Sunnyslope County Water District

Earthquake Emergency Response Plan

2021

Purpose

The purpose of this Response Plan is to establish protocols and provide direction to all Sunnyslope staff in the event of a major earthquake. While it is understood that this plan cannot address every specific incident or scenario, it should be used as a framework and guide for Sunnyslope's response and actions immediately following the earthquake. It also outlines the long-term strategies for effective recovery. This plan should be reviewed by managers every year and by all staff at least every two years.

Background

Sunnyslope County Water District is located in a very seismically active region with the Calaveras Fault running through a portion of the District and the San Andreas Fault only a few miles to the west. Both of these faults have a high likelihood of experiencing a major earthquake of 7.0 or more on the Richter Scale in the next 50 years. It is thus vitally important that the District is prepared and trained for this likely emergency situation.

District Water and Sewer System Summary

Water System

Sunnyslope owns and operates the potable water distribution system for the eastern portion of Hollister and some surrounding developments in San Benito County. The system contains approximately 90 miles of buried water mains, of which about 38.5 miles are ACP pipes. This pipe material is very susceptible to damage due to earth movement as it tends to be brittle. Additionally, Sunnyslope provides fire protection water supply for buildings and residents within the District. This service could become vital during an earthquake as damaged gas and electrical facilities could create dangerous fires.

Water Supply

Sunnyslope supplies water to the system through five groundwater wells and two surface water treatment plants. The wells pump directly into the distribution system with wellhead chlorination. Each well has an emergency backup generator and are thus rather resilient to emergencies. Wells are anticipated to be the primary water source immediately after a major earthquake.

The surface water is piped to the Lessalt and West Hills Water Treatment Plants via the Hollister Conduit and San Benito County Water District's distribution system. Therefore, any major issues in SBCWD's system will have a significant impact on the water supply to the treatment plants. Additionally, the Lessalt WTP does not have a backup generator if grid power is lost. For these reasons, the water treatment plants are anticipated to be the secondary water source during the emergency.

Sewer System

Sunnyslope owns and operates the wastewater collection and treatment system for the Ridgemark, Oak Creek, and Quail Hollow areas. Within the collections system are four lift stations that pump wastewater toward the Ridgemark Wastewater Treatment Plant (WWTP). At the Ridgemark WWTP, sewage is treated through an SBR process and the effluent is disposed of in percolation ponds. All the sewer facilities MUST remain online and operational throughout the entire emergency.

Response Procedures

When Earthquake Hits

1. **STAY WHERE YOU ARE!!**
2. Sit down and try to remain calm. Do NOT attempt to leave a building during the earthquake.
3. Carefully move away from windows, bookcases, shelves, and cabinets.
4. Get under a desk or table if possible. Protect your head.
5. If in a vehicle, pull to the side of the road and park. Turn on the Emergency Flashers.

Immediately Following Earthquake

1. Assess your physical condition and check for injuries.
2. Check on anyone else around you to ensure they are not injured.
3. If you, a coworker, a family member, or other close relation are injured or in need of emergency assistance, respond to that emergency first.
4. Everyone must communicate their status to the District Office as soon as possible. Assume that cellular service will be overloaded, so use truck radios.
5. **ALL** staff must immediately assemble at the District Office to report their status and receive their assignments. *Exception – On Call operators for Lessalt & West Hills are to radio in their status and then go immediately to their treatment plant.
6. If any staff member fails to assemble at the Office or report their status, an investigation into that staff member's location and condition will be initiated.
7. **Expect to experience aftershocks of equal magnitude to initial earthquake at any time. Stay away from bookcases, shelves, cabinets or other potential dangers from aftershocks.**

Chain of Command and Emergency Operation Center

1. Drew Lander (General Manager) will serve as the Emergency Response Manager and administer task assignments.

If Drew is not immediately available, Jose Rodriguez (Superintendent) will serve in his place.

If neither Drew nor Jose are available, Rob Hillebrecht (Engineer) shall be Emergency Response Manager.

