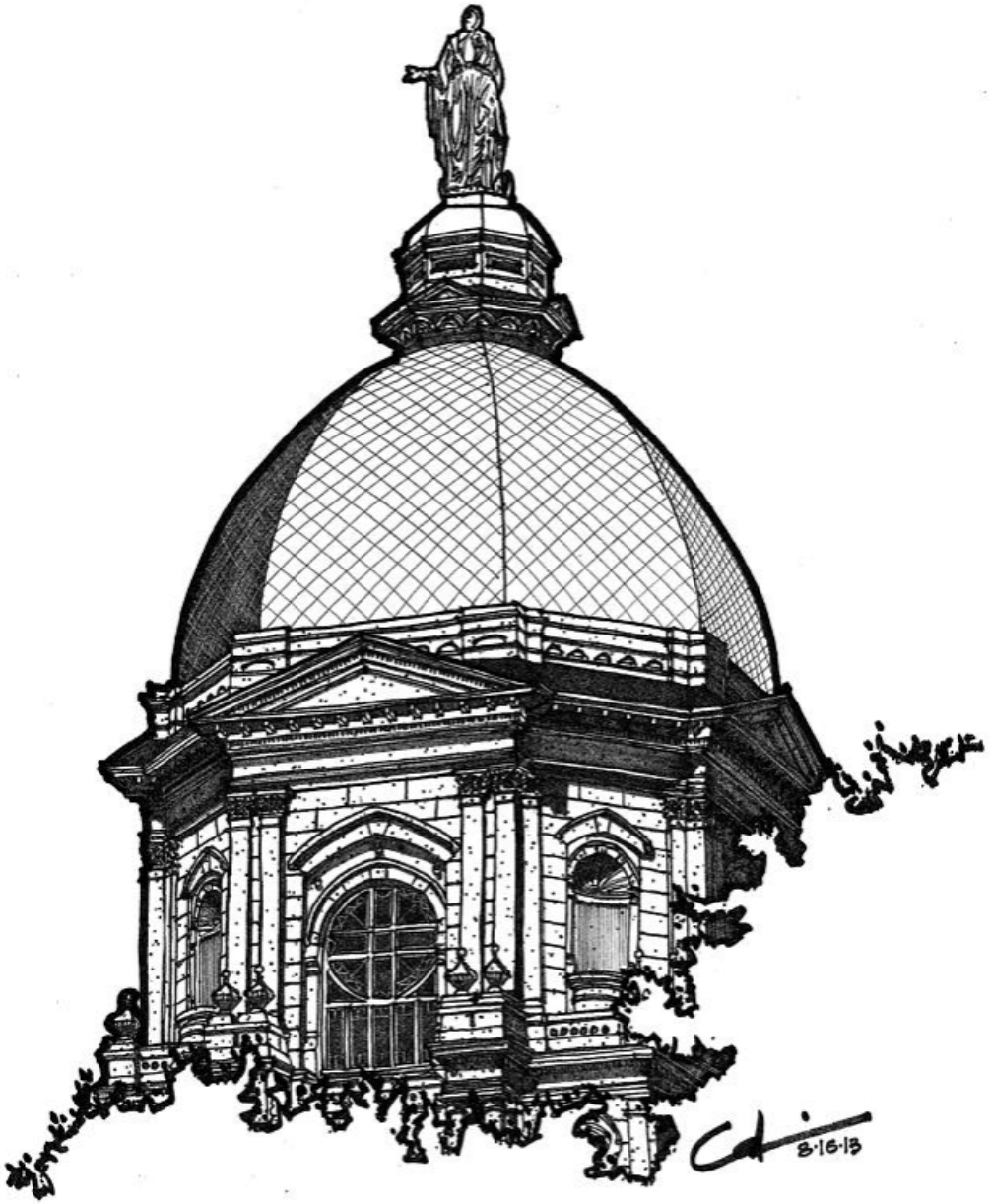


Managing PFAS in our Drinking Water

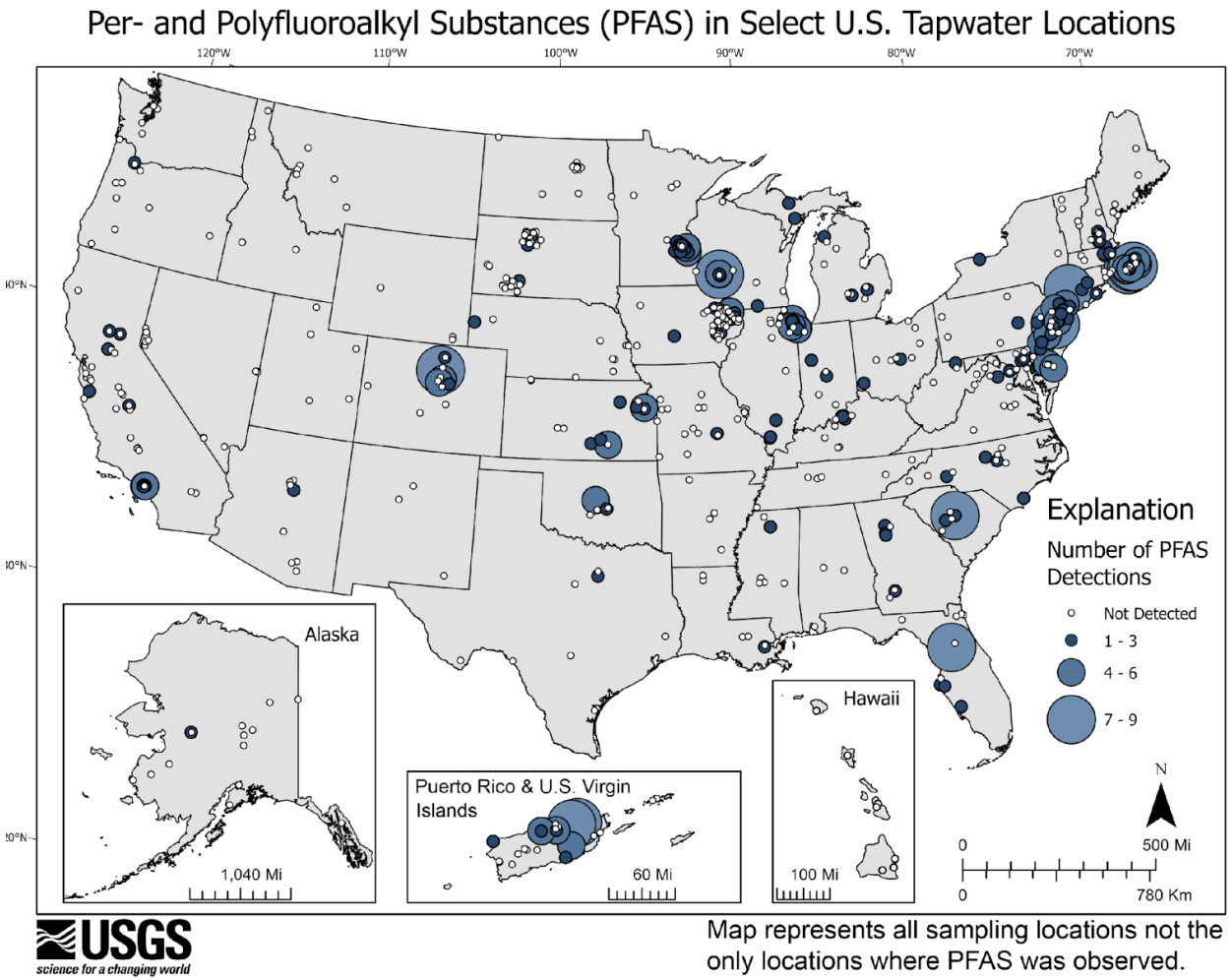
Kyle Doudrick

Associate Professor

Department of Civil & Environmental Engineering & Earth Sciences

