

Testing PFAS in King County's Waste Systems

Sampling results for 2023-2024

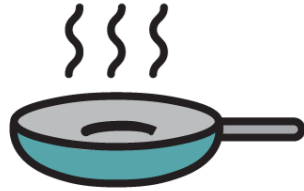
Erika Kinno

Policy & Research Supervisor

May 2025

Sources of PFAS

*Wastewater & treatment plants are **not** the source of PFAS*



Nonstick
Cookware



Stain-proof
Furniture



Personal care
products



Firefighting
Foams



Fast food
Packaging



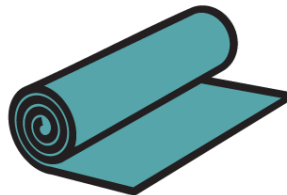
Microwave
Popcorn bags



Water-resistant
Clothing



Stain-resistant
products



Carpet



Cosmetics

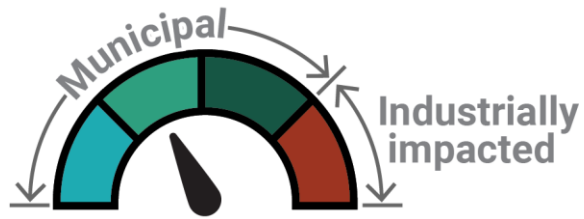


Paint



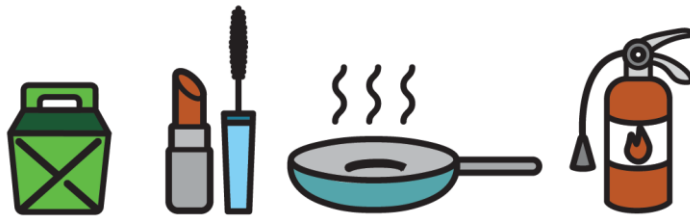
Pesticides

