# Water Quality & Sustainability in Private Wells

TAMI MCVAY – PARTNER SERVICES ASSISTANT DIRECTOR SELF-HELP ENTERPRISES, EMERGENCY SERVICES

## SHE's Service Area

Kern, Tulare, Kings, Fresno, Madera, Merced, Mariposa & Stanislaus Counties



### Private Wells

- ▶ In California close to 2 million residents are served by a private domestic well or by an unregistered unregulated small water system (state small).
- Over 500 disadvantaged communities (DAC) largely dependent on private wells and small systems.
- Many Private Well Communities ranging from 20 to 630 private wells.

## Emergency Services

Established due to the overwhelming need for emergency response during the drought

#### Since 2014

- Provided Private Well Owner's resources and education
  - ▶ Water Conservation
  - ▶ Water Quality
  - ► Long Term O&M
  - ► Financial Management
  - ► Funded over nearly 500 private wells and 13 connections
  - Installed 3,231 Emergency potable tank water systems, including water hauling services
  - ▶ Bottled Water delivery services for over 4,500 households
  - ▶ Tested around 600 privates wells for contamination
    - ▶ Installed over175 filtration devices

## Existing Regional Programs

All Programs Funded by SWRCB -DFA

## Emergency/Interim Access

- Emergency Tank & Hauled Water
  - NSF Certified Potable water tanks, solar pumps & systems
  - Potable water (hauling & delivery)
  - 50 gpd/per person hauled water
- Bottled Water Deliveries
  - 60 gpm per household

## Well Assessment & Water Quality

- Well Quality
- Water Quality
- Well Depth
- Depth to Water
- Depth of Pump
- Identify well deficiencies or hazards educate family on avoiding hazards and deficiencies identified
- Sample water for primary contaminates & take to lab for analysis
- Review results, educate family on results & ongoing testing
- Install (if needed) appropriate filtration device

# Well Repair, Replacement & Connections

- Provide funding to property owners whose PDW's have gone dry, for drilling a new well.
- Low- interest loans (1%-2%)
- Five-year recorded grant
- Contract is between the driller & property owner
- Identify if there is a possibility of connecting to an existing local water system

## Contamination Testing

Test Method	Contaminants			
Bacterial				
SM 9221 B,C B,E	Total Coliform	E. Coli		
Primary Contaminants				
EPA 200.7/200.8	Arsenic	Total Chromium	Copper	
EPA 504.1	DBCP	EDB		
EPA 300.0	Nitrates			
EPA 314	Perchlorate			
EPA SM 524M-TCP	TCP			
EPA 200.8 by metals 908.0 by radio	Uranium			

## Major Concerns

- Demand for Affordable Housing Governor Newsom plan to build 3.5 million new homes by 2030
  - CA lacks in existing infrastructure needed to provide water to rural communities and small water systems.
  - 3.5 million new homes in 5 years
  - Battle for funds to create infrastructure vs affordable housing
- ► Homelessness Over 160,000 Homeless in CA in 2020
  - ▶ Bathing & Using canals/rivers & other waterways for personal hygiene
    - ▶ Increased risk of illnesses
    - ► Impacts Water Supply

## Major Concerns cont.

- ► Economic Impacts
  - Dry well equals zero value for homes owners
  - ▶ Transient Society
- Middle to Low Income Families abandoning their homes
  - Overcrowding 2-3 families living in one home
  - Overcrowding Increased Domestic Violence Reports (86% increase in one year)
  - Increased Trauma Related PTSD

## How Do We Do ALL of This ????



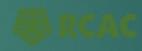
























#### HOW TO FIND US

- www.selfhelpenterprises.org/programs/emergency-services/
- Facebook <a href="https://www.facebook.com/selfhelpenterprises">https://www.facebook.com/selfhelpenterprises</a>
- LinkedIn <a href="https://www.linkedin.com/company/self-help-enterprises/">https://www.linkedin.com/company/self-help-enterprises/</a>
- Emergency Lines
  - ► Tanks & Hauled Water (559)802-1685 or droughtsupport@selfhelpenterprises.org
  - ▶ Bottled Water (559) 802-1284
  - ► Water Quality (559) 802-1285 waterquality@selfhelpenterprises.org

# QUESTIONS