Upcoming Issues

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OVERVIEW

EPA Rule Changes

Unregulated Contaminant Monitoring

KOUI – Known On-going Unauthorized Impacts

EPA Rule Changes

“Lead Free” rule

As of Sept 1, 2020, the rule prohibits the use of any pipe, fitting, fixture, solder, or flux, that is not lead free in the installation or repair of

(i) any public water system; or

(i) any plumbing in a residential or non-residential facility providing water for human consumption

“Lead Free” rule

Definition for “lead free”

> *a weighted average of 0.25% lead calculated across the wetted surfaces of a pipe, pipe fitting, plumbing fitting, and fixture and 0.2% lead for solder and flux*

Drinking water and plumbing products must include “lead free certification marks” by Sept 1, 2023

Lead and Copper – Long Term Revisions

The proposal focuses on six key areas:

Identifying the most impacted areas by requiring water systems to prepare and update a publicly-available inventory of lead service lines and requiring water systems to "find-and-fix" sources of lead when a sample in a home exceeds 15 parts per billion (ppb).

Strengthening treatment requirements by requiring corrosion control treatment based on tap sampling results and establishing a new trigger level of 10 ppb.

Replacing lead service lines by requiring water systems to replace the water system-owned portion of an LSL when a customer chooses to replace their portion of the line. Additionally, depending on their level above the trigger level, systems would be required to take LSL replacement actions.

Lead and Copper – Long Term Revisions

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Increasing drinking water sampling reliability by requiring water systems to follow new, improved sampling procedures and adjust sampling sites to better target locations with higher lead levels.

Improving risk communication to customers by requiring water systems to notify customers within 24 hours if a sample collected in their home is above 15 ppb. Water systems will also be required to conduct regular outreach to homeowners with LSLs.

Better protecting children in schools and child care facilities by requiring water systems to take drinking water samples from the schools and child care facilities served by the system.

Safe Drinking Water Act in Arizona

SDWA Revisions docketed

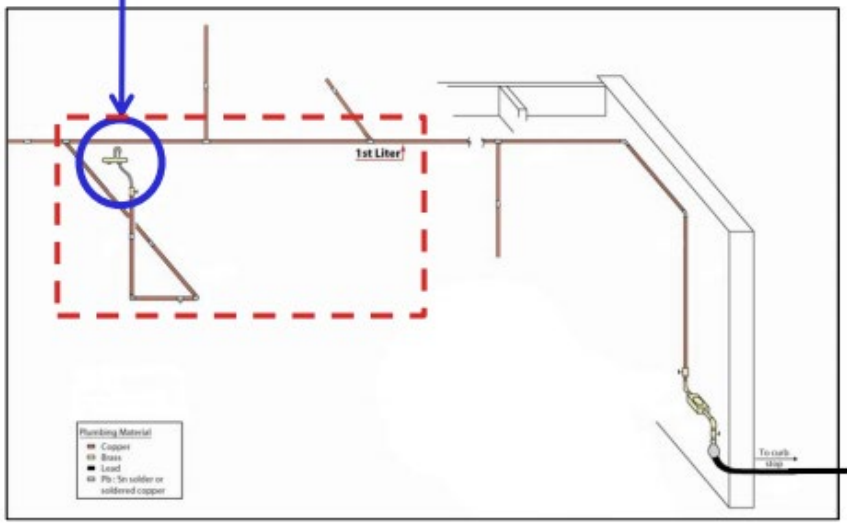
Arizona legislation and primacy

New requirements

What is Sequential Sampling?

A set of samples, collected one right after another that captures all of the water in the plumbing from the kitchen tap to the water main

Kitchen tap



For comparison, the red dashed box indicates what is captured by one 1-liter sample

Service Line

Water Main

Residence

Risk and Resiliency Assessments

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RISK AND RESILIENCE ASSESSMENTS AND EMERGENCY RESPONSE PLANS:

EPA

NEW REQUIREMENTS FOR DRINKING WATER UTILITIES

Section 2013 of America's Water Infrastructure Act of 2018 (AWIA) requires community water systems[1] that serve more than 3,300 people to complete a risk and resilience assessment and develop an emergency response plan.

RISK AND RESILIENCE ASSESSMENT

Your utility must conduct a risk and resilience assessment and submit certification of its completion to the U.S. EPA by the following dates:

EMERGENCY RESPONSE PLAN

Your utility must develop or update an emergency response plan and certify completion to the U.S. EPA **no later than six months** after risk and resilience assessment certification. Each utility deadline is unique; however, the dates below are the due dates for utilities who submit a risk and resilience assessment certification by the final due date according to the population served.