After Rob the chain of command shall go to Dee J. Burbank (Crew Chief) and then to Manny Chavez (Lead Treatment Operator).

2. The safety and structural integrity of the District Office must be evaluated. If deemed safe, the District Office will serve as the Emergency Operations Center (EOC) and the headquarters for all District emergency response action.
3. If the District Office is not safe, staff are to take each computer laptop and other vital equipment to West Hills WTP which would become the EOC.

Assignment of Duties

Account Technicians/Billing Clerk

1. Man the phones and radios at the EOC to serve as the first point of contact for Sunnyslope.
2. Fill out Emergency Phone Call Log to keep a record of all phone calls received.
3. Fill out Emergency Radio Log to record internal communication with field staff.
4. Pass key information (i.e. leak locations, damage, status reports, etc.) to Rob for data gathering, mapping, and planning.

Maintenance Crew Chief (Dee J.)

1. Determine whether the SCADA system is operating and communicating properly. Check key system parameters on SCADA such as:
    - Tank levels
    - System pressure at various sites
    - Lift station wet well levels
    - Well water production
2. Assign staff to each of the duties listed under the Maintenance section.
3. Update assignments as the status of the water and sewer systems is communicated to the EOC. Redirect
4. Communicate staff assignments with Drew, Jose, and other staff to maximize efficiency.
5. Create a list of equipment, material, labor, and contractor needs and the reasons for each.
6. Provide regular updates of this "Needs List" to Drew who can submit mutual aid requests.

7. After immediate emergency response, ensure that staff are assigned to important ongoing regular operation and maintenance duties rather than emergency response. Much of the repair work can be relegated to contractors or emergency assistance personnel.

Water/Wastewater Superintendent (Jose)

1. Determine the importance and priority level for each activity using the following criteria:
    - Is this a critical danger or threat to human health?
    - Are there regulations that need to be met or kept?
    - Does this require the plant/lift station to shut down?
    - What equipment, skills, or materials are required to repair the damage and how can we get whatever is needed?
    - How long will these repairs take?
    - How does this issue effect other aspects of the water/sewer system operation?
2. Track staff labor hours to minimize overtime and staff exhaustion. If necessary, establish a rotation schedule for staffing.
3. Communicate issues and potential solutions with Drew.
4. Oversee staffing assignments and ensure that they align with the priority levels of each activity.

Associate Engineer (Rob)

1. Assist in the determination of whether the District Office is safe to be the EOC.
2. Collect and display key information at the EOC and staff.
3. Evaluate the individual and cumulative effects of various issues on the overall water and wastewater system.
4. Assist in determining the priority level for each activity.
5. Create and communicate action plans and strategies in response issues.
6. Predict possible or probable cascading issues and their ramifications.
7. Prepare alternative strategies, trigger points, and plans for a variety of scenarios.
8. Organize, maintain, and assess all documentation relating to the emergency.
9. After the immediate response, begin to evaluate all aspects of the response and revise emergency plans.

Water/Wastewater Maintenance

Jose or Dee J. assign Maintenance staff to the following job duties.

One *person assigned to* ***Zone 1*** *(everything north of Sunnyslope Rd.)*

A. First drive up Memorial Dr. to check the Sunnyslope Rd. intertie, City Booster station and intertie at Hillcrest & Memorial, and Santa Ana Rd. intertie.

B. Report the status of each intertie to the EOC.

C. Drive down roads with ACP mains (shown in red on the system map below) followed by roads with PVC mains (shown in blue) to check for leaks. High priority roads are:

- **Santa Ana Rd.**
- **Fairview Rd.**

D. Report the status of each road to the EOC. Take pictures of any issues.

Zone 1 Map

Red lines are ACP pipes. Check these streets first.

One *person assigned to* ***Zone 2*** *(everything between Union Rd. and Sunnyslope Rd.)*

A. Go immediately to the Fairview Tank to evaluate it and the 12" Ductile Iron main in the dirt road behind the houses along Sage Dr. shown in **GREEN** on the map below.

