



**WSCAC/WAC Meeting**  
Location: Remote via Zoom  
October 8, 2021 – 10:30 am

**Members in Bold in Attendance:**

**WAC Members:** **Wayne Chouinard** (Chair, Town of Arlington), **Kannan Vembu** (Vice-Chair), **Adrianna Cillo** (BWSC), Craig Allen, Dan Winograd, **George Atallah**, James Guiod (AB), **Karen Lachmayr**, Martin Pillsbury, **Mary Adelstein**, **Philip Ashcroft**, **Stephen Greene**, **Taber Keally** (NepRWA) (Members in attendance in **bold**)

**WSCAC Members:** Michael Baram, Whitney Beals, **Bill Kiley-BWSC**, Andrea Donlon, **Bill Copithorne-Arlington**, **Bill Fadden-OARS**, **Steve Daunais-Tata & Howard**, **Paul Lauenstein-NepRWA**, **Janet Rothrock-LWV**, Jerry Eves, Martha Morgan, Martin Pillsbury, James Gioud, Bruce Spencer, Kurt Tramposch

**Guests:** Wendy Leo, Denise Ellis-Hibbett, Sally Carroll, Dave Duest, Steve Estes-Smargiassi, Dave Granados, (MWRA), Charlie Jewell (BWSC), Lou Taverna (Advisory Board), Jim Barsanti (DEP), Jeffrey Soares (Sen. Cyr's office), Griffin Tighe (Rep. Hogan's office), Ivan Cooper (civil/environmental consultant), Gary Broberg (practical applications), Jeremy Masette (Natick DPW, Adv.Bd), Joe Nerden (DEP), John Rashko (Mass. Office of Technical Assistance), Judy Pederson (OMSAP), Juliette Simpson (OMSAP), Kerry Snyder (NepRWA), Lisa Kumpf (CRWA), Maria Rose (Newton), Lou Taverna, Chair Adv. Bd. Robert McGregor (NepRWA), Abbie Goodman (ACEC-MA), Daniel Moss, Maureen Reilly Meagher, Griffin Tighe, Chief of Staff for Rep. Hogan and Jeff Soares, Legislative and Budget Director for Sen. Cyr.

**Staff:** Andreae Downs, Lexi Dewey

Lexi introduced Jeff Soares, Legislative and Budget Director for Sen. Cyr. Jeff spoke briefly about the work of the PFAS Interagency Task Force which began hearings in June and is chaired by Sen. Cyr and Rep. Hogan. The task force has held numerous monthly meetings beginning on June 1 with a variety of presenters over the summer. The last meeting was on October 19 where presentations were given by advocates and stakeholders.

Griffin Tighe, Chief of Staff for Rep. Hogan introduced himself. He and Jeff noted that the members of the task force will be writing a report with policy and legislative recommendations based on the information gathered during the hearings. The report is due to the legislature by December 31<sup>st</sup>. The public can access the archived/recorded version of every hearing using this website: <https://malegislature.gov/Events/Hearings/Detail/3754>

Andreae introduced Dr. Paul Brown, Ph.D., a University Distinguished Professor of Sociology and Health Sciences at Northeastern University. Dr. Brown gave a presentation to the PFAS

Interagency Task Force at a hearing in August. He is a co-director with Alissa Cordner from Whitman College of the PFAS Project Lab, Studying Social, Scientific, and Political Factors of Per- and Polyfluoroalkyl Substances. [www.pfasproject.com](http://www.pfasproject.com) This is a large group effort including collaborating faculty and scientists, postdoctoral fellows, graduate and undergraduate students, and community and organizational collaborators. Dr. Brown encouraged WAC and WSCAC members to visit the PFAS Project website for additional information. Dr. Brown's presentation is posted on both WAC and WSCAC's websites:

<https://www.mwra.com/monthly/wscac/presentations.htm>

### Decades of Industry Research and Secrecy

- 1961 – DuPont finds evidence of liver toxicity in animals
- 1962 – DuPont finds evidence of toxicity in humans
- 1976 – 3M finds PFOA in workers' blood
- 1981 – 3M finds PFOA causes rare birth defects in rats
- 1981 – DuPont workers give birth to infants with similar rare birth defects; DuPont removes all women workers from Teflon unit but doesn't say why and doesn't share this data with EPA
- 1984 – DuPont finds PFOA in community drinking water, doesn't disclose results
- 1987 – 3M looks for uncontaminated blood samples to compare to their workers and finds widespread global contamination

For more details: DuPont and 3M documents in EWG's Chemical Industry Archives; Toxic Docs (Columbia SPH); Callie Lyons *Stain Resistant, Non-stick, Waterproof and Lethal: The Hidden Dangers of C8* (2007)

Dr. Brown discussed how long PFAS contaminants have been known by specific industries and hidden from the public. DuPont and 3M did internal studies on contaminants in some of their products and kept the evidence secret from employees and the public.

