



Division of Drinking Water Response to October 2017 Wildfires

North Coast RWQCB Meeting Post Fire Response and Recovery Actions

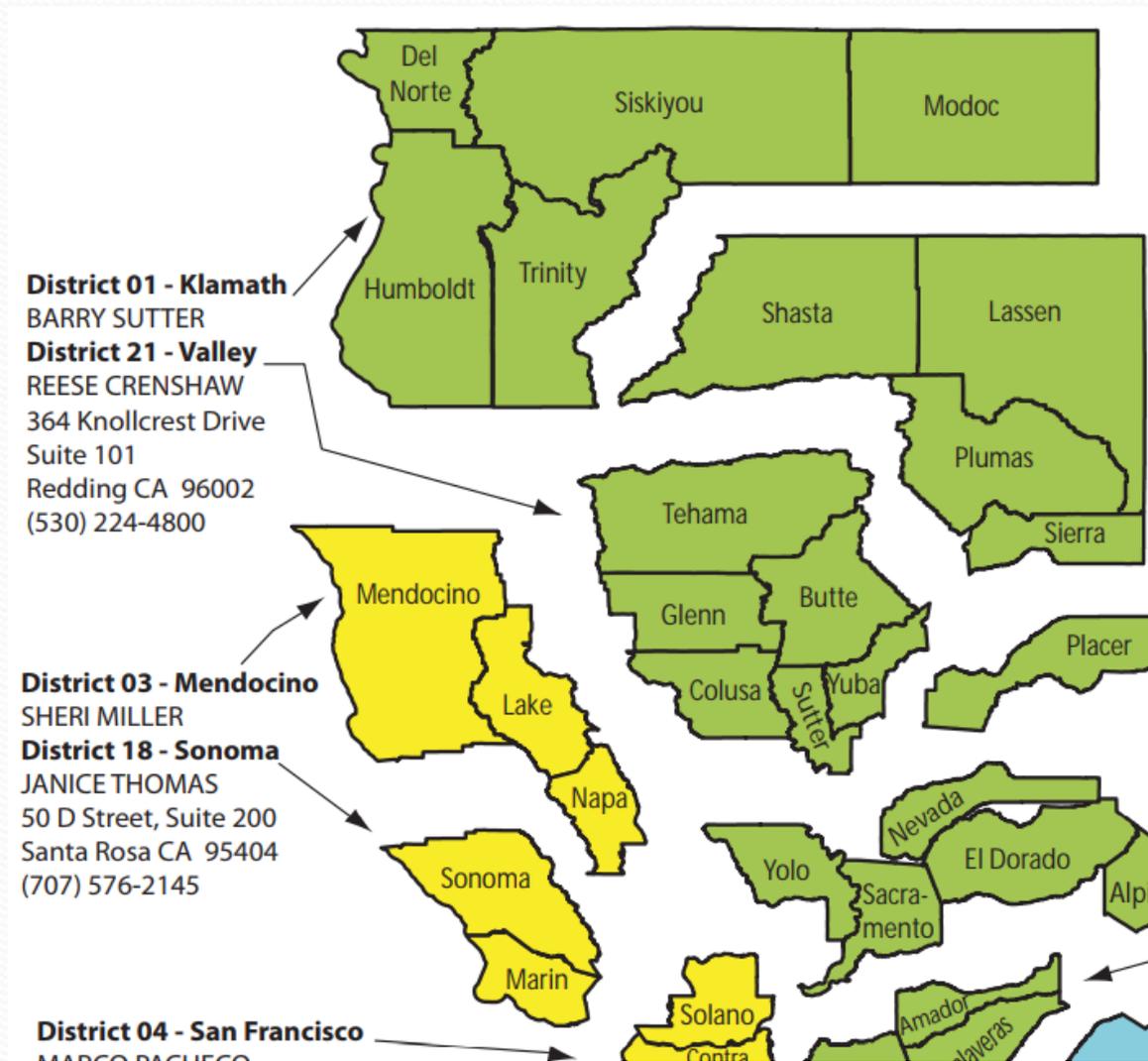
December 13, 2017

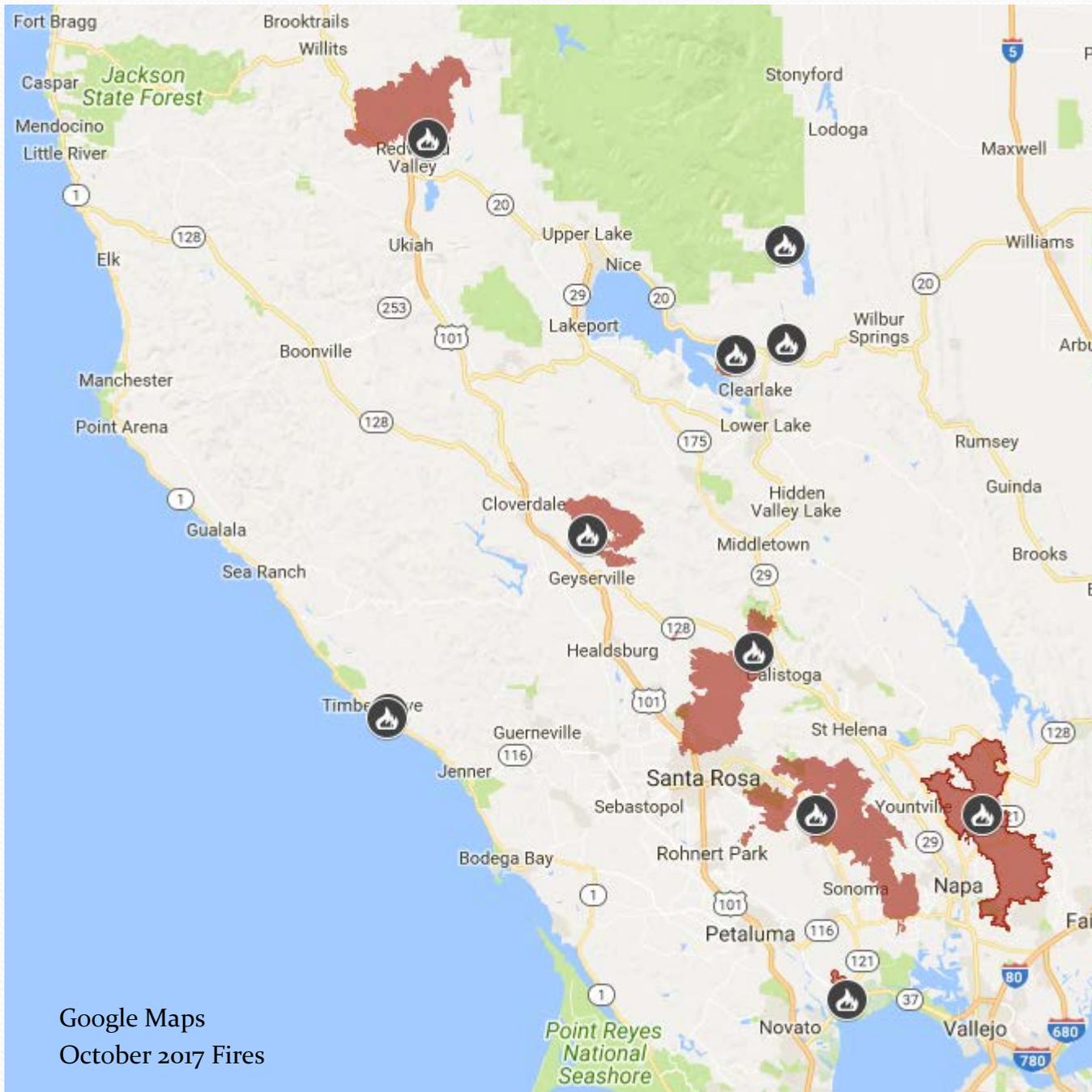
Janice Thomas, Sonoma District Engineer
Sheri Miller, Mendocino District Engineer
North Coastal Section, Division of Drinking Water
State Water Resources Control Board

Division of Drinking Water's Role

- Responsible for the enforcement of the federal and California Safe Drinking Water Acts and the regulatory oversight of **public water systems** to assure the delivery of safe drinking water to all Californians.
- California Health and Safety Code Section 116275: “Public Water System” means a system for the provision of water for human consumption ... that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.

DDW Field Offices





Google Maps
October 2017 Fires

Role of DDW In Fire Response

- Like Regional Boards, Division of Drinking Water (DDW) engages in direct, field-level implementation and oversight:
 - Assess fire impact on drinking water supplies and water system infrastructure
 - Assist in identifying needs and informing appropriate responders
 - Assist in bringing water systems back to normal as quickly as possible
 - Participate in SEMS as appropriate, via SOC, local Operational Areas, and Division Response Center
 - Protect public health by ensuring that drinking water is safe, or that consumers are notified



Redwood Tanks
Mark West Acres MWC

Immediate Impacts on DDW

- October 9, 2017: multiple fires start overnight in North Bay counties (and elsewhere). Hundreds of structures and many thousands of acres consumed by morning, thousands evacuated.
- DDW Santa Rosa staff responsible for all affected water systems, but many are evacuated and all are affected by fire conditions.
- DDW Santa Rosa office stays open with skeleton crew for initial response; others work from wherever they can.
- DDW mobilizes statewide to support response effort.



