



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

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# Briefing Overview

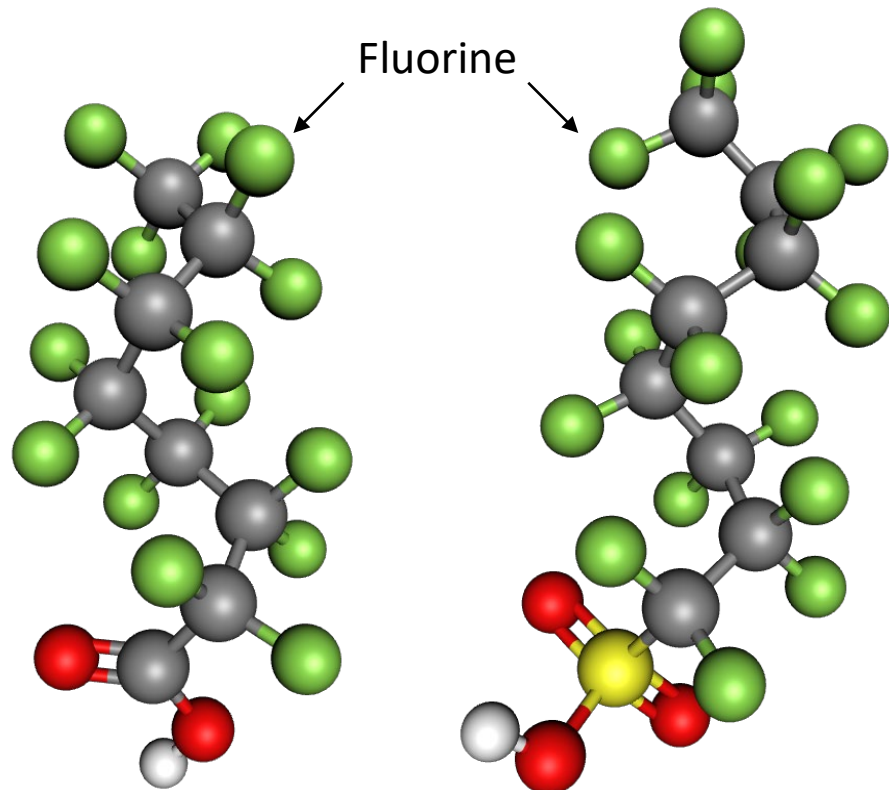
- **EPA's PFAS Strategic Roadmap**
- Background on Per- and Polyfluoroalkyl Substances (PFAS)
- EPA's Approach and Goals
- Key Roadmap Progress and Upcoming Actions
- Whole-of-Agency Actions
- Bipartisan Infrastructure Law and PFAS

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

- EPA Administrator Michael Regan established the EPA Council on PFAS in April 2021.
- The Council developed the PFAS Strategic Roadmap, released in October 2021 – a bold, strategic, whole-of-EPA strategy to protect public health and the environment from PFAS.
- The Roadmap:
  - 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.



