

Water & Health  Advisory Council

**CORONA** | ENVIRONMENTAL  
CONSULTING

# Prioritizing Risks: Putting PFAS into Context

US Conference of Mayors, Water Council

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## **Safe Drinking Water Act**

“meaningful opportunity for health risk reduction”

# Addressing risks that matter most

1. What's there?
2. What's the concern?
3. What can be done about it?

# What's the concern?



Unknown,  
unregulated risk

Unidentified DBPs,  
chemicals, microbes, PFAS

Known,  
unregulated risk

PFAS, chlorate, CCL contaminants,  
nitrosamines

Known,  
regulated risk

Arsenic, Nitrate, TTHMs, etc.  
*Cryptosporidium, Giardia*, etc.

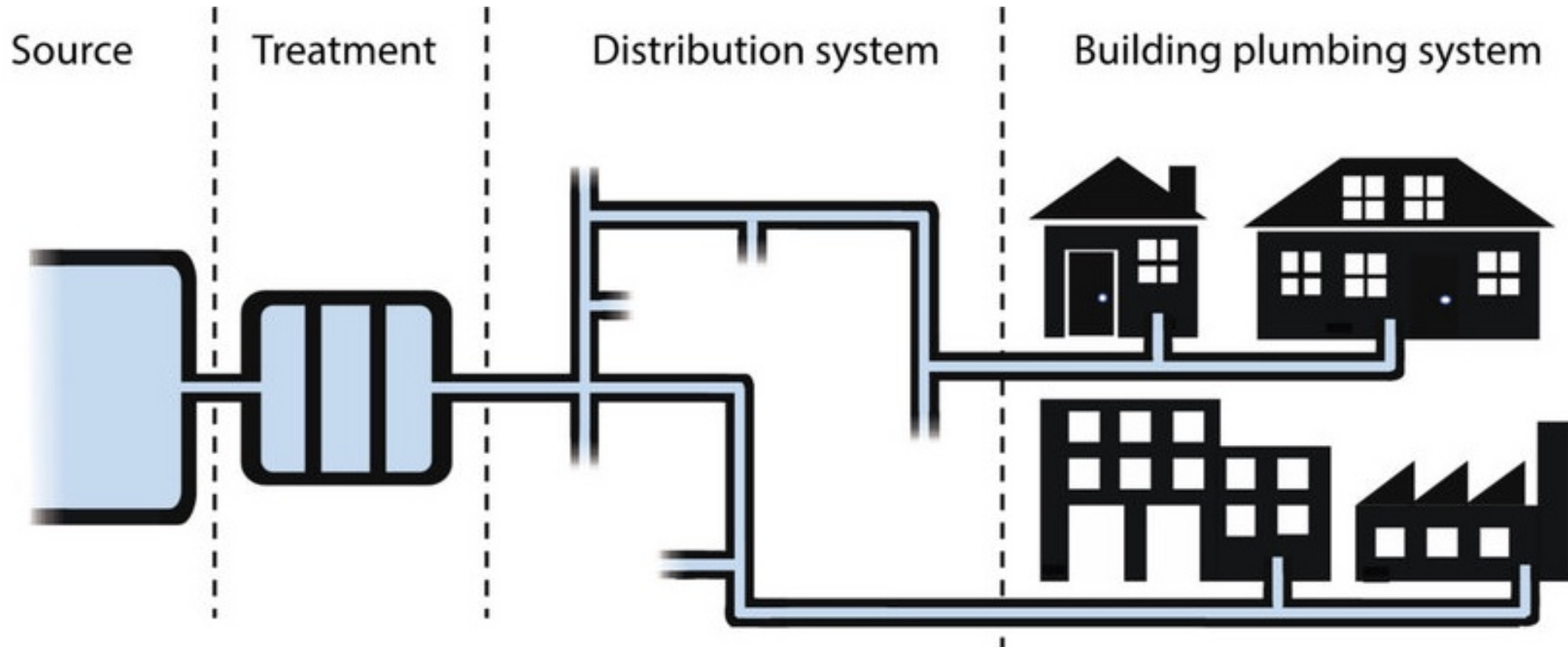
# What's the concern?



Not having water...

- Infrastructure failure
- Workforce limitations
- Natural disasters
  - Drought
  - Wildfires
  - Flooding

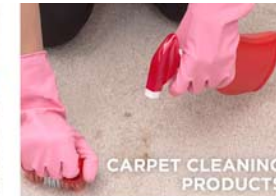
# What can be done about it?



