

City of Stockton
Fire Department
Municipal Utilities
Department
Fire Hydrant Readiness

Stockton City Council
April 15, 2025
Agenda Item No. 15.3

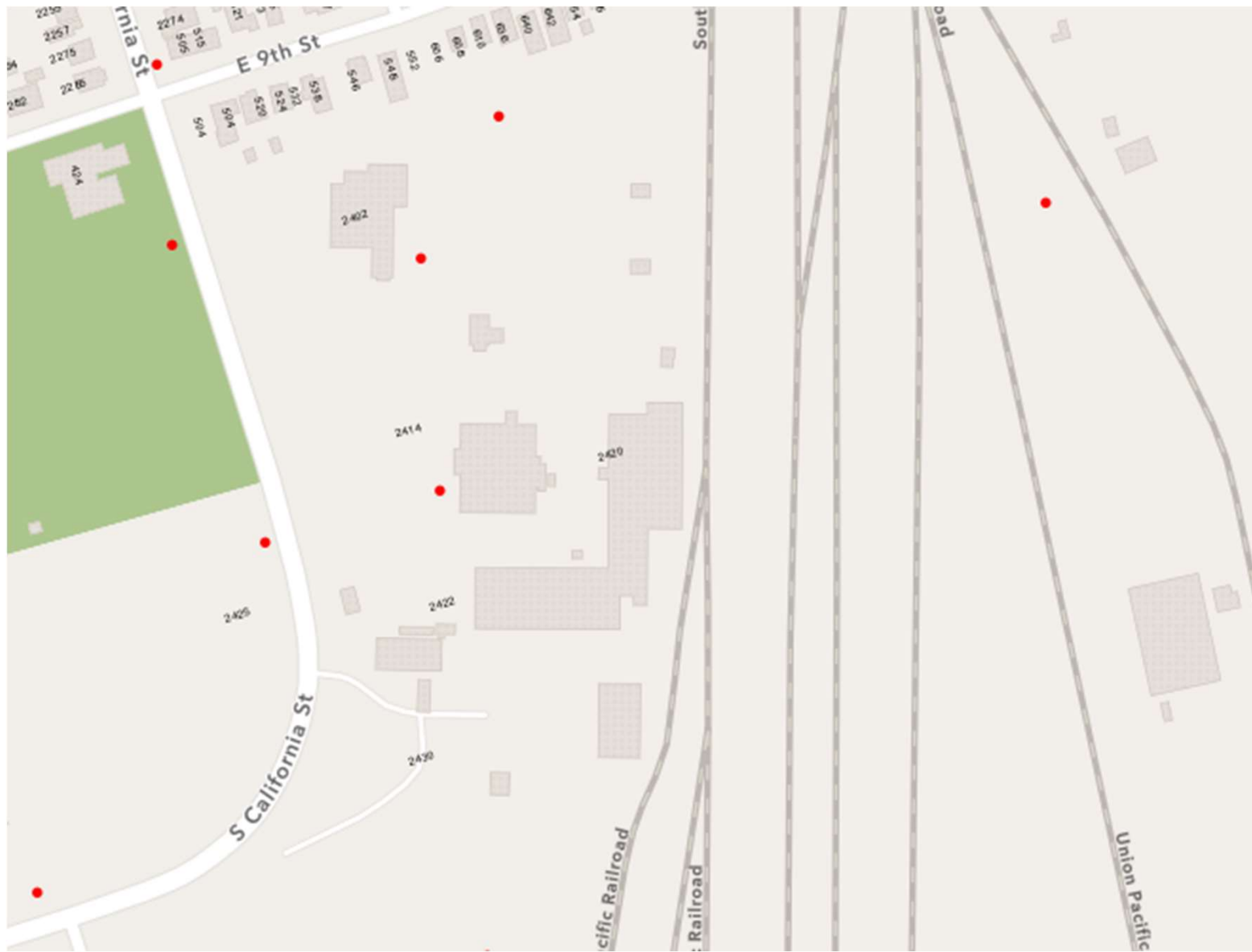


CITY OF STOCKTON'S COMMUNITY WIDE EMERGENCY & URGENT NOTIFICATION SYSTEMS

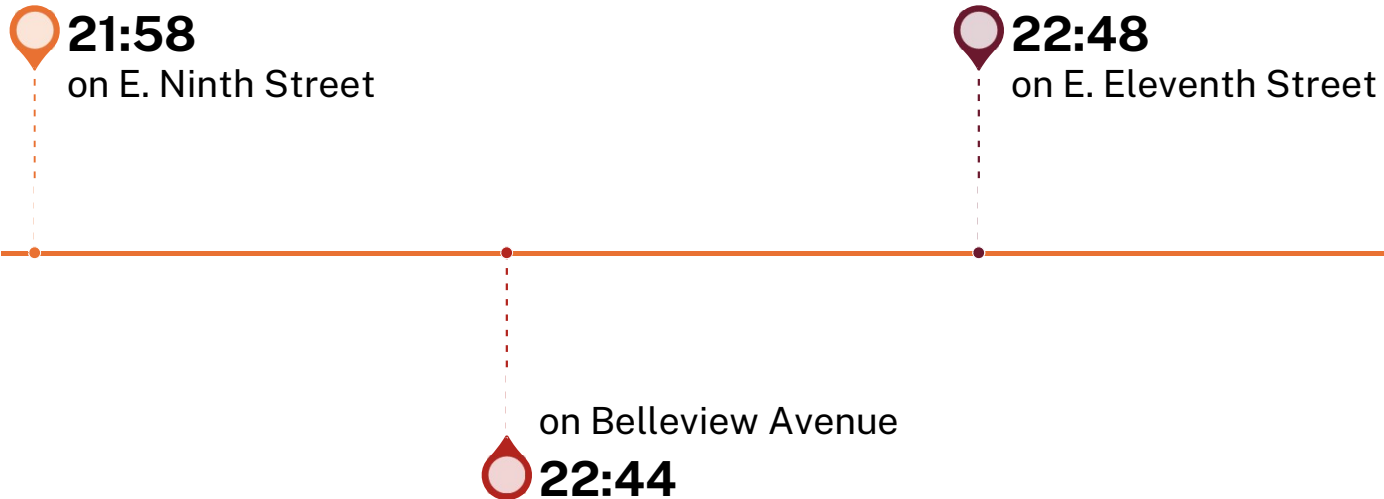
Presented by: Deputy Chief Brandon Doolan
Stockton Fire Department



1 AM Thursday Morning

