
Los Angeles Post-Fire Monitoring Network

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**Southern California Coastal
Water Research Project**



Photo credit: LA County Life Guard Department

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LA Fires Presented Unique Challenges

The Palisades and Eaton Fires are among the top 3 most destructive wildfires

Multiple watersheds and habitats impacted

- Estuaries/lagoons, coastal ocean, rivers/stream

Multiple jurisdictions with different concerns

- Hydrology (sedimentation, flow)
- Water quality (water chemistry, chemicals, nutrients,...)
- Aquatic and human health

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— Post-Fire Monitoring Network

Consortium of 30+ organizations from government, non-profit, industry and academia

- Managing the impacted waterbodies
- Collecting and analyzing samples
- Experts in fire impacts, human and ecological health

LA Regional Water Quality Control Board
 LA Sanitation and Environment
 Resource Conservation District of the Santa Monica Mountains
 San Gabriel River Regional Monitoring Program
 Heal the Bay
 CA Department of Public Health

California Ocean Protection Council
 Office of Environmental Health Hazard Assessment
 NASA Jet Propulsion Laboratory
 University of Southern California
 University of California, Irvine
 University of Southern California, Sea Grant Program

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— Goals of the Network

- Coordinate monitoring activities
- Develop best practices guidance
- Facilitate data sharing and integrated assessment

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— Collaboration and Leveraging

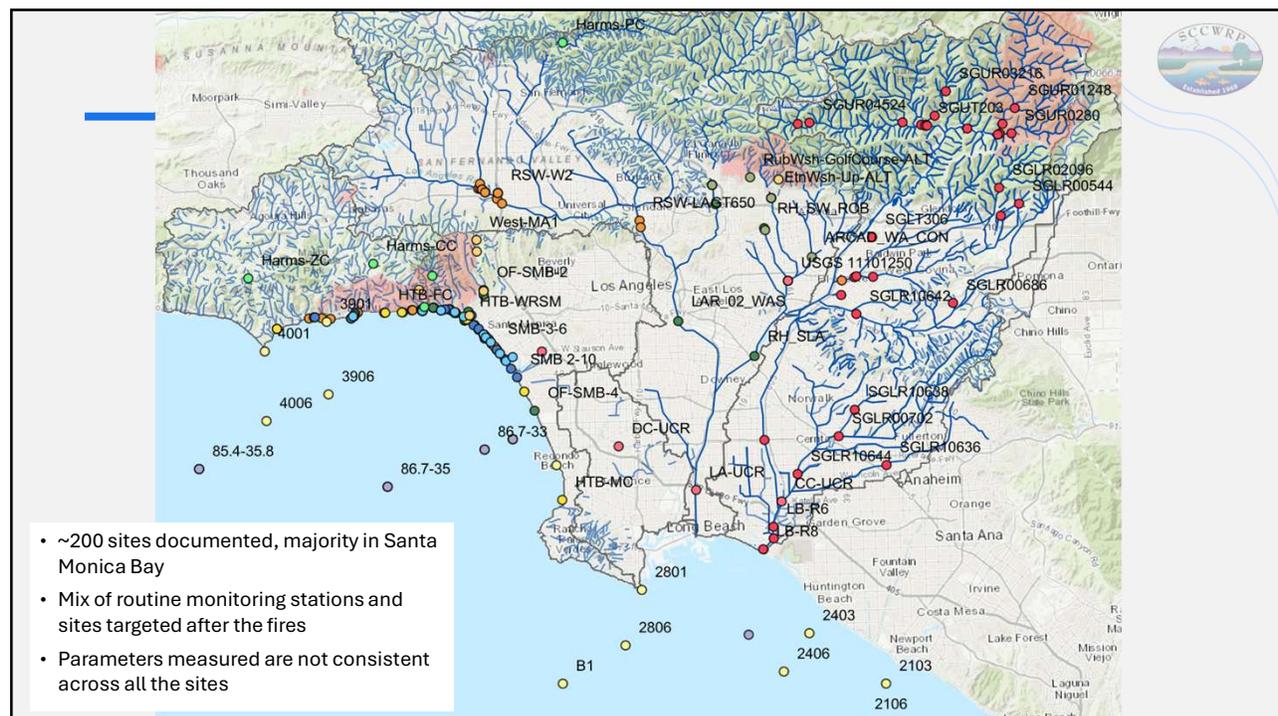
Information gathering

- Identified key players (i.e., agencies responsible for sampling and analysis)
- Documented sites and analytes monitored, study designs and timeframe
- Identified data gaps and duplicated efforts

