Robert F. Kennedy Jr., Secretary
U.S. Dept. of Health and Human Services
200 Independence Ave. S.W.
Washington, D.C. 20201

Lee Zeldin, Administrator (1101A)
U.S. Environmental Protection Agency
1200 Pennsylvania, Ave. NW
Washington, D.C. 20460

May 5, 2026

Re: Nitrate Contamination in U.S. Drinking Water – Urgent Call for Action

Dear Secretary Kennedy and Administrator Zeldin:

Nitrate pollution in the lakes, rivers, and groundwater that provide drinking water for communities across the U.S. has reached crisis levels. As the evidence mounts showing a broad array of human health consequences from drinking water contaminated with nitrate, the undersigned organizations request that you take immediate, effective action to clean up and protect our drinking water at the source and at the tap.

As discussed below, a major new report by Drake University's Harkin Institute and the Iowa Environmental Council demonstrates that people drinking water with elevated nitrate levels are at increased risk of cancer, adverse birth outcomes, and other severe health effects. These are often Americans living in rural areas where intensive agricultural practices continue to pollute the environment with excessive nutrients, which are the primary cause of high levels of nitrate in sources of drinking water. But the problem extends into large urban areas as well, where cities deal with their own sources of pollution or face pollution from upstream. This is a public health emergency and now is the time to act.

This letter briefly outlines the seriousness of the problem by focusing on recent research in Iowa associating nitrates in drinking water with cancer rates. It then calls on EPA and HHS to take immediate action to protect the public and address this growing problem.

The IEC-Harkin Report

The recently issued report by the Iowa Environmental Council and the Harkin Institute, *Environmental Risk Factors and Iowa's Cancer Rate*s (the "IEC-Harkin Report"), highlights the body of evidence showing an urgent need for action.[1] The IEC-Harkin Report details extensive and growing evidence demonstrating that nitrate threatens the health and wellbeing of large

[1] Fowle, Colleen et al. (2026). Environmental risk factors and Iowa's cancer crisis. Iowa Environmental Council and the Harkin Institute for Public Policy & Citizen Engagement, Drake University. https://www.iaenvironment.org/webres/File/Environmental%20Risk%20Factors%20and%20Iowa's%20Cancer%20Crisis%20-%20Report(1).pdf. (hereinafter, IEC-Harkin Report)

numbers of Iowans each year. The IEC-Harkin Report is clear that intensive agricultural practices are the dominant source of this nitrate pollution in Iowa's waters.

The IEC-Harkin Report shows that nitrate levels in Iowa surface waters have increased from under 1.0 mg/L to over 7.0 mg/L over the last century. It also explains why nitrate concentrations have skyrocketed: too much nutrient pollution dumped into the environment. In 2024 alone, 11.9 billion pounds of synthetic fertilizer, a major source of nitrate pollution, were purchased in Iowa, much of which ran off the fields where it was applied or leached into waterways.[2] Iowa is also home to more concentrated animal feeding operations (CAFOs) than any state in the country, and these operations produce large volumes of manure that contribute to nitrate runoff. Further, Iowa has lost over 97% of its wetlands that, had they not been destroyed, could have helped filter nitrates and other contaminants from agricultural sources, keeping these pollutants from getting into Iowans' drinking water.

The result of this massive increase in nitrate inputs combined with the loss of natural nitrate removal capacity has been disastrous, as nitrate levels in drinking water have increased to levels with clear risks to human health:

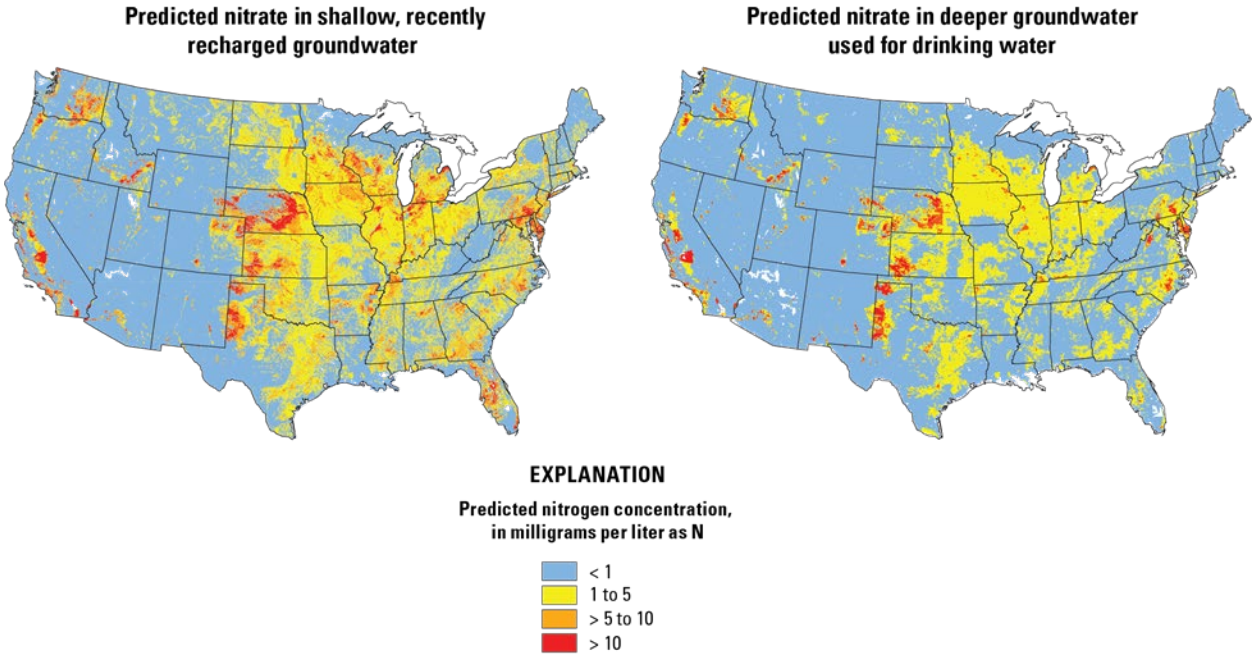
> Nitrate exposure has been linked to many serious health risks including birth defects, reproductive health risks, thyroid issues and several types of cancer. Certain populations are at a higher risk of these conditions, especially children, infants, pregnant women, and residents of agricultural areas who obtain their water from private wells.[3]

The IEC-Harkin Report is focused on Iowa, but the report and data on which it relies make clear that people drinking water across the country where fertilizer application and manure from CAFOs result in massive amounts of nitrate entering surface water and groundwater are at substantially higher risk of cancer and other adverse health impacts.

Rural residents of the United States are especially affected by nitrate pollution because this contamination often ends up in groundwater,[4] the source of drinking water for households across the country with private wells and the source for many public water systems. In the maps below, areas with elevated nitrate in groundwater are shown in yellow, orange, and red.

[2] IEC-Harkin Report at 42.
[3] IEC-Harkin Report at 44.
[4] IEC-Harkin Report at 41.

Predicted Concentrations of Nitrate in U.S. Groundwater



Source: U.S. Geological Survey, 2015

As these maps make clear, nitrate contamination of groundwater poses a widespread threat, particularly in areas where intensive agricultural activity dominates the landscape. The extent of nitrate contamination in water across the United States underscores the urgent need to act now to protect public health.

Action # 1: Act on the Pending Petition for Emergency Action in Iowa under Section 1431 of the Safe Drinking Water Act

This issue of nitrate contamination of drinking water is not unique to Iowa, but Iowa is at the forefront of the crisis. Iowans provided EPA with a roadmap for action when they filed a Petition for Emergency Action Pursuant to the Safe Drinking Water Act to Protect Citizens of the Karst Region of Iowa in April 2024.[5] The Petition explains the problem in detail and documents how nitrate contamination of groundwater poses an imminent and substantial endangerment to tens of thousands of private well users in Iowa. These private wells often rely on the same aquifers as public water supplies, which are also vulnerable to nitrate contamination. To maintain compliance with the nitrate maximum contaminant level (MCL), some public water systems such as Strawberry Point, Iowa, have had to abandon underground sources of drinking water.

Most importantly, the Petition provides numerous actions EPA can take immediately to begin to address the issue of nitrate in groundwater, from investigating why state regulations have failed

[5] Available at: https://www.iaenvironment.org/webres/File/IA_SDWA_Petition_Complete.pdf.

to curb increasing nitrate contamination to prohibiting the expansion of intensive agricultural practices in contaminated areas.

But to date EPA has *not even responded to the Petition*, much less taken any action. This is an egregious dereliction of duty by