Top results



Wastewater

Similar to average municipal systems



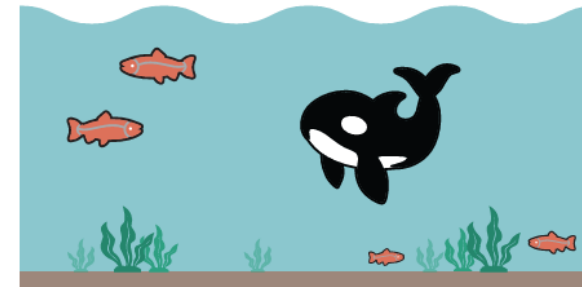
Diffuse sources

Likely coming from everyday products put in drains and trash



Landfill leachate

Magnitudes higher concentration than wastewater



Aquatic life

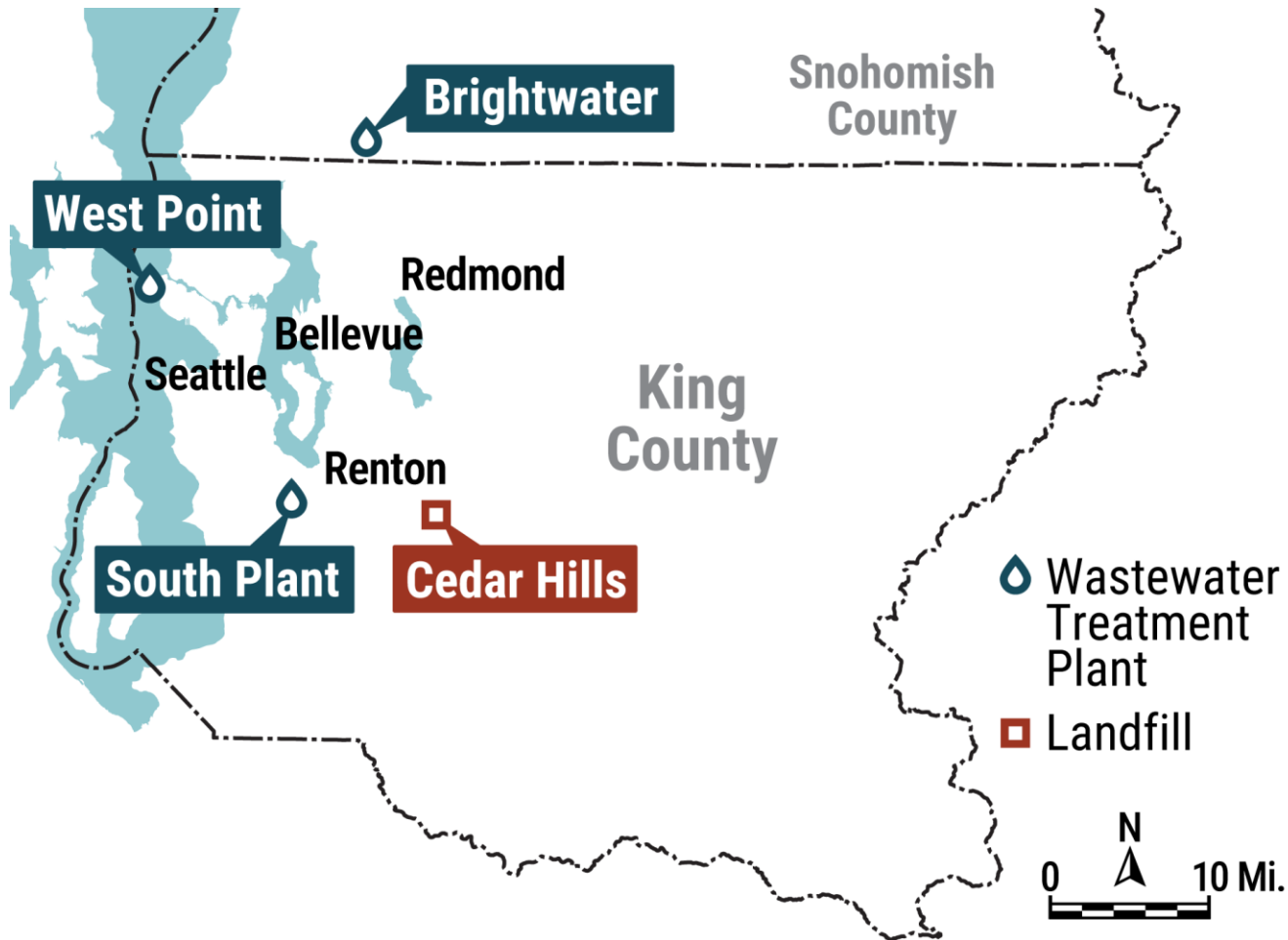
Effluent remains protective of aquatic life

What King County is doing

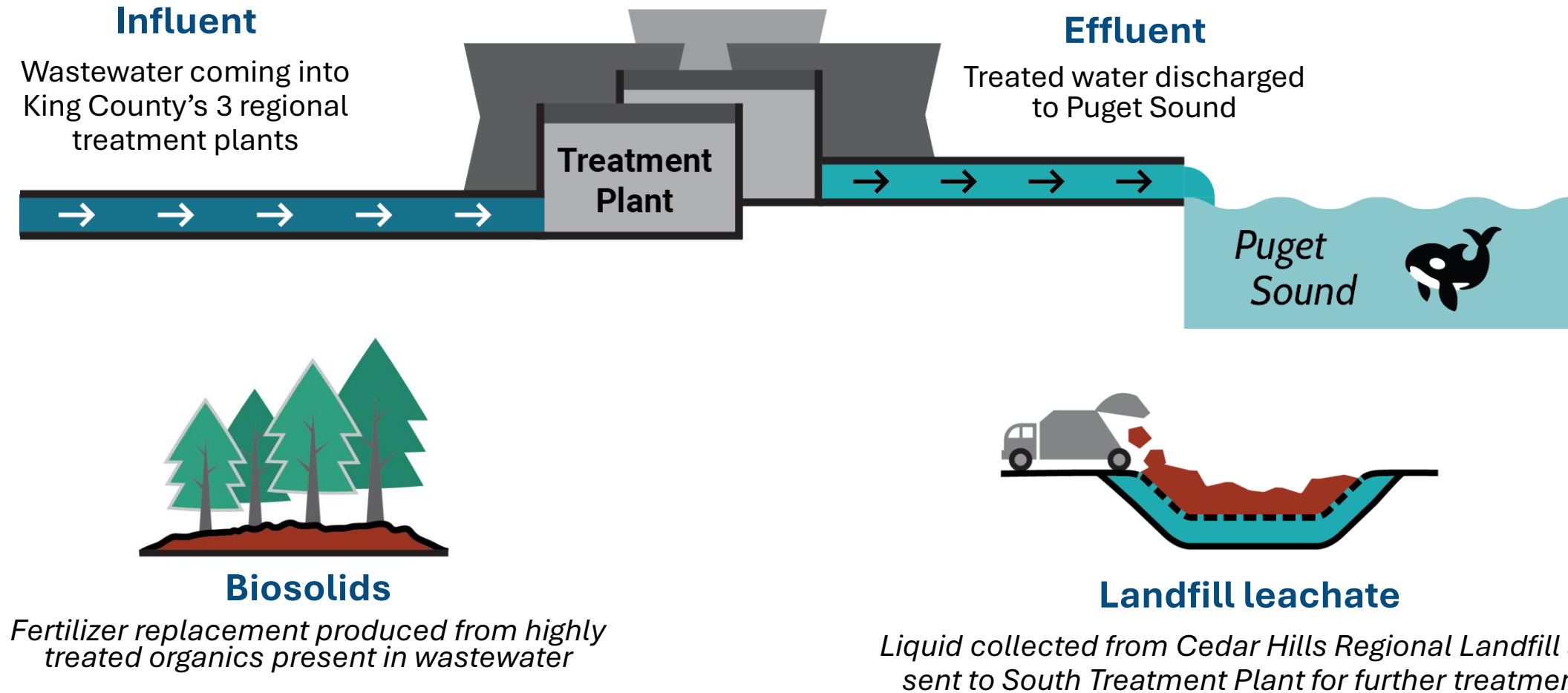
- Promote source control
- Pursue legal action against PFAS producers
- Work with local, state, and federal agencies
- Measure PFAS levels in our environment and in our waste streams