Important Dates

- March 31, 2020 if serving ≥100,000 people.
- December 31, 2020 if serving 50,000 to 99,999 people.
- June 30, 2021 if serving 3,301 to 49,999 people.

- September 30, 2020 if serving ≥100,000 people.
- June 30, 2021 if serving 50,000 to 99,999 people.
- December 30, 2021 if serving 3,301 to 49,999 people.

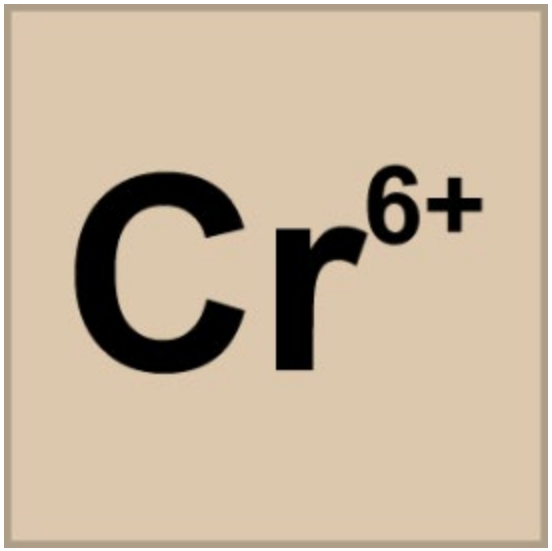
Perchlorate

Agency requested comment on three alternative regulatory options:

- MCL set at 18 micrograms per liter
- MCL set at 90 micrograms per liter
- Withdrawal of determination to regulate perchlorate

Chose third option on July 21, 2020

Chromium



Current federal drinking water standard for total chromium is 0.1 or 100 ppb

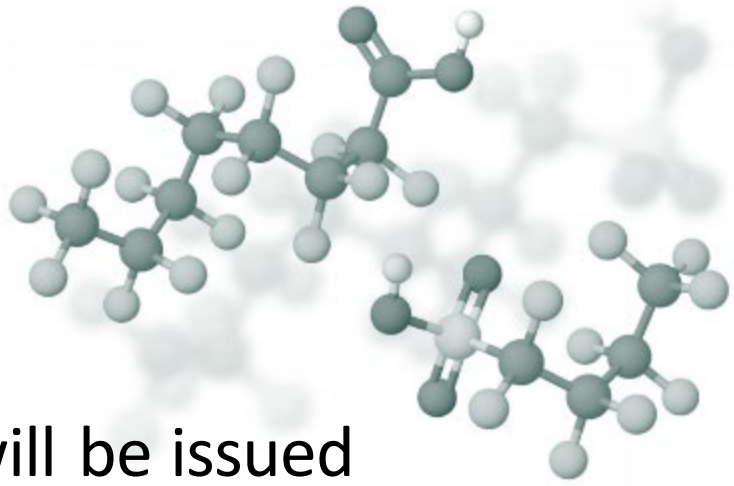
Explore whether a standard should be developed for Chromium-6

EPA must issue final human health assessment prior to considering new standard

PFAS/PFOA

EPA issued preliminary determination to regulate PFOA and PFOS on February 20, 2020

Current health advisory levels at 70 parts per trillion



No timeline for when draft rule will be issued

More information

EPA Proposed Rule Changes

https://www.epa.gov/sdwa/drinking-water-regulations-under-development-or-review

"Lead Free" Rule

https://www.epa.gov/sdwa/use-lead-free-pipes-fittings-fixtures-solder-and-flux-drinking-water

Lead and Copper Long-term Revisions

https://www.epa.gov/ground-water-and-drinking-water/proposed-revisions-lead-and-copper-rule

Risk and Resiliency Requirements

https://www.epa.gov/waterresilience/americas-water-infrastructure-act-risk-assessments-and-emergency-response-plans

Perchlorate

https://www.epa.gov/sdwa/perchlorate-drinking-water

Chromium

https://www.epa.gov/sdwa/chromium-drinking-water

PFOA/PFOS

https://www.epa.gov/pfas

https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos

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Unregulated Contaminant Monitoring Rule (UCMR)

Unregulated Contaminant Monitoring

Used to determine which contaminants to regulate in the future.

