



## PFAS IN CALIFORNIA: PAST, PRESENT & FUTURE

**Location:** California Environmental Protection Agency  
 1001 I Street, Sacramento, CA 95814  
**Webcast Information:** <https://video.calepa.ca.gov/>

**Date:** December 4, 2019 (8:30AM – 4:00PM) and  
 December 5, 2019 (8:30AM – 3:30PM)

**Objective:** The State Water Resources Control Board is hosting a two-day Technical Seminar and concurrent Datathon on per- and polyfluoroalkyl substances (PFAS) to share technical information about PFAS (past), the current landscape and state of knowledge about PFAS (present), and the upcoming technical advances in remediating or treating PFAS (future). Data scientists are invited to work alongside PFAS experts during the Datathon to develop data schema and answer broader PFAS questions. Their results will be presented to the larger seminar audience at the end of the 2<sup>nd</sup> day.

### Day 1- Seminar Agenda Bryon Sher Auditorium, 2nd Floor

8:30AM to 9:00AM – Registration (1<sup>st</sup> Floor)

<p align="center"><b>Opening Remarks and Keynote Address (9:00AM to 9:30AM)</b>          E. Joaquin Esquivel, Chair of the State Water Resources Control Board</p> <p align="center"><b>Update on Water Board Actions (9:30AM to 10:00AM)</b>          Dan Newton, Division of Drinking Water, <i>State Water Resources Control Board</i>          Shahla Farahnak, Division of Water Quality, <i>State Water Resources Control Board</i></p>
<p align="center"><b>PAST: WHAT ARE PFAS – WHY DO WE CARE? (10:00AM to 11:30AM)</b></p>
<p><b>Panel 1: History, Use, Nomenclature, Chemistry, Toxicology</b></p>
<p>Erica Kalve, P.G., <i>San Francisco Bay Regional Water Quality Control Board</i>  <a href="#"><i>Overview of the History, Use and Nomenclature of PFAS</i></a></p>
<p>Taryn McKnight, <i>Eurofins/ TestAmerica</i>  <a href="#"><i>Overview of existing PFAS chemistry and laboratory analysis methods</i></a></p>
<p>Melanie Marty, Ph.D., and Christopher Banks, Ph.D., <i>Office of Environmental Health Hazard Assessment</i>  <a href="#"><i>Summary of current knowledge on the toxicological effects from PFAS in humans</i></a></p>
<p><b>11:30AM to 1:00PM - Lunch</b></p>



**PRESENT: WHAT IS THE CURRENT STATE OF KNOWLEDGE ABOUT PFAS?  
 (1:00PM to 4:00PM)**

**Panel 2: Drinking Water – PFAS Data Analysis on Source and Treated Drinking Water and the Economic and Legal Impacts to Public Water Purveyors**

Susan Glassmeyer, Ph.D., *Office Research and Development, USEPA*  
*Overview of current nationwide PFAS research in source and treated drinking water*

Matthew Small, Ph.D., P.G., *Region 9, USEPA*  
*Summary of the latest data analysis tools being used by US EPA*

Tim Sloane, *Sher Edling LLP*  
*Summary of the economic and legal impacts to public water purveyors from PFAS investigations*

**Panel 3: Exposure Pathways – Impact to Human Body and Effects on Aquatic Ecosystems**

Jim Strandberg, P.G., CHG, *Woodard & Curran*  
*Overview of the various exposure pathways for PFAS to humans*

Kathleen Attfield, Sc.D, *Center for Healthy Communities, California Department of Public Health*  
*Update on CDPH's effort to conduct biomonitoring in California*

Rebecca Sutton, Ph.D, *San Francisco Estuary Institute*  
*Summary of research on PFAS effects to aquatic ecosystems*

<p>4:30PM-6:00PM</p> <p>Cinema Showing:          “The Devil We Know”</p> <p>Sierra Hearing Room,          2nd Floor</p>	
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## Day 2 – Seminar Agenda Bryon Sher Auditorium, 2nd Floor

8:30AM to 9:00AM Registration (1<sup>st</sup> Floor)

