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# Risk Management Panel – How Are We Managing Risk?

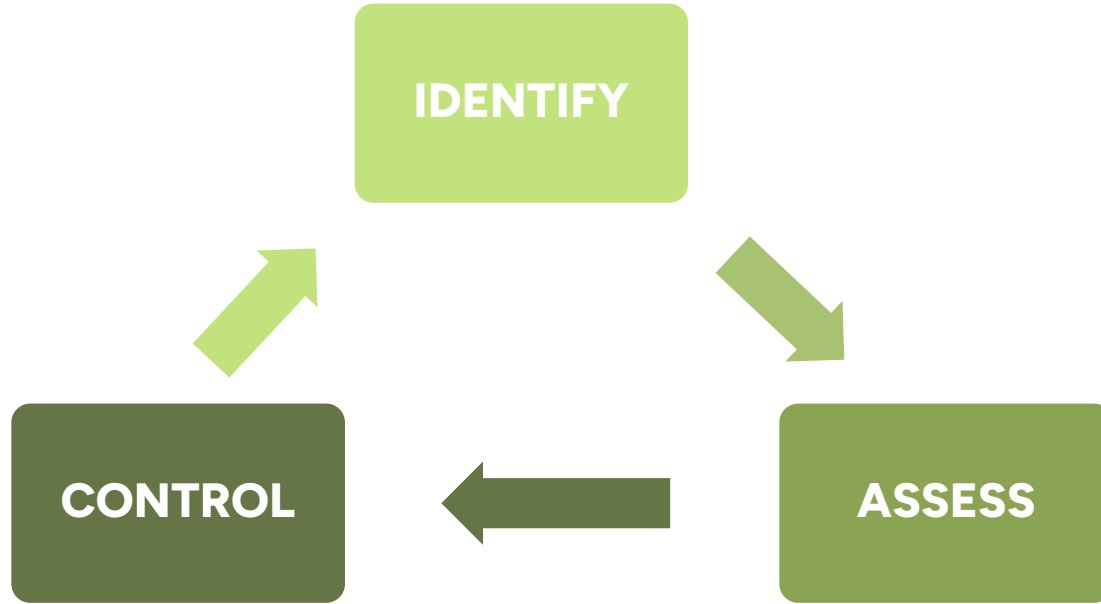
ESAA PFAS Symposium

December 6, 2023





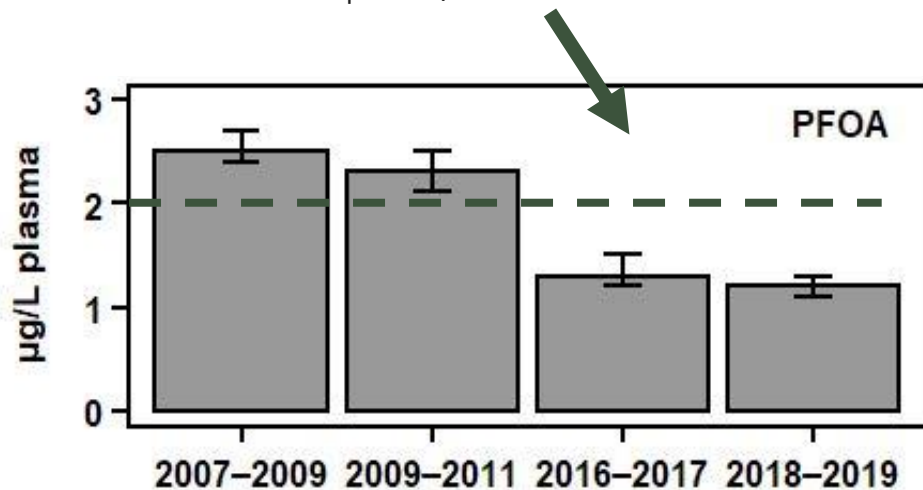
# Risk Management



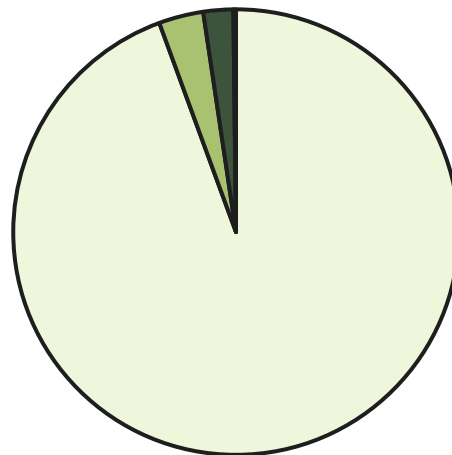


# Estimated Daily Intake PFOA – General Public

German HBM-1 value (concentration at and below which adverse health effects are not expected)



Geometric mean PFOA concentration in adult blood plasma (µg/L)  
Canadian Health Measures Survey (2007-2019)

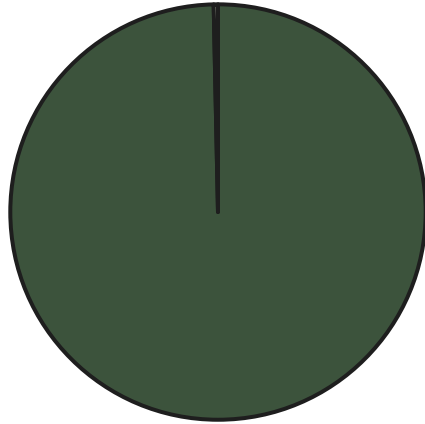


Food/Drinks      Dust ingestion  
Air inhalation      Dermal absorption

Mean daily intake of  $2.8 \times 10^{-7}$  mg/kg-d  
