

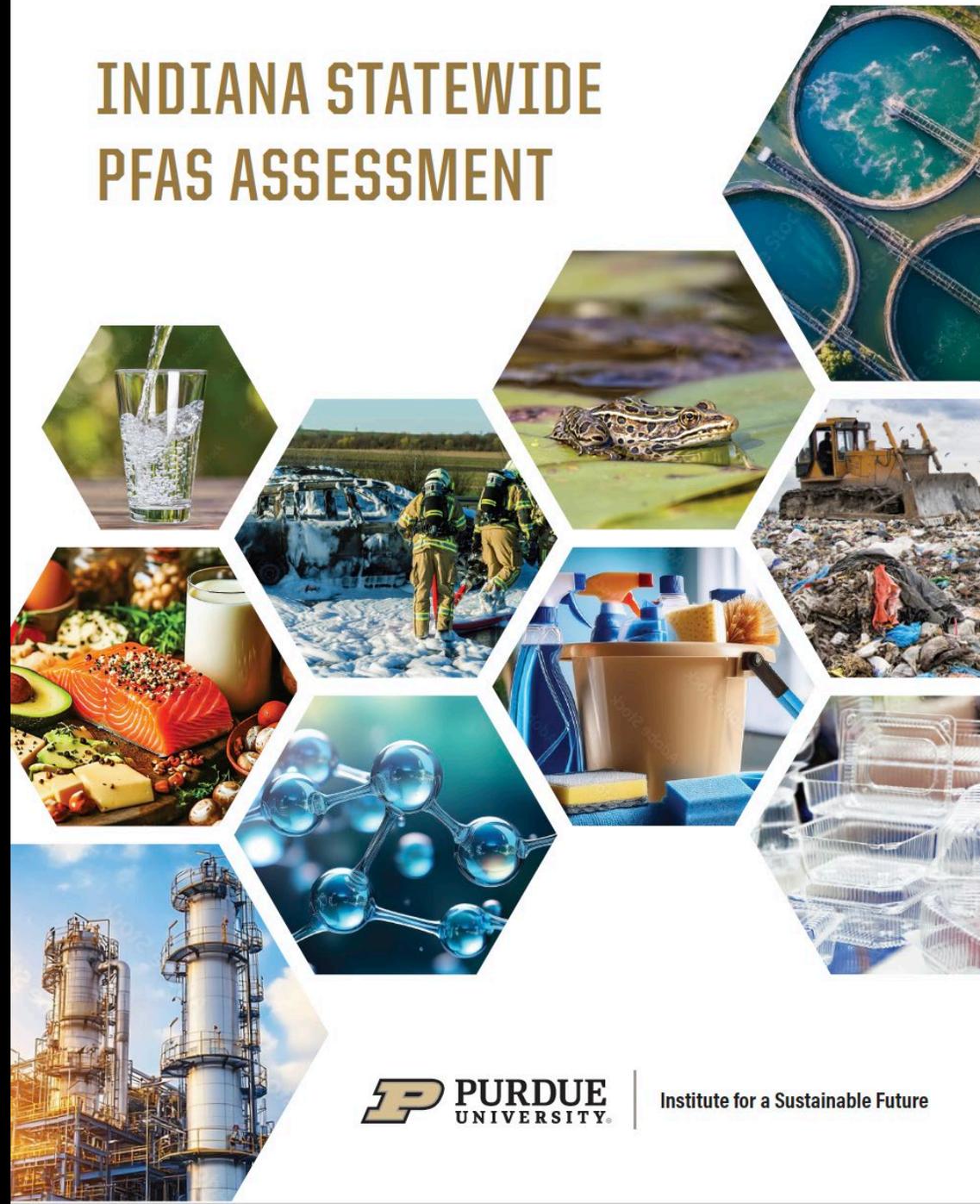
Indiana Statewide PFAS Assessment

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INDIANA STATEWIDE PFAS ASSESSMENT



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What is the Assessment?



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- White paper describing the state of knowledge around PFAS in Indiana
 - General information about PFAS, but highlights data/expertise/challenges specific to Indiana *per se*
- Collaborative document: led by Purdue ISF its PFAS Strategic Research Team, but with input from numerous experts across multiple organizations
 - Highlights data and research findings from numerous IN academic and agency groups
 - [Hyperlinks](#) to data and resources throughout

Topics Covered in Assessment

- Wide range of topics, including:
 - Sources
 - Fate/transport
 - Where to find IN PFAS data
 - Toxicity concerns for humans and wildlife
 - Mitigation/remediation
 - Consumer guidance
 - Legislative landscape
 - Also, a perspective on some key actions to reduce uncertainties and hazards