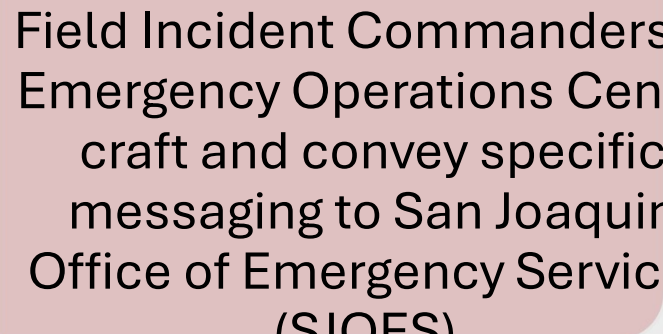


Documented Calls for Smoke

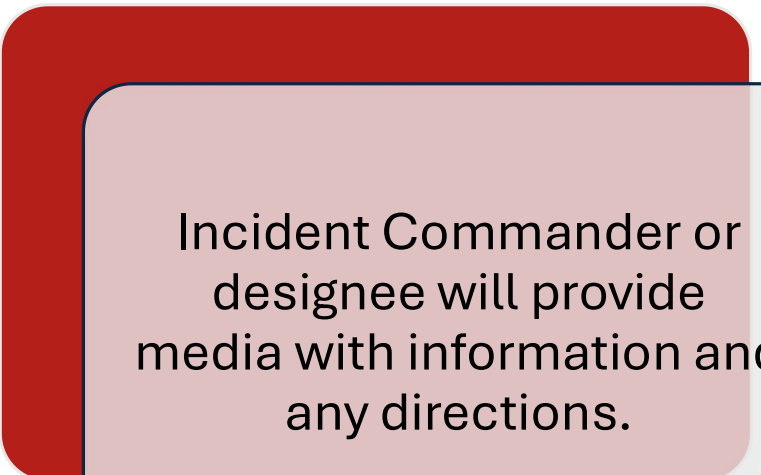




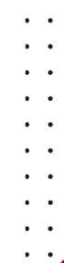


Emergency Notifications Procedures



Field Incident Commanders or Emergency Operations Center craft and convey specific messaging to San Joaquin Office of Emergency Services (SJOES).









Incident Commander or designee will provide media with information and any directions.





