

Colorado's approach to addressing PFAS contamination

January 28, 2020

David Dani



Per- and polyfluoroalkyl substances (PFAS)

- Family of thousands of human-made substances.
- Carbon fluorine bond - strongest in nature, no natural degradation.
- Used in products that resist heat, oil, stains, grease and water.
 - Class B fire-fighting foams.
 - Raincoats, shoes, popcorn bags, pizza boxes, Teflon pans.
- Found in 99% of people's blood.
- Primary concern is drinking water. People drinking contaminated water tend to have high PFAS blood levels.



PFAS and health



- High cholesterol.
- Liver damage.
- Decrease vaccine effectiveness.
- Asthma.
- Thyroid disease.
- Decrease fertility.
- Pre-eclampsia.
- Lower birth weight.
- Possible kidney & testicular cancer.

EPA PFAS drinking water health advisory (non-regulatory)

2016: PFOS + PFOA < 70 ng/L



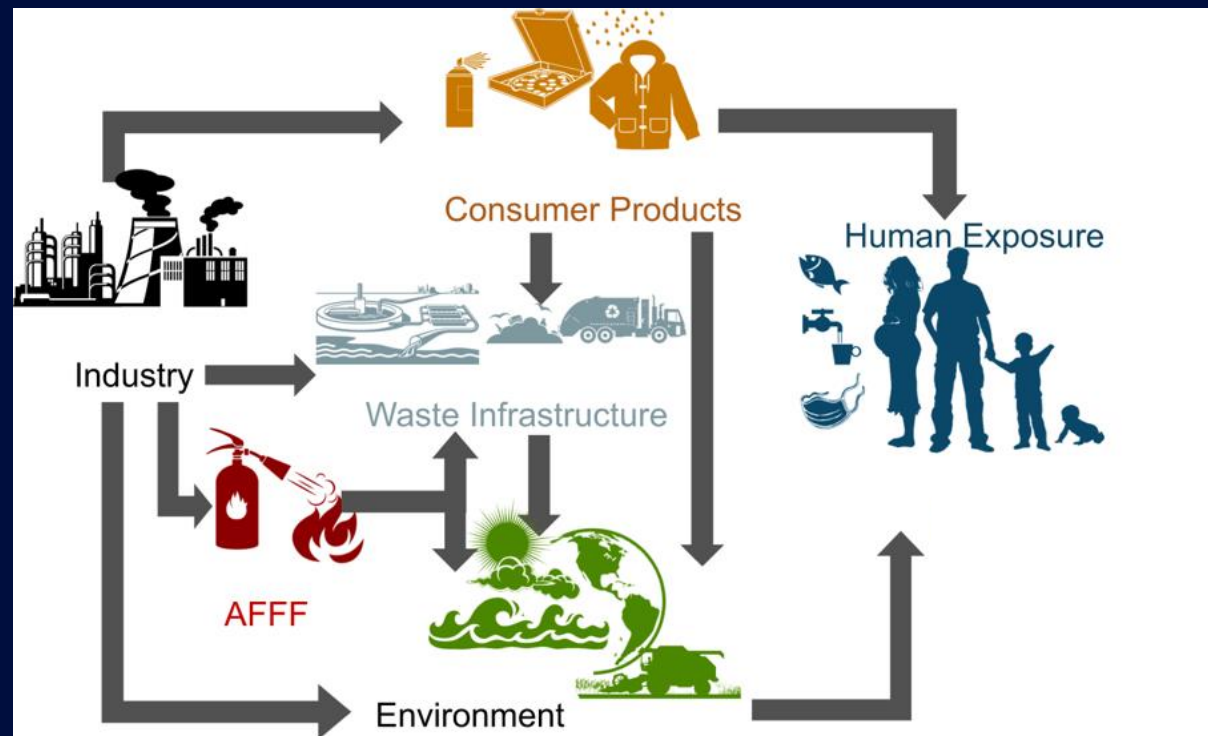
2019 EPA PFAS Action Plan

- Proposed regulatory determination for PFOA and PFOS in 2019.
- Determining if PFOA and PFOS are CERCLA hazardous substances.
- Determining if regulation is appropriate for broader class of PFAS.
- Developing toxicity assessments for PFBS, PFBA, PFHxA, PFHxS, PFNA, PFDA, and GenX.
- Including a larger group of PFAS in UCMR 5 for public water systems serving 3,300 and above.
- Developing guidance/toolkits for communications, cleanup, etc.