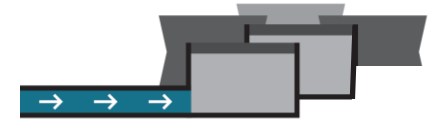
Where King County tested



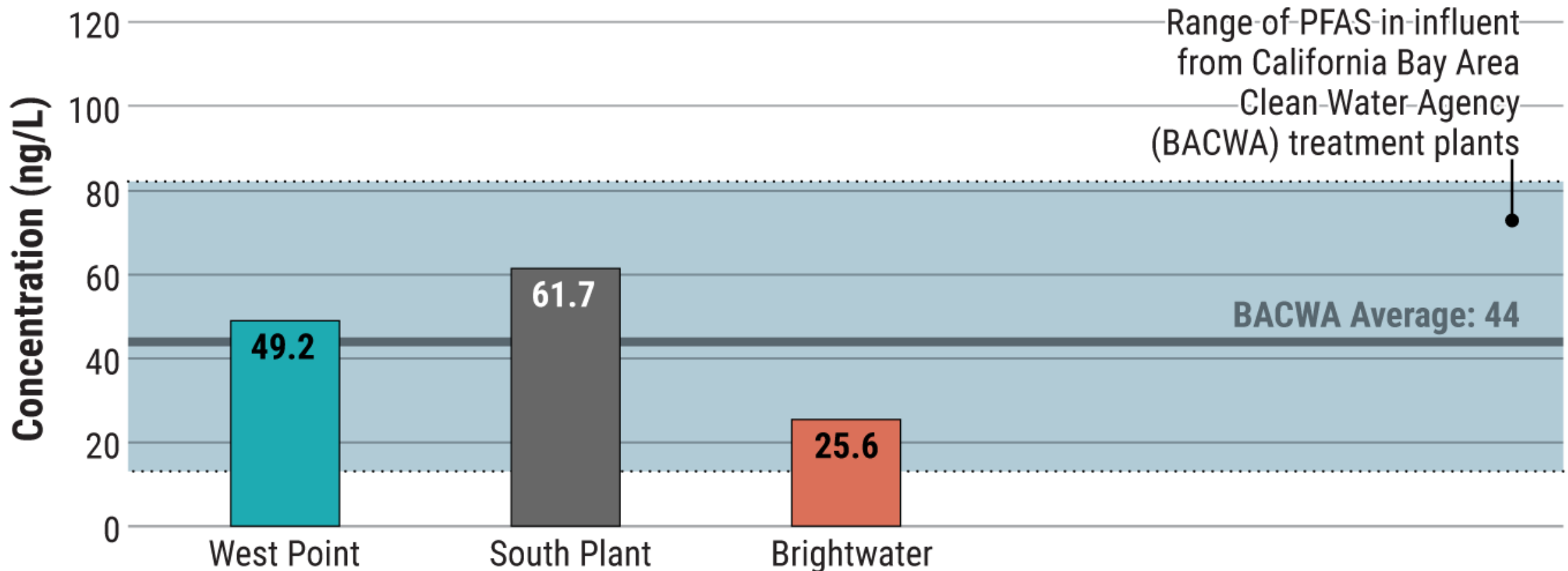
What King County tested



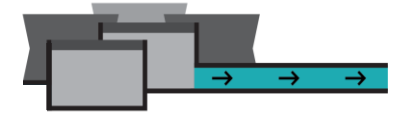
Average PFAS in wastewater influent



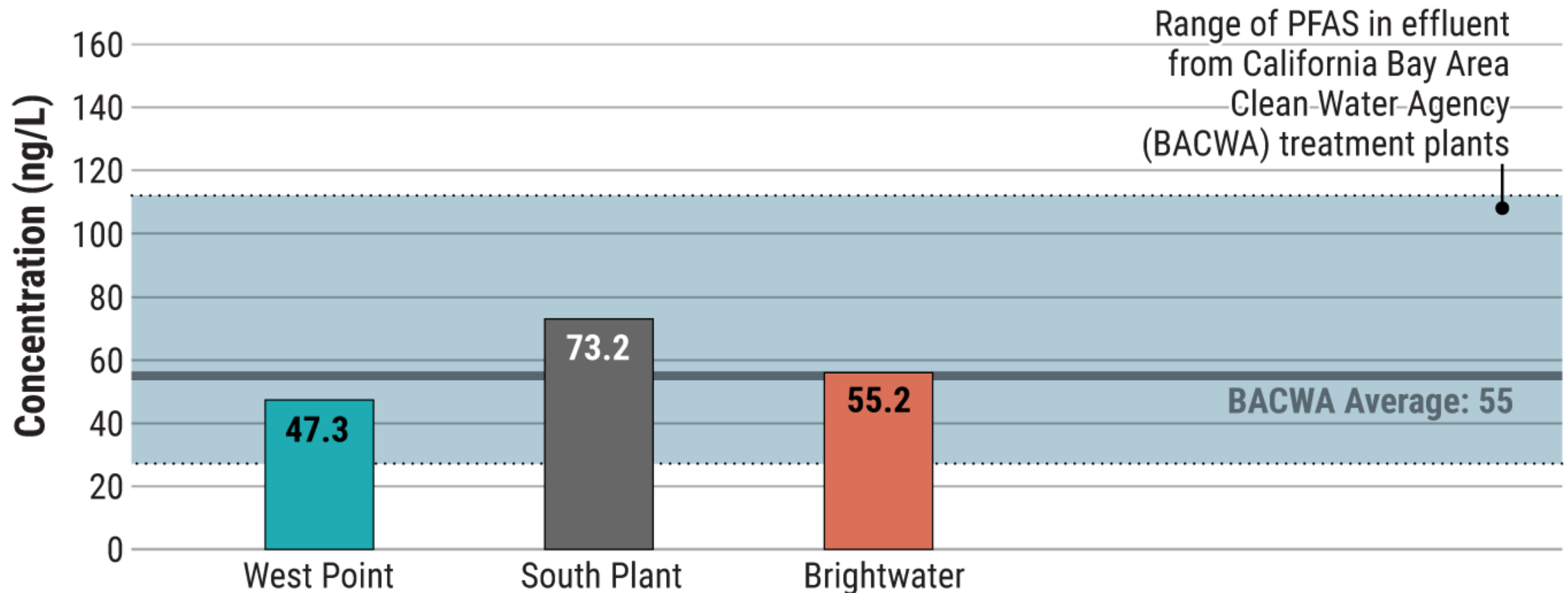
