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# Drinking Water PFAS Update

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UTAH DEPARTMENT of  
ENVIRONMENTAL QUALITY  
**DRINKING  
WATER**

# PFAS



Per- and polyfluoroalkyl substances, 10,000+ compounds

Used in many consumer products

Many industrial applications and firefighting foam

Stable and don't degrade naturally

Water soluble and environmentally mobile

Analytical methods for 29 PFAS in drinking water

# PFAS - Sources



Metal platers

Water reclamation facilities, landfills

Leather and fabric treaters, tanneries

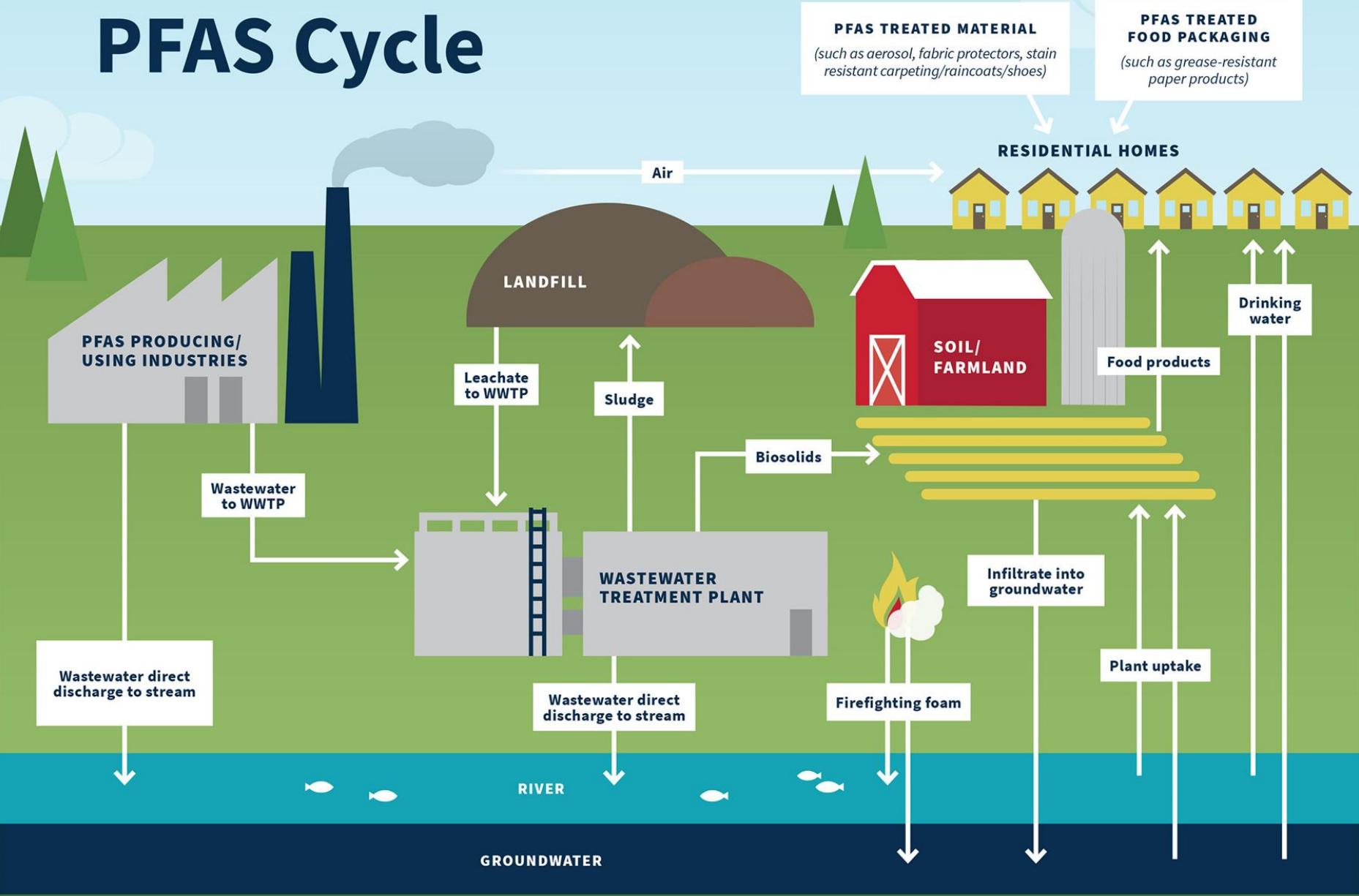
Paper and packaging manufacturers

Fire training grounds, airports

Groundwater cleanup sites



# PFAS Cycle



# PFAS - Health Impacts

Ingestion is primary route of exposure

Estimated 20% of exposure may come through drinking water

PFAS are bioaccumulative

Health impact: hormone and immune function interference

Health impact: cancer-causing

Health impact: increase in cholesterol, liver effects

# EPA Proposed MCLs

## PFOS

MCL - 4.0 ppt (ng/L)