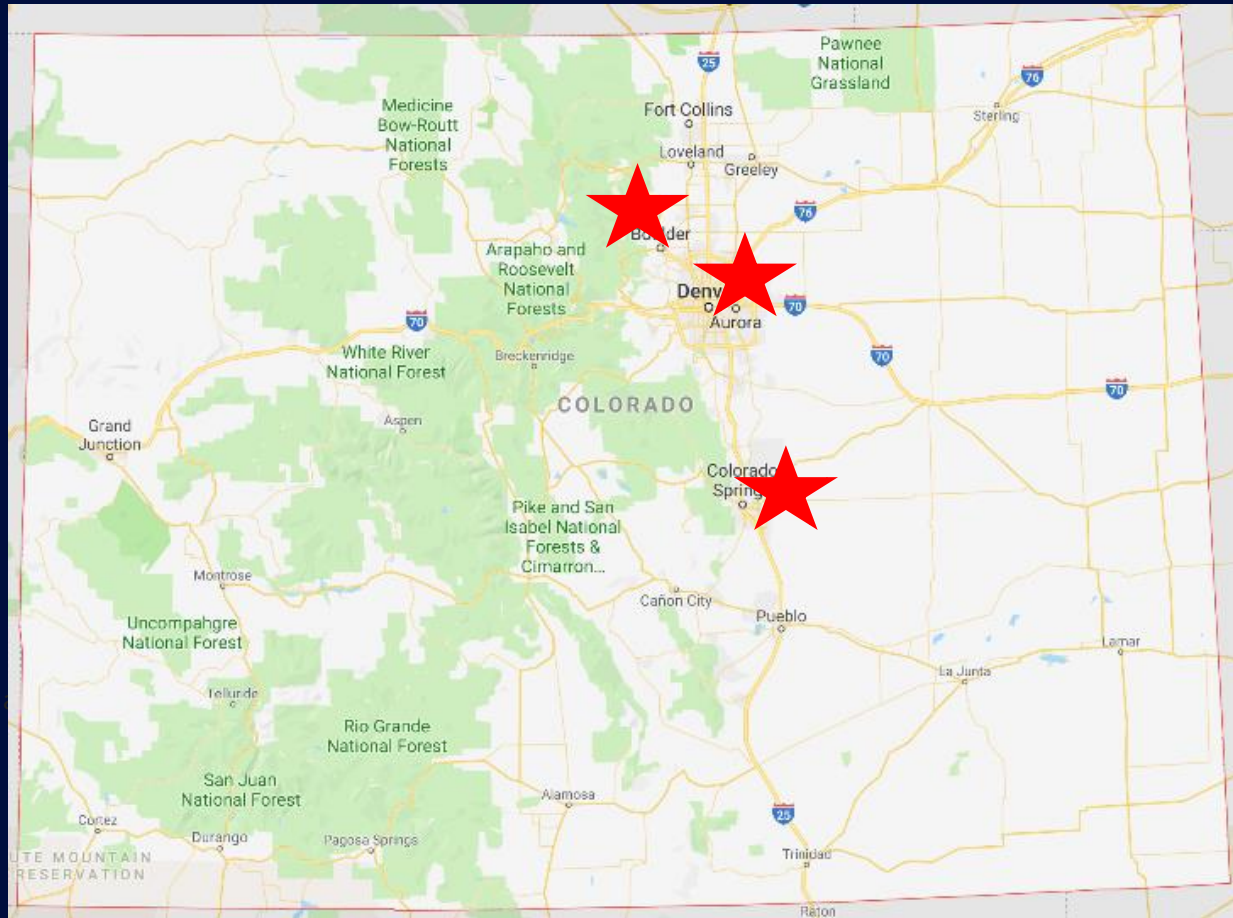
CDPHE PFAS Action Plan

- Statewide monitoring to identify impacted drinking water.
- Develop inventory of contaminated sites.
- Reduce chain of exposure when levels found above health advisory guidelines.
- Regulatory authority.



Journal of Exposure Science & Environmental Epidemiology volume 29, pages131–147 (2019)

PFAS contamination impacting water supplies in Colorado - what we know and don't know



Hu, et



PFAS drinking water sampling project

- Free PFAS testing for drinking water using emergency supplemental funds approved by Joint Budget Committee.
- All community and non-transient, non-community public water systems can apply for these funds.
- We'll share results with systems and publish them on our website.
- If results are above level of concern, we'll coordinate with water system to notify public and identify options to reduce exposure.

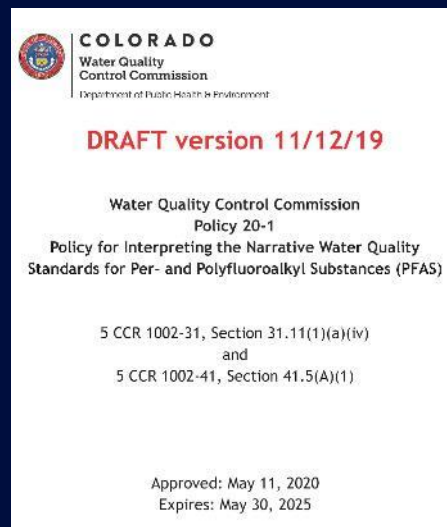


CDC website



PFAS Narrative Policy Workgroup

- Narrative provisions in Regulations 31 and 41 to limit PFAS contamination entering surface water and groundwater.
- Implementation in Colorado Discharge Permit System:
 - Initial monitoring: based on survey results for 25 PFAS species.
 - Continued monitoring and source investigation.
 - Effluent limits.
- CDPHE will propose policy to WQCC in May 2020.
- For more information: colorado.gov/cdphe/PFCS



Fire Fighting Foams Control Act (HB 19-1279)

- Prohibits use of PFAS foam for training or testing.
- Prohibits sale of PFAS foam by August 2021.
- Requires CDPHE to survey fire departments every 3 years on amount of PFAS foam held, used, and disposed of.
 - Results were due October 31 and report due January 1.
 - 89 of 331 fire departments, airports, and industries responded.



Thank you!

What are your questions?

More information available at colorado.gov/cdphe/PFCS

David Dani
david.dani@state.co.us
303-692-3605