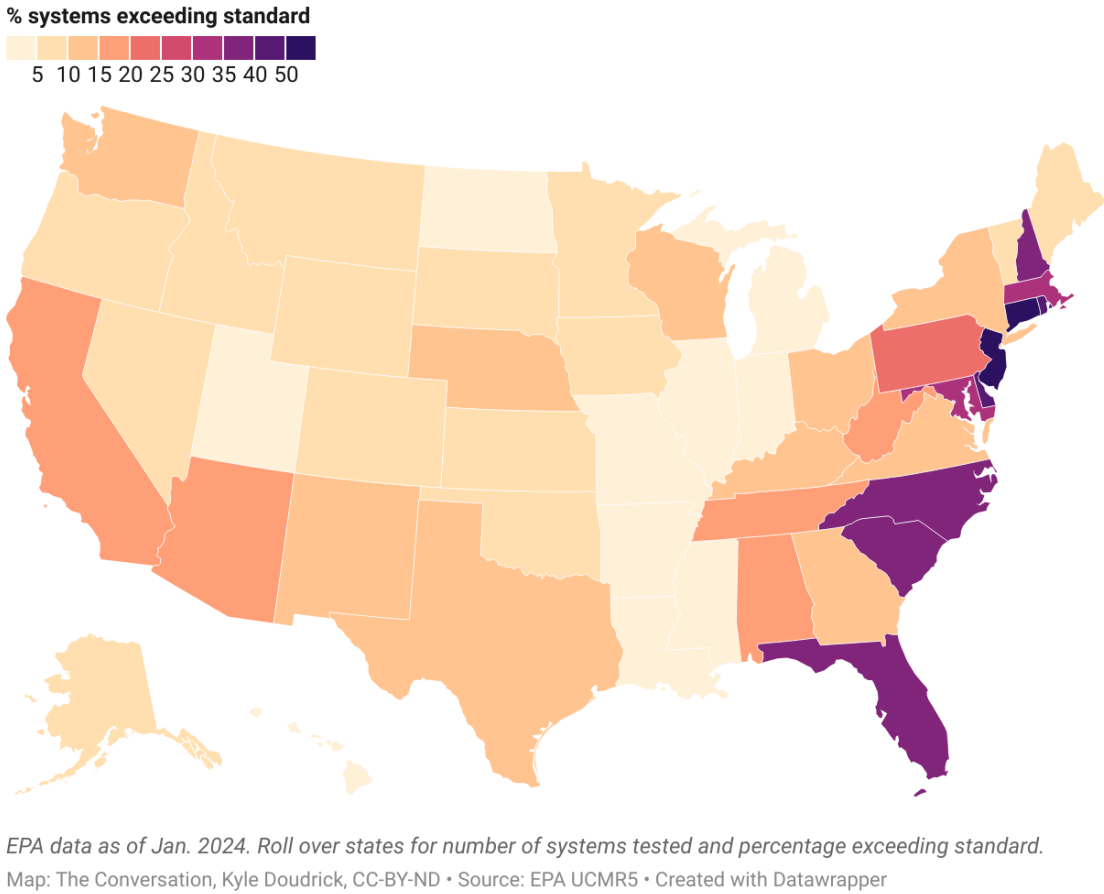
University of Notre Dame

Indiana Water Summit (8-22-24)



Where high PFAS levels are most common

Early PFAS testing by the EPA found a high percentage of public water systems in several states had levels exceeding new federal standards for at least one type of PFAS. As of early 2024, the EPA's testing had covered 3,764 public drinking water systems out of 154,106.

