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, FEBRUARY 20, 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. **APPROVAL OF CONSENT CALENDAR**: *Action may be taken.*
   a. Approval of Meeting Agenda Order
   b. Approval of Minutes: Regular Meeting of January 16, 2019
   c. Approval of ACWA Invoice: 2019 Annual Agency Dues
   d. Acceptance of Invoice for Election Services: November 6, 2018 General Election

3. **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.

4. **FACILITIES STATUS REPORT UPDATE**: A verbal report regarding the status of PID facilities. *Information item only*.

5. **STAFF REPORTS**: Verbal Staff Reports for January, 2019. *Information items only*.
   a. Staff Report Updates
   b. Community Relations Update (Mickey Rich)

6. **TREASURER'S REPORT:** A verbal Treasurer's Report for the period ending January 31, 2019. *Information item only*.

7. **APPROVAL OF CHECKS**: Approval of General Fund Check Numbers 52697 through 52784 for the month of January, 2019 totaling $535,426.05, exclusive of voided check numbers 52700, 52746, 52754, 52765, and 52766, and authorization of a similar amount allowing or adjusting for extraordinary budget or Board approved items during the month of February. Action may be taken.

8. **LEGAL REPORT**: A verbal update from Legal Counsel. *Information item only*.

9. **NEW BUSINESS**:
   a. Butte County Fire Safe Council – Camp Fire Timber & Biomass Removal Project for Hazardous Fuels Reduction (Kevin Phillips): Authorize approval to enter into a Memorandum of Understanding with the Butte County Fire Safe Council as outlined in the project proposal subject to PID legal review . *Action may be taken.*

   b. Professional Arborist Services for Camp Fire Hazardous Tree Evaluation (Kevin Phillips): Authorize the District Manager to execute a professional services agreement with Firestorm Wildland Fire Suppression, Inc. for arborist services for a not to exceed amount of $26,880.00. *Action may be taken*.

   c. Director Vacancy, Division 3 – Letter of Resignation from Anne Rice effective February 20, 2019. Review options and provide Board direction with regard to filling the Division 3 Director vacancy. *(Action may be taken).*

   d. Election of Vice President: Consider nominations from the Board members for the office of Vice-President succeeding Director Anne Rice. *Action may be taken*.

   e. Discussion regarding internet and phone service provider options for Paradise Irrigation District facilities – Requested by Director Kellogg (Update provided by Mickey Rich). *Action may be taken to provide direction to staff.*

   f. Mobile Telephone Use (Director Kellogg): Consider assigning District owned cell phones to all PID employees for District business. *Action may be taken to provide direction to staff*.

   g. Discussion regarding water service for homeowners with travel trailers on their property (Director Kellogg). *Action may be taken to provide direction.*

10. **DIRECTORS' COMMENTS**: *Information Item Only.*

11. **RECESS as the Paradise Irrigation Board of Directors and convene as the Paradise Irrigation Public Facilities Financing Corporation (PFFC) Board. <u>PFFC Agenda included (see page after Consent Calendar).</u>**

**CONTINUED – PARADISE IRRIGATION DISTRICT BOARD OF DIRECTORS REGULAR MEETING FEBRUARY 20, 2019**

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

   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.

   c. PUBLIC EMPLOYMENT: Finance & Accounting Manager Pursuant to Government Code section 54957.

**13. ANNOUNCEMENT FROM CLOSED SESSION**

14. **OPEN SESSION**:
   a. Finance & Accounting Manager Position: Consider compensation adjustments and Employment Agreement with Ross Gilb for Finance & Accounting Manager Position. *Action may be taken*.

15. **ADJOURNMENT**

**DRAFT**

# Onsite Visit Response and Recovery Observations Presented to PID February 13, 2019

Purdue University & Manhattan College
Andrew J. Whelton, Ph.D., Amisha Shah, Ph.D.,
Juneseok Lee, Ph.D., P.E., Caitlin Proctor, Ph.D., David Yu, Ph.D.
Questions: awhelton@purdue.edu

## A. Overall

- PID has done a good job in moving towards stabilizing their infrastructure. This includes repressurizing distribution systems, identifying damaged assets, fixing breaks/leaks, flushing out contaminated water, issuing appropriate water advisories, and other activities.
- The water system is still in the response phase because the system is not yet stabilized and there are many challenges to resolve: for example, how to test for contamination.
- Persons living in the disaster area have complicated the response because PID has had to take action to both respond to their system damage but also to requests of customers.
- A recommendation is that PID focus on completing the response and moving into recovery, but this is and will continue to be slowed by multiple demands on limited resources. For example, PID staffing has been reduced since the disaster took place and the disaster has created an enormous need for additional staffing for response and recovery.
- A critical element to moving forward in a timely manner will be clear and straight-forward recommendations from CalOES and FEMA regarding funding of response efforts.