B. Report the status of the Tank and pipeline to the EOC.

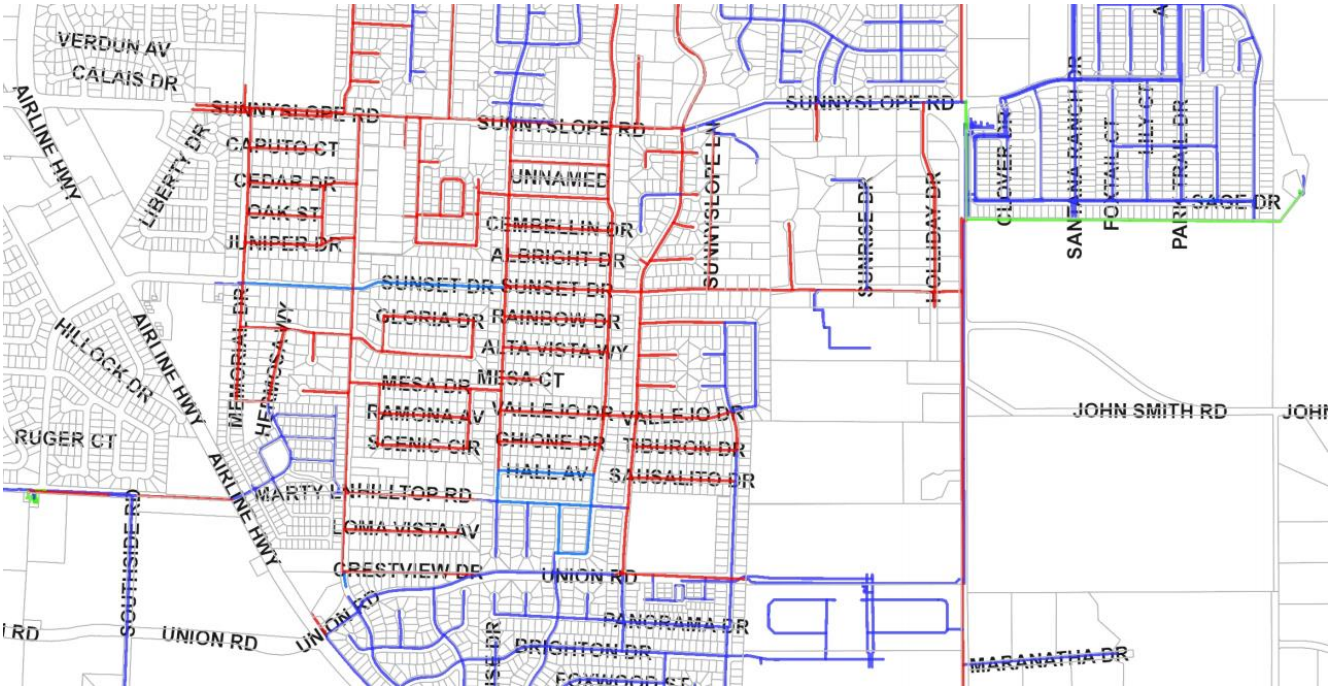
C. Drive down to Well 2 to check and report the status of the well and booster station.

E. Drive down roads with ACP mains (shown in **RED**) followed by roads with PVC mains (shown in **BLUE**) to check for leaks or damage. High priority roads are:

- **Valley View Dr.**
- **Sunset Dr.**
- **Cerra Vista Dr.**
- **Clearview Dr.**
- **Highland Dr.**

F. Report the status of each road to the EOC. Take pictures of any issues.

Zone 2 Map



Red lines are ACP pipes. Check these streets first.

One *person assigned to* ***Zone 3*** *(everything outside Ridgemark up to Union Rd.)*

A. Drive immediately to the Oak Creek Lift Station to check and report its status to the EOC.

B. Drive to Well 7 and connect its backup generator to run the well. It will likely need to run to feed main breaks and maintain pressure.

C. Go to Well 11 to check its status. Well 11 should automatically run off its backup generator and automated transfer switch.

