

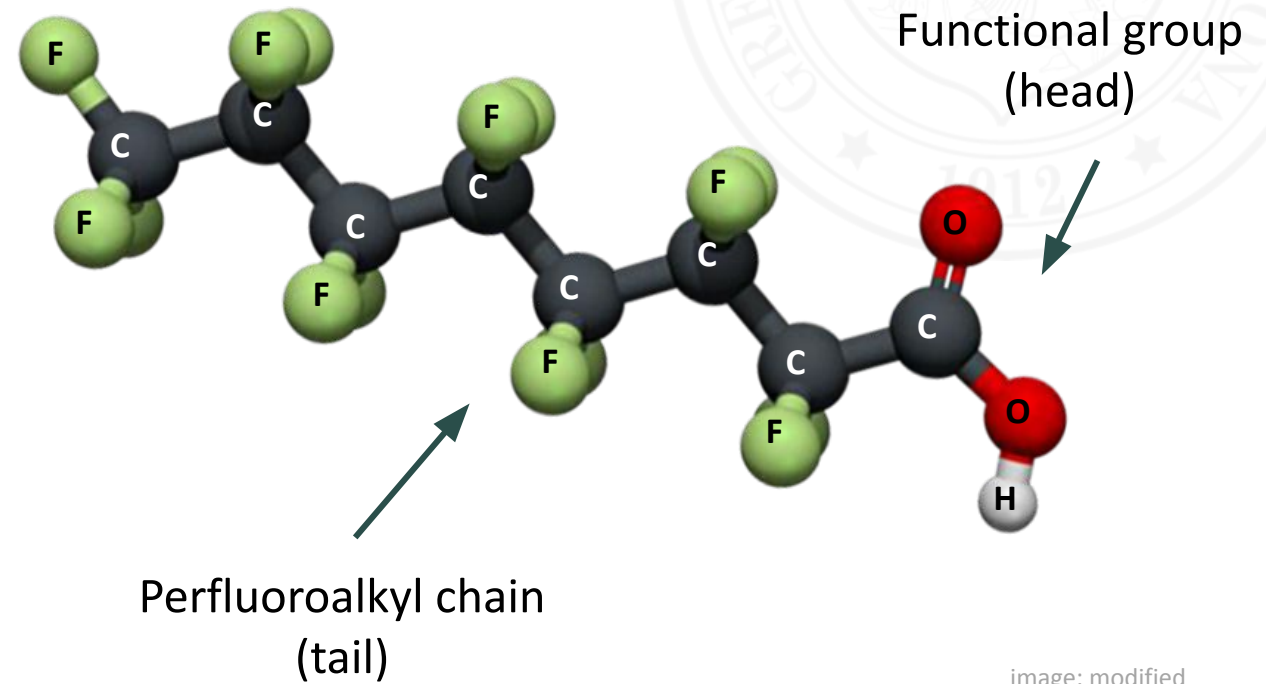
An Introduction to PFAS in Arizona





What are PFAS?

Per- and Polyfluoroalkyl Substances (PFAS)



