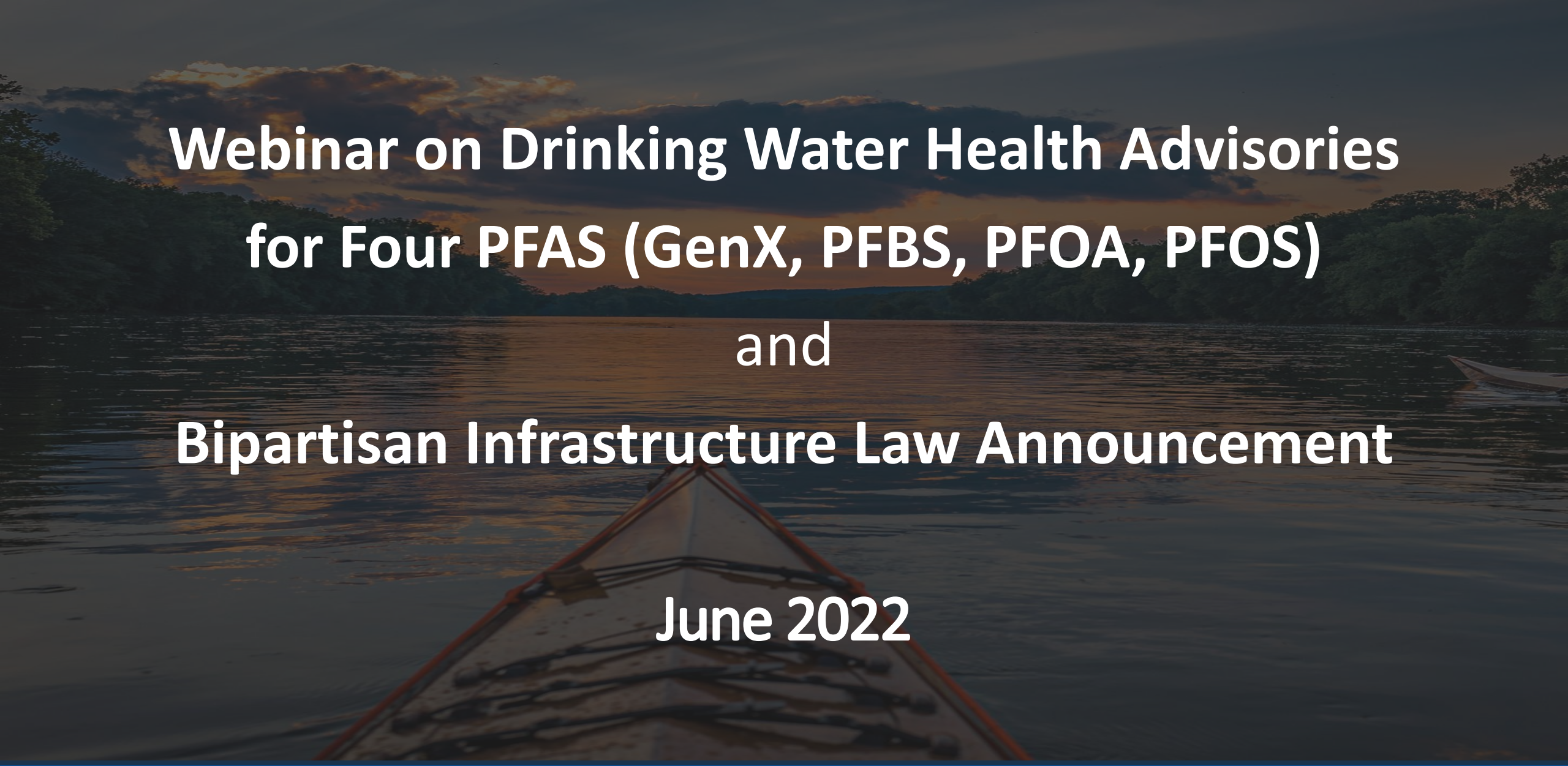

Webinar on Drinking Water Health Advisories for Four PFAS (GenX, PFBS, PFOA, PFOS)

and

Bipartisan Infrastructure Law Announcement

June 2022

EPA United States Environmental Protection Agency

Office of Water

Overview of Today's Webinar

- Context for These Actions: PFAS and PFAS Strategic Roadmap
- What Is a Drinking Water Health Advisory?
- Health Advisory Values for the Four PFAS.
  - Interim Updated Health Advisory Documents for PFOA and PFOS.
  - Final Health Advisory Documents for PFBS and GenX Chemicals.
- Announcement of Bipartisan Infrastructure Law Funding
- Key Questions and Answers about these Actions