Poothong et al 2020



# Estimated Daily Intake PFOA – Ski Wax Techs



■ Inhalation   ■ "Background"

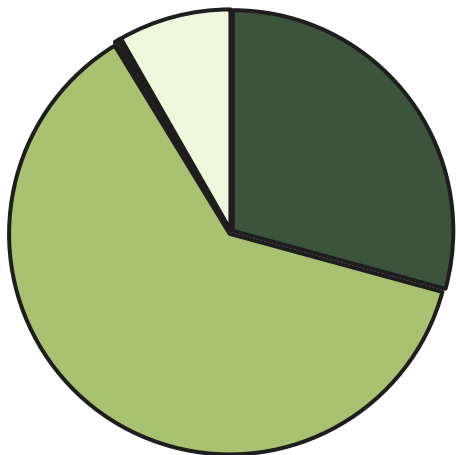
*Nilsson et al 2010*  
*Based on mean air concentration of 1.2  $\mu\text{g}/\text{m}^3$*





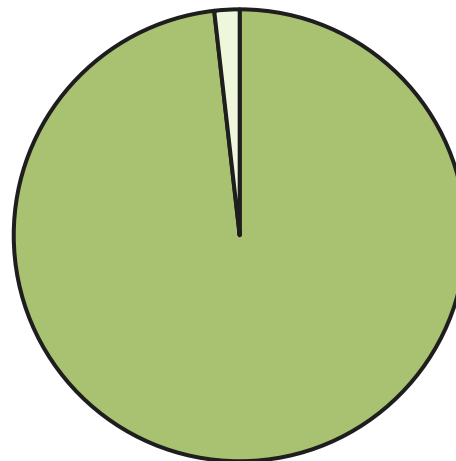
# Contaminated Site-Related Exposure

PFOA – Multiple Residential Media



- Garden Produce
- Soil ingestion
- Soil contact
- Drinking Water
- Inhalation
- "Background"

PFHxA – Tap Water Only



- Drinking Water
- "Background"



# Risk Management & Exposure – Contaminated Sites

- Are PFAS sources present at the site?
- Are PFAS present in site media (incl. media subject to off-site transport)?
- Can people or biota come into contact with those media?