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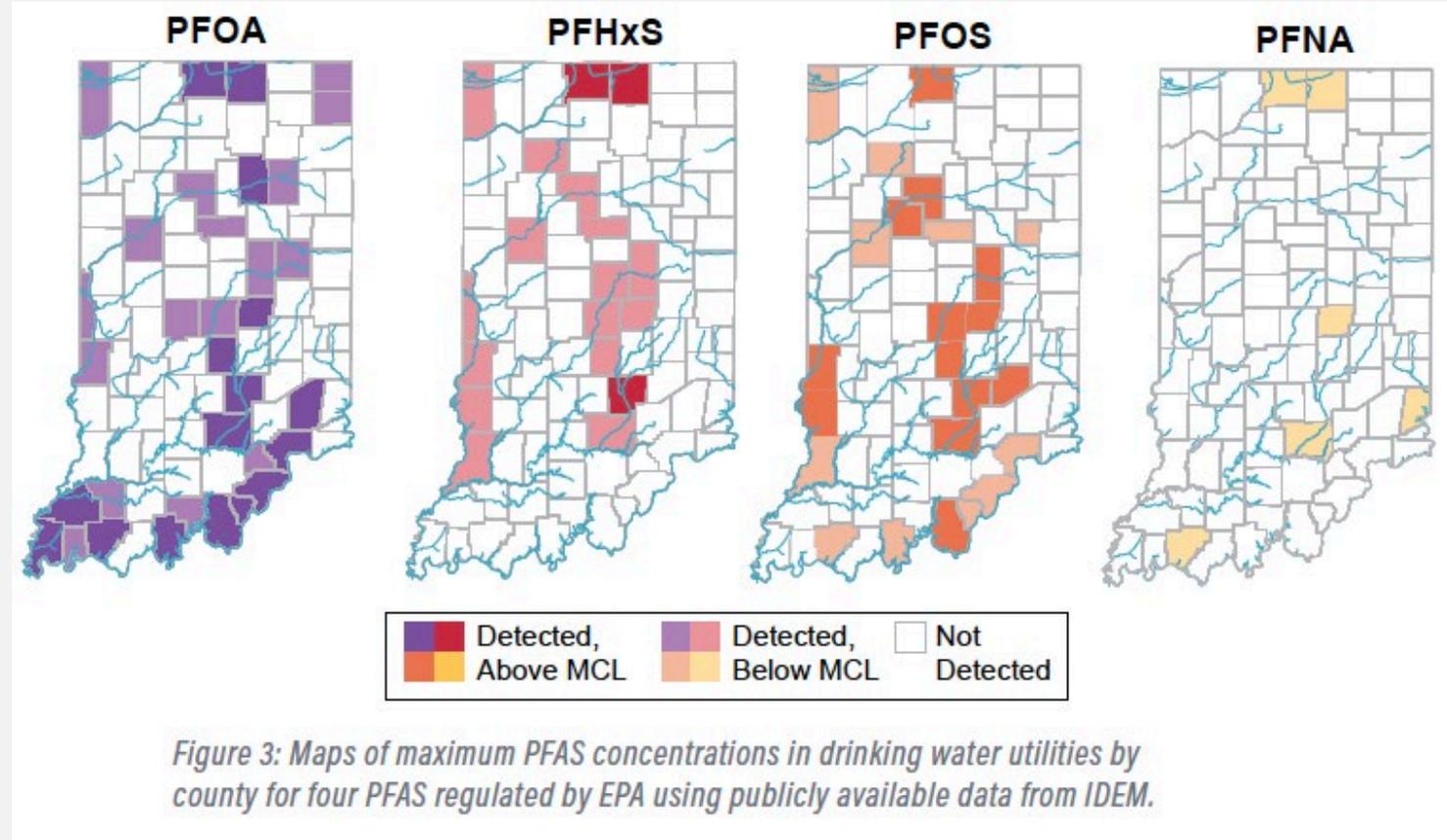
Indiana PFAS Sources are Numerous