## B. Recommended Actions

1. Isolate mains by shutting-off corp stops. Corp stops, or corporation stops, can stop the water directly at the water main, cutting off all portions of the service line from the distribution network. The justification for this is to protect health and safety by eliminating the spread chemically contaminated water from the service lines and preventing further damage to service lines and water mains.
    a. Possible Exception: By not acting rapidly enough, some homeowners are now installing water treatment systems in their home (~$3500/home). Regardless of whether these systems adequately protect consumers against contamination, shutting off corp stops in these locations will likely precipitate a severe public response (lost investment, lack of water again, unclear for how long). For persons living in standing homes, PID may consider requiring these individuals to immediately install back-flow prevention devices (BFPDs) within certain time period to avoid corp stop shutoff. While it cannot be ruled out completely, standing structures are less likely to have damaged pipes that would introduce further contamination into the mains. These standing structures may still have contamination in the home (i.e., from pumping in contaminated water, or from damage), and these homeowners will also need further advice to protect them from dangerous exposures.
    b. Rapid service line replacement needs to be conducted in parallel with corp stops. Stringent construction oversight is needed for contractors to confirm expected quality and respond to unexpected problems.

2. Conduct leak detection for water mains after service lines are corp stops are shut. The justification for this is to protect health and safety from negative pressure and contaminant intrusion into the water mains (i.e., bacteria, chemicals, contamination from failed septic systems).
3. Conduct water main sampling. The justification for this is to determine the integrity and level of contamination of the main system. Until this is determined, it is unclear if and what decontamination and removal/replacement actions are needed for the mains. These actions need to be evidence based.
    - What to test for?
        - PID does not have sufficient evidence to declare that benzene is the leading contaminant of concern for its water distribution system or that it can be used as a surrogate indicator (i.e., that other contaminants present do not pose a health risk at an equal or greater level). Additional wide scan volatile organic compounds (VOC) testing is recommended until sufficient evidence is available to justify ruling out other contaminants. At this stage in the response, enough evidence does not yet exist to demonstrate that the benzene only approach is health protective enough.
            - As of Feb 12, PID has only collected 34 water samples for a 173 mile system where wide VOC scans were applied. Of these samples with a more complete analysis, many had more than just benzene.
            - The state waterboard has only collected a few samples, and also found more than just benzene was present above health-based drinking water limits.
            - Santa Rosa did wide scan VOCs because their chemist was uncomfortable agreeing that 'benzene only tests' would be health protective enough based on the data he was reviewing. They also found more than benzene was in their system.
        - Santa Rosa conducted semi-volatile organic compounds (SVOC) sampling. PID has not done this, nor has State waterboard for drinking water. SVOC sampling is recommended to rule out the potential contamination in the water mains by these other compounds. SVOCs, including various polycyclic aromatic hydrocarbons (PAHs), were found in contaminated source waters near campfire and have been associated with fire damage. While some of these compounds are also detected with VOC methods, they have a different structure, and could be from a different source of contamination (i.e., infiltration into pipes from source waters). It is unknown if SVOC sampling will indicate the presence of more regulated contaminants.
        - PID should make sure that the state waterboard or EPA looks at compounds in combination for health effect exposures (i.e., synergistic affects). PID should rely on the state waterboard or EPA for acceptable/unacceptable health exposure guidance. PID should cast a wide net to rule out possible compounds and rule compounds out using substantial evidence.
    - Where to test for water mains?
        - 1x/week, 22 sampling stations and tanks. Using these controllable drinking water quality testing sites repeatedly can give an indication of system-level contamination over time. Continuing to test in 'cleared' areas

can give an indication of progress and insure that contamination does not continue to spread after clearing a section.
    - To clear the water mains, progress from A-Zone to G-Zone at hydrants and water main sampling locations
- How to test?
    - Santa Rosa collected a first draw on a hydrant, ran the hydrant, and conducted second draw on hydrant, then compared the two numbers
    - It is important for PID to know where their collected water sample is coming from (location in the water main). Using volume and flowrate, they roughly can calculate where each sample is coming from.
    - Need a standard operating procedure (SOP): They should apply consistent sampling practices (how hydrant is opened/shut, types of bottles, headspace free, volume, preservatives)
    - Train and standardize teams that collect samples and draw hydrants (more personnel needed)
- How long do they test the mains? This is based on Santa Rosa experience, but should be modified for PID based on optimization of resources and system.
    - For every hydrant where < 0.5 ppb benzene found, test 1x/week for 4 weeks before calling it 'clear'.
    - After they replace a service line, retest that service line to understand water main water quality
    - Then test 1x/2 weeks
    - Then test 1x/month
    - Then test 1x/2 months
    - Then test 1x/6 months
    - Then test 1x/4 months
    - Then only go to water sample stations for the pressure zones 1x/4months