Feeding the Building Plumbing Microbiome: The Importance of Synthetic Polymeric Materials for Biofilm Formation and Management - Scientific Figure on ResearchGate.  
Available from: [https://www.researchgate.net/figure/Drinking-water-from-source-to-tap-highlighting-key-differences-between-the-main\\_fig1\\_342435101](https://www.researchgate.net/figure/Drinking-water-from-source-to-tap-highlighting-key-differences-between-the-main_fig1_342435101)

# So, what's the risk?

- Relative health risk: toxicity data and occurrence data
- Putting PFAS into context



Credit: Green Policy Institute



# Council Member Research



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## EMERGING CONTAMINANT ARTICLE

TOPICAL COLLECTION ON PFAS ANALYTICS AND TREATMENT



## Does regulating per- and polyfluoroalkyl substances represent a meaningful opportunity for health risk reduction?

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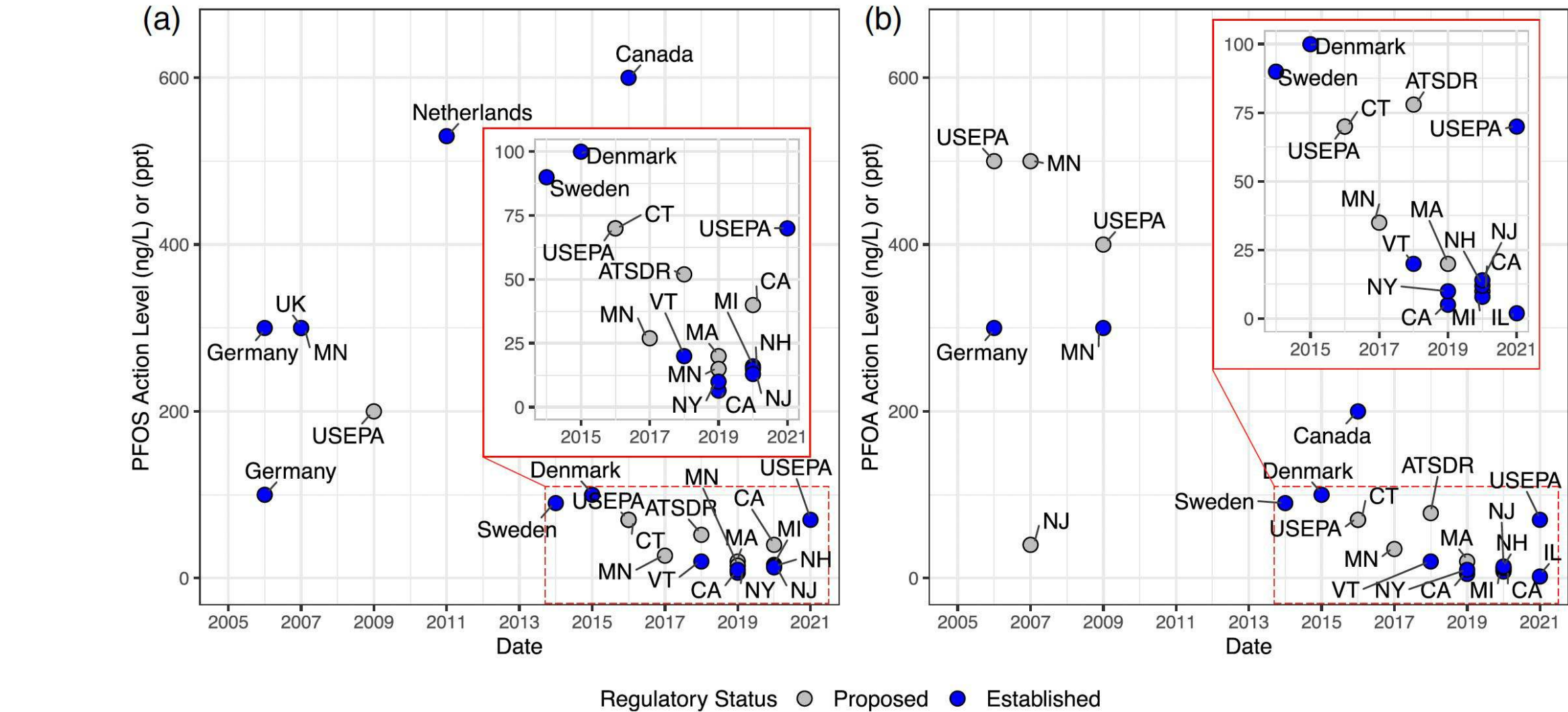
### Abstract