<b>FUTURE: WHAT CAN WE DO FOR PFAS SOURCE CONTROL? (9:00AM to 11:30AM)</b>
<b>Panel 4: Approaches to Remediating, Treating, and Monitoring for PFAS</b>
Rula Deeb, Ph.D., BCEEM, PMP, Geosyntec <i>Latest approaches &amp; technologies in PFAS remediation</i>
Eugene Leung, P.E., <i>Division of Drinking Water, State Water Resources Control Board</i> <i>Update on new and upcoming treatment technologies for PFAS at public water systems and point of use</i>
Kavitha Dasu, Ph.D., <i>Battelle</i> <i>Update on new or developing monitoring methods (target vs non-target) for PFAS</i>
<b>Panel 5: Regulatory Approaches in Reducing PFAS in Consumer Products and Packaging</b>
Simona Bălan, Ph.D., <i>Department of Toxic Substances Control</i> <i>Update on DTSCs efforts to address PFASs as a class through the Safer Consumer Products process</i>
Daphne Molin Contreras, <i>CalRecycle</i> <i>CalRecycle inquiry on PFASs in compostable plastic food serviceware and in exploratory remediation technique for compost leachate</i>
Jen Jackson, <i>San Francisco Department of the Environment</i> <i>Municipal level efforts to address PFAS</i>
<b>11:30AM to 1:00PM - Lunch</b>
<b>DATATHON RESULTS WORKSHOP AND OPEN DISCUSSION (1:00PM TO 3:00PM)</b>



**Closing Remarks (3:00PM to 3:30PM)**  
 Dan Newton, *Division of Drinking Water, State Water Resources Control Board*  
 Shahla Farahnak, *Division of Water Quality, State Water Resources Control Board*

## Day 1 & 2 - Datathon Agenda

**8:30AM to 9:00AM – Registration (1<sup>st</sup> Floor)**

December 4, 2019	December 5, 2019
Encouraged: <b>Attend Seminar Panel #1</b> <i>(9:00AM to 11:30AM)</i> Bryon Sher Auditorium, 2nd Floor	<b>Datathon</b> 9:00 AM to 11:30 AM Rooms 230 and 240, 2 <sup>nd</sup> Floor
<b>Datathon</b> 1:00 PM to 4:00 PM Training Room 2 West/East, 2nd Floor	<b>Datathon Results Presentations and Open Discussion</b> 1:00 PM to 3:00 PM Bryon Sher Auditorium, 2nd Floor

Panel #1 at the Seminar provides background on PFAS that maybe useful for the project themes at the Datathon. On the afternoon of the 2<sup>nd</sup> day of the Seminar, Datathon data theme leaders will present their results to the attendees of the Seminar.

### **Theme #1: PFAS Analysis and Intervention**

Interpretation of multiple time-point PFAS concentration data for a water district can provide insights into possible sources of contamination. However, thorough analyses can be complex and time-consuming. The goal of this project is to develop data analytic tools to expedite the analysis process for a water district, including statistical hypothesis testing of potential transport pathway factors, such as rainfall and proximity to potential sources.

**Data Scientist Lead: Melissa Salazar, Moulton Niguel Water District**

### **Theme #2: PFAS Biomonitoring: Possible Linkages to Drinking Water**

CDPH conducted biomonitoring for PFAS in selected regions in California. The relative contribution of PFAS in drinking water to body load is unknown. The goal of this project is to determine if drinking water PFAS levels are correlated with measured exposure concentrations using statistical hypothesis testing.

**Data Scientist Lead: Dori Bellan, State Water Board**



**Theme #3: PFAS Source Identification through Fingerprinting**

PFAS sources may be identified through chemical composition ratios. The goal of this project is to develop a tool that would be capable of analyzing data collected by the State Water Board through PFAS Investigations to identify potential sources of contamination. ***Data Scientist Lead: Sarabeth George, Region 2, Water Board***

***DATATHON RESULTS WORKSHOP AND OPEN DISCUSSION  
(December 5, 2019, 1:00PM TO 3:00PM  
Bryon Sher Auditorium, 2<sup>nd</sup> Floor)***