PFAS exposure has been linked to negative health effects

- Effects are based on length of exposure and concentration

Possible Health Effects



Increased risk of
kidney and
testicular cancer



Increased
cholesterol
levels



Reduced
immune
response

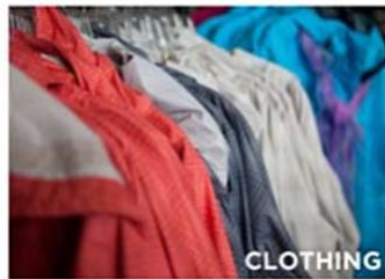


Reduced
chance of
getting
pregnant



Negatively
impacting growth,
learning, and
behavior of
children

Sources of Human Exposure



PFAS Life Cycle

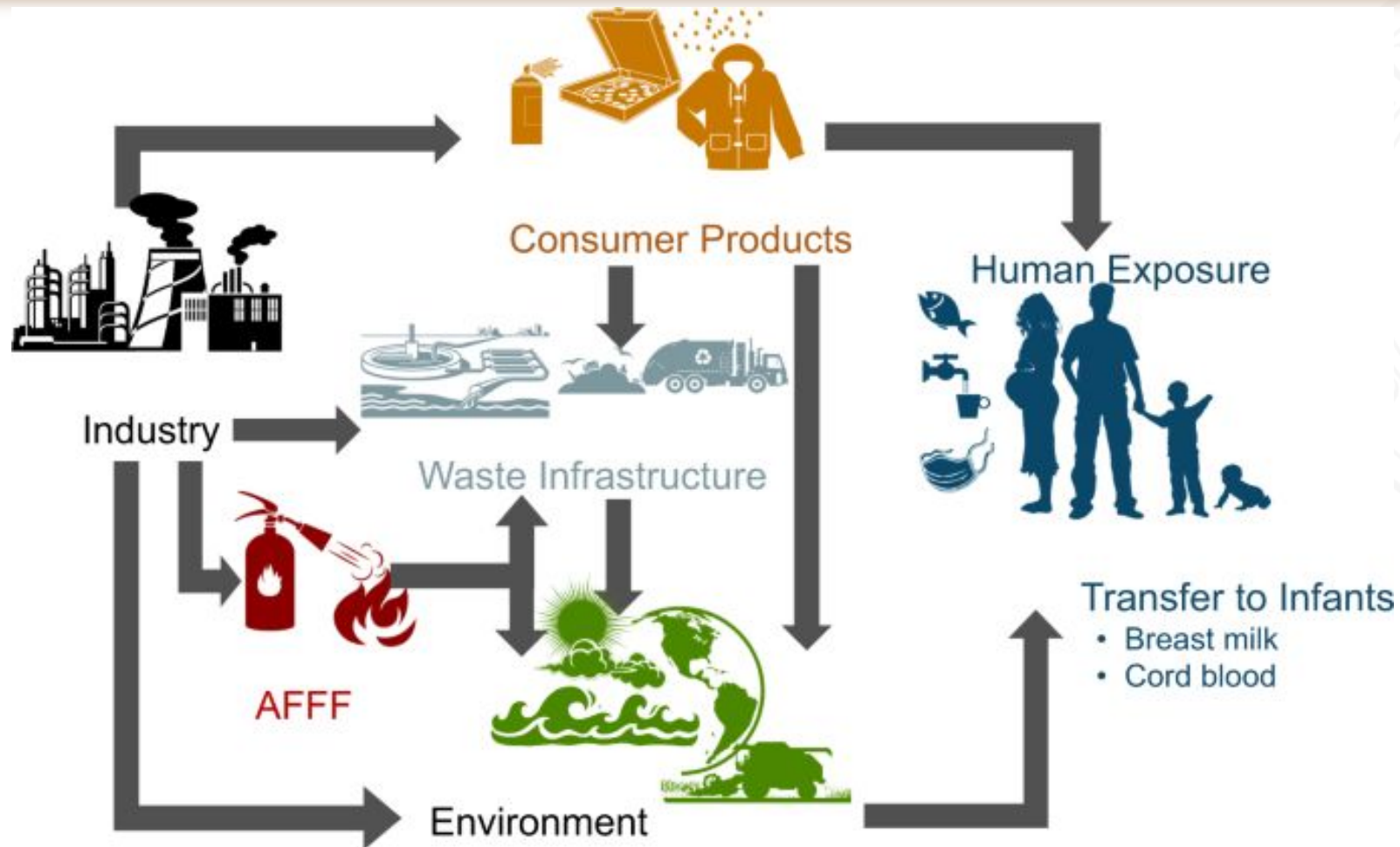
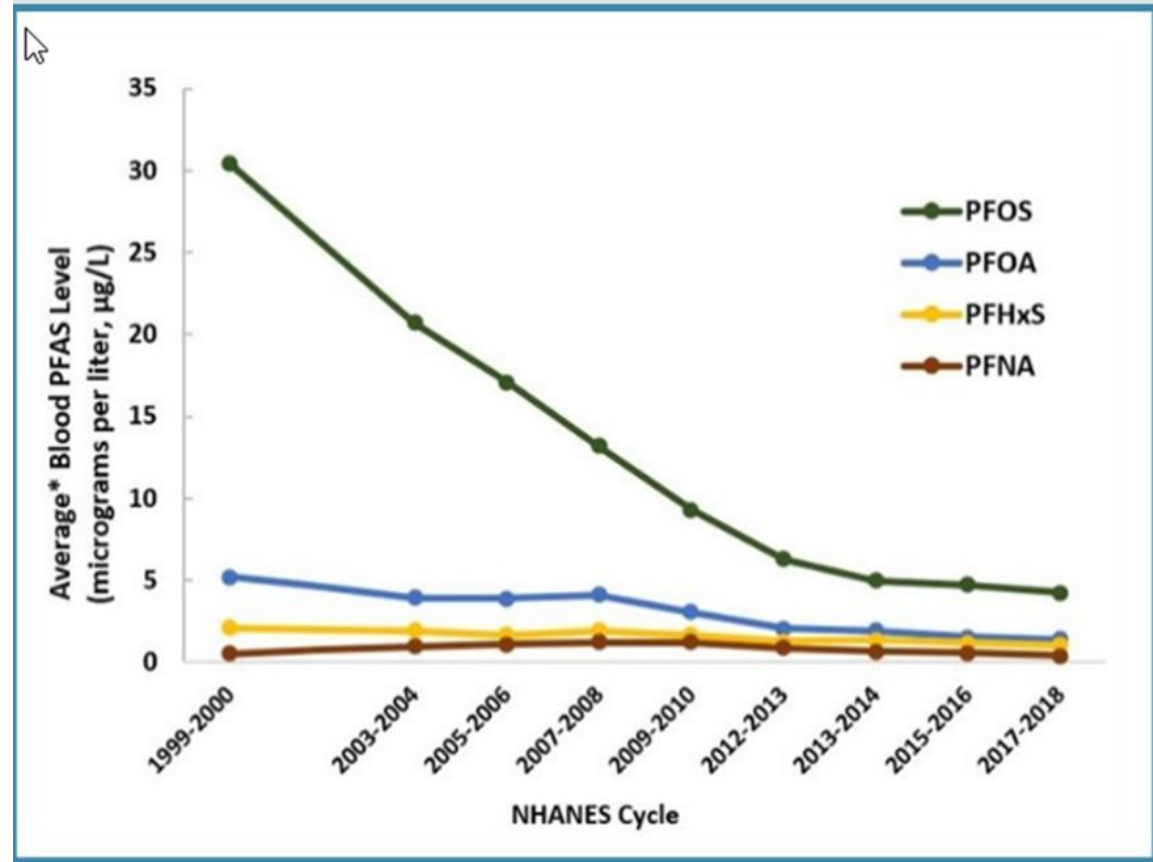