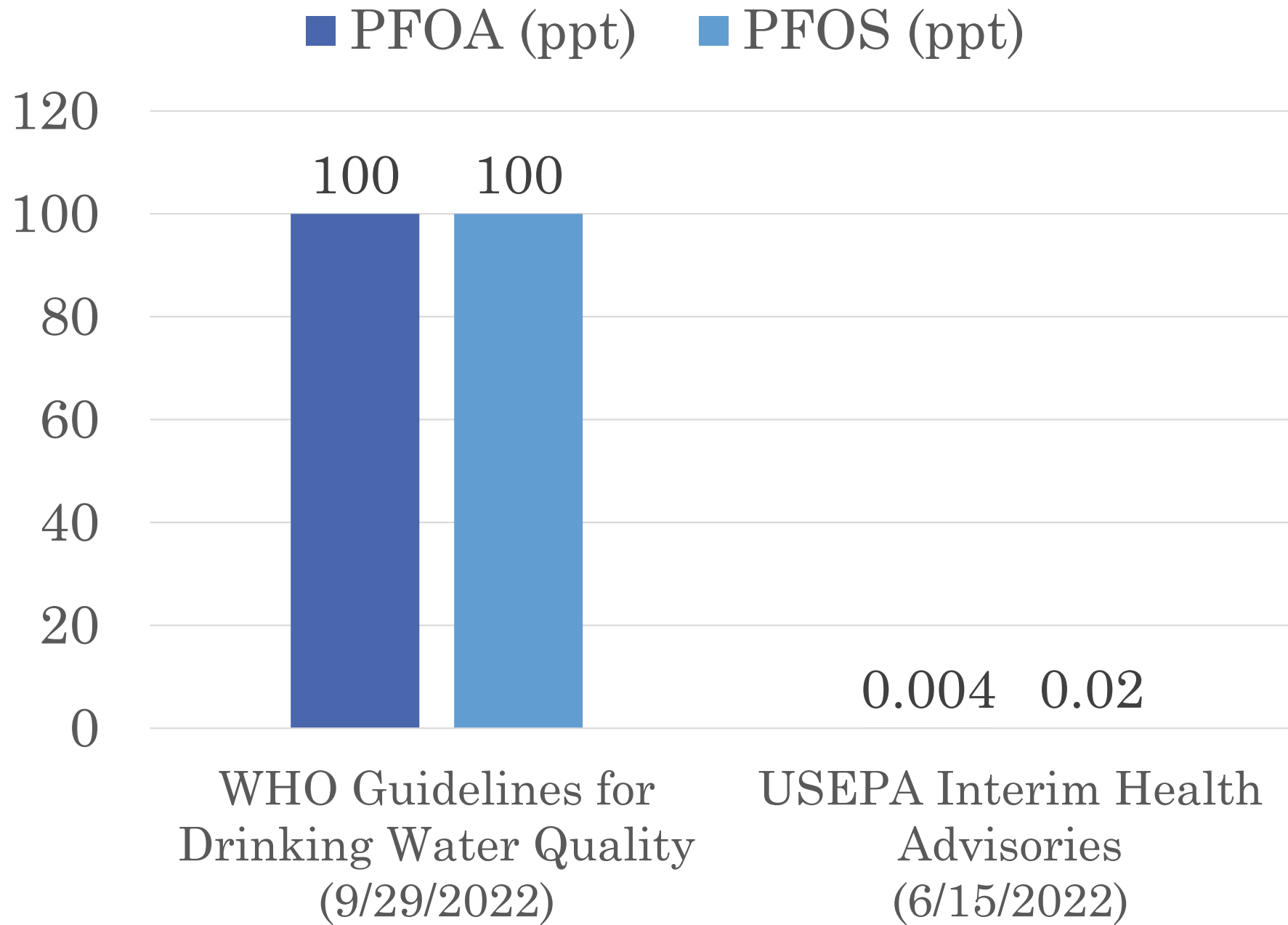
US Environmental Protection Agency's drinking water contaminant regulations must meet a qualitative "meaningful opportunity" threshold in health risk reduction. Using our Relative Health Indicator (RHI) metric, we quantify the ranges of potential health risk reductions that could be achieved from state and federal per- and polyfluoroalkyl substances regulatory levels (proposed or finalized) and compare them with previous regulatory determinations of other contaminants to create a quantifiable, comparable scale of "meaningful opportunity" justifications. If perfluorooctanoic acid (PFOA) and perfluorooctyl sulfonate (PFOS) were present in 100% of water systems, contaminant concentrations of 227 ng/L PFOS and 2295 ng/L PFOA would be needed to exceed the minimum threshold of percent population\*RHI (PopRHI) to justify "meaningful opportunity," based on the current regulatory levels of uranium; these concentrations exceed any levels being proposed. Using this comparison