Pump Station
Redwood Valley
County Water District

DDW Response

- Day 1: Tasked GIS-savvy staff with generating list of possibly impacted systems (initial list contained about 130)
- Immediately began contacting water systems
- Created tracking spreadsheet for internal use and external stakeholders (SOC, local EOCs, CalWARN) – in use by Day 2

Priority Flag	County	District #	System #	System Name	Service Connections	Population Served	Status Code	Public Notice	Comments
CLEAR	SONOMA	18	4900580	SONOMA MOUNTAIN COUNTY WATER	55	130	E		10/17 Sonoma Mountain County Water without any damage. Our hydrants were and the firefighters were able to keep the Crane Canyon Road. EARLIER UPDATE W being used to fight fire.
URGENT	SONOMA	18	4900585	BENNETT RIDGE MUTUAL WATER COM	128	200	D	DND	10/24: Staff conducted damage assessm may have contaminated the water. Syst monitoring to lift DND. 10/21: Placed sys reentry. 10/20: Spoke to Michael Wright there are any water system needs. 10/19 and he said that there are about 35 home repopulated once the evacuation order is have special access to all parts of the wat has some fire damage to the control syst superficial damage to the rooftop. There tanks for PG&E/operator crew to use. Th placed on a BWN once residents move bi water. Rick Rogers - 10/9 2:25 pm - ~90% water system likely gone T. Judson - no w underground so may be ok. Only about 3
CLEAR	SONOMA	18	4900587	BRAND WATER COMPANY	34	95	N	Lifted	10/23 - received voicemail from Gary Mic did lose power. Took 2 samples on 2 cons: Lifted BWN. 10/19 11:07: Spoke to Shari water system does not have damage to it

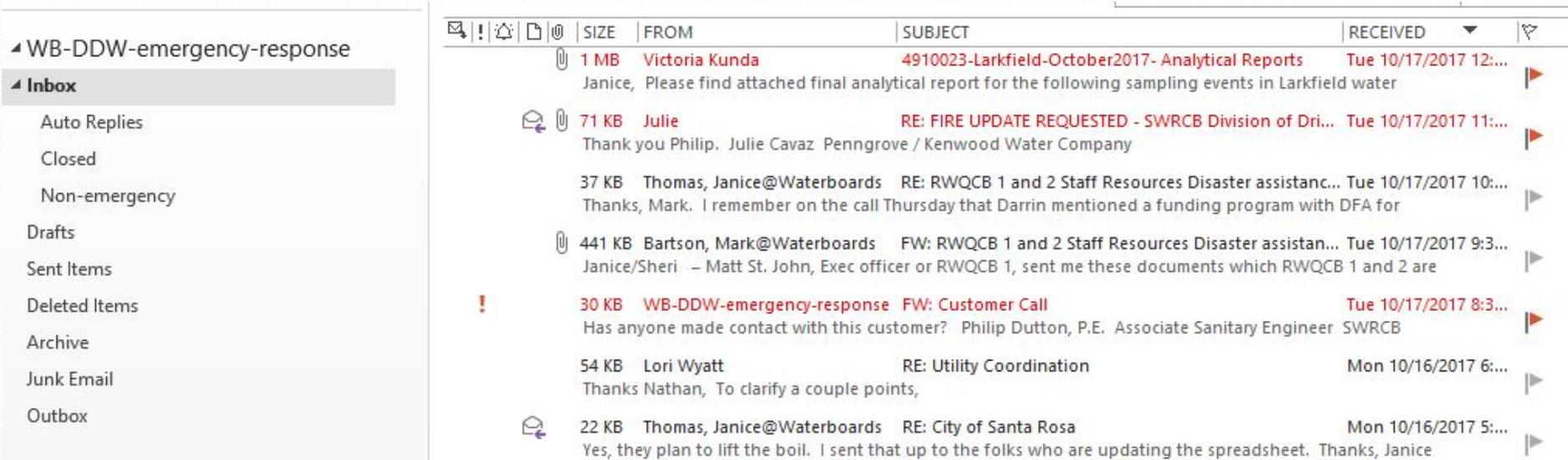
* CalWARN = California Water/Wastewater Agency Response Network

DDW Response

- Began feeding updates to SOC, participating in CalWARN daily phone meetings
- Day 4: Activated Division Response Center to organize and distribute response effort, relieve Santa Rosa staff
- Following drought response experience, used “virtual” DRC to allow for division-wide support
- Day 8: began attending Utilities Meetings at local ICC, to help coordinate repopulation (Before this, local response was focused primarily on the fire threat)
- Day 15: Santa Rosa office ready to resume normal operations, DRC deactivated

Response Tools

- Asked DIT to create new platforms to support response: generic Emergency Response email and phone hotline, cloud-based SharePoint and OneNote.