SJ OES Emergency Messaging Tools






-  **Wireless Emergency Alerts**
 -  **Emergency Alerting System**
 -  **Everbridge**
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Wireless Emergency Alerts (WEA)



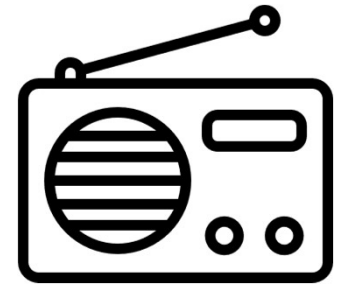
- **Very loud alerting that comes across individual cell phones in a given area**
 - **Provides a text message and unique vibration to each cell phone**
 - **Limited to 360 characters on 4 and 5G Networks**
 - **NOT SUBSCRIPTION BASED**
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WEAs Used For:

- **National Alerts**
- **Imminent Threat Alerts**
- **Public Safety Alerts ***
- **AMBER Alerts**
- **Opt-in-Testing ***

Emergency Alert System

- **National public warning system utilizes Television, Radio, and Satellite audio providers to push notifications out based on local emergencies.**
- **May only be used by State and designated local authorities.**
- **Commonly heard as “This is a test of the local emergency broadcast system” on TV or the radio.**



Everbridge

- **Community notification system that requires individuals to register their phone number and email through SJReady.org portal**
- **Administrators can push out important information and actions to be taken to each cell phone and email that's subscribed to the notification system**
- **Can feed the same messaging into WEA and various social media accounts with the push of a button**




All Notifications Provide:






Nature of the incident

General location of the incident

Instructions on what to do next



Direction back to local PIO or social media site(s)
for additional information





Moving Forward...





Initiate notifications including WEA & EAS through SJ OES for fires that are especially hazardous in nature.

Explore Nixle Notifications similar to Stockton Police Department's Watch Commander daily report.



Fire Department has submitted a budget request for Genasys notification platform.



Current State of Stockton's Fire Hydrants

Presenter:
Travis Small
Deputy Director of Water Resources

Municipal Utilities Department (MUD)

Department Description

Water Utility

- Treat & deliver high-quality drinking water to the community

Wastewater Utility

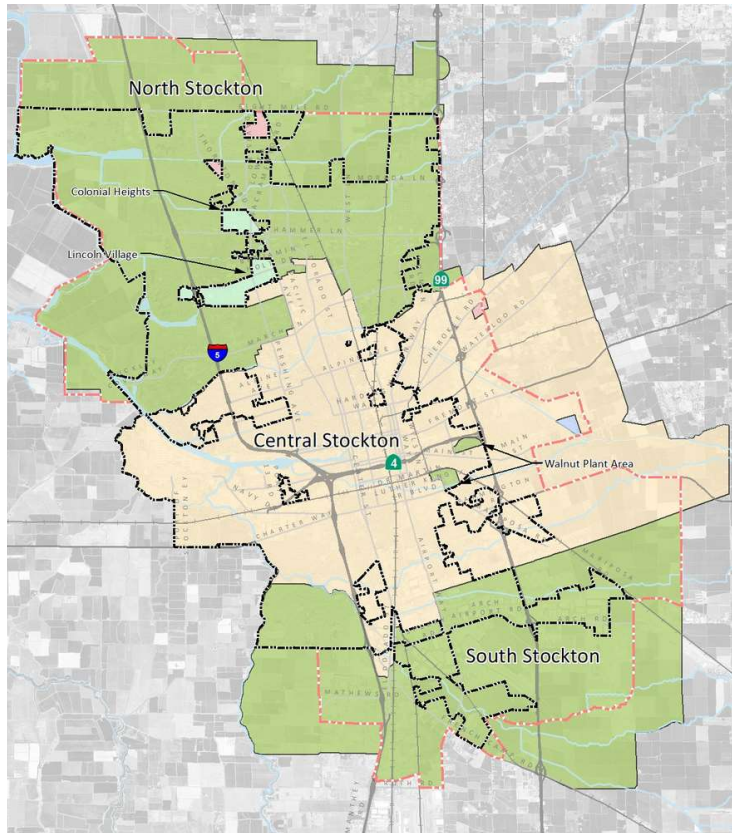
- Collect, treat and recover wastewater for the greater Stockton area

Stormwater Utility

- Collect & discharge surface runoff in City to rivers and local flood basins



City of Stockton Water Service Areas



- **MUD** serves North and South Stockton
- **California Water Service Company** Serves Central Stockton
- **City of Stockton** retains ownership of fire hydrants in Cal-Water Service Area