Context: Per- and Polyfluoroalkyl Substances (PFAS) Background

PFAS captures a large class of synthetic chemicals.

- Chains of carbon atoms surrounded by fluorine atoms.
- Wide variety of chemical structures.

Used in homes, businesses, and industry since the 1940s.

- Used by a number of industries and found in many consumer products.
- Detected in soil, water, and air samples.
- Most people have been exposed to PFAS.

Known or suspected toxicity.

- Potential developmental, liver, immune, and thyroid effects.
- Some are relatively well understood; many others are not.
- Resist decomposition in the environment and in the human body.

Context: EPA's PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024

- EPA announced the PFAS Strategic Roadmap in October 2021 – a bold, strategic, whole-of-EPA strategy to protect public health and the environment from PFAS.
- The PFAS Strategic Roadmap:
  - Lays out EPA's whole-of-agency approach to tackling PFAS;
  - Sets timelines for concrete actions from 2021 to 2024;
  - Fills a critical gap in federal leadership;
  - Supports states' ongoing efforts; and
  - Builds on the Biden-Harris Administration's commitment to restore scientific integrity.
- Among other actions, the PFAS Roadmap commits EPA to **developing drinking water health advisories** and a **national drinking water regulation**.

What is a Drinking Water Health Advisory?

- Drinking water health advisories:
  - provide information on contaminants that can cause health effects and are known or anticipated to occur in drinking water
  - **are non-enforceable and non-regulatory**
  - include information on analytical methods and treatment
- EPA has developed HAs for ~200 drinking water contaminants.
- An HA level or value is the concentration of a drinking water contaminant for a specific exposure duration, at or below which exposure is not anticipated to lead to adverse human health effects.
  - A **lifetime HA** (such as those EPA recently released) protects all Americans, including sensitive populations and life stages, from adverse health effects resulting from exposure throughout their lives.

Development of Health Advisories

- **Interim HAs for PFOA and PFOS** are based on publicly available EPA *drafts* undergoing EPA Science Advisory Board review (final Aug/Sept) to provide information to public health officials while regulatory process is ongoing.
  - Address pressing need to replace 2016 PFOA/S HAs of 70 ppt based on more recent health effects studies showing that **PFOA/S can impact human health at much lower exposure levels than the 2016 HAs.**
  - Toxicity values **will change** as a result of work to address SAB recommendations. **But the HAs (and MCLGs) are likely to remain below the PFOA and PFOS minimum reporting limit of 4 ppt.**
- **Final HAs for PFBS and GenX chemicals** are based on publicly available, and peer-reviewed final toxicity assessments published in 2021.

Summary of Four PFAS Health Advisories

- EPA is releasing health advisories for four PFAS:
  - **Interim HAs**: PFOA and PFOS
  - **Final HAs**: GenX chemicals (PFOA replacement) and PFBS (PFOS replacement)
- Analytical methods can detect GenX chemicals and PFBS at the HA values but cannot detect PFOA and PFOS at the level of the interim HAs.
- Because of this, EPA recommends that if water systems detect PFOA and PFOS, they take steps such as informing residents, undertaking monitoring, and examining steps to limit exposure.

Chemical	Health Advisory (ppt)	Minimum Reporting Level (MRL)[a] (ppt)
PFOA	0.004 (Interim)	4
PFOS	0.02 (Interim)	4
GenX Chemicals	10 (Final)	5
PFBS	2,000 (Final)	3

[a] Fifth Unregulated Contaminant Monitoring Rule (UCMR 5) MRL is the minimum quantitation level that, with 95 percent confidence, can be achieved by capable analysts at 75 percent or more of the laboratories using a specified analytical method. These MRLs are based on the UCMR 5 requirement to use EPA Analytical Method 533.

