Original Equipment Manufacturer parts in terms of kind, quality, safety, fit and performance.

If you believe that all or part of your claim was wrongfully denied, you may have your claim reviewed by the California Department of Insurance. This department can be reached at California Department of Insurance, Customer Services Division, 300 South Spring Street, Los Angeles, CA 90013, by phone at (800) 927-HELP or (213) 897-8921 or over the internet at www.insurance.ca.gov.

For your protection California law requires the following statement to appear on this form. Any person who knowingly presents false or fraudulent claim for the payment of a loss is guilty of a crime and may be subject to fines and confinement in state prison.

ESTIMATE RECALL NUMBER: 02/06/2019 15:55:16 3269010056

Mitchell Data Version: OEM: JAN_19_V

Alternate Parts: 02/06/2019 15:50:13

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Review Results: Passed

Owner: PARADISE IRRIGATION DISTRICT, Claim #19-0446

Page 1 of 1

Vehicle: 2007 Ford, Pickup F150

Profile: 1 PDA Standard Profile NT Version: 33

Estimate lines

Line	Severity	Description	Actual	Guideline	Override	Notes
Estimate lines Passed						

Profile (rates, taxes, amounts)

Line	Severity	Description	Actual	Guideline	Override	Notes
Profile items Passed						

Administrative Information

Line	Severity	Description	Actual	Guideline	Override	Notes
Admin items Passed						

Compliance Utility Version 4.7.0.0



PARADISE IRRIGATION DISTRICT

TO: Board of Directors
FROM: Georgeanna Borrayo, District Secretary
DATE: April 11, 2019
RE: Letter of "Merit Rejection"
4/17/19 Board of Directors Meeting

On January 27, 2019, the District received a claim for water damages from a customer whose Marlee Lane home is standing following the November 8, 2019 Camp Fire. Notification about a water leak was taken by the District's answering service on January 28, 2019 and responded to by PID standby on that day.

The District, as a public entity, is bound by certain Government Code regulations relating to claims. This claim will be forwarded to ACWA Joint Powers Insurance Authority for processing; however, the JPIA cannot process the claim unless the District has formally "rejected" the claim at its level. Following is a rejection letter that will be sent to the claimant upon Board authorization as a formality to meet the legal requirement.

The recommended form of motion is:

"I move to reject the claim for water damages recorded as ACWA-JPIA Claim Number 19-0514 and approve the letter of merit rejection for submittal to ACWA Joint Powers Insurance Authority to process and respond to the Claim."



PARADISE IRRIGATION DISTRICT

6332 Clark Road, Paradise CA 95969 | Phone (530)877-4971 | Fax (530)876-0483

April 18, 2019

{Claimant's Name}

{Address}

{City,} {State} {Zip}

RE: ACWA-JPIA Claim Number: 19-0514

Dear {Claimant's Name}:

Notice is hereby given that the claim which you presented to the Board of Directors of the Paradise Irrigation District on January 27, 2019 was rejected on April 17, 2019.

WARNING

Subject to certain exceptions, you have only six (6) months from the date this notice was personally delivered or deposited in the mail to file a State Court Action on this claim. See California Government Code §945.6. Your time for filing an action in federal court may be less than this six months.

You may seek the advice of an attorney of your choice in connection with this matter. If you desire to consult an attorney, you should do so immediately.

In providing this notice, or by any other action it has taken on this claim, Paradise Irrigation District does not intend to relinquish or waive any of its legal claims requirements or any rights or defenses potentially available to Paradise Irrigation District or its officers, directors, employees or agents.

Should you file a lawsuit in this matter which is determined to be in bad faith and without reasonable cause, please be advised that Paradise Irrigation District will attempt to recover all of its defense costs from you as allowed by California Code of Civil Procedure § 128.5, § 128.7 and §1038.

