MINNESOTA POLLUTION CONTROL AGENCY

PFAS: Everything is Connected

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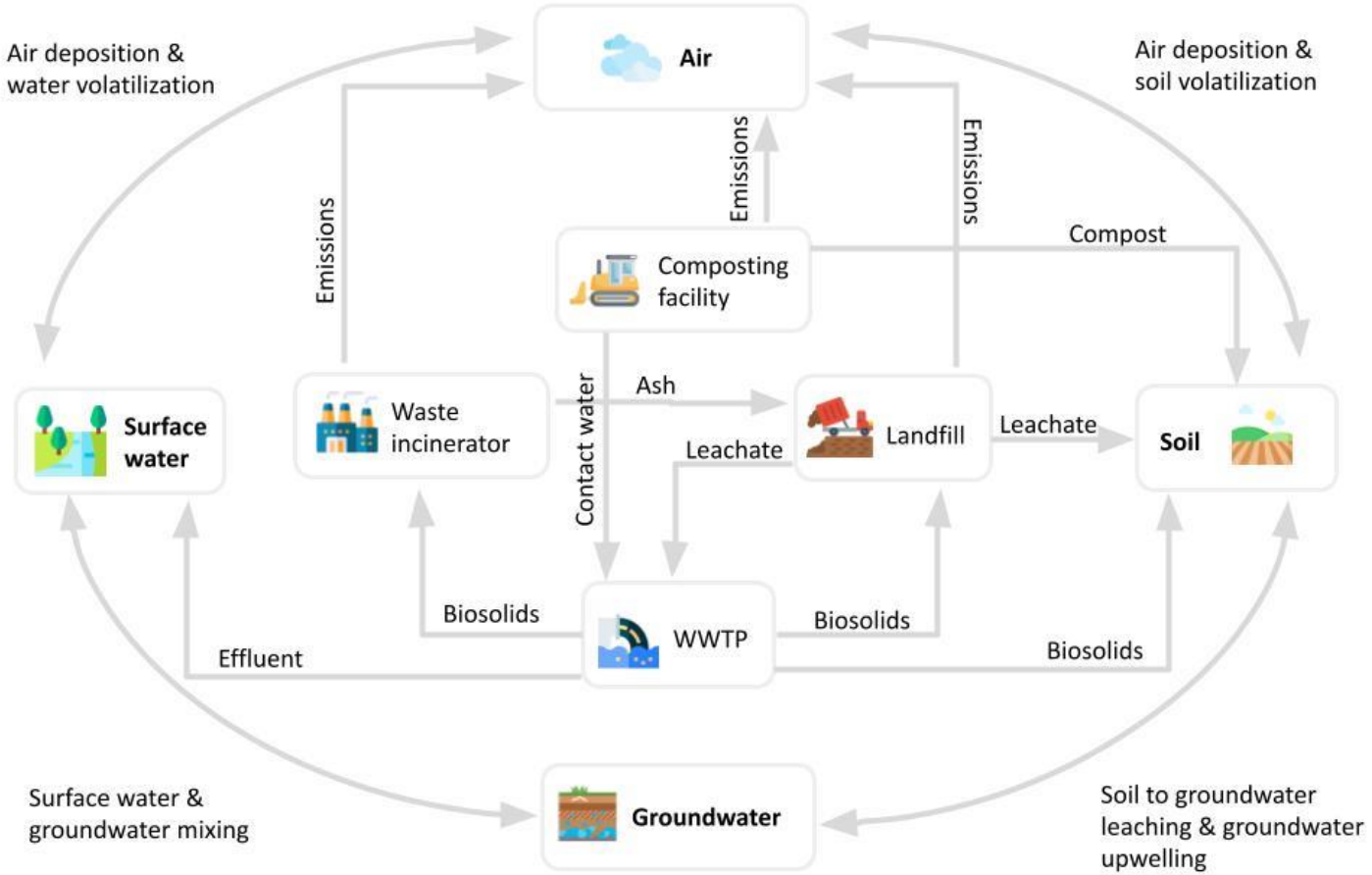
Transitioning PFAS to Regulated Pollutant