Subcommittee meetings

- Identified relevant fire-related parameters
 - Recommended: metals, turbidity, PAHs, nutrients, flow, pH
 - Others: PFAS, benzene, asbestos
- Aimed to fill in the gaps (more sites and analytes) and discuss findings

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Tools to Support Interagency Coordination



Best Practices

- Recommended analytical methods
- Data quality objectives
- Data entry templates



Interpretation

- Human exposure scenarios and thresholds
- Aquatic life exposure and thresholds



Data Sharing

- Data portal for submission and retrieval
- Integrated site assessment

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Aquatic Health Thresholds

Acute Toxicity Values		
Habitat	Tier	Sources for Acute Toxicity Assessment
Freshwater & Seawater	1	California Toxics Rule - CMC *FW dissolved metal thresholds must be adjusted based on hardness **Note that data displayed in the dashboard uses a standard 100 mg/L hardness
	2	EPA National Recommended Water Criteria
Chronic Toxicity Values		
Habitat	Tier	Sources for Chronic Toxicity Assessment
Freshwater	1	California Toxics Rule - CCC *select dissolved metal thresholds adjusted based on hardness
	2	EPA National Recommended Water Criteria
	3	US EPA EcoTox Thresholds
Seawater	1	California Toxics Rule - CCC
	2	EPA National Recommended Saltwater Criteria
	3	US EPA EcoTox Thresholds

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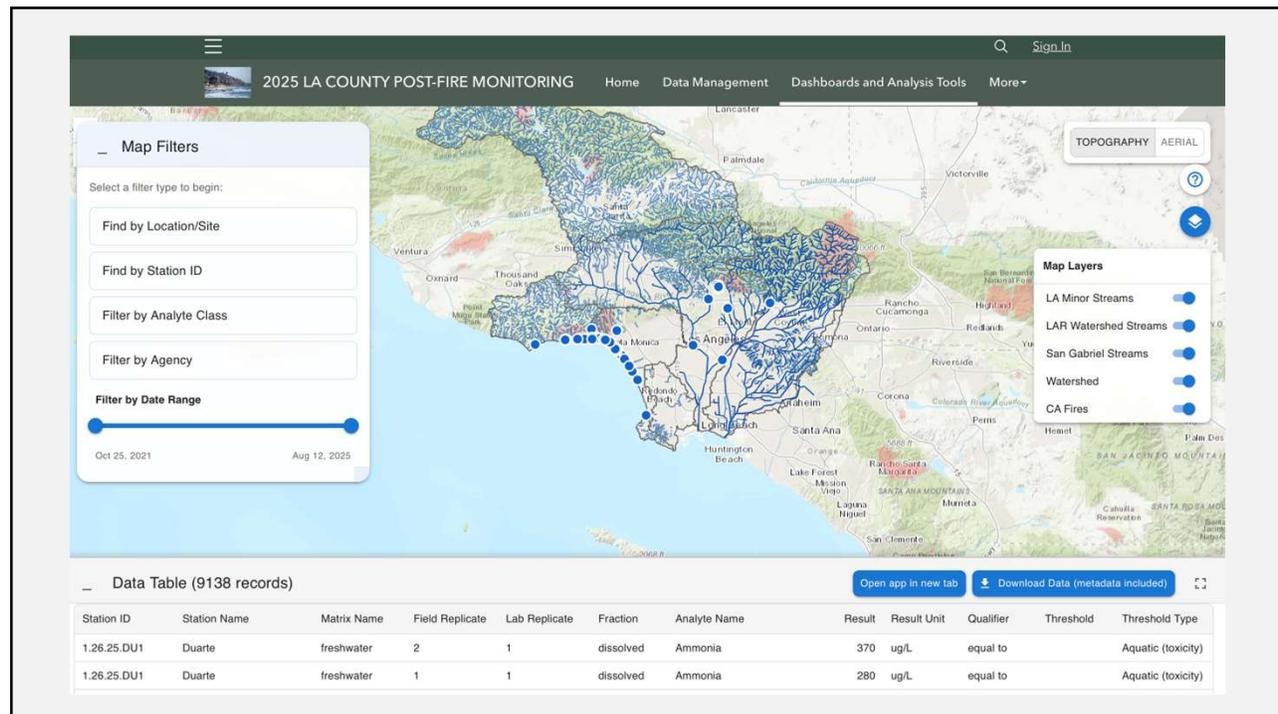
— Data Management, Sharing and Visualization

SCCWRP is developing a data portal to:

- Compile all available data
- Visually display the results and identify impacted sites
- Facilitate exploration of the data by site or contaminant over time
- Access all documents produced for and by the network (data templates, thresholds tables, useful links, etc...)