Health Advisory Materials Available on EPA's Website

- Drinking water health advisory documents and supporting scientific documents
- Questions and Answers
- Fact sheet for communities
- Fact sheet for public water systems
- Technical fact sheet
- See https://www.epa.gov/sdwa/drinking-water-health-advisories-pfoa-and-pfos

Bipartisan Infrastructure Law and PFAS

The Bipartisan Infrastructure Law provides $10 billion to invest in communities impacted by PFAS and other emerging contaminants:

$4 billion	**Drinking Water State Revolving Fund**
$1 billion	**Clean Water State Revolving Fund**
$5 billion	**Small or Disadvantaged Communities Drinking-Water Grants**

Last Week

- **EPA announced the first $1 billion (of $5 billion) in grants to help small or disadvantaged communities on the front lines of PFAS contamination.**
- **EPA is reaching out to states and territories with information about how to submit a letter of interest to participate**

Responding to Questions on Health Advisories (1)

- **Who can I contact to learn more about PFAS levels in my drinking water?**
  - *If you are concerned about PFAS in your drinking water, EPA recommends you contact your local water utility to learn more about your drinking water and to see whether they have monitoring data for PFAS or can provide any specific recommendations for your community.*
  - *If you own a private well, EPA recommends learning more about how to protect and maintain your well for all contaminants of concern. For information on private wells visit: www.epa.gov/safewater.*

Responding to Questions on Health Advisories (2)

- **My water has measurable levels of PFOA/PFOS or GenX chemicals/PFBS above the health advisory:**
  - **Should I be concerned about my health?**
    - *EPA's lifetime health advisory levels offer information that indicates the safe levels of exposure through drinking water over the course of a person's lifetime to avoid adverse health effects.*
    - *These levels are calculated to offer a margin of protection that also takes into account exposure through other sources beyond drinking water.*
    - *If you are concerned about potential health effects from exposure to these PFAS above the health advisory level, EPA encourages you to contact your doctor or health care professional.*

Responding to Questions on Health Advisories (3)

- **My water has measurable levels of PFOA/PFOS or GenX chemicals/PFBS above the health advisory:**
  - **Should I drink bottled water?**
    - *At this time, EPA is not recommending bottled water for communities based solely on concentrations of these chemicals in drinking water that exceed the health advisory levels.*
    - *If you are concerned about PFAS in your tap water, EPA recommends you contact your local water utility to see whether they can provide any specific recommendations for your community.*

Responding to Questions on Health Advisories (4)

- **My water has measurable levels of PFOA/PFOS or GenX chemicals/PFBS above the health advisory:**
  - **Should I install a filter?**
    - *EPA recommends that communities and water systems that measure any levels of PFOA or PFOS or that measure Gen X chemicals or PFBS at levels higher than the health advisory levels inform their customers and consider taking actions to reduce PFAS levels in their drinking water by installing treatment technologies or obtaining a new uncontaminated source of drinking water, if available.*
    - *Individuals who are concerned about PFAS in their wells or in their homes may consider in-home water treatment filters that are certified to lower the levels of PFAS in water.*
    - *EPA has information available on these filters on EPA's website.*
    - *If you are concerned about potential health effects from exposure to these PFAS above the health advisory level, contact your doctor or health care professional.*

Responding to Questions on Health Advisories (5)

- **Should I be concerned even if PFOA/PFOS are not detected in my drinking water?**
  - *The lower the levels of PFOA and PFOS, the lower the risk. This means that while PFOA and PFOS may be present in drinking water in trace concentrations that cannot be measured, water provided by these systems that test but do not detect PFOA or PFOS is of lower risk than if they are found at measurable levels.*
  - *EPA recommends that public water systems that find PFOA or PFOS in their drinking water take steps to inform customers, undertake additional sampling to assess the level, scope, and source of contamination, and examine steps to limit exposure. While water systems may not be able to eliminate all risks from PFOA and PFOS, they can successfully reduce those risks.*

Responding to Questions on Health Advisories (6)