D. Drive to the Airline Booster pump to check and report its status.

E. Check and report the status of the Quail Ridge Way PRV stations.

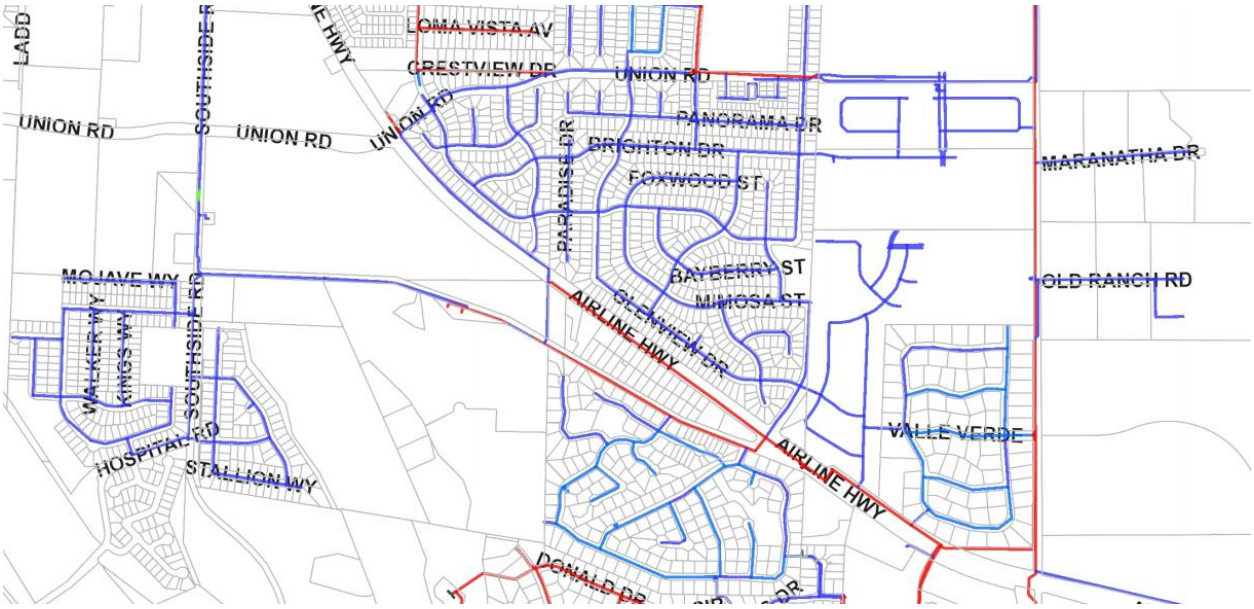
F. Check and report the status of the Labor Camp Intertie.

G. Drive down roads with ACP mains (shown in **RED**) followed by roads with PVC mains (shown in **BLUE**) to check for leaks or damage. Check that sewer in Quail Hollow & Oak Creek is flowing properly. High priority roads are:

- **Airline Hwy.**
- **Enterprise Rd.**
- **Fairview Rd.**

H. Report the status of each road to the EOC. Take pictures of any issues.

Zone 3 Map



Red lines are ACP pipes. Check these streets first.

One *person assigned to* ***Zone 4*** *(everything within Ridgemark except for SBR)*

A. Immediately go to the Ridgemark Tanks. Check the 12" ACP main going down the northeast side of the hill toward George's Dr. Report to the EOC. Close the 12" valve going from the tanks to that pipeline, even if there is not currently any issue. Keep the 8" valve going toward Franks Dr. open.

B. Go to the Main Lift Station to ensure its proper operation. Check the Force Main going up to the SBR. Report to the EOC.