Water Production Facilities

- **North Stockton** – 75 Million Gallons Per Day (MGD) Capacity
 - Delta Water Treatment Plant – 30 MGD
 - North Stockton Wells – 20 MGD
 - Stockton East Water District Water Treatment Plant – 65 MGD
 - 25 MGD to North Service Area
 - Maximum Day Demand in North Service Area is approximately 40 MGD
- **South Stockton** – 18 MGD Capacity
 - South Stockton Wells – 8 MGD
 - Stockton East Water District Water Treatment Plant – 65 MGD
 - 10 MGD to South Service Area
 - Maximum Day Demand in South Service Area is approximately 10 MGD
- **Central Stockton (CAL-WATER)** – 64 MGD Capacity
 - Cal-Water Wells – 33.7 MGD
 - Stockton East Water District Water Treatment Plant – 65 MGD
 - 30 MGD to Cal-Water Service Area

Water Storage for Fire Suppression

- **Citywide Storage – 54.8 Million Gallons (83 Olympic Pools)**
- **North Stockton** – 40 Million Gallons of Storage
 - Nearly 20 Million Gallons of Storage from 5 storage reservoirs and 1 Clearwell at the Delta Water Treatment Plant.
 - 20 Million Gallon Clearwell at the Stockton East Water Treatment Plant (SEWD WTP)
- **South Stockton** – 26 Million Gallons of Storage
 - 6 Million Gallons of storage at the Weston Reservoir
 - 20 Million Gallon Clearwell at the SEWD WTP
- **Central Stockton (CAL-WATER)** – 28.8 Million Gallons of Storage
 - 8.8 Million Gallons of Storage throughout Cal-Water Service Area
 - 20 Million Gallon Clearwell at the SEWD WTP

Booster Pump Facilities - Fire Suppression

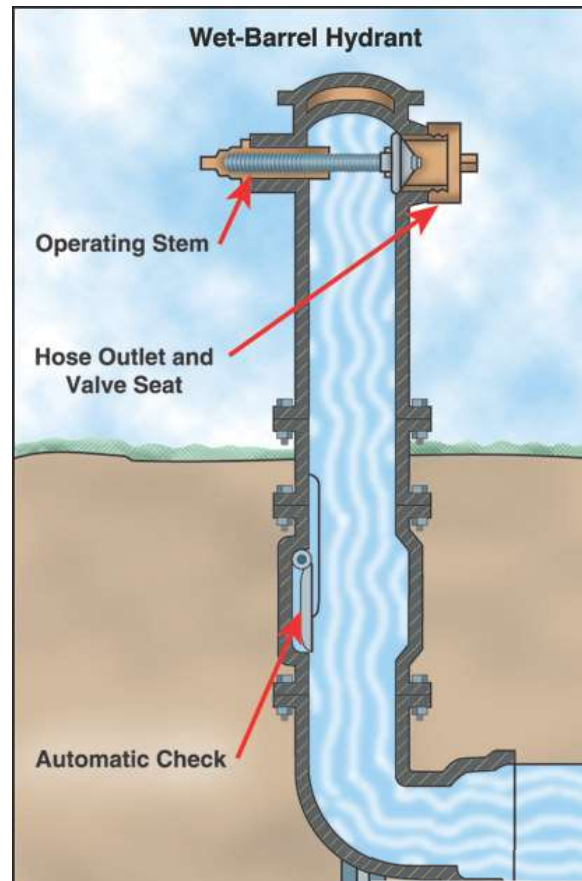
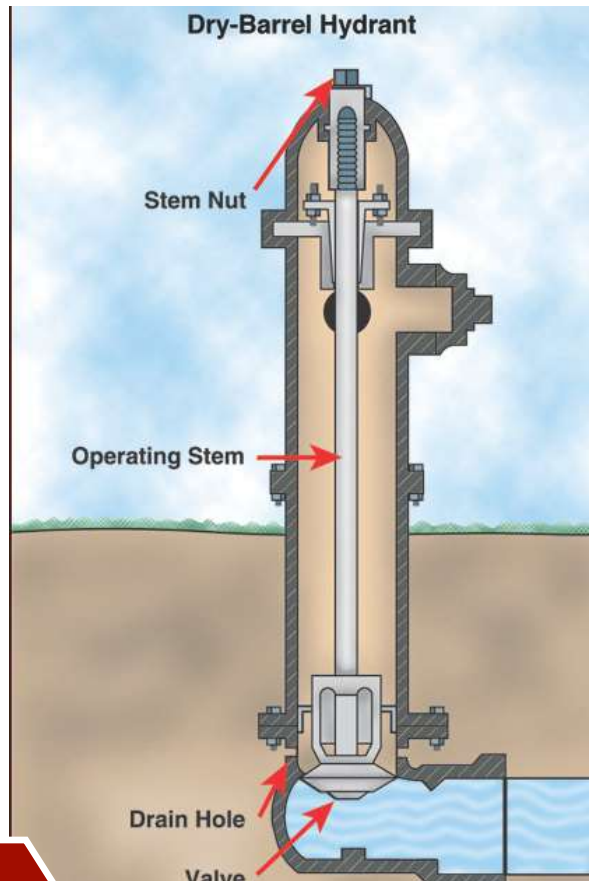
- **North Stockton** – 27,000 Gallons Per Minute (GPM) Fire Flow Boosters
 - 9,000 GPM Capacity from Northwest Reservoir
 - 9,000 GPM Capacity from 14-Mile Reservoir
 - 9,000 GPM Capacity from Delta Water Treatment Plant
 - **South Stockton** – 9,000 GPM Fire Flow Boosters
 - 9,000 GPM Capacity from Weston Ranch Reservoir
 - **Central Stockton (CAL-WATER)** – 14,115 GPM from Booster Pumps at Storage Facilities
- Note: Additional Capacity is Available from Wells and the Water Treatment Plants.