He noted that there are traditional sources of PFAS in the environment such as:

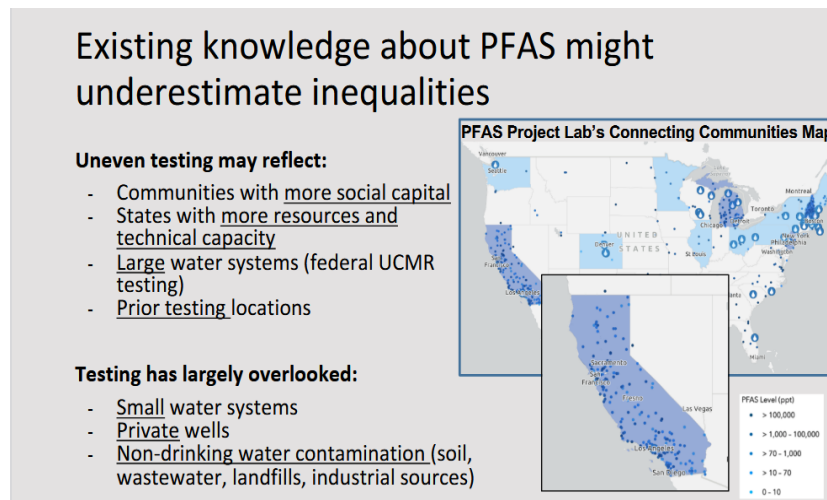
- Production facilities and industries that incorporate PFAS in their products
- AFFF firefighting foams
- Landfills
- Wastewater from septic systems and biosolids from wastewater treatment plants
- Food packaging
- Food grown in fields where sludge is applied
- Metal plating shops
- Oil rigs and refineries
- Bulk fuel storage
- Munitions facilities

There are also many more sources we don't yet know about, how they affect human health and the environment. Dr. Brown discussed the documented health effects and the research (see PFAS Project website) that is being done. Effects include:

- Hormonal changes
- Liver malfunction

- Obesity, high cholesterol, ulcerative colitis
- Immunotoxicity
- Lower birth weight and size, pregnancy-induced hypertension
- Delayed puberty, decreased fertility and early menopause
- Reduced testosterone, prostate cancer, testicular cancer
- Ovarian cancer
- Kidney cancer

Dr. Brown discussed the inequitable impacts of contamination on those who live in close proximity to the facilities that use PFAS such as military bases and factories. Research documents an uneven distribution of health hazards from contaminants to people living in low-income communities. These populations are often not adequately represented in the decision-making process, and clean-up of known hazardous chemical sites such as landfills and factories can take years to resolve. This causes higher rates of illness and exposure to pollutants.



Dr. Brown talked about the importance of engagement with the community groups that can discuss the impacts affecting residents and guide new policies to address these areas. Groups including:

- Westfield Residents Advocating for Themselves (WRAFT)
- People of Ayer Concerned about the Environment (PACE)
- PFAS Alliance
- Testing for Pease

Dr. Brown discussed the need for a class-based approach to managing PFAS given that replacement compounds (short-chain PFAS) have many of the same toxicity concerns and environmental persistence as long-chain PFAS. The “whack-a-mole approach to chemical policy doesn’t work.”

In the paper, ‘Scientific Basis for Managing PFAS as a Chemical Class,’ footnoted in Dr. Brown’s presentation, the authors said,

*“Limiting the entire class of PFAS, including fluorinated polymers, to essential uses is critical, given that currently, remediating PFAS, once released to the environment, is at best extremely costly and, in some cases, impossible. Governments can take a class-based approach to cleanup efforts, for example, by prioritizing research and development funding for treatment and disposal/destruction methods that are effective for the entire class of PFAS. Such an approach would ensure that treatment strategies remove all PFAS from all impacted environmental media (water, air, and soil) and that treatment residuals (for example, spent activated carbon and reverse osmosis concentrate) are managed such that the entire PFAS class is destroyed and its degradation products (or minerals) captured, so that unknown fluorinated reaction intermediates and harmful levels of organofluorines and hydrogen fluoride are not reintroduced into the environment.*

*A class approach can also be used in developing cleanup standards, so that responsible industries are held accountable for remediation of all PFAS, not just a few. Additionally, governments can hold responsible parties accountable for exposure and health monitoring in heavily exposed populations, in order to promote effective and lasting solutions.*

<https://pubs.acs.org/doi/pdf/10.1021/acs.estlett.0c00255>

Dr. Brown also mentioned EPA’s PFOA Stewardship Program which was launched in January 2006 due to concerns about the impacts of PFOA and long-chain PFAS on human health and the environment. EPA [asked the eight major companies in the PFASs industry](#) to commit to reducing PFOA from facility emissions and product content by 95 percent no later than 2010, and to work toward eliminating PFOA from emissions and product content no later than 2015.

<https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-20102015-pfoa-stewardship-program>

In closing, Dr. Brown discussed the recommendations he and his colleagues shared with the PFAS Interagency Task Force:

## 4. We made these recommendations for the MA Interagency Task Force this past summer (some specifically relevant to you at MWRA)

What should legislatures and health and environmental agencies do?