October 2023 – August 2024



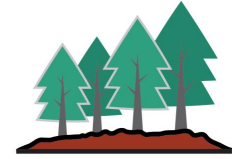
Average PFAS in wastewater effluent



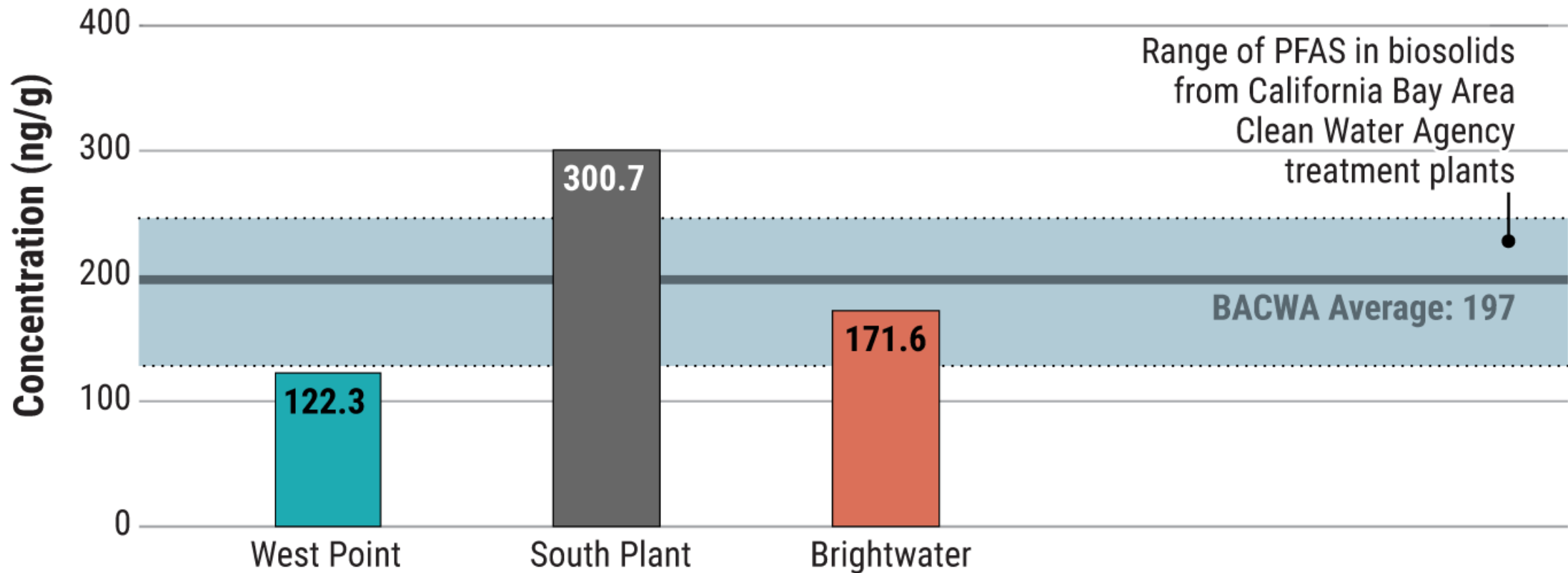
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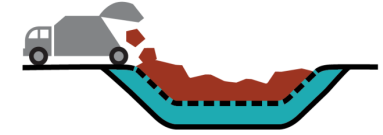
Average PFAS in biosolids