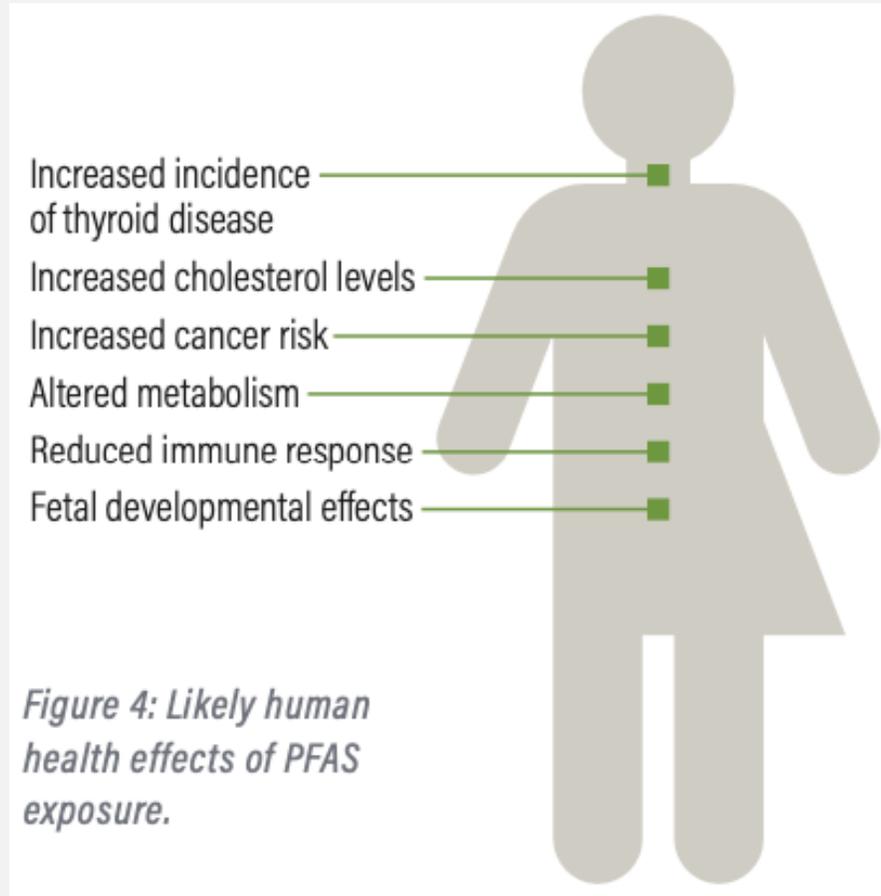
- No fluorochemical manufacturing in Indiana
- Many PFAS-using industries in the state:
 - Pharmaceuticals/medical devices, semiconductors/electronics, agriculture (especially, biosolids), wood/paper production, among many others
- Landfills and wastewater plants: not sources, but can be sites of secondary release
- Balancing economic necessity with hazards PFAS release highlights need for cooperation across sectors

PFAS Occur in Indiana Water and Biota

- IDEM has monitored drinking water in public supplies
 - Some exceedances of EPA MCLs
- Multiple groups collecting data on surface water and fish tissues around the state
 - Surface/ground water: IU, Purdue, Ohio River Sanitation Commission
 - Fish: IDEM, Notre Dame, Purdue



Knowledge Around Toxicity Rapidly Evolving



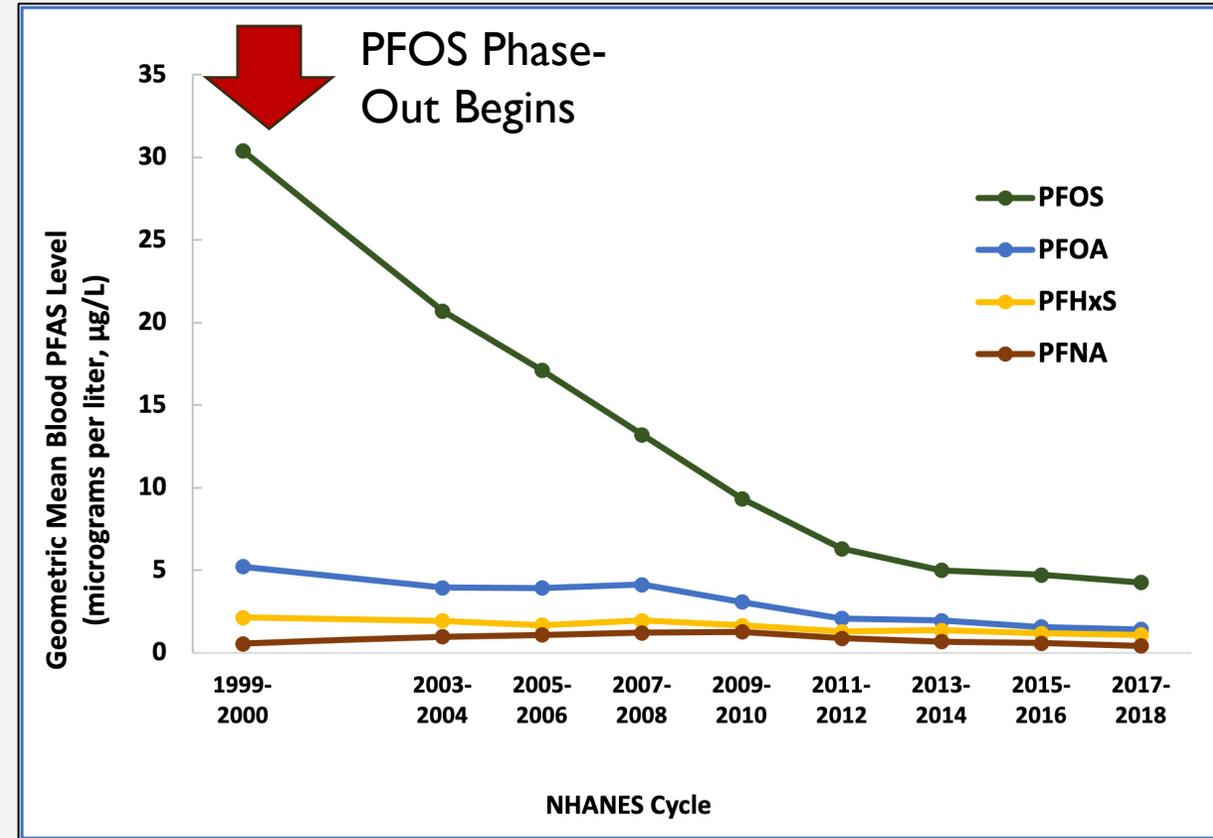
- PFAS can be toxic via a wide range of mechanisms
- Researchers at Purdue are exploring multiple mechanisms relevant to humans, using animal models and epidemiological approaches
- Researchers at Purdue and Notre Dame have explored bioaccumulation and ecotoxicity using a variety of systems
 - Ecological impacts still poorly understood