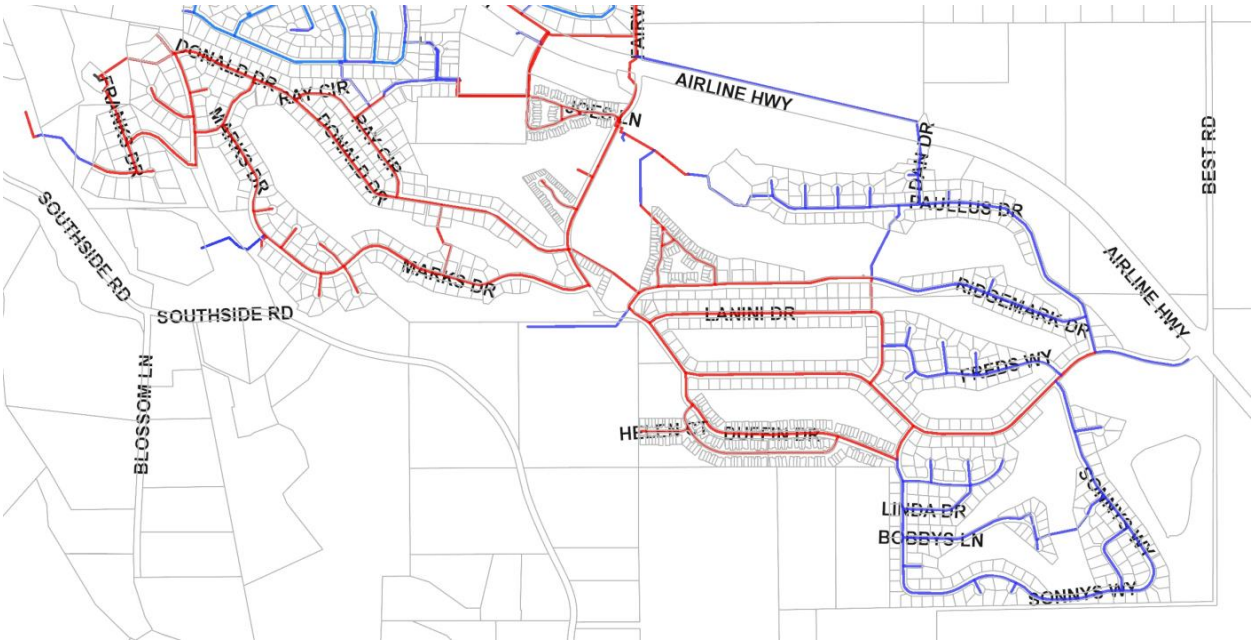
C. Go to Well 8 to connect the backup generator and run the well. It will likely need to run to feed main breaks and maintain system pressure.

D. Go to Well 5 to connect the backup generator and run the well. It will likely need to run to feed main breaks and maintain system pressure.

E. Check Ridgemark II Lift Station and Paullus Lift Station. Report to the EOC.

F. Drive down roads with ACP mains (shown in red) followed by roads with PVC mains (shown in blue) to check for leaks or damage. Check that sewers are flowing properly. Report the status of the water and sewer for each road. Take pictures of any issues.

Zone 4 Map



Red lines are ACP pipes. Check these streets first.

One** person assigned to **Ridgemark WWTP

A. Immediately go to the SBR.

B. Check all piping for leaks and report to EOC.

C. Check for cracks or damage in the concrete basins.

D. Check chlorine area for spills or leaks.

E. Check that blowers are operating properly.

F. Check percolation ponds for landslides or erosion.

G. Check and test the backup generator. PG&E power will likely be down already or go down soon.

H. Check the sludge treatment basin and drying beds.

I. Check the shop area for shelving and equipment that may have been damaged.

J. Report everything to the EOC. Take pictures of any issues.

One** person assigned to **Portable Emergency Backup Generators

A. Go to Well 8 and hook up the **75 KW Generator** trailer to your truck.

B. Drive the generator to the Oak Creek Lift Station.

C. If power is out, connect the generator to the lift station and pump down the wet well.

D. Once the wet well is pumped down, shut off and disconnect the generator.

E. Move the generator to the Paullus Lift Station.

F. If power is out, connect the generator to the lift station and pump down the wet well.

G. Contact the EOC to report the status.

Two** people assigned to **Isolate Main Breaks and Repair Leaks

A. Check parts inventory in the upstairs of the Shop.

B. Ready the Leak Truck and the Vactor Truck.

C. Locate a copy of the District Maps.

D. Ready and load various traffic control measures (cones, flags, signs, flares, etc.)

E. When directed by the EOC, dispatch in a normal work truck to a reported leak site.

F. Set up traffic control as soon as you arrive on site.

G. Check maps to determine how to isolate the leak.

H. Close valves to shut off the section with the break.

I. Determine the severity of the break and the importance of the repair for overall system operation. Report and consult with the EOC about this determination.