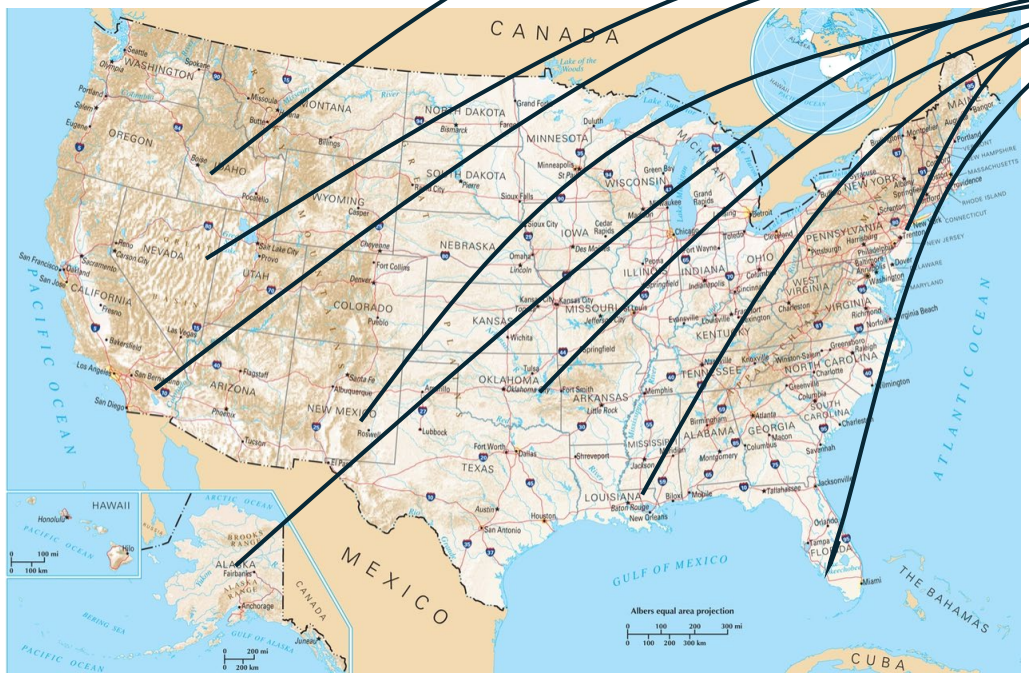


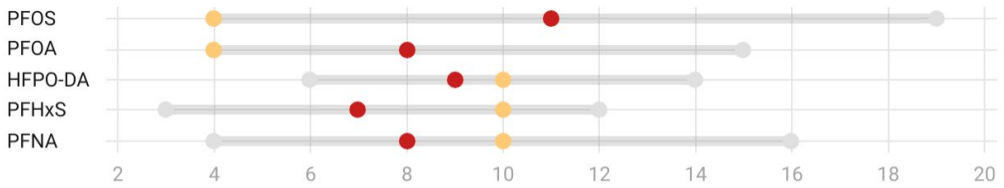
EPA data as of Jan. 2024. Roll over states for number of systems tested and percentage exceeding standard.

Map: The Conversation, Kyle Doudrick, CC-BY-ND • Source: EPA UCMR5 • Created with Datawrapper

At <u>least 45%</u> of the nation's drinking water contains PFAS

Cost Estimates from AWWA





EPA data as of Jan. 2024. Gray bars show the 10th to 90th percentile range of all results.

Chart: The Conversation, CC-BY-ND • Source: EPA, Kyle Doudrick • Created with Datawrapper

More than 7,000 entry points will require treatment

Requiring capital costs of $27.1 to $48.3 billion in the next five years

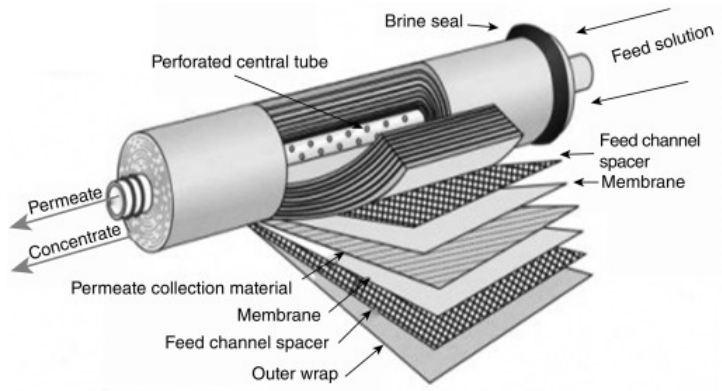
With annual costs from $2.7 to $3.5 billion

Paid for by who?

Granular Activated Carbon

Ion-Exchange Resin

Reverse Osmosis



Waste Management – Where Does it Go?

GAC

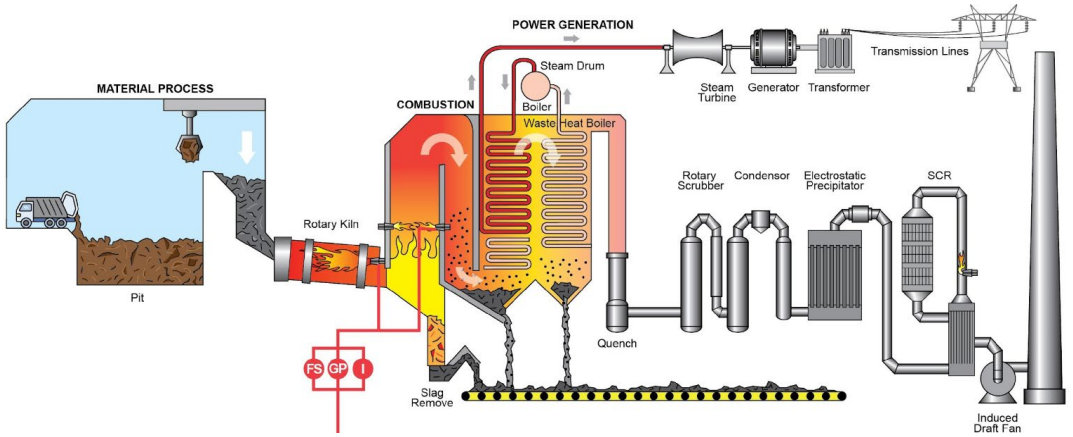
Resin

RO

Spent media

Brine wastewater

Incineration



Landfill