

Focus on: PCB Sediment Trends – Summer 2024

What are we doing?

Washington State Department of Ecology (Ecology) scientists collect sediment cores to study how chemicals have built up in the environment over time. Sediment cores will be collected from the following Washington lakes this summer:

- Bead Lake (Pend Oreille County)
- Lake Goodwin (Snohomish County)
- Lake Sawyer (King County)

We choose three new lakes each year to sample different parts of the state and target water bodies based on the chemicals we are measuring. In 2024, we are focusing on polychlorinated biphenyls (PCBs). PCBs are synthetic compounds primarily found in industrial and commercial production, including:

- Caulk
- Electrical transformers and capacitors
- Heat transfer materials
- Hydraulics
- Plasticizers
- Pigment and dyes
- Wax and pesticide extenders

PCB production was banned in 1979 but can still be present in products manufactured between 1929 and 1979. PCB release and exposure can happen from mishandling PCB-containing products or waste. PCBs can travel long distances from release sites, persist in the environment, bioaccumulate in living things, and cause many adverse health effects. You can learn more about PCBs from the [Environmental Protection Agency's \(EPA\) PCB webpage](#)¹.

Why do we do this?

Sediment cores help us understand how the concentration of chemicals in the environment has changed over time. We age-date the cores to find the peak concentration for a set of chemicals and

determine whether levels are increasing or decreasing. This is important because the chemicals we study are persistent, bioaccumulative, and toxic.

To learn more about actions Ecology is taking to address PCBs, visit our [toxics reduction webpage](#)².

Results are coming soon!

We expect our 2024 results to be available as an interactive StoryMap and in Ecology's EIM database by Fall 2025. Reports for previous sampling years are available on Ecology's publications page. These resources are linked on Ecology's [Contaminants in Lake Sediment Cores webpage](#)^{3, QR}.

Related Links



¹<https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls#healtheffects>

²<https://ecology.wa.gov/waste-toxics/reducing-toxic-chemicals/addressing-priority-toxic-chemicals/pcbs>

³<https://ecology.wa.gov/research-data/monitoring-assessment/toxics-monitoring/contaminants-in-sediment-cores>

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ADA accessibility

To request an ADA accommodation, contact Ecology by phone at 360-407-6831 or email at ecyadacoordinator@ecy.wa.gov, or visit <https://ecology.wa.gov/accessibility>. For Relay Service or TTY call 711 or 877-833-6341.