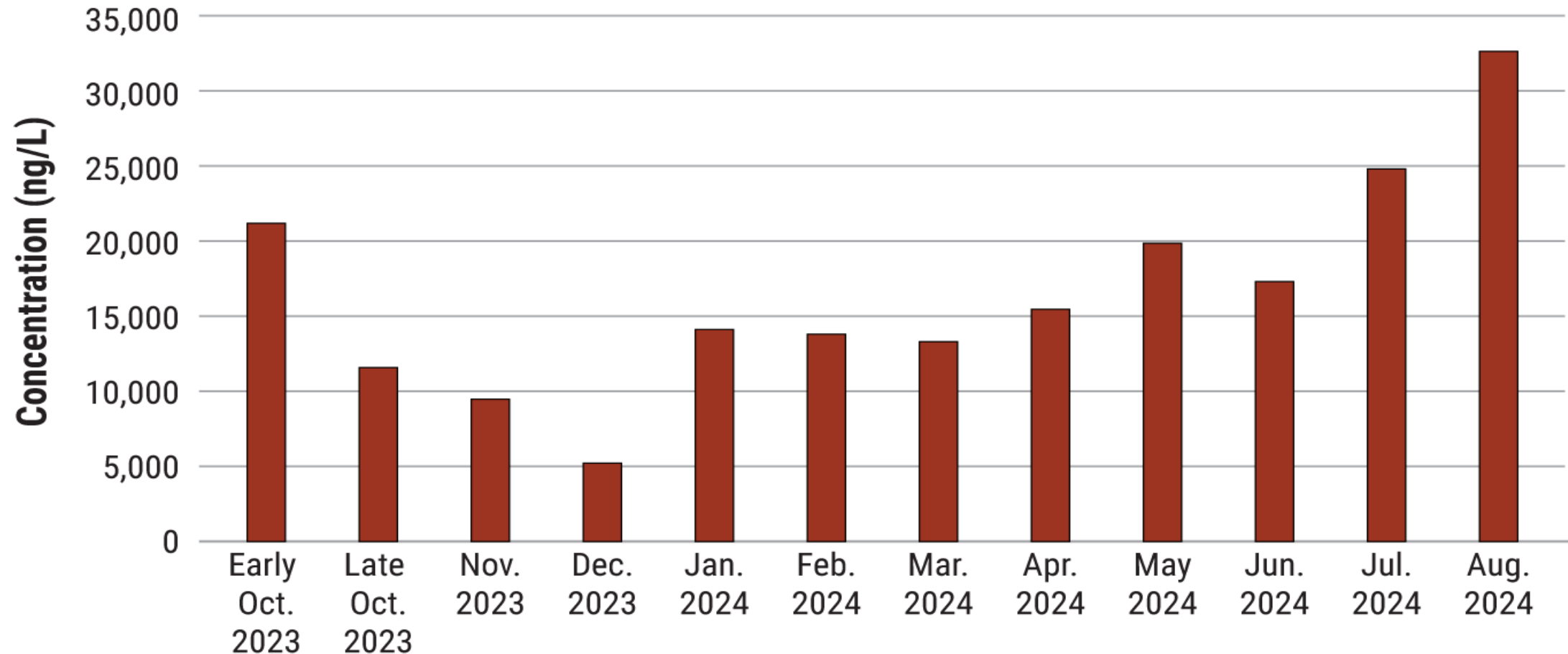
October 2023 – August 2024



PFAS in Cedar Hills landfill leachate



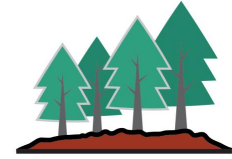
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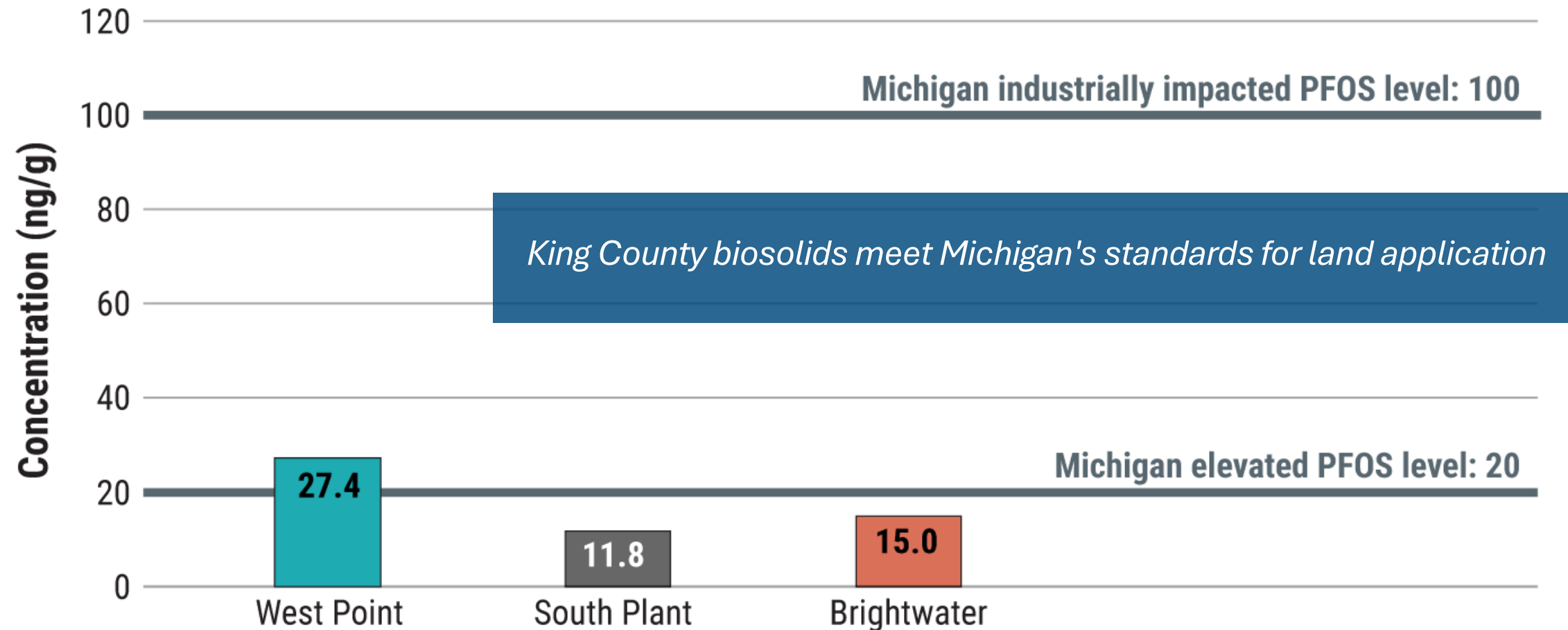
Regulatory comparisons

- Currently no federal and Washington state laws for PFAS in waste streams
- Ongoing efforts to understand risk associated with PFAS
- Other states, including Michigan, have begun to set limits and guidance for PFAS

Average PFOS in biosolids



October 2023 – August 2024

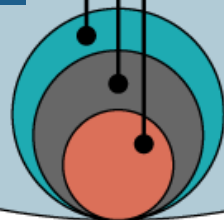


Aquatic life at **low risk** from **PFAS** in King County wastewater

250 ng/L
EPA Chronic
Aquatic Life Criteria

*The concentration of PFOS considered by EPA to be harmful to aquatic life is **36 times greater** than the average PFOS concentration in King County effluent*