J. Double check that traffic control measures are sufficient. Consider the possibility of sink holes, flooding, visibility, and other factors.

K. Dispatch to the next reported leak site from the EOC. Take pictures of any issues.

Water Treatment Plant Operators

1. Contact San Benito County Water District for information about any breaks the Hollister Conduit or other parts of their system. Determine how this may affect supply water to the Lessalt and West Hills Water Treatment Plants.
2. Immediately to ramp up production at West Hills to compensate for main breaks and leaks.
3. The On-Call operator should check if the cameras are working on the tablet. If they are, initially check all the cameras to see if there is immediate damage.

Jose or Manny will assign staff to the following duties.

One *person assigned to* ***Lessalt WTP***

A. If electrical power goes out, shut down the plant. It can be restarted once reliable power is available again. Contact PG&E to try to get an estimate on when power will be back on.

B. If electrical power stays on and there is sufficient pressure in the Hollister Conduit, continue operating the plant. Water will be needed to feed anticipated City and Sunnyslope main breaks.

C. Check chemical tanks, pumps, and injectors.

D. Check Treated Water Tank and Backwash Tank for leaks or damage.

E. Check Greensand and GAC filters.

F. Check MF's.

G. Check Middle Zone, High Zone, and Backwash pumps.

H. Check electrical panels.

I. Check fire sprinkler system.

J. Check lab, being careful for broken glass in the cabinets.

K. Report everything to the EOC. Take pictures of any issues.

Three** people assigned to **West Hills WTP

One person should go down to the Raw Water Booster Pump Station to check the following:

A. Booster Pumps
B. Sodium permanganate tank & injector
C. Eyewash station
D. Backup Generator (power will likely be down)
E. Electrical Panels
F. Report everything to the EOC. Take pictures of any issues.

The other people should go directly to West Hills to check the following:

A. Check the backup generator (power will likely be down).
B. Check chemical tanks, pumps, and injectors.
C. Check for leaks in water and pneumatic piping.
D. Check PAC Silo and injection equipment.
E. Check strainers and acid injection.
F. Check for cracks or damage in the concrete of the treatment structure.
G. Check electrical panels.
H. Look inside the Treated Water Tank for damage to the baffles.
I. Check the shop area for damaged spare parts, equipment, or shelving.
J. Check Poly injection system.
K. Check lab, being careful for broken glass when opening cabinets.
L. Monitor Tank underdrain pump to determine if leaks were formed in the tank.
M. Begin increasing the flow through the plant with the goal of reaching 4.0 MGD to feed leaks and maintain pressure in Hollister and Sunnyslope water systems.
N. Report everything to the EOC.

One** person assigned to **City Turnouts and Well 2 Booster

A. Go to SSCWD Well 2 Booster Station, City Bundeson Well 2 Turnout, City Well 5 Turnout, and City Well 4 Turnout.
B. Check the Transmission main from SSCWD Well 2 Booster to West Hills Treated Water Tank. (Southside Rd., San Benito St., River Pkwy., Nash Rd., Riverside Dr.)

C. Check under the Nash Rd. bridge to see that it is not leaking inside the bridge.

D. Report everything to the EOC. Take pictures of any issues.

Executive Assistant (Carol)

1. Provide logistical support for all activities.
2. Manage the ordering and delivery of food, drinks, etc.
3. Assist and coordinate for any injuries or medical emergencies among staff.
4. Serve as Sunnyslope's liaison to the San Benito County EOC and coordinate interagency emergency responses.