System Monitoring

- All Production Facilities in the North and South Service Areas have real time 24-hour monitoring through MUD's SCADA System.
 - SCADA = Supervisory Control and Data Acquisition
 - Monitor for Pressure, Production, and Water Quality Parameters
 - SCADA system sends out alarms for conditions such as bad water quality, pump failures, and high and low levels of storage reservoirs.
 - Monitoring Equipment is located at Wells, Reservoirs, Booster Pumps and Water Treatment Plants.
 - Allows for Remote Operation
- Cal-Water has similar capabilities.

Fire Hydrant Statistics



- Total Fire Hydrants in the City: 9,000
 - City Owned hydrants – 7,500
 - Each hydrant is inspected annually
 - Private Fire Hydrants – 1,500
 - Hydrants located on private property which require annual inspection to maintain annual operating permit
- Current Nonoperational Fire Hydrants: 20
 - **99.7% of all public hydrants are operable**
- Recycling Fire had 2 Public Hydrants and 1 Private Hydrant that was inoperable during the Fire.
 - A 4th hydrant broke in the open position
- Estimated # of Fire Hydrants Over the Age of 50:
 - 2453
 - The oldest hydrants generally occur in Central Stockton (Cal-Water)



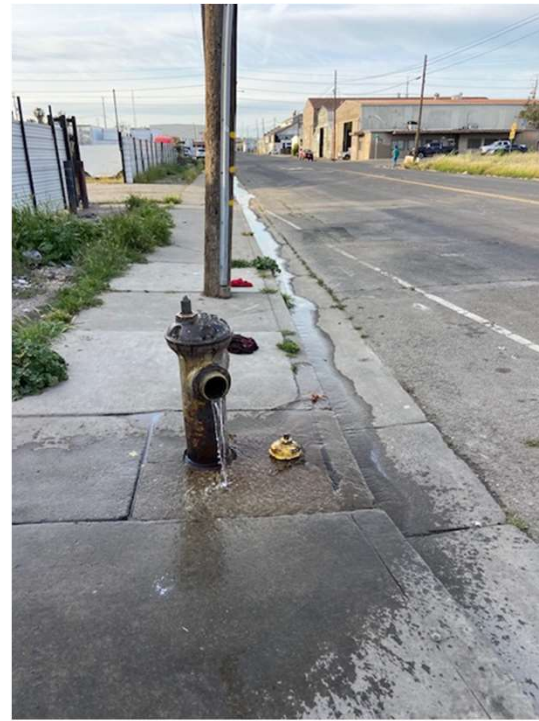
**Two types of
Hydrants
found in
various makes**