- We know enough about the environmental and health impacts of PFAS to set key goals (like water quality standards)
- Implementation remains a huge question
  - Facilities are making decisions today because of concern about the future
  - Single (or small groups) of facilities making decisions based on the regulatory programs that they see – and only those – can upend the whole system
- We as regulators needs to take a holistic look across programs that we maybe are not used to connecting

PFAS Cycle Connections



- PFAS has two characteristics that really expose how everything is connected
  1. Persistence through multiple types of movement in the environment
  2. Impacts at extremely low levels
- These connections put a lot of pressure on implementation

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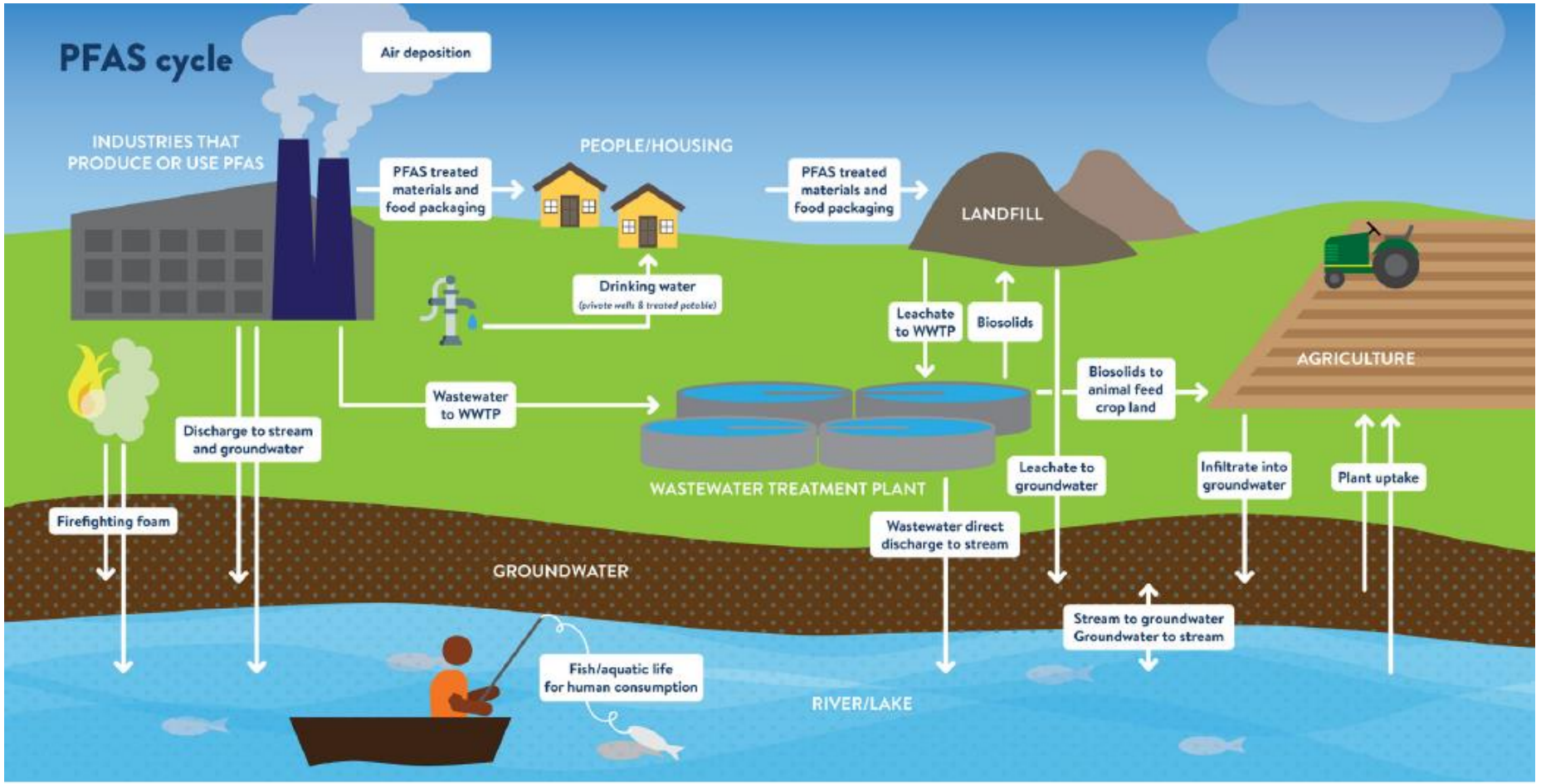
PFAS Cycle