Figure 1 from Sunderland et al. (2019) *Journal of Exposure Science & Environmental Epidemiology* 29(2). doi:10.1038/s41370-018-0094-1

PFAS in the US Population

99% of Americans have
PFAS in their blood

From 1999-2018, levels
in blood declined by as
much as **85%**



Centers for Disease Control and Prevention. [National Report on Human Exposure to Environmental Chemicals, Biomonitoring Data Tables for Environmental Chemicals](#). Atlanta, GA: U.S. Department of Health and Human Service, Centers for Disease Control and Prevention.

PFAS are not regulated in Arizona

- **2009:** Provisional Health Advisories (HAs) for PFOA and PFOS
- **2016:** Lifetime HAs for PFOA and PFOS
- **2022:** Interim, updated HAs for PFOA and PFOS – HAs for PFBS and HFPO-DA



March 2023:

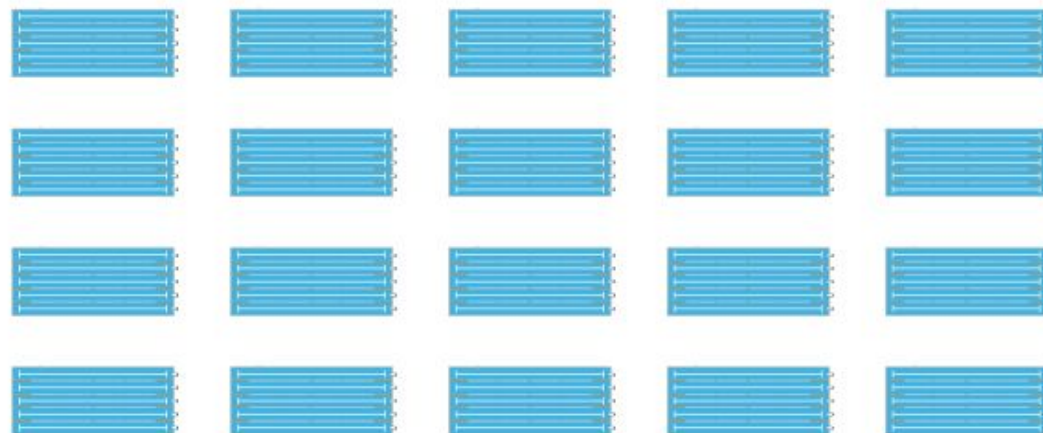
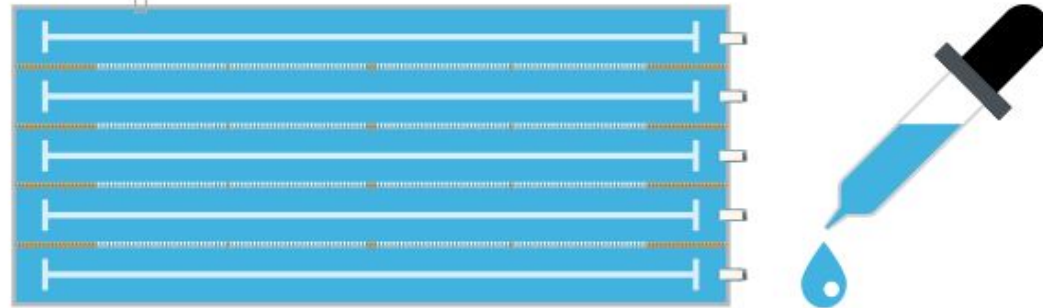
EPA Proposed Maximum Contaminant Levels (MCLs) for Drinking Water

- PFOA (4 ppt)
- PFOS (4 ppt)
- PFBS + HFPO-DA + PFHxS + PFNA (Hazard Index)



1 part per trillion (ppt)

is equivalent to a single drop of water
in 20 Olympic-sized swimming pools



Future EPA actions expected to include, at a minimum:

- Final drinking water regulation **(2024)**
- Full implementation of regulation **(2027)**
- Hazardous substance designation
- Aquatic Life Standards

