# **Sensing & Decision Support for PFAS** Contamination

# **OVERVIEW**

Per- and polyfluoroalkyl substances (PFAS) are a class of thousands of synthetic chemicals. PFAS, found in many consumer and industrial products, persist in the environment and bioaccumulate in the body.

- **PFAS** are found in drinking water, air, and soil at locations across the globe.
- **Certain PFAS** may be linked to harmful health effects in humans and animals.

## **RESEARCH GAPS**

Sensing. Capabilities are needed to screen for PFAS outside of a laboratory, in a relatively inexpensive way, that can provide results faster than the weeks to months for samples analyzed in conventional laboratory settings.

### Making Sense.

There is a gap in understanding how PFAS move through surface and groundwater, as well as PFAS trends over time.

Acting. Additional research and analysis are needed to determine best remediation approaches and policy considerations given PFAS is a whole-ofnation challenge.

# MITRE CAPABILITIES

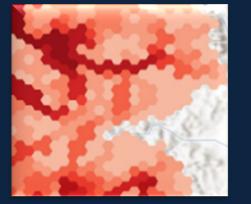
MITRE and University of North Carolina (UNC) at Chapel Hill are developing realtime, lowcost PFAS sensors, paired with geospatial models and decision-support solutions, that would enable more rapid, lower-cost detection and remediation of chemical contaminants across the defense and public sectors.

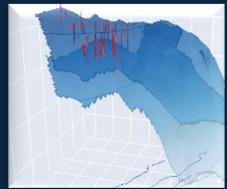


**Decision Support** for **PFAS** Sampling **Decision Support for PFAS Remediation** 

### **Realtime PFAS Detection in** Water







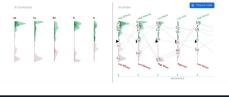


idely used today. These "forever chemicals" persist in the body and the er using serious health and ecological impacts.

tify solutions that are a good fit for their facility and situa

PFAS Treatment Technologies







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