- **What treatment technologies exist to remove PFOA, PFOS, GenX chemicals, and PFBS?**
  - *Activated carbon, anion exchange and high-pressure membranes have all been demonstrated to remove PFAS from drinking water systems. These treatment technologies can be installed at a water system's treatment plant and are also available in-home filter options.*
  - *Each of the four Health Advisory documents identifies the treatment technologies that have been demonstrated to remove the specific PFAS and the factors that impact performance of the technologies.*
  - *Learn more about these treatment technologies.*

Responding to Questions on Health Advisories (7)

- **Is EPA going to establish a national drinking water regulation for PFOA, PFOS and additional PFAS?**
  - *EPA is developing a proposed National Drinking Water Regulation for publication by the end of 2022 for PFOA and PFOS. As EPA undertakes this action, the agency is also evaluating additional PFAS and considering regulatory actions to address groups of PFAS. EPA anticipates finalizing the rule by the end of 2023.*
  - *The proposal will include both a non-enforceable Maximum Contaminant Level Goal (MCLG) and an enforceable standard, or Maximum Contaminant Level (MCL) or Treatment Technique.*
  - *The MCLG is the maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, allowing an adequate margin of safety.*
  - *The enforceable standard is set as close as feasible to MCLG. EPA considers the ability to measure and treat a contaminant as well as costs and benefits in setting the enforceable standard.*

Responding to Questions on Health Advisories (8)

- **What if my state already has a different regulatory or health advisory level for one of these chemicals?**
  - *EPA is committed to working with state agencies and drinking water systems on solutions to reduce public health risks posed by exposure to these PFAS.*
  - *EPA's health advisories reflect our analysis of the best available, peer-reviewed science and provide non-regulatory and non-enforceable information to assist federal, state, Tribal and local officials, and managers of public or community drinking water systems in protecting public health when spills or contamination situations occur.*
  - *States may issue different values, including regulatory levels, based on their own analyses and based on their primacy role under the Safe Drinking Water Act.*
  - *EPA recommends that water systems work with state authorities to determine if they have state requirements or guidance on concentrations of PFOA, PFOS, GenX chemicals, or PFBS that warrant action or concern.*

Next Steps

- Consistent with the PFAS Roadmap, EPA is developing a proposed national primary drinking water regulation for PFOA and PFOS
  - Also evaluating additional PFAS chemicals and considering groups of PFAS as supported by the best-available science
  - Will utilize final input from the Science Advisory Board to develop the proposed Maximum Contaminant Level Goals (MCLGs) – the non-enforceable health-based goals to inform the standard-setting process.
  - The enforceable standard (Maximum Contaminant Levels (MCLs) or treatment technique) will be set as close as feasible to the MCLG.
    - EPA considers the feasibility of measuring and treating the contaminant in setting the standard as well as the costs and benefits.
- Expect a proposed rule in fall 2022 and a final rule in fall 2023

Related EPA and Federal PFAS Actions

- **These actions build on the other important and meaningful actions in EPA's PFAS Strategic Roadmap to safeguard communities from PFAS contamination:**
  - **December 2021:** Finalizing the Fifth Unregulated Contaminant Monitoring Rule to improve understanding of the frequency and levels at which 29 PFAS are found in the nation's drinking water
  - **April 2022:** Publishing draft aquatic life water quality criteria for PFOA and PFOS, and issuing a memo to proactively address PFAS in Clean Water Act permitting
  - **May 2022:** Adding five PFAS to EPA's contaminated site cleanup tables
  - **June 2022:** Issuing the first Toxic Substances Control Act PFAS test order under the National PFAS Testing Strategy.
- **On June 15, the White House announced new Biden-Harris Administration actions to restrict PFAS from entering Americans' water, air, land, and food, including coordinated actions from EPA and our Federal partners (HHS, USDA, DHS, and DOD)**

Moving Forward

- EPA is committed to partnering with federal agencies, states, Tribes, territories, and water utilities to address PFAS in drinking water.
- These health advisories represent a key data point that federal, state, and local agencies can use to inform decisions on water quality monitoring, optimization of existing technologies that reduce PFAS, new investments in controls, and regulatory approaches.