If you have any questions about your claim, or this letter, please contact our claims administrator, Jennifer Nogosek, Association of California Water Agencies (ACWA/JPIA) at 1-800-535-7899, extension 3149.

Sincerely,

Kevin M. Phillips
District Manager

cc: Jennifer Nogosek, ACWA-JPIA

Claim Form

(A claim shall be presented by the claimant or by a person acting on his behalf.)

NAME OF DISTRICT: <u>PARADISE IRRIGATION DISTRICT</u>	
1	<p>Claimant name, address (mailing address if different), phone number, social security number, e-mail address, and date of birth. Effective January 1, 2010, the Medicare Secondary Payer Act (Federal Law) requires the District/Agency to report all claims involving payments for bodily injury and/or medical treatments to Medicare. As such, if you are seeking medical damages, we <u>MUST</u> have both your Social Security Number and your date of birth.</p> <p>Name: [REDACTED] Phone Number: [REDACTED] Address(es): [REDACTED] Social Security No.: <u>NON-MEDICAL</u> Date of Birth: [REDACTED] E-mail: [REDACTED]</p>
2	<p>List name, address, and phone number of any witnesses.</p> <p>Name: [REDACTED] Address: [REDACTED] Phone Number: [REDACTED]</p>
3	<p>List the date, time, place, and other circumstances of the occurrence or transaction, which gave rise to the claim asserted.</p> <p>Date <u>12/25/13</u> Time <u>4:11 PM</u> Place <u>PARADISE LANE, PARADISE CA, 95969</u> Tell What Happened (give complete information): <u>HE I WAS CONTACTED BY [REDACTED] NOTIFYING ME THAT WATER WAS SPRAYING OUT FROM DAMAGED WATER LINE FROM THE CAMP FIRE. HE STATED WATER WAS FLOODING MY PROPERTY. WE DO NOT CURRENTLY RESIDE AT [REDACTED] PARADISE LANE AS WE WAIT FOR OUR HOME TO BE REHABILITATED. P.D. HAD MADE A PUBLIC STATEMENT STATING IN ORDER TO HAVE WATER TURNED ON THE HOMEOWNER WOULD NEED</u> → NOTE: Attach any photographs you may have regarding this claim. </p>
4	<p>Give a general description of the indebtedness, obligation, injury, damage, or loss incurred so far as it may be known at the time of presentation of the claim.</p> <p><u>FLOODING OF PROPERTY WITH POTENTIAL CONTAMINATED WATER. WATER ENTERED THE GARAGE AREA.</u></p>
5	<p>Give the name or names of the public employee or employees causing the injury, damage, or loss, if known.</p> <p><u>PARADISE IRRIGATION DISTRICT</u></p>
6	<p>The amount claimed if it totals less than ten thousand dollars (\$10,000) as of the date of presentation of the claim, including the estimated amount of any prospective injury, damage or loss, insofar as it may be known at the time of the presentation of the claim, together with the basis of computation of the amount claimed. If the amount claimed exceeds ten thousand dollars (\$10,000), no dollar amount shall be included in the claim. However, it shall indicate whether the claim would be a limited civil case.</p> <p><u>DAMAGES ARE UNKNOWN AT THIS TIME ESTIMATES NO MORE THAN \$1,000 TO \$2,000</u> <u>9:12 AM</u></p>
<p>Date <u>1/27/14</u> Time <u>4:11 PM</u> Signature: [REDACTED]</p>	
ANSWER ALL QUESTIONS. OMITTING INFORMATION COULD MAKE YOUR CLAIM LEGALLY INSUFFICIENT!	

White - JPIA Office Copy / Yellow - District Office Copy / Pink - Claimant Copy

Revised - October 2013

TO CONTACT PIO FIRST AND A PIO REPRESENTATIVE WOULD COME
TO THE HOME TO TURN THE MAIN WATER LINE ON AND INSPECT
ANY DAMAGES AND MAKE NECESSARY REPAIRS IF NEEDED.