Finance and Human Resource Manager (Travis)

1. Conduct and oversee the investigation into the status of any absent staff members.
2. Manage office staff for best efficiency and to reduce overtime if possible.
3. Collect and document all financial impacts of the incident.
4. Prepare and execute emergency contracts and purchase orders.
5. Maintain records of all expenditures including staff labor, equipment used, parts & materials, water loss, and other costs.
6. Provide preliminary cost estimates for damage and loss.
7. Ensure that SEMS/NIMS Emergency Response protocols are followed to qualify for State and Federal disaster relief funds.
8. Apply for financial aid or disaster relief funds and coordinate those with the City and County.

General Manager (Drew)

1. Serve as the Water Utility Emergency Response Manager (WUERM).
2. Determine whether the District Office is safe to be the EOC.
3. Communicate with CalWARN to request or provide mutual aid for labor or equipment.
4. Confirm the priority level and direct the ranking of each incident.
5. Determine if and when to issue official notices to the public (e.g. "Boil Water").
6. Report to and regularly update RWQCB and DDW of the events and actions taking place.

7. Act as the **SOLE** spokesperson with the media and manage the public messaging strategy.
8. Delegate tasks and authority as necessary.
9. Establish concrete and realistic goals and objectives.
10. Encourage staff and maintain a calm and collected attitude.
11. Notify Board members of the incidents and the actions being taken to address them.

Coordination with Other Agencies

Effective communication and coordination with other agencies and organizations is vital throughout the emergency response, especially after the immediate District response. The General Manager shall assign a liaison to the San Benito County OES.

To facilitate interagency partnerships, Sunnyslope shall develop relationships with key staff in various agencies including:

A. Hollister Fire Department
B. Hollister Police Department
C. Hollister Utilities Department
D. San Benito County Water District
E. San Benito County Sherriff
F. San Benito County Resource Management Agency (Public Works)
G. San Benito County Office of Emergency Services (OES)
H. San Benito County Environmental Health
I. CalFire
J. CalWARN
K. Regional Water Quality Control Board
L. Division of Drinking Water

CalWARN

Sunnyslope is a member of the CalWARN mutual aid group through which public water agencies can share resources, labor, and materials during an emergency. Following the immediate response activities, the General Manager can contact CalWARN to request assistance based on the specific situation. CalWARN will then distribute the requests to all member

agencies. Assistance can include pipe repair crews, equipment, generators, vehicles, materials, and many other key needs.

Continued System Operation

Throughout the emergency response, it is important that the immediate pressures and demands of the emergency do not cause staff to neglect the continuing standard operation and maintenance of the water and wastewater systems. Staff must make a concerted effort to ensure that all daily and scheduled activities continue. This is especial important for any regulatory and public safety operations such as chlorine residual testing, sampling, flushing, sewer jetting, and other rounds activities.

Managing Non-Staff Crews

It is probable that non-Sunnyslope pipe repair crews will be providing assistance for main leak repairs. This could include both private contractors and public water system crews providing assistance through CalWARN. Multiple non-staff crews may be conducting work simultaneously. To manage these crews, Sunnyslope will assign one staff member to each crew to provide overall guidance and assistance. Sunnyslope staff are the only people allowed to operate system valves and facilities. However the excavation, repair, and backfilling may be conducted by non-staff crews.

Contractors

Significant assistance from various local construction contractors may be needed immediately following a major earthquake. Sunnyslope does not have the equipment or manpower to repair multiple main leaks simultaneously. Recognizing this, the following construction contractors will be contacted and may be issued emergency contracts for time and materials.

Mark Nicholson Inc.

Don Chapin Co.

Bob Enz Construction

Trinchero Construction Inc.

Sanco Pipelines Inc.

Granite Rock

Monterey Peninsula Engineering

Suppliers

Sunnyslope can contact the following suppliers for assistance, equipment, materials, or labor.

Wastewater Pump/Disposal

Al's Septic Tank Service

Green Line

Morton Septic Service

Chemicals

Brenntag

Sierra Chemicals

Veolia

Bracewell

CM Analytical

Parts/Equipment

Corix

Ferguson

Wells/Pumps

Maggiora Brothers Well Drilling

Salinas Pump

Enterprise Electric