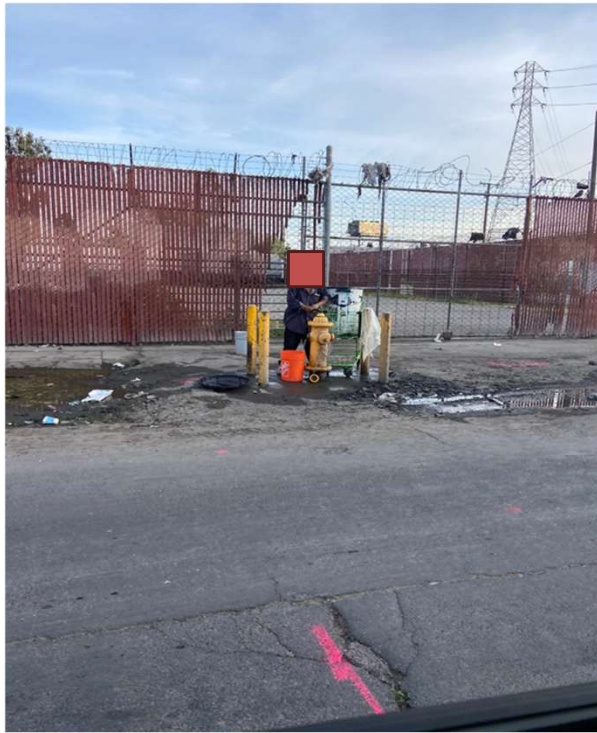
Failures may result from:

- Damaged hydrant valves and connections
 - Broken water mains
 - Greater demand than the system can provide
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Damage is usually due to overuse and vehicles



Homeless Shelter and Mormon Slough



Identifying Inoperable Hydrants



Annual Inspections

- Fire Department has a contract with Xylem Dewatering Solutions
 - Conduct annual inspections for all public hydrants in October
 - Full report provided to fire 30 days later- forwarded to MUD
- All hydrants on private property must have hydrant inspection done as a condition of obtaining an annual operating permit

Inspection Process



**Operate all
moving parts
including caps
and valves**



**Visual
inspection to
identify missing
or worn parts,
graffiti, need for
paint**



**Verify location
in GIS mapping
systems**



**FLOW TESTING
is very limited**

Who Is Responsible?


- City Manager placed hydrant maintenance under MUD in FY 2008/09.
 - Pre-2008/9 Funding from General Fund + Billing to Small County Pocket Districts.
 - Post 2008/9 Funding from Water Fund + Billing to Small County Pocket Districts.
 - Severely limited on what can be funded from Water Fund in Cal Water Service Area due to Proposition 218.
 - \$80,000 per year for emergency repair (4 Hydrant Replacements).
 - \$90,000 per year for hydrant materials and supplies.
- Fire Department staff must notify MUD anytime they discover a problem with a fire hydrant. Usually conveyed through the Emergency Dispatch Center.
- Stockton Municipal Code 13.04.110(E), 13.28.030(B), and CA Penal Code 594 give the Police authority to cite or arrest vandals and obstructionists.

Infrastructure & Public Safety Are Top Priorities

- Direct staff to prepare a report to council to repair 20 inoperable hydrants at a cost estimate of \$400K (rough estimate of \$20k/hydrant)
 - Water Enterprise can pay for hydrants in the North and South Service areas
 - Cal-Water Service Area the Water Enterprise Fund cannot be used due to Proposition 218. (General Fund?)
- Work with SPD's Strategic Community Officers to address illegal Fire Hydrant usage in known hotspots.
- Weekly updates between MUD and FIRE to identify hotspots, repaired, and inoperable hydrants.
- Daily report out to suppression staff regarding hydrant status throughout town



Long Term Solutions for Obsolete Fire Hydrants

- Turn Ownership of Fire Hydrants over to the Water Purveyors
 - Cal-Water owns and maintains Fire Hydrants in Central Stockton
 - City of Stockton MUD owns and maintains Fire Hydrants in North and South Stockton
 - City Fire Department continues with yearly audit and meets with water purveyors to address broken/damaged hydrants
 - Water Purveyors have a responsibility to provide fire hydrants in their distribution systems.
 - Water Main Replacement Programs such as identified in the City's Water Master Plan and the Current Cal-Water Main Replacement Program include the replacement and addition of Fire Hydrants.
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Public Reporting of Fire Hydrant Tampering or Use

- Utilize Ask Stockton to report tampering
- 24-Hour Hotline to Report: 209-937-8341
- Add language to City website regarding how to report tampering
- Utilize current work order system for documentation that specifies hydrant tampering in the work order

Questions??