MCLG - 0 ppt

## PFOA

MCL - 4.0 ppt

MCLG - 0 ppt

## Hazard Index MCL

PFHxS, GenX, PFNA, PFBS

HI ≤ 1.0

$$\text{Hazard Index} = \left( \frac{[\text{GenX}]}{10 \text{ ppt}} \right) + \left( \frac{[\text{PFBS}]}{2000 \text{ ppt}} \right) + \left( \frac{[\text{PFNA}]}{10 \text{ ppt}} \right) + \left( \frac{[\text{PFHxS}]}{9 \text{ ppt}} \right)$$





# What is a ppt?

1 ppt is equivalent to 1 drop of water in 20 Olympic-sized swimming pools



# Proposed MCL Compliance

## Compliance

- Community and Non-transient non-community systems
- Entry point(s) to distribution system
- Determined by running annual averages

## Monitoring

- Frequency depends on water source and system size
- Waivers or decreased monitoring possible

## Public Notice

- Tier 2 - ASAP, within 30 days



# Proposed MCL Impacts

## Treatment

- Carbon demand and waste disposal
- Feasibility and costs
- Unintended water quality consequences
- Lack of consumer options

## Other costs

- Sampling, lab capacity, methods
- Operator education and system complexity

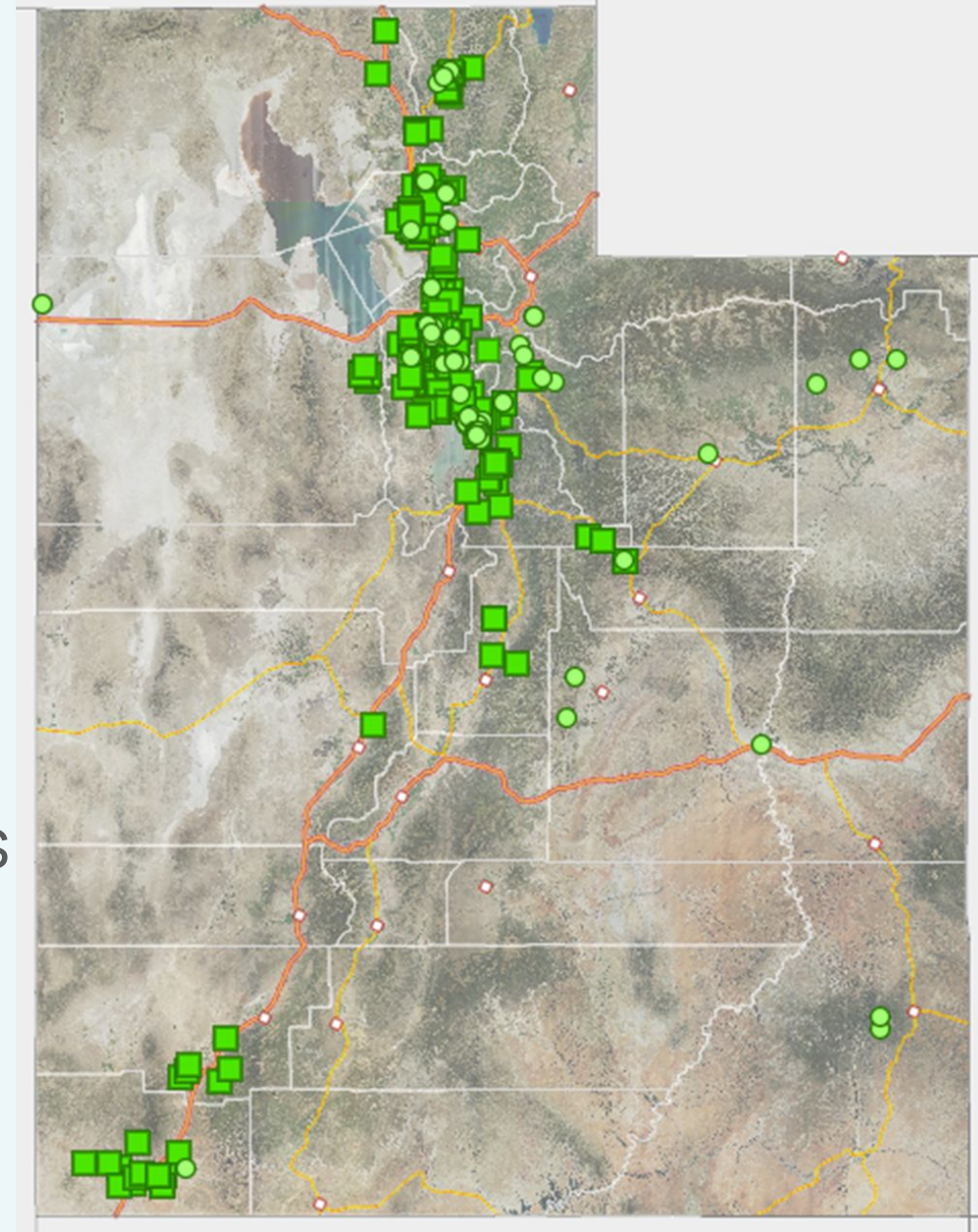
## Communication



# PFAS in Utah

- Data generally indicates low risk for PFAS exposure from drinking water in Utah
- Some PFAS detects associated with ski wax
- Ongoing sampling
- Funding available for water systems
- Goal: revisit PFAS source assessment

[pfas.utah.gov](https://pfas.utah.gov)



# Questions?



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