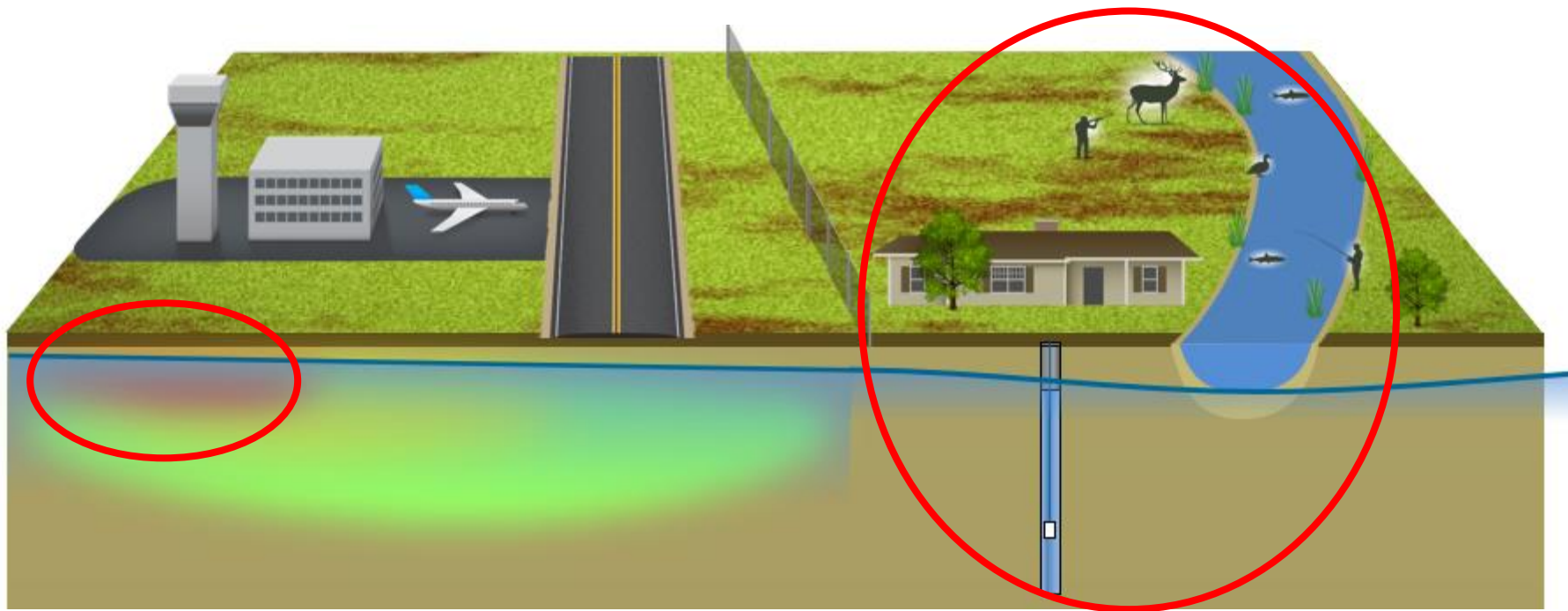
## Risk Management & Exposure – Contaminated Sites

- Wide-area water usage surveying and sampling
- Agricultural product and home garden produce sampling
- Comprehensive stormwater & surface water sampling
- Surficial soil sampling
- Biota tissue sampling





# Risk Management & Exposure – Contaminated Sites







# Summary

- Intake near contaminated sites can be much higher than typical intakes of the general public.
- “Near” is a lot further away from the source site than you might think.
- Due to their mobility, persistence and for some PFAS, potential to bioaccumulate, the evaluation of exposure at contaminated sites requires more effort than other contaminants.
- Risk management entails understanding contributions from a variety of media to exposure and implementing combinations of receptor and source controls.



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