WB-DDW-emergency-response

Inbox

- Auto Replies
- Closed
- Non-emergency
- Drafts
- Sent Items
- Deleted Items
- Archive
- Junk Email
- Outbox

SIZE	FROM	SUBJECT	RECEIVED
1 MB	Victoria Kunda	4910023-Larkfield-October2017- Analytical Reports	Tue 10/17/2017 12:...
Janice, Please find attached final analytical report for the following sampling events in Larkfield water			
71 KB	Julie	RE: FIRE UPDATE REQUESTED - SWRCB Division of Dri...	Tue 10/17/2017 11:...
Thank you Philip. Julie Cavaz Penngrove / Kenwood Water Company			
37 KB	Thomas, Janice@Waterboards	RE: RWQCB 1 and 2 Staff Resources Disaster assistanc...	Tue 10/17/2017 10:...
Thanks, Mark. I remember on the call Thursday that Darrin mentioned a funding program with DFA for			
441 KB	Bartson, Mark@Waterboards	FW: RWQCB 1 and 2 Staff Resources Disaster assistanc...	Tue 10/17/2017 9:3...
Janice/Sheri - Matt St. John, Exec officer or RWQCB 1, sent me these documents which RWQCB 1 and 2 are			
30 KB	WB-DDW-emergency-response	FW: Customer Call	Tue 10/17/2017 8:3...
Has anyone made contact with this customer? Philip Dutton, P.E. Associate Sanitary Engineer SWRCB			
54 KB	Lori Wyatt	RE: Utility Coordination	Mon 10/16/2017 6:...
Thanks Nathan, To clarify a couple points,			
22 KB	Thomas, Janice@Waterboards	RE: City of Santa Rosa	Mon 10/16/2017 5:...
Yes, they plan to lift the boil. I sent that up to the folks who are updating the spreadsheet. Thanks, Janice			

Response Tools

- Documented “live” SOPs using OneNote on shared drive.

The screenshot shows a OneNote application window with a purple ribbon at the top. The document title is 'DDW Fire Response Operations Team'. The content area displays a 'ROTATION SCHEDULE' section with two tables. The first table lists the transition of the Operations Chief from Stefan Cajina to Betsy Lichti, and then to Sheri Miller. The second table lists the assignment of Op Staff members: Jonathan Weininger, Philip Dutton, and Alla Lilichenko.