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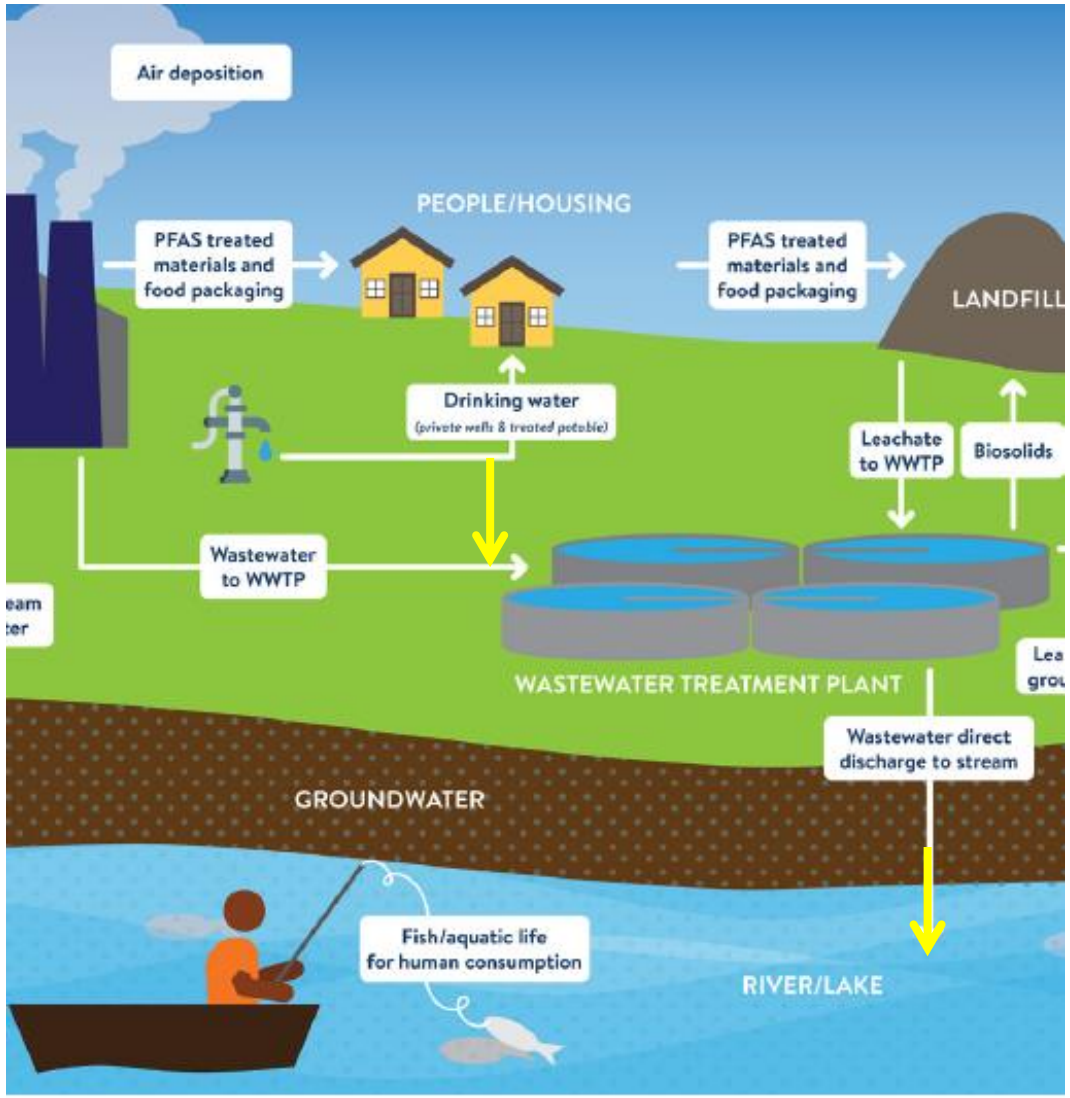
Example 1: Drinking Water and Wastewater



