

# Glacial melting may release pollutants in the environment

October 21 2009

---



Pollutants from melting glaciers may help explain an increase in persistent organic pollutants in certain lakes since the 1990s, despite decreased used of pesticides. Credit: Wikimedia Commons

Those pristine-looking Alpine glaciers now melting as global warming sets in may explain the mysterious increase in persistent organic pollutants in sediment from certain lakes since the 1990s, despite decreased use of those compounds in pesticides, electric equipment, paints and other products. That's the conclusion of a new study, scheduled for the Nov. 1 issue of *ACS' Environmental Science & Technology*.

In the study, Christian Bogdal and colleagues focused on organic pollutants in [sediment](#) from a model body of water -- glacier-fed Lake

Oberaar in the Bernese Alps, Switzerland -- testing for the persistent [organic pollutants](#), including dioxins, PCBs, organochlorine [pesticides](#) and synthetic musk fragrances. They found that while contamination decreased to low levels in the 1980s and 1990s due to tougher regulations and improvements in products, since the late 1990s flow of all of these pollutants into the lake has increased sharply. Currently, the flow of organochlorines into the lake is similar to or even higher than in the 1960s and 1970s, the report states.

The study attributed the most recent spike in the flow of pollutants into Lake Oberaar to the accelerated release of organic chemicals from melting Alpine [glaciers](#), where contaminants were deposited earlier and preserved over decades. "Considering ongoing global warming and accelerated massive glacial melting predicted for the future, our study indicates the potential for environmental impacts due to pollutants delivered into pristine mountainous areas," Bogdal said.

More information: *Environmental Science & Technology*, [pubs.acs.org/stoken/presspac/p.../10.1021/es901628x](https://pubs.acs.org/stoken/presspac/p.../10.1021/es901628x)

Source: American Chemical Society ([news](#) : [web](#))

Citation: Glacial melting may release pollutants in the environment (2009, October 21) retrieved 20 September 2024 from <https://phys.org/news/2009-10-glacial-pollutants-environment.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--