Mitigation and Destruction are Challenges

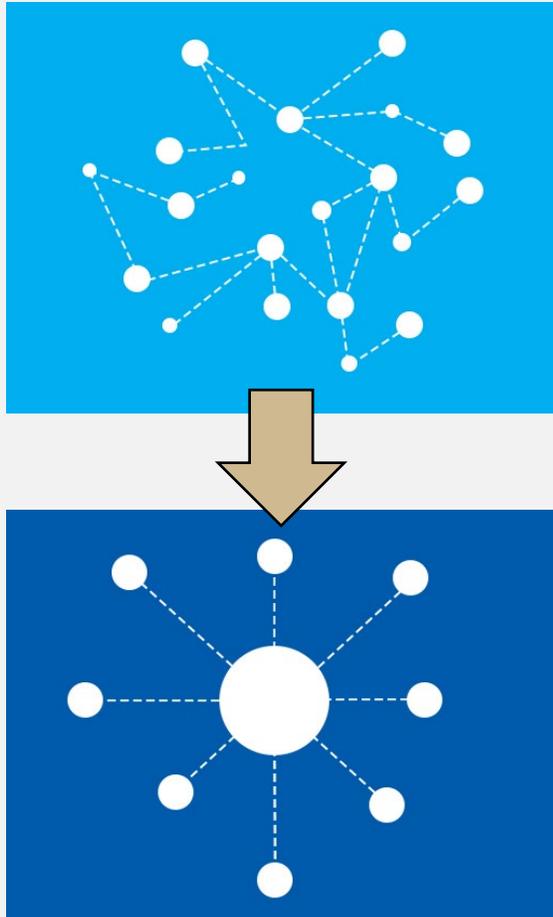
- Given widespread occurrence, there is a need for technologies to remove PFAS from water and other media
- For filtration, activated carbon, reverse osmosis, and ion exchange are all options
 - Assessment contains filtration guidance for consumers
 - Expensive at large scale: EPA estimates initial \$15B, then annual \$1B/year to treat public water in USA
 - How to destroy PFAS after filtration is a challenge
- Researchers at IU, Purdue and Notre Dame actively developing new quantification, filtration and destruction technologies

Ultimate Strategy Must Include Reduced Use

- Given very widespread occurrence and extreme persistence, reducing exposure will require a reduction in PFAS use
 - Essential Use Paradigm provides a path forward
- When we take-action, exposure can be reduced!



Leveraging Data/Expertise: Major Opportunity



- Numerous experts and organizations in Indiana conducting monitoring, management, and basic research about PFAS
 - Spread across multiple organizations
- Centralizing resources/expertise and increasing communication among groups could better leverage this
- Researchers from Purdue ISF/PFAS SRT are working to organize an **Indiana PFAS Network**
 - Hub for: IN PFAS data, interactive maps, calendar of events, directory, and more
 - MPART is excellent example of what is possible

Thank You

Access the IN PFAS Assessment:

Search "IN PFAS Assessment": free
to download

or

Scan the QR Code at left for direct
link

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