- Drinking water is likely to have to meet less stringent standards than water used for aquatic consumption
  - Because of bioaccumulation
  - Because the SDWA allows consideration of costs
- What is appropriate and legal for WWTP that need to meet WQBELs, and are receiving water that meets SDWA values?

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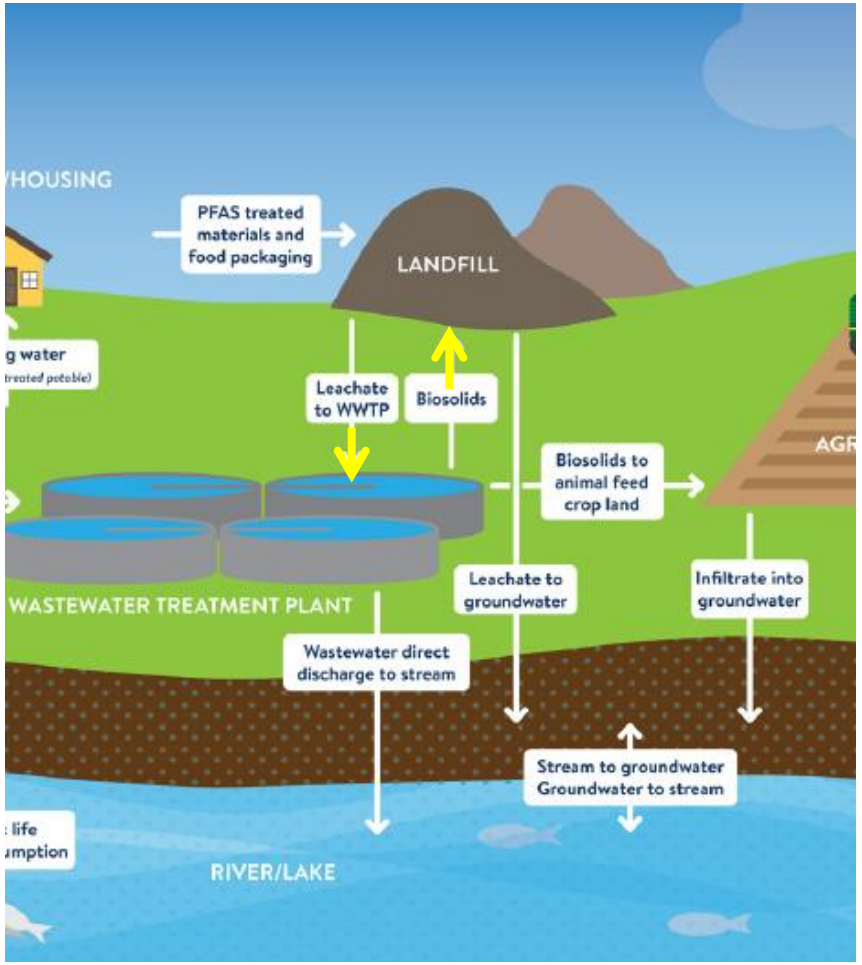
Example 2: Waste streams

- Management of waste between landfills and WWTP is closely linked
  - Landfill leachate → WWTP
  - WWTP biosolids → Landfills
    - Especially in situations of concern for land application
- Significant questions being raised about accepting waste likely to have high PFAS concentrations