6.85 ng/L West Point
4.41 ng/L South Plant
1.86 ng/L Brightwater



Takeaways from Public Health – Seattle & King County

- Still studying the human health impacts
- No known health concerns at this time in King County wastewater treatment
- Ways to reduce PFAS exposure



Learn more at [KingCounty.gov/PFAS](https://www.kingcounty.gov/PFAS)



Next steps

King County will continue to study PFAS in waste systems

- Survey 600+ businesses and industrial dischargers into the wastewater system
- Examine possible sources of higher levels of PFAS at South Treatment Plant
- Investigate cause of elevated PFOS levels at West Point Treatment Plant
- Partner with third-party researchers and projects
- Inform regulators, partners, and the public about our findings
- Advocate for controlling upstream sources of PFAS



Thank you

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King County | Wastewater Treatment

Q & A



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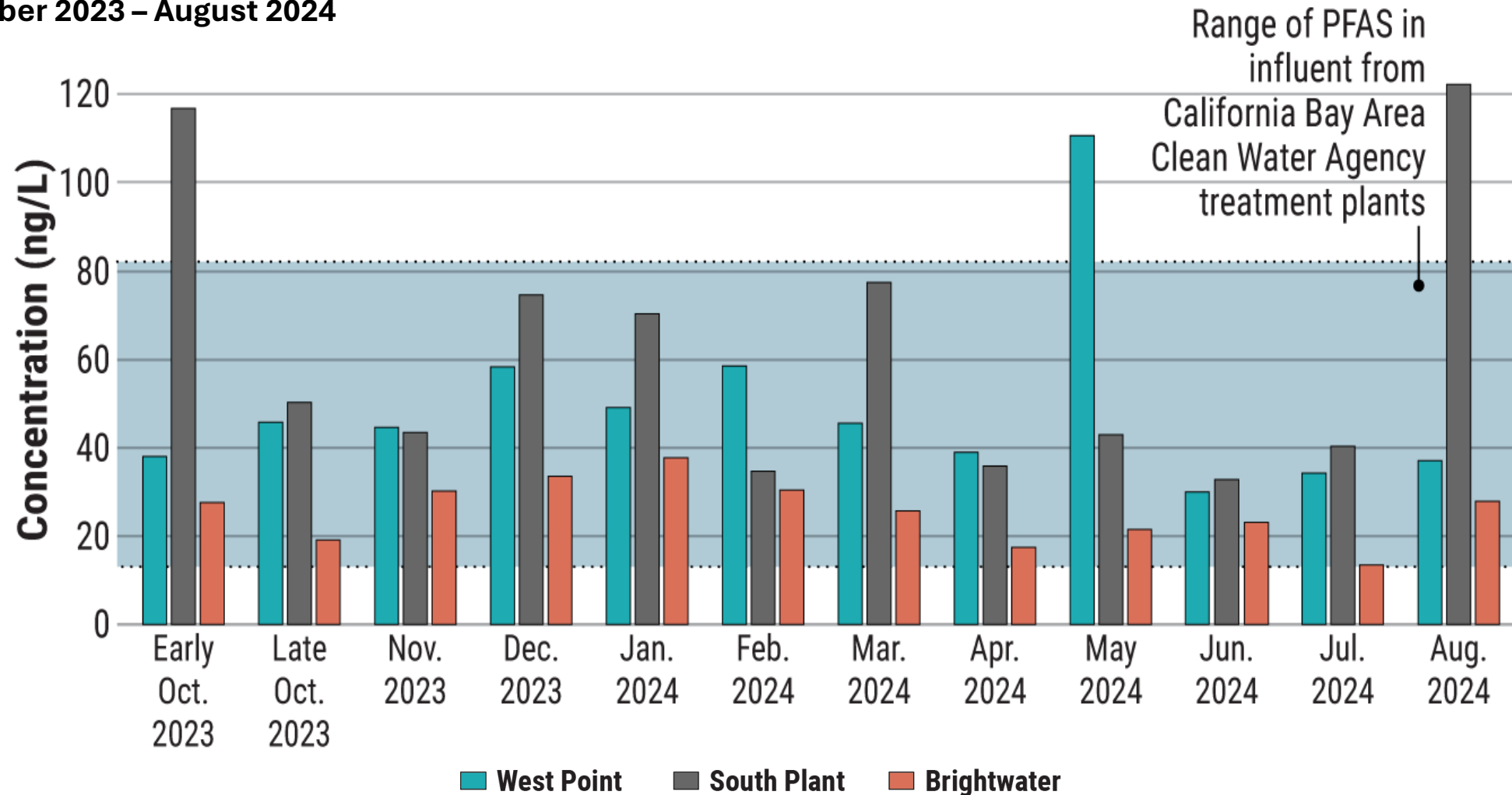
King County

