

May 15, 2023

Deb Haaland
Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

Dave Applegate
Director
United States Geological Survey
12201 Sunrise Valley Drive
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Re: Restoring the National Pesticide Use Map Database

Dear Secretary Haaland and Director Applegate,

We write to you on behalf of the over 250 undersigned scientists to express our serious concern that the United States Geological Survey (“USGS”) may terminate the National Pesticide Use Map database¹ – one of the most vital tools for monitoring pesticide use and estimating water pollution nationwide. Many of us have extensively used this resource for our own research and would be unable to do the high quality scientific work that we do without it.

Since 1991, the USGS National Water Quality Assessment (“NAWQA”) has been a key tool in measuring the quality of our Nation’s streams and groundwater, how conditions are changing over time, and how human activities are affecting these vital resources. An extremely important component of NAWQA has always been the National Pesticide Use Map database, which has produced highly sophisticated pesticide use estimates throughout every single watershed in the country.

Pesticide use estimates have been generated for every agricultural pesticide annually since 1992, which have been essential for the design of USGS water-quality studies. In many cases these important data have been used to predict concentrations of pesticides in streams and groundwater, implicate atmospheric transport of pesticides that are detected in air and rain samples far from sites of application, and predict changes in local water quality based on temporal and spatial variations in pesticide use over time.

While the National Pesticide Use Map database has been an invaluable resource to the federal government, perhaps the greatest benefit has been to scientists, state and local public health officials, and environmental health advocates, as it provides vital information and tracks trends that are not available anywhere else. The pesticide use data produced by the USGS have been used in the development of over 500 peer-reviewed scientific papers, including some of the most highly cited and seminal works in the field. It is information vital to understanding water pollution and landscape-level impacts associated with pesticides.

¹ <https://water.usgs.gov/nawqa/pnsp/usage/maps/index.php>

After accumulating valuable data for over 30 years, the National Pesticide Use Map database is now in danger of termination.² The Pesticide Use Mapping Project previously provided data for around 540 agricultural pesticides that are used and can contaminate water throughout the country. Beginning in 2019, the Pesticide Use Mapping Project now only follows just over 70 pesticides – an 87% reduction. Furthermore, after a planned update for those 70 pesticides in 2024, there are no definite plans to continue the program or update the database unless action is taken.

We use 1.1 billion pounds of pesticides each year in the United States and total pesticide use in the U.S. is up 47% since 1970. Chemical mixtures of pesticides have never been more prevalent in the environment since pesticide use began in earnest in the 1950s.

We need credible sources of data to be able to study and understand what this widespread pesticide use means to the health of people and the environment. There is not a single data source that can even come close to replacing the USGS National Pesticide Use Map database. Data from the USDA's National Agricultural Statistics Service, for example, is collected intermittently, for a specific subset of crops, in a limited number of states and in a difficult to use format. The USGS pesticide use estimates are the only comprehensive, national sources of information about pesticide levels in the environment. Important work by water quality facilities, agricultural extension offices, farmworker healthcare clinics and countless other services will be compromised by the loss of the Pesticide Use Mapping Project.

We urge the USGS to:

- 1) Provide use estimates for *all* agricultural pesticides by restoring the scope of the program to its pre-2019 level;
- 2) Retroactively calculate estimates for all pesticides that lapsed during the recent program cuts; and
- 3) Continue adding new agricultural pesticides to the database as they gain EPA-approval

Thank you for your consideration of our request,

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² USGS, New Water Quality Directions (2019) <https://www.usgs.gov/mission-areas/water-resources/science/new-water-quality-directions>

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