

# Focus on: Lake Sediment Core Study for Toxic Chemical Trends — Summer 2025

## PBT study in three lakes

Scientists who work for the Washington State Department of Ecology will be collecting lake sediment cores from three lakes this summer 2025:

- Bonaparte Lake in Okanogan County
- Leland Lake in Jefferson County
- Mineral Lake in Lewis County

Our science crew is studying how chemicals build up in the environment over time. Testing sediment cores — deep cross-cut samples of the lake bottom — is one way to tell what chemicals have been in the lake and when, and to understand how the concentrations of these long-lasting chemicals have changed over time.

We sample three new lakes each year, choosing lakes distributed across the state, representing a broad range of potential sources.

## Testing for PAHs and mercury

In 2025, we are focusing our study on two persistent, bioaccumulative, and toxic (PBT) chemicals:

- Polycyclic aromatic hydrocarbons — PAHs  
<https://ecology.wa.gov/PAH>
- Mercury  
<https://ecology.wa.gov/Hg>

Both of these PBT chemicals are harmful to humans and wildlife and are priority chemicals for risk-reduction actions.

## Analysis and results

Contaminants in Lake Sediment Cores ([website](#) also linked below) is a long-term study building a large dataset of results collected over years. We age-date sediment cores to find the peak concentration for a set of chemicals and determine whether levels are increasing or decreasing over time. Each year's results broaden our spatial understanding of historical contamination and recent trends and point to new gaps in the data.

Age-dating, chemical analyses, and quality checking and review of a season's data can take over a year to complete. Once the data are ready, we will upload them to the Environmental Information Management database at <https://ecology.wa.gov/eim>.

When all our analyses are finished, we will create a storymap to report on this summer's findings. We expect to launch this in late 2026.

## Study website

For more about our study, including links to published reports for previous years, study data access, and quality assurance project plans, see the study webpage:

Contaminants in Lake Sediment Cores  
<https://ecology.wa.gov/SedimentCores>



## Contact

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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](mailto:ecyadacoordinator@ecy.wa.gov), or visit <https://ecology.wa.gov/accessibility>. For Relay Service or TTY call 711 or 877-833-6341.