# What Are Per- and Polyfluoroalkyl Substances (PFAS) and Why are We Concerned?



*Perfluorooctanoic acid (PFOA)*

*Perfluorooctanesulfonic acid (PFOS)*

**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.**

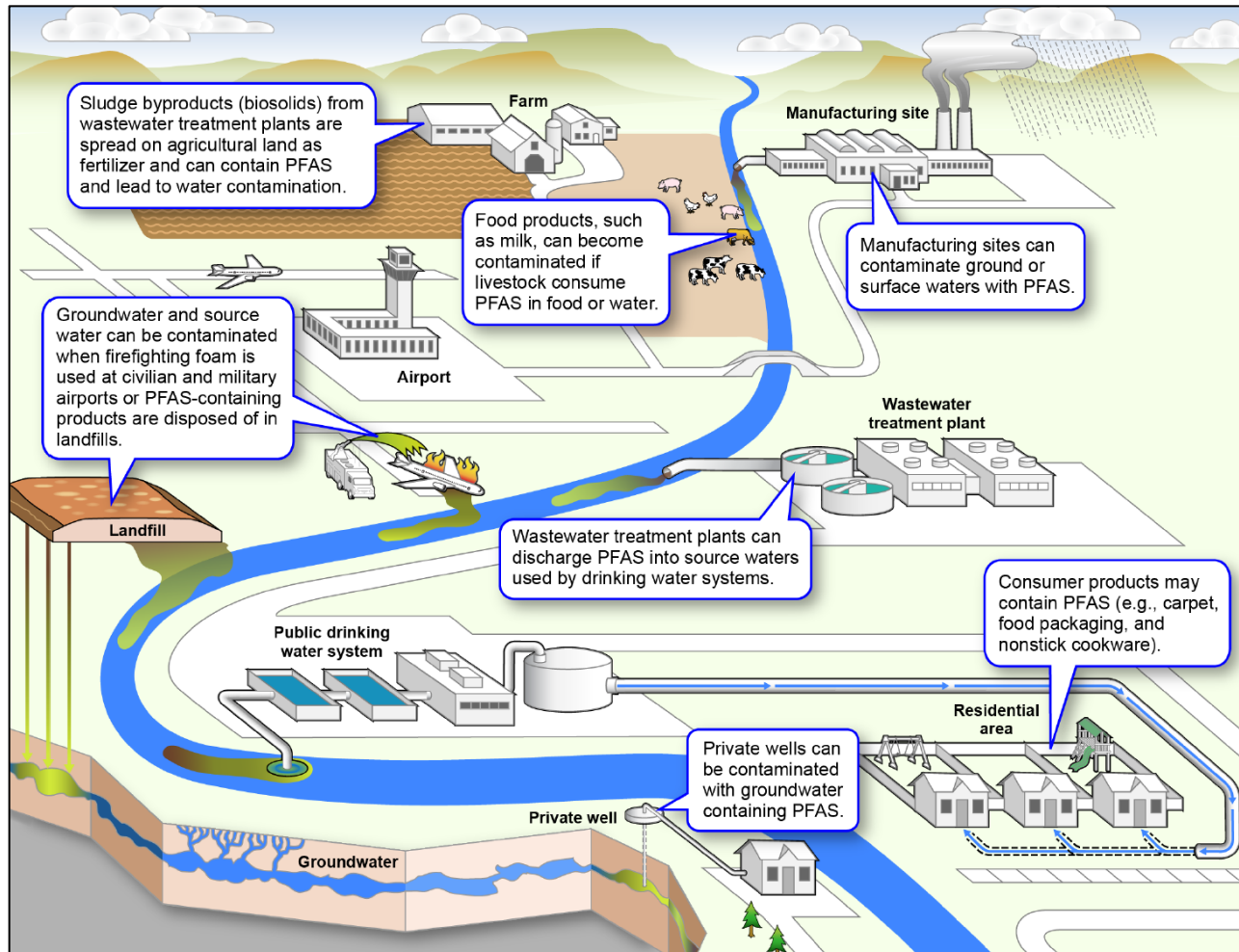
- Used by a number of industries and found in many consumer products.
- Detected in soil, water, and air samples.
- Most people have been exposed to PFAS.

**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.



# PFAS Lifecycle and EPA's Approach



**PFAS contamination presents unique challenges. EPA's approach is centered around the following principles:**

- Consider the Lifecycle of PFAS.
- Get Upstream of the Problem.
- Hold Polluters Accountable.
- Ensure Science-Based Decision-Making.
- Prioritize Protection of Disadvantaged Communities.

# EPA's Goals in the Strategic Roadmap

## RESEARCH

Invest in research, development, and innovation to increase understanding of

- PFAS exposures and toxicities;
- Human health and ecological effects; and
- Effective interventions that incorporate the best-available science.

## RESTRICT

Pursue a comprehensive approach to proactively prevent PFAS from entering air, land, and water at levels that can adversely impact human health and the environment.

## REMEDiate

Broaden and accelerate the cleanup of PFAS contamination to protect human health and ecological systems.