- **Test water in locations with likely contamination**
- **Offer blood testing** to people in exposed areas
- **Proactively target testing** in low-income and BIPOC communities
- **Prioritize EJ communities** for remediation
- **Provide financial support to towns and cities** - remediation is expensive and while some towns and cities have taken early action, many are unaware of the problem or lack financial resources and technical capacity
- **Provide funds** for statewide research, education, testing and surveillance, and remediation
  - Yes, MA has started but we need more
- **Turn off the tap** - stop new uses and emissions of PFAS for all non-essential uses
- **Pass legislation** to restrict many uses of PFAS, including AFFF foam, food packaging (hearing yesterday), textiles, and carpets, require health insurers to cover blood testing
- **Issue investigative orders** for likely sources (e.g. CA State Water Resources Control Board)
- **Provide education to health providers** so they can properly inform patients



Sen. Carper (D-DE) pointing to our map



Our conferences



## Recommendations (continued)

- **Learn from the experts:** Our international conferences (past presentations on our website [pfasproject.com](http://pfasproject.com)), PFAS-Exchange ([pfas-exchange.org](http://pfas-exchange.org)), Interstate Technology and Regulatory Council ([itrcweb.org](http://itrcweb.org)), National Academy of Science, Green Science Policy Institute ([greensciencepolicy.org](http://greensciencepolicy.org)), Safer States ([saferstates.com](http://saferstates.com)), Environmental Working Group ([ewg.org](http://ewg.org))
- **Work with the EPA** for national action, including MCLs, Superfund (CERCLA) listing, abolish corporate withholding of data and Confidential Business Information claims
- **Work with academics** in life sciences, natural sciences, and social sciences
- **Work with our Congressional delegation** – Representatives and Senators are playing important roles
- **Use a class-based approach** and don't be fooled into thinking that one or two chemicals at a time is OK
- **Work with community groups** who have always been at the forefront

Andreae and Lexi thanked Dr. Brown for his presentation.

Steve Estes-Smargiassi, MWRA Director of Planning & Sustainability gave a brief update on the following topics:

- MWRA continues to review the revisions to the federal Lead & Copper Rule. They continue to provide outreach to schools and daycare facilities. The fall sampling round is now in progress and will be compared to previous sampling rounds. MWRA is considering alternatives to their corrosion control methods
- The first piece of land for the Metro Tunnel was purchased in Waltham. Borings were done in several communities over the summer and are being studied. Necessary infrastructure improvements in the water system were identified before the Metro Tunnel Program began. These improvements are ongoing. One project now being addressed is in Shaft 9A.
- Due to all the rain this past summer, it was difficult to move higher quality Quabbin water into Wachusett Reservoir which has higher levels of reactive organic material. This material calls for an increase in chlorine demand. Under these conditions, chlorine decays faster leaving lower residuals and higher coliform positives in some communities. MWRA staff hosted a webinar for ratepaying communities to explain the issues which led to these conditions and how to address them.
- Some chemicals are in short supply and suppliers are affected by trucking issues. MWRA has a priority as a water supplier involved with public health. They are in close communication with suppliers to monitor the situation.
- MWRA is following the state mandate for vaccinating employees. Staff, other than operations employees is using a hybrid schedule of both home and office. The MWRA will be leaving the Charlestown Navy Yard in the spring of 2023. Staff will be moved either to the Chelsea facility or to Deer Island. This will save MWRA money and energy costs.

Wendy Leo, MWRA director of Environmental Quality, briefed WAC on the following:

- Draft regulations on implementing the Sewage Notification Law—public comment closing **Nov. 8**. Not just CSOs, but SSOs and blending events. Notification of the latter just on the website. Extensive requirements on local Boards of Health. CSO communities need detailed plans by next February. MWRA has been doing notification for a while, but this law will mean that it has to do more. May generate public interest and support for reducing CSOs, but in MWRA's case, already spent \$9b, so whether further reductions will have a significant impact on the Charles is unlikely.
- MWRA submitted a new application for a new Clinton NPDES permit, as one is due soon.
- EPA is working on a new permit for Deer Island, but they have been for many years. Last permit application was 2005.
- CSO program is actively working on a report due Dec. 31. Receiving water quality report issued in July. On the MWRA website. CSO assessment project will have a new report at the end of October.

- MassBay monitoring is back up to pre-pandemic levels. Threshold exceedance for dissolved oxygen—not clear that this has an impact. Early warning of a change. OMSAP will be discussing at their next meeting. Not sure if it's due to warmer water or something else.
- New faces at MWRA—superintendent at Clinton Bob McDonald. Ken Keay has retired, and David Wu is taking his post. Lots of job openings. And David Kubiak has retired.
- Biobot contract was extended, so COVID testing results will continue to be posted on the MWRA website.

Nut Island and Chelsea Creek are finishing up. Upcoming projects are Prison Point CSO—that will result in a reduction in capacity there. Clarifiers at DI is upcoming, but delayed.

Andreae and Lexi thanked Steve and Wendy for the MWRA updates.

Next virtual WSCAC meeting is on November 9 @ 10:00 AM. with DCR-DWSP staff discussing the Continuous Forest Inventory and water quality monitoring with an update on the road salt project.

Meeting adjourned.