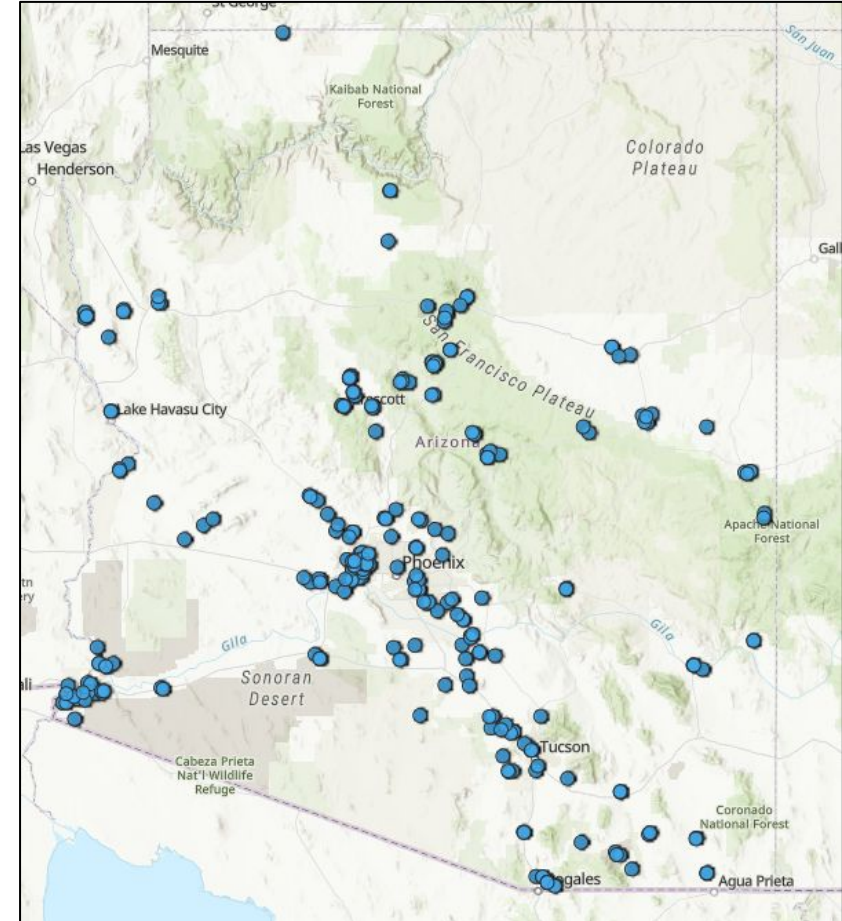




What is ADEQ Doing?

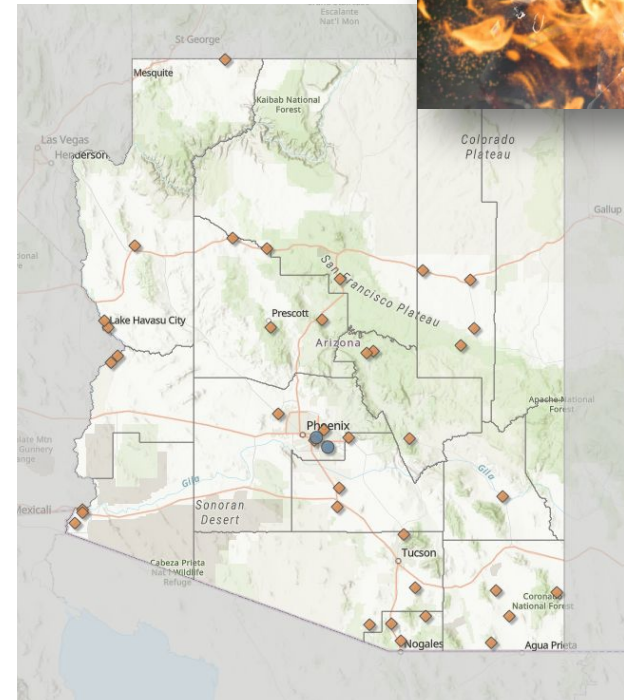
ADEQ's Initiatives

- Completed targeted statewide PFAS screening
- Conducting comprehensive drinking water testing
- Working with affected water providers on long-term solutions
- Seeking available federal funding to address PFAS in Arizona



AFFF Take Back and Replace Pilot Program

- \$395,000 allocated in FY23
- 40 Fire Departments Participating
- 5,790 Gallons Replaced



2023 Drinking Water PFAS Testing



EPA Drinking Water System Testing Requirement

- 3,300 or more customers

ADEQ's Proactive Testing Program

- Less than 3,300 customers
- Goal: Ensure that all regulated systems are tested
- \$3 Million of federal Safe Drinking Water Act funds