4. Need calibrated hydraulic model with field data including flow rates and pressure. The justification for this is to protect health and safety from further spreading chemically contaminated water and identifying the origination of contaminants in the water mains. This information will inform a faster recovery.
5. Hydraulic investigation of A-Zone East side. The justification for this is that the structural system may be compromised, and water quality may be negatively affected based on the number of leaks present. Contaminant infiltration may be more likely in this area.
6. Replace or test PID service lines. The justification for this is to protect health and safety from spreading chemically contaminated water.
7. Replace meters and associated components. The justification for this is that there is both a structural and contamination issue.
8. Backflow prevention device installation on PID side to prevent customer contamination from building plumbing/irrigation system into utility property. The justification for this is to protect health and safety from spreading chemically contaminated water into the PID service line and water mains.
9. Add automatic flushing systems at strategic locations. The justification for this is to protect public health and safety by better maintaining chlorine residual which can limit biological growth (e.g., bacteria, biofilms). The recovered system will have reduced use (95% of homes burned down) for an extended period. This will keep water moving to maintain chlorine residual in the interim. It's also possible that the system will always have lower water use.
    a. Messaging consideration needed. Why the public will see "wasted water"?
    b. Consider installing at cul-de-sacs, don't permanently shutoff entire developments and leave stagnant indefinitely

c. Do this early on in the response

10. Develop, establish, and maintain a data management and quality assurance system to support multiple activities associated with PID system recovery.
    a. Data analysis SOPs (thresholds for action and what actions will look like)
    b. Some examples of information needed for sample records: Pressure zone, address / Street, Date sampled, Who sampled, laboratory used, field SOP applied, visual notes from field team
    c. Mapping capability needed to heat map results (red, orange, yellow, green, etc.)

**C. Additional Critical Needs**

**1. Target Groups for Communication Interactions**

- Customers
  - PID needs to develop a newsletter ASAP that will be released at a routine frequency about the recovery.
  - Should go to elected local officials and state officials
  - Newsletter can be posted at Starbucks, other local businesses, given to field teams, posted on website, public meetings
  - Newsletter can describe why public hasn't heard much from PID yet and answered their FAQs
    - What is PID finding in the water?
    - Should I install a home filter? What kind?
    - When will the water be safe to drink?
    - What are some examples of safe uses of the water?
    - When will my water be on?
  - Newsletter can get out information PID wants customers to know:
    - What is PID doing to make the water safe to drink?
    - What do the test results mean on the map?
    - Any alternatives to PID drinking water?
    - Requirements for burned parcels hooking back up to drinking water.
  - Newsletter can raise the question of in-home treatment devices, water testing
  - This communication should happen very soon for reasons described below.
- Construction meter users
  - Contractors should be encouraged to draw water and report any unusual observations (leaks, etc.) to specific telephone #
- People in inhabited homes
  - Persons need to understand what water they are receiving, what's known, what PID and others are doing
  - Persons need to understand that testing results they may have from one home likely not representative of another, their neighbor
  - Persons need to understand how a water sample is collected will significantly impact the results (flush vs. first draw, plastic container vs. glass container, overnight stagnation vs. middle of day sampling, spigot vs. kitchen faucet, cold vs. hot water, etc.)
  - Guidance about how to collect a water sample to determine if and the degree a building has contaminated water is lacking. People have been left on their own. Private sector seems to be trying to help but applying widely

variable unrepresentative approaches. This may add to confusion when interacting with PID.
    - Provide opportunity for input to recovery, their concerns are being integrated.
- Displaced persons
    - Persons need to update their addresses so PID can communicate with them (90% of persons in Santa Rosa didn't update their addresses months after their incident.)
    - Some of the same information above needs to be conveyed. Invest these people in positivity and that PID and the community is moving forward. You want them to return.
    - Provide opportunity for input to recovery, their concerns are being integrated.
- Enlist create community ambassadors into being updated about PID progress: Civic leaders, religious community leaders, Rotary and other clubs. Communicate on a routine basis and let them know when you will next communicate with them.
- Business/restaurants
    - Unclear how restaurants decontaminated their plumbing and confirmed their plumbing is not contaminating the clean trucked in water they are pumping through their plumbing.
    - Have businesses been left on their own too like homeowners? Who is providing oversight there to make certain no public health threats are permitted related to plumbing contamination?

**2. Human health concerns for persons inside standing homes**

- Plumbing has likely been contaminated and is likely continuing to be contaminated.
- Buildings have been receiving contaminated water. Nearby fire may or may not have caused thermal damage to plumbing similar to buried service lines and water mains.
- Unclear the degree persons are following do not drink procedures to protect safety.
- Evidence suggests no credible authority is helping people with drinking water safety in homes.
- Water testing companies providing homeowners benzene only water testing results.
- POE device salesmen approaching homeowners.
- Homeowners have been and continue to be on their own.
- If house damaged in any way, water testing should be required in home plumbing by potentially some public health authority
- A nondetect at a single tap or single water sample does not mean plumbing is safe.
- Installation of point-of-entry (POE) device on home does not mean the plumbing is safe.
- POE devices are tested for treating certain water quality, NOT all water quality
- Plumbing is a mini-water distribution network, highly complicated. Extreme care must be taken in selecting when to test, where to test, what to test for and how frequently.
- The compounds to test for in homes are not necessarily the same as water mains. If plumbing is damaged different chemicals may be present. The magnitude of chemical contamination in plumbing could differ from water mains because of smaller diameter pipes (greater chance of affecting chemical levels, less dilution).
- Input on how to test buildings requires some additional initial investigation, not trivial

- Someone needs to help homeowners