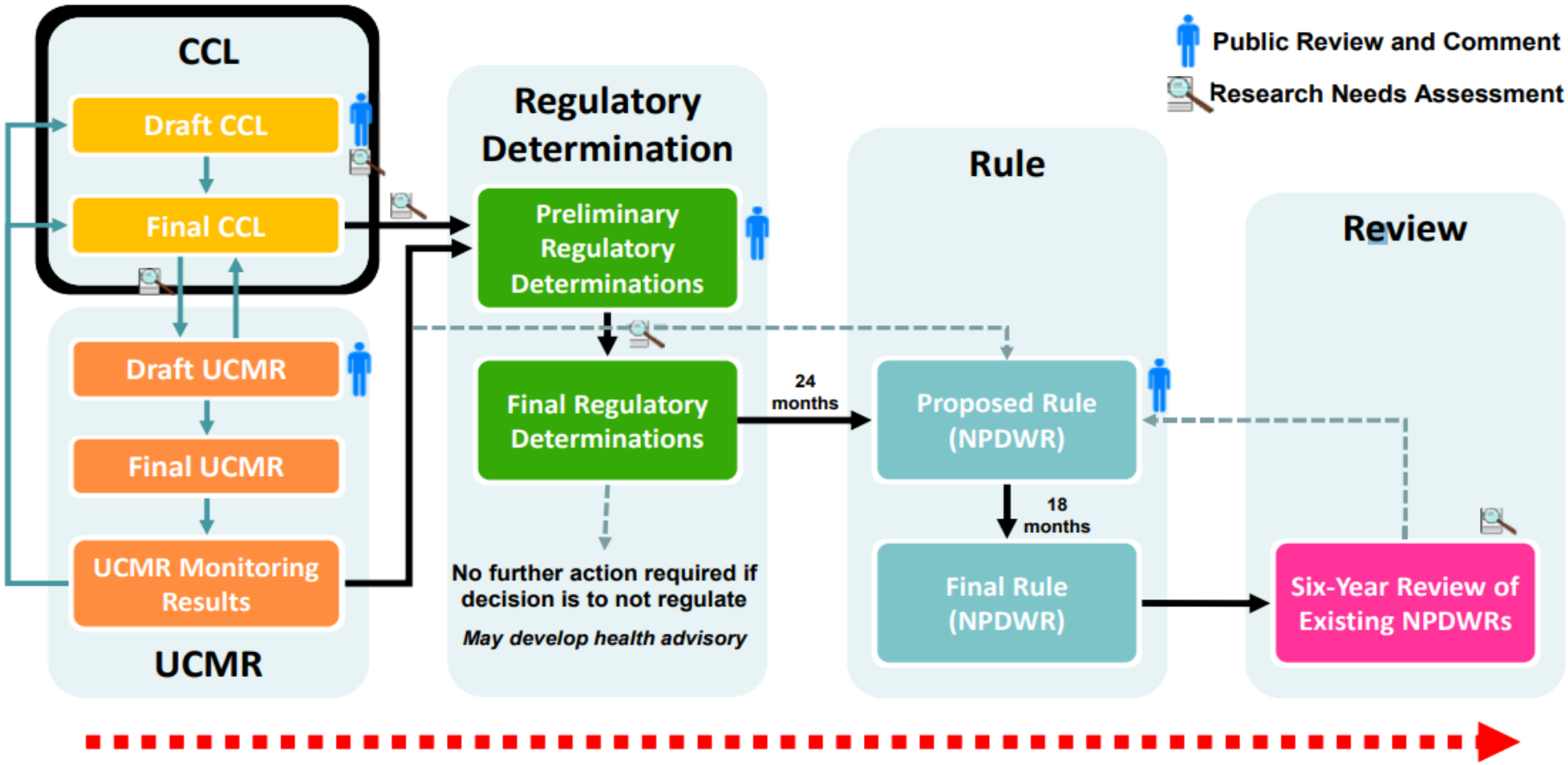
Large systems (<10,000 people) and representative sample of small systems monitor no more than 30 contaminants every 5 years.

America's Water Infrastructure Act of 2018 now requires systems >3,300 people to monitor.

- also provided an additional $15M for monitoring

Unregulated Contaminant Monitoring

General Flow of SDWA Regulatory Processes



Increased specificity and confidence in the type of supporting data used (e.g., health, occurrence, treatment) is needed at each stage

Unregulated Contaminant Monitoring

Round	Dates	Description
UCM (States 1&2)	1988 to 1997	110 contaminants
UCMR 1	2001 to 2005	26 contaminants
UCMR 2	2008 to 2010	25 contaminants
UCMR 3	2013 to 2015	30 contaminants (28 chemicals & 2 viruses)
UCMR 4	2018 to 2020	30 contaminants

https://www.epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule

UCMR5

Consultations for UCMR5 started in 2018.

Proposal anticipated in summer 2020, with final ruling in late 2021.