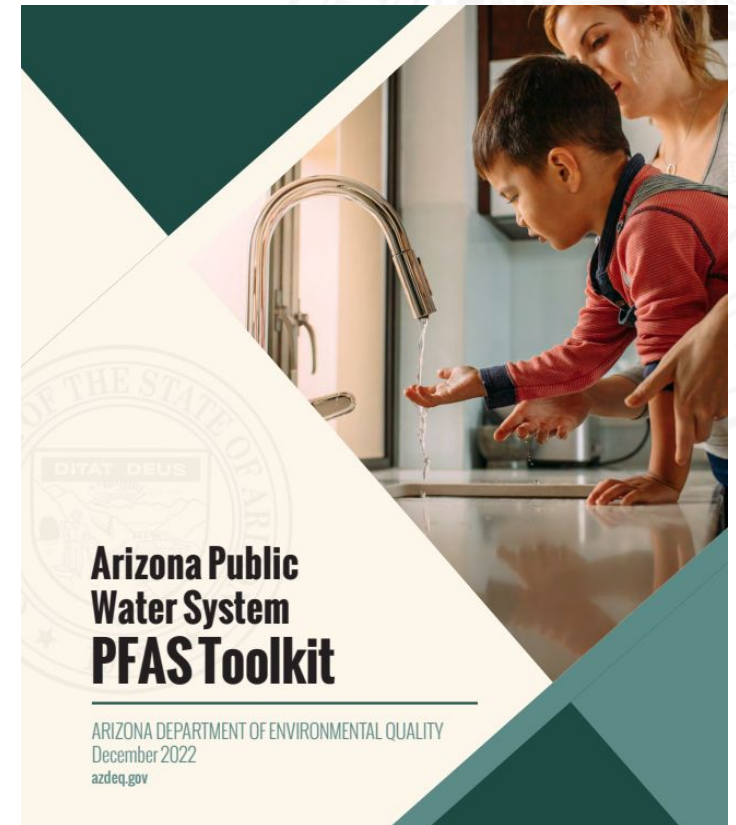


All Results

- Shared with the water system
- Posted on the ADEQ website

PFAS detections

- PFAS Toolkit is provided
- Systems asked to inform customers



Assistance to small drinking water systems

- Free testing
- Early notification
- Head-start planning for:
 - Expanded testing
 - Potential solutions
 - Federal Funding



ADEQ Photo



What Can You Do?

What if my water contains PFAS?

OK to Use



Limit Exposure



What if my water contains PFAS?



Granulated
Carbon Filter

At home PFAS water treatment



Reverse
Osmosis



Boiling water
will **NOT**
remove PFAS



Bottled water
is **NOT** required
to test for PFAS

Home Water
Treatment Systems
Certified by NSF



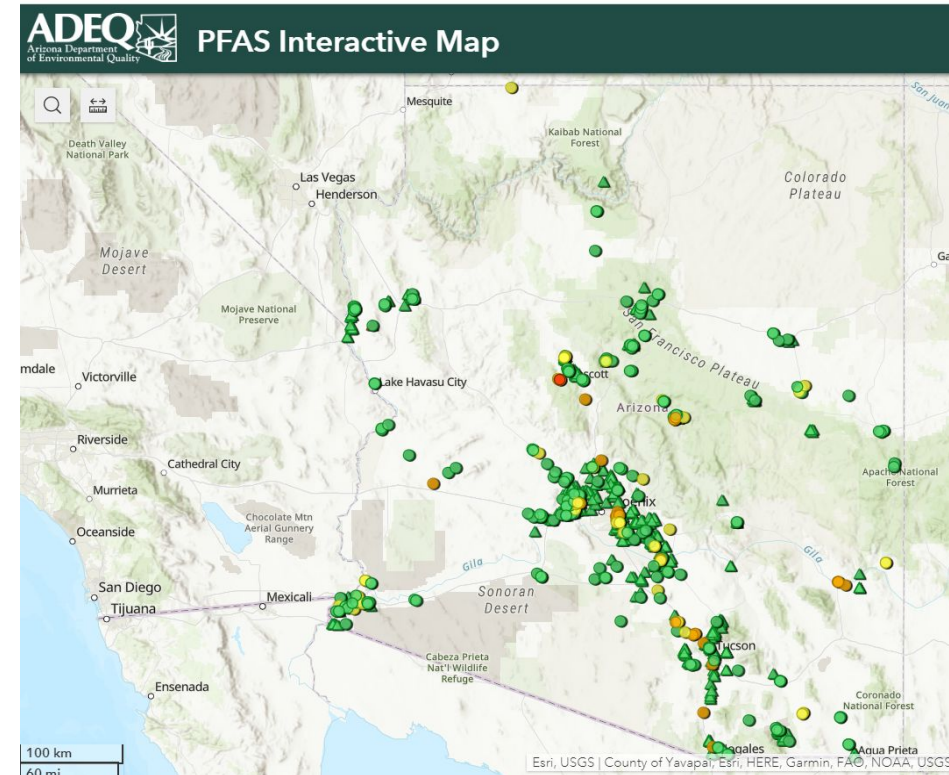
NSF is an independent organization which test, audit and certify products that comply with environmental requirements. ADEQ does not endorse NSF or any products on their list.

How can I stay informed?

ADEQ My Community



azdeq.gov/mycommunity



Drinking Water PFAS Questions:
602-695-7518

All Other PFAS Questions:
520-770-3128