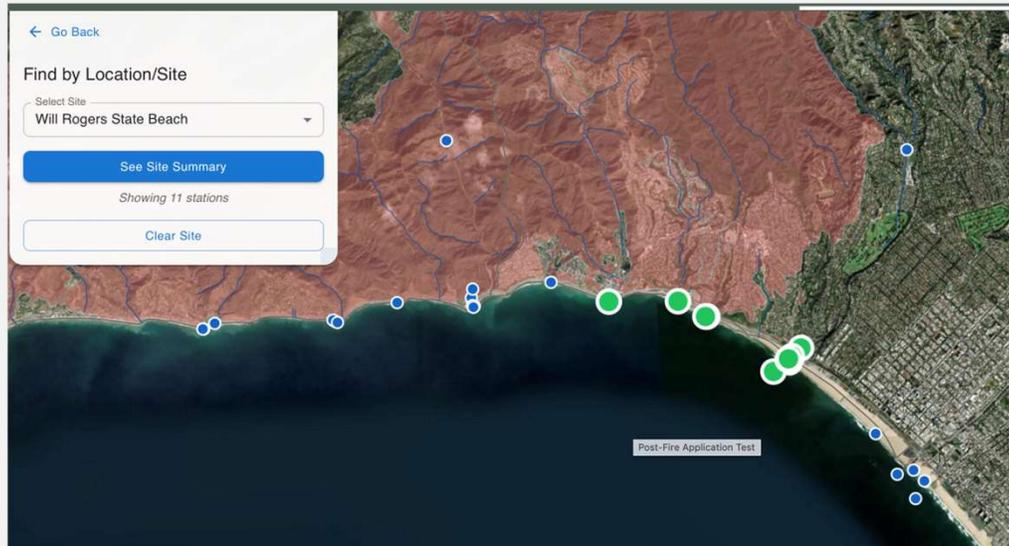
Portal will be publicly available in the coming weeks

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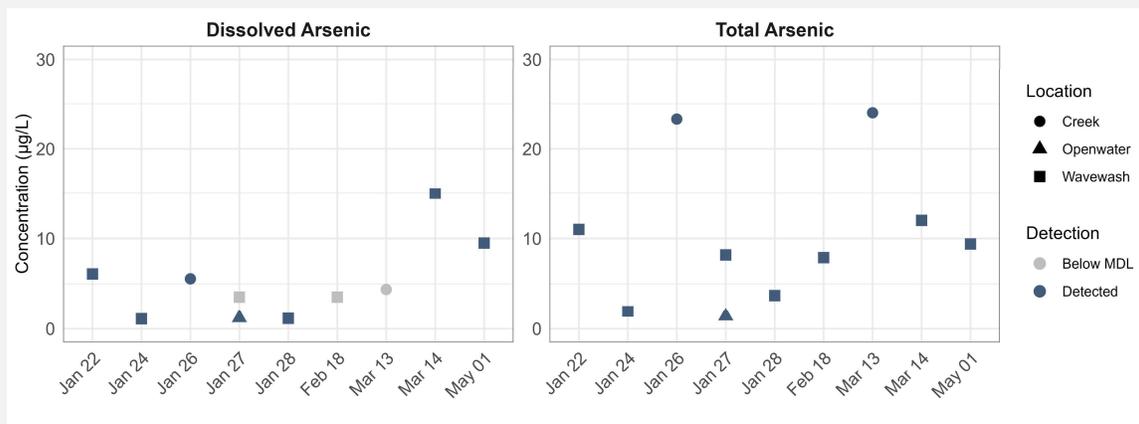
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Integrated Water Quality Assessment



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Integrated Water Quality Assessment



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— Lessons Learned

- Multi-agency monitoring increased spatial and temporal coverage, but many questions remain
 - Biological effects and their persistence
 - Impacts of the fire on pollution by emerging contaminants
 - Recovery trajectory of different types of systems
- Post-Fire Monitoring Program is valuable but should leverage existing efforts



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Thank you!

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