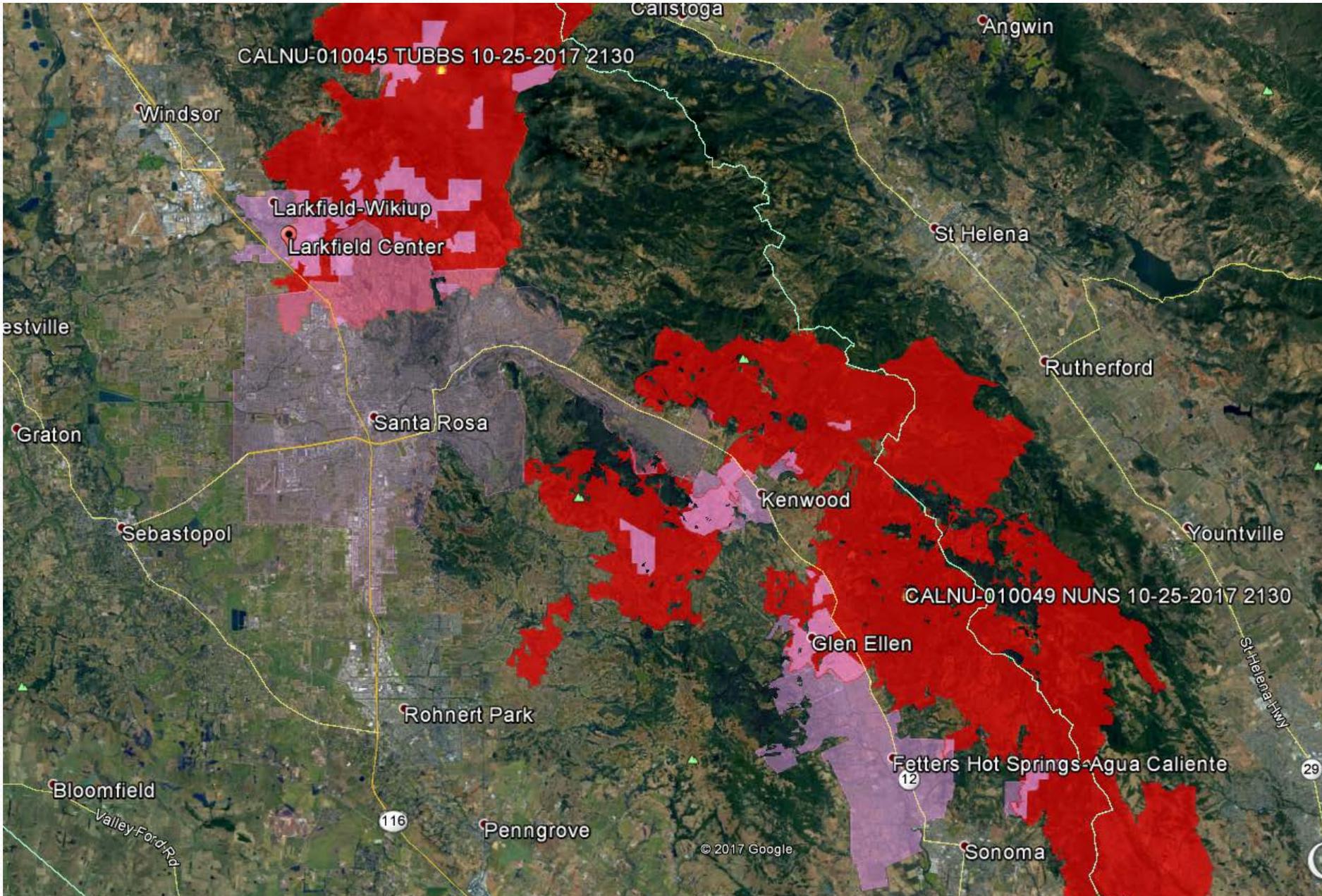
Operations Chief	Start Date	End Date	Transition to:
Stefan Cajina	10/9/17	10/16/17	Betsy Lichti
Betsy Lichti	10/17/17	10/24/17	Sheri Miller
Sheri Miller	10/24/17		

Op Staff	Start Date	End Date	Transition to:	Assignment
Jonathan Weininger	10/12/17	10/16/17	Shaminder Kler	Non-Sonoma Co WSSs
Philip Dutton	10/13/17	10/17/17	Samantha Mak	Sonoma Co. CWSS
Alla Lilichenko	10/16/17	10/18/17	Vlad Rakhimimov	Sonoma Co. NCWSS

Immediate Concerns

- Destruction of water system facilities
- Access to critical WS infrastructure during evacuations
- Haz-mat removal at WS facilities
- Compromised water quality – need for public notification as repopulation occurs
- “Clearing” water systems through inspection and sampling
- Staff safety in fire zone

CALNU-010045 TUBBS 10-25-2017 2130



CALNU-010049 NUNS 10-25-2017 2130

Mark West Meadows MWC



At a Glance

- **Over 30 public** water systems impacted by damage to facilities and/or loss of service connection revenues.
- The use of GIS expedited and narrowed down the communication to those impacted by the disaster.
- The recovery phase is not over!
- We made a lot of contacts trying to locate answers to questions.

Production Building Paradise Ridge Winery



Long-term Concerns

- Burned watershed and effects on water quality
 - Mitigate impacts to surface water treatment plant operations
- Financial recovery of water systems
 - Adequate records for FEMA claims
 - Need for additional treatment in near-mid term? (E.g., GAC contactors for TOC removal)
 - Availability and timeliness of financial assistance
 - Sustainability – opportunities for consolidation?

Paradise Ridge Winery



Lessons Learned –

What Worked Well

- Information Technology made a giant difference, allowing live collaboration and workload distribution across many offices
- Early – and continuous – establishment of SOPs allowed new staff to get quickly up to speed
- Daily 10am Calwarn calls
- Getting a representative tasked in the Sonoma EOC

Lessons Learned –

What Can Be Improved

- Ensure staff have basic training in ICS, SEMS, FEMA
- Live answer on phone line preferable to recorded message
- Better and more accurate mapping tools
- Specific water sector representative placed in the County's EOC immediately following the disaster
- Local area communication **before** the disaster to include CalOES regional staff, County OES and EH before the disaster, and other Water Board regional offices.

Contact Information

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