# Key EPA Accomplishments Since October 2021



## EPA's PFAS Strategic Roadmap: A Year of Progress

November 2022



- Proposed to designate PFOA and PFOS as CERCLA hazardous substances
- Released drinking water health advisories for four PFAS
- Laid the foundation for enhancing PFAS chemical and drinking-water data
- Began distributing \$10 billion in Bipartisan Infrastructure Law funding to address emerging contaminants in water
- Expanded the scientific understanding of PFAS and translated the latest science into EPA's cross-agency efforts
- Proactively used enforcement tools to identify and address PFAS releases
- Engaged with federal partners and the public

# Key Upcoming Priority Actions

**Propose a national drinking water standard for PFOA & PFOS**

**RESTRICT**

**Take final action on proposed CERCLA designations**

**REMEDiate**

**Improve chemical data and safety by enhancing PFAS reporting and limiting new or resumed PFAS uses**

**RESEARCH**

**RESTRICT**

**Restrict upstream PFAS discharges to waterways**

**RESTRICT**

**Address PFAS in biosolids**

**RESEARCH**

**CROSS-PROGRAM ACTIONS**

**Provide public PFAS tools**

**Engage with communities**



# Key Roadmap Actions: Research and Development

**Develop and validate methods to detect and measure PFAS** (*ongoing*)

RESEARCH

**Advance the science to assess human health and environmental risks** (*ongoing*)

RESEARCH

**Evaluate and develop technologies for reducing PFAS in the environment** (*ongoing*)

RESEARCH

REMEDiate

# Key Roadmap Actions: Ensuring Chemical Safety

**Deepen our understanding of PFAS categories through the National PFAS Testing Strategy** (*October 2021, June 2022*)

RESEARCH

RESTRICT

**Strengthen EPA oversight over both new and existing PFAS** (*summer 2022 and ongoing*)

RESTRICT

**Collect data and improve reporting of how PFAS are used and released** (*winter 2022*)

RESEARCH

RESTRICT

**Establish a PFAS voluntary stewardship program** (*ongoing*)

RESTRICT

**Reduce PFAS in federal procurement** (*ongoing*)

RESTRICT

# Key Roadmap Actions: Protecting our Water

**Set enforceable limits for PFOA and PFOS in drinking water**  
*(proposed fall 2022, final fall 2023)*

RESTRICT

**Improve PFAS drinking-water data through monitoring, toxicity assessments, and health advisories** *(Dec 21 & June 22)*

RESEARCH

**Develop technology-based PFAS limits for industrial dischargers** *(2022 & ongoing)*

RESTRICT

**Address PFAS in Clean Water Act permitting, analytical methods, water quality criteria & fish advisories** *(2022 & ongoing)*

RESEARCH

RESTRICT

**Evaluate risks of PFAS in biosolids** *(winter 2024)*

RESEARCH

# Key Roadmap Actions: Cleaning Up PFAS Contamination and Addressing PFAS Air Emissions

**Develop regulations to designate PFAS as CERCLA hazardous substances** (*PFOA and PFOS proposal published September 2022*)

REMEDIATE

**Take regulatory action to tackle PFAS under RCRA** (*ongoing*)

RESTRICT

REMEDIATE

**Update research and guidance on PFAS destruction and disposal** (*fall 2023*)

RESEARCH

REMEDIATE

**Build the technical foundation for potential Clean Air Act regulation** (*fall 2022 and ongoing*)

RESEARCH

RESTRICT



# Cross-Program Actions

**Engage  
directly with  
affected  
communities**

**Use  
enforcement  
tools to  
identify and  
address  
PFAS  
releases**

**Coordinate  
with federal  
partners on  
policy  
strategies**

**Report on  
EPA's  
progress and  
communicate  
PFAS risks**

# Bipartisan Infrastructure Law and PFAS

The Bipartisan Infrastructure Law makes transformational investments in America's water infrastructure. It provides \$10 billion to invest in communities impacted by PFAS and other emerging contaminants, including:

**\$4 billion**

**Drinking Water State Revolving Fund**

**\$1 billion**

**Clean Water State Revolving Fund**

**\$5 billion**

**Small or Disadvantaged Communities  
Drinking-Water Grants**

# Additional Information

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<https://www.epa.gov/pfas>