Wastewater
Treatment

Total PFAS in wastewater influent



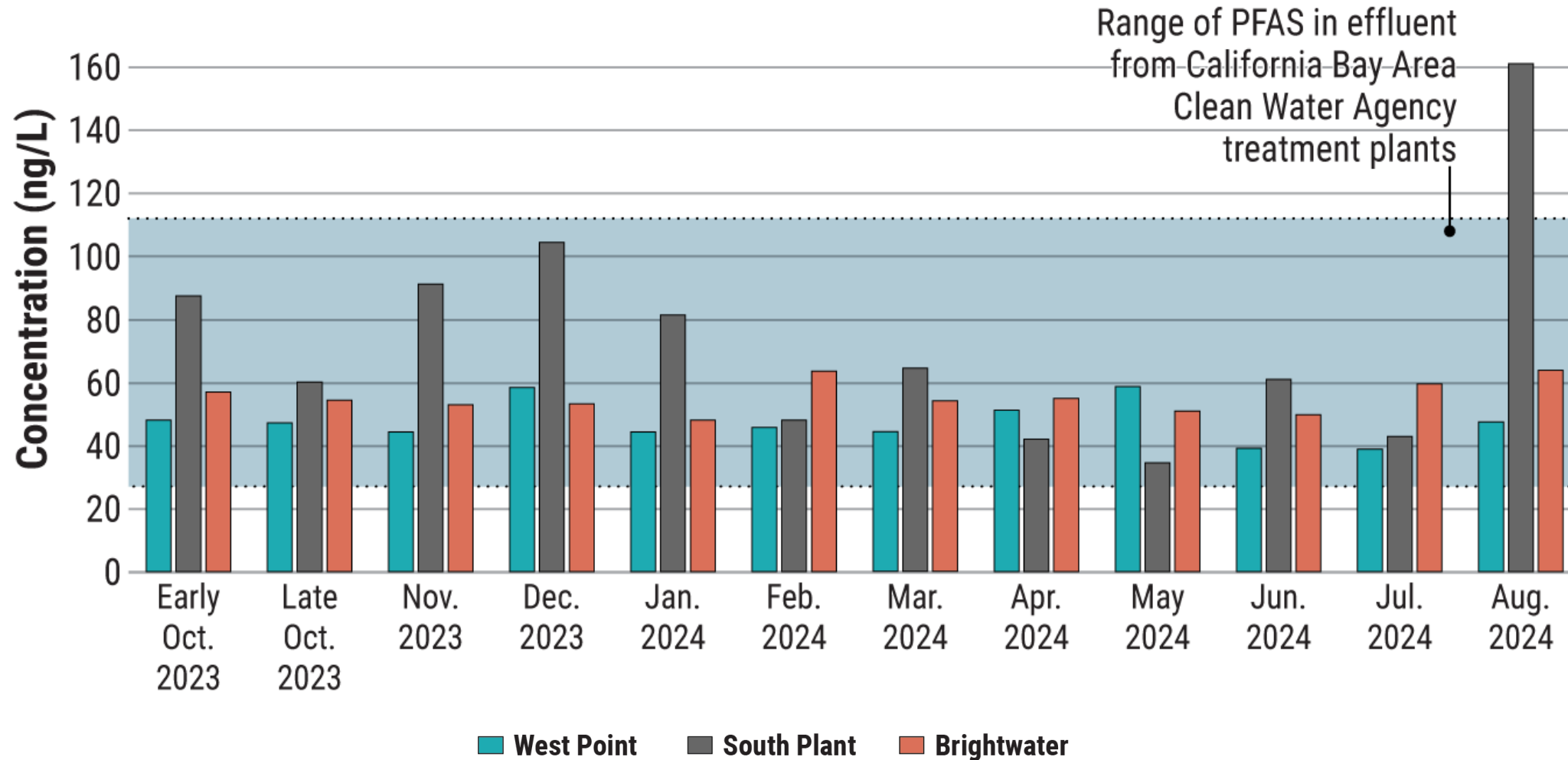
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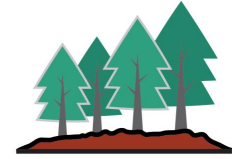
Total PFAS in wastewater effluent



October 2023 – August 2024



Total PFAS in biosolids



October 2023 – August 2024