Anticipated monitoring 2023 to 2025 by ~10,300 systems nationwide.

Includes continuing focus on PFAS

- new methodologies with lower detection limits
- detects 25 compounds

KOUI

What Does KOUI Mean?

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Known

Ongoing

Unauthorized

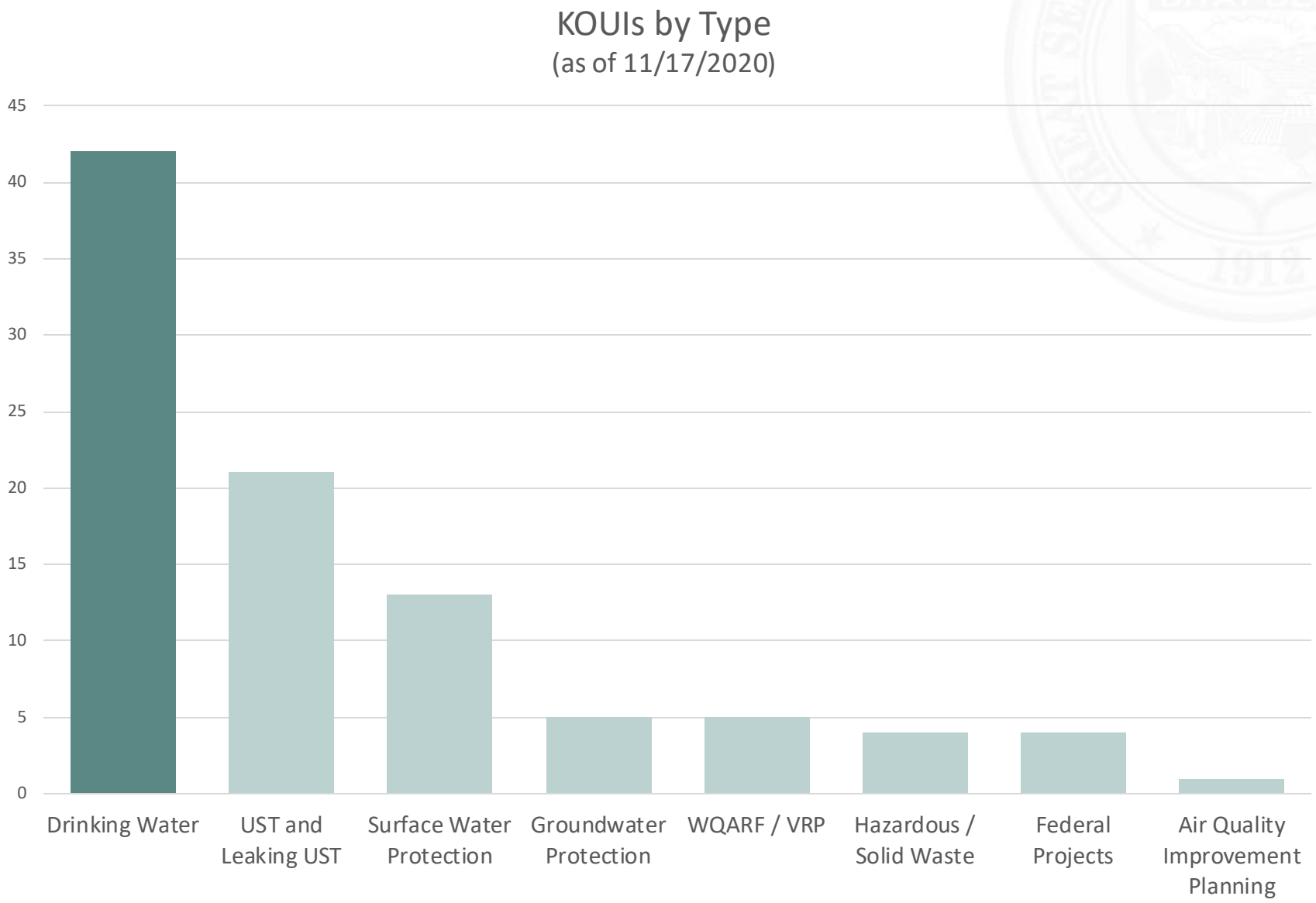
Impact

KOUI

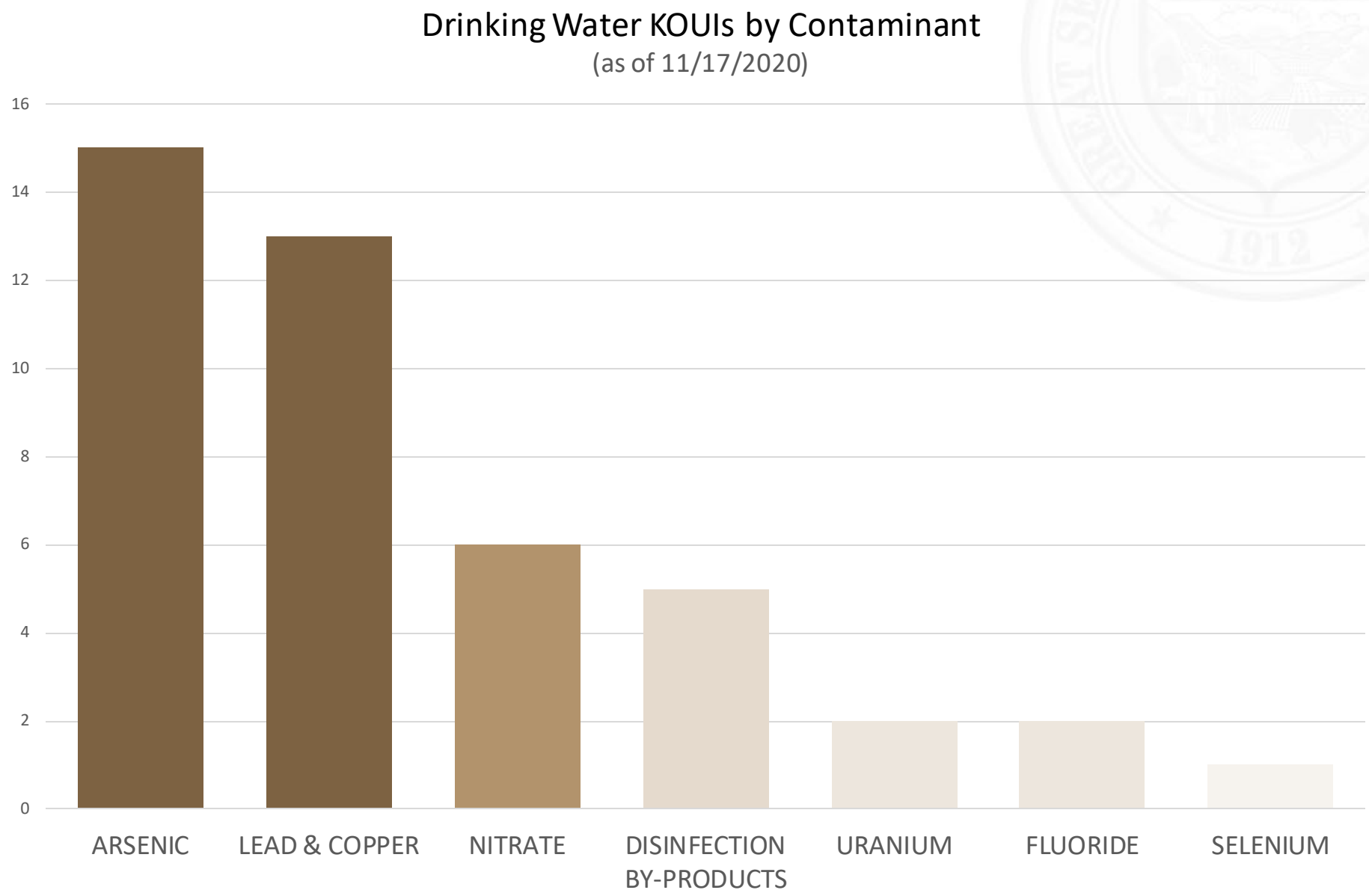
ADEQ's key goals are to **protect human health and the environment** – so KOUIs are those activities that are currently having the most negative impact.

For drinking water, this occurs any time a public water system **serves water that exceeds health standard or maximum contaminant level**.

KOUI


KOUIs by Type
(as of 11/17/2020)
45
40
35
30
25
20
15
10
5
0
Drinking Water
UST and Leaking UST
Surface Water Protection
Groundwater Protection
WQARF / VRP
Hazardous / Solid Waste
Federal Projects
Air Quality Improvement Planning

KOUI


Drinking Water KOUIs by Contaminant
(as of 11/17/2020)
16
14
12
10
8
6
4
2
0
ARSENIC
LEAD & COPPER
NITRATE
DISINFECTION BY-PRODUCTS
URANIUM
FLUORIDE
SELENIUM

KOUI

Goal: for drinking water to comply with all health standards as soon as possible

Increased attention from ADEQ

- Regular updates that are reported to Governor
- Milestones of progress

Technical assistance and funding may be provided when legal requirements are met

Thank you for your time!