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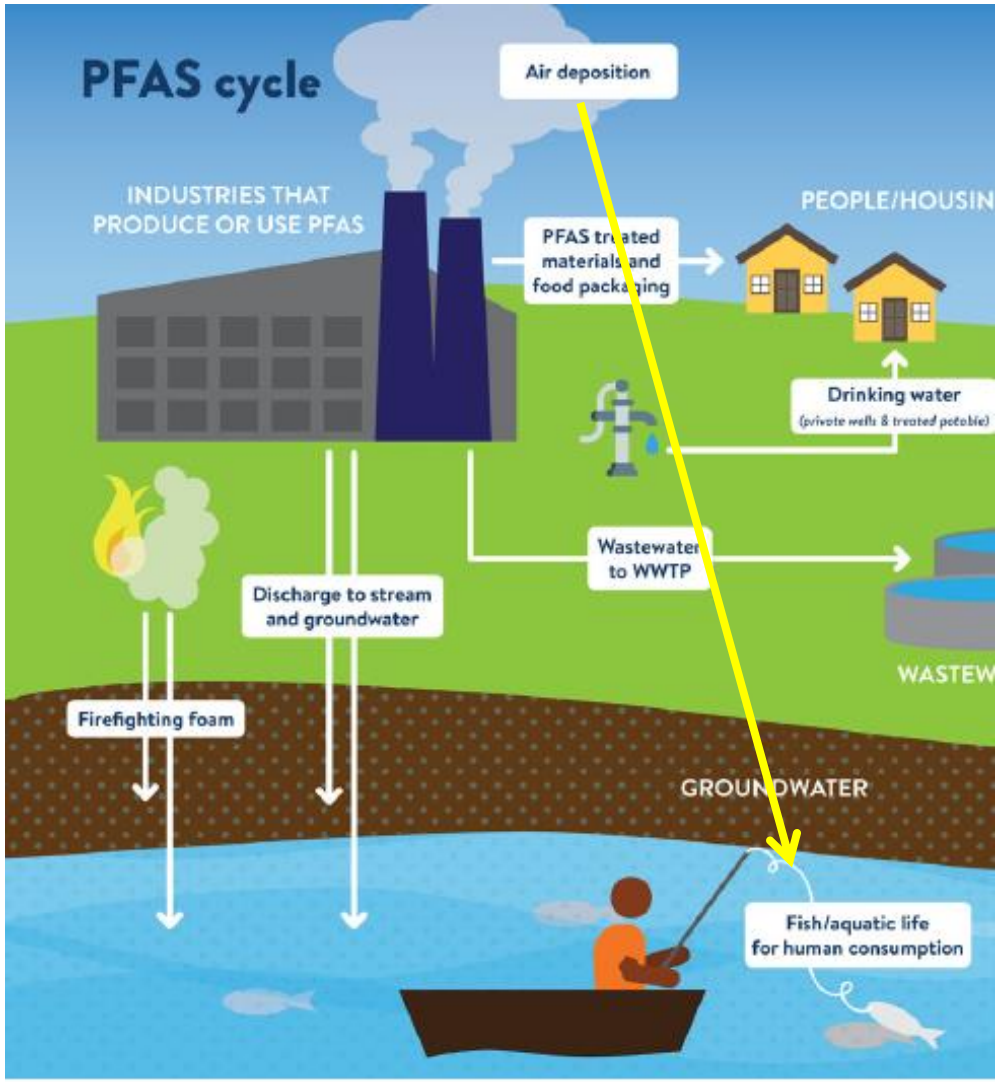
Example 3: Air Deposition



- The air to water pathway is also likely to be critical
  - Especially because of the low-levels of PFAS that can impact fish consumption
- Likely need to think about PFAS (esp. PFOS) similar to how we think of mercury

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Everything, Everywhere, All at Once

- We are in a big moment of regulatory uncertainty
  - Everybody is nervous about the future
  - Leads to potential for short-sighted actions because of lack of clarity
- Regulators across all our key programs – water, land air – need to ensure we're considering the potential for unintended consequences
- Work laterally and holistically