WHO GOVERNS THE FOREVER CHEMICALS?

Centering the Local Level in US Environmental Federalism

THE UNIVERSITY OF ARIZONA UDALL CENTER for Studies in Public Policy

RIPPLES Research In Pollutant PoLicy for Environment & Society

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1. Abstract

Per- and polyfluoroalkyl substances (PFAS), or "forever chemicals," persist in the environment and are linked to a range of human and environmental health impacts. Yet US policy responses have advanced slowly: the first enforceable federal drinking-water standards came only in 2024, leaving roughly two decades during which states and localities built a patchwork of responses to PFAS contamination. Against a backdrop of deregulatory pressures and political polarization, localities have become an increasingly important locus of environmental action; but they remain understudied in environmental federalism scholarship. We address this gap through a US-wide study of 575 local government meetings across 137 localities in 33 states, 2010–2023, drawn from the LocalView dataset.

Our findings shed light on the critical roles localities play in governing PFAS; the actions they take, the challenges they face, and the emergent solutions they craft. By situating local responses within debates on environmental federalism and multilevel governance, we clarify when and how localities act as implementers and innovators in emerging policy domains.

This research was conducted by the RIPPLES (Research in Pollutant Policy for Environment and Society) lab at the University of Arizona Udall Center for Studies in Public Policy. Scan the QR code to read more

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02. Research Questions

- What actions are localities taking to address PFAS in their communities?
- What are the major challenges facing localities, and what emergent solutions are they crafting on this issue?

What is a locality?

In this study, a locality refers to municipalities, counties, tribal governments, utilities, and other local governance entities with authority or responsibility over drinking water, land use, public health, environmental protection, or related policy areas.

03. Methodology

- Data drawn from the LocalView dataset, containing local government meeting videos and transcripts uploaded to YouTube.
- PFAS-related meetings were identified using keyword searches based on prior literature.

After cleaning and removing irrelevant data, the final dataset included:

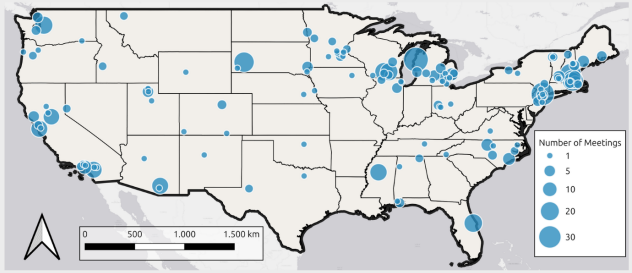
575 unique meetings

33 states

137 locations

2010–2023 period

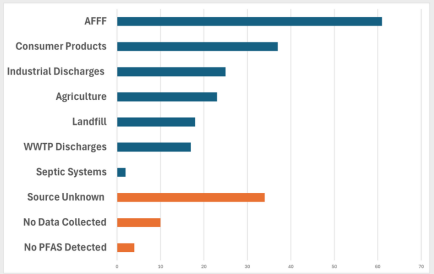
Geographic distribution of PFAS-related local government meetings across the United States (2010–2023).



No data was available for Alaska, Hawaii, or U.S. territories.

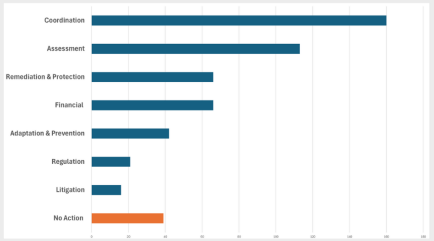
04. Results & Key findings

What sources of PFAS are localities aware of?



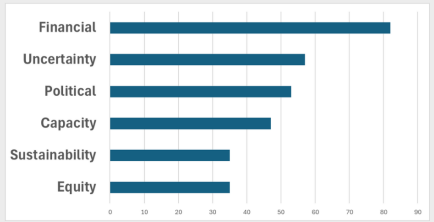
- Identifiable point sources like military bases and airports dominate
- Diffuse consumer-product contamination, by contrast, surfaces only through wastewater monitoring
- Large shares of localities reporting no data or unknown sources

What types of actions are localities taking to address PFAS?



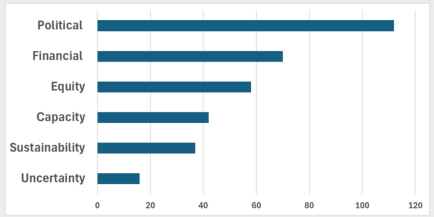
- Coordination dominates: localities act mainly as network-builders to access funding and technical capacity.
- Regulatory and litigation actions remain relatively rare, reflecting often limited local authority and resources
- Limited forward-looking adaptation and prevention measures raise sustainability concerns

What types of challenges do localities face in their PFAS responses?



- Financial burdens lead, with upfront treatment and testing costs falling hardest on small and rural localities
- Regulatory uncertainty outranks scientific uncertainty: localities struggle more with shifting standards
- High reliance on local champions, their networks and expertise, creating key-man risks

What types of solutions are localities developing in response to challenges?



- Building partnerships with state agencies and the EPA key to unlock funding, expertise, and regulatory clarity
- Proactive, transparent communication a key response to manage public trust
- Most equity solutions emerge from residents advocating for themselves, not government

05. Discussion

- **Localities are the "face" of government PFAS response and shape public trust.** Local governments and utilities often find themselves on the front line of response even in the absense of state or federal guidance.
- **Three structural barriers dominate:**
  - pervasive financial and capacity constraints
  - regulatory uncertainty more than scientific uncertainty
  - fragmented authority that makes collaboration essential but costly.
- **Three high-impact practices address multiple challenges at once**:

strong collaborative networks to mobilize resources across levels of government and different sectors

proactive, consistent, and transparent communication with communities

responsiveness to self-advocating communities