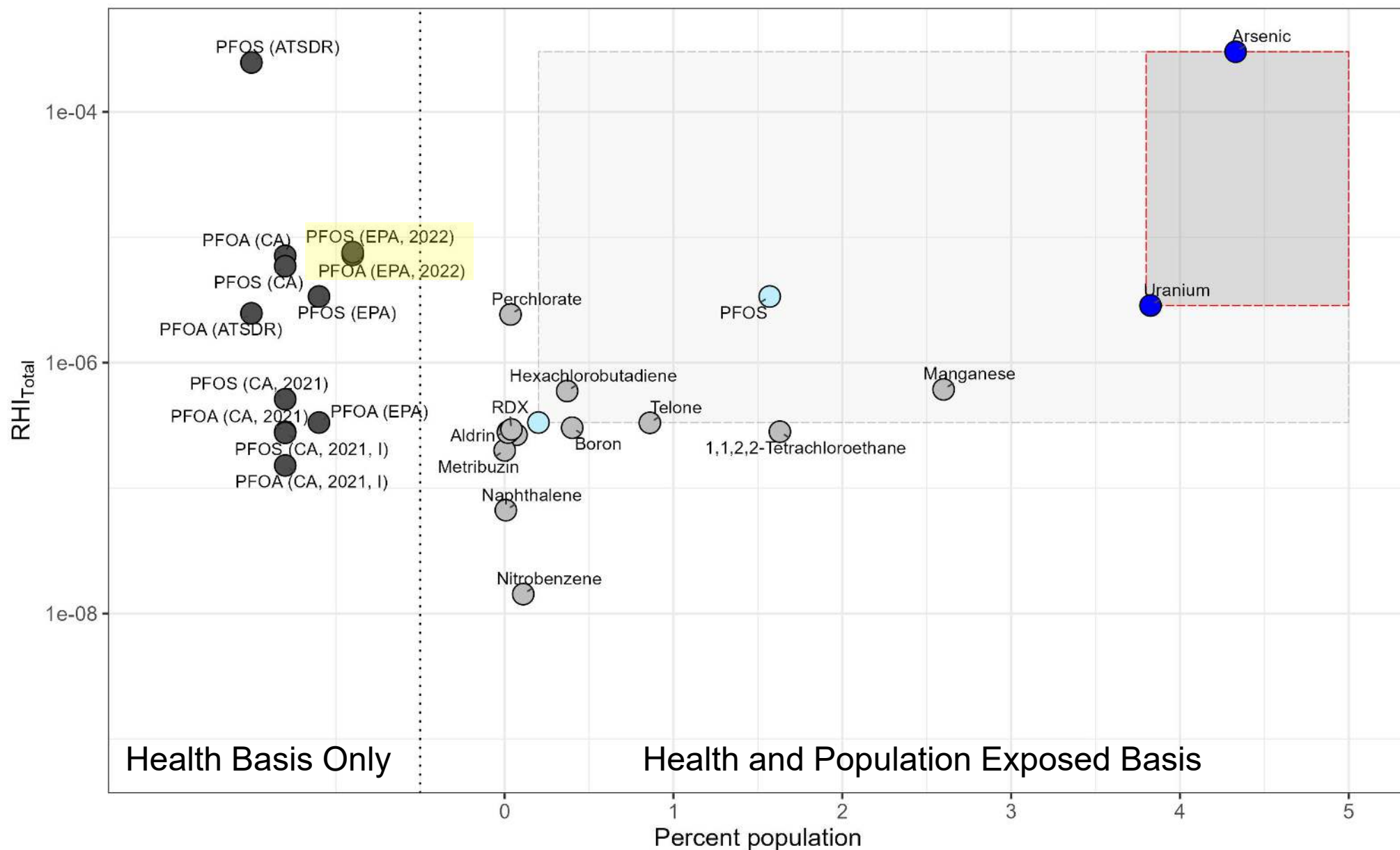
# Does regulating per- and polyfluoroalkyl substances represent a meaningful opportunity for health risk reduction?

Katherine Alfredo<sup>1</sup> | Chad Seidel<sup>2</sup> | Amlan Ghosh<sup>3</sup>





# Is regulating PFAS a meaningful opportunity?







# What's the Priority?

- Limited funding and competing priorities
- Prioritizing risks to be efficient with our limited funding and achieve the greatest health benefit



# California's water supply goes beyond the current drought



A sign warns about lower water levels near the entrance to Castaic Lake. The Metropolitan Water District of Southern California hosted a media availability on Wednesday, April 27, 2022, after imposing restrictions that will limit outdoor watering to one day per week for roughly 6 million people. (Photo by Dean Musgrove, Los Angeles Daily News/SCNG)

By **CRAIG MILLER** and **PAUL HELLIKER** |

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SAFER Status

- ☒ (All)
- ☒ Failing
- ☒ At-Risk
- ☒ Potentially At-Risk
- ☒ Not At-Risk
- ☒ Not Assessed

Service Connections

(All) ▼

Population

(All) ▼

County

(All) ▼

Regulating Agency

(All) ▼

Service Area Econ...

(All) ▼

Receiving Funding?

(All) ▼

Clear All Filters



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# *America's Water Infrastructure Needs Help*

[www.wateradvisory.org](http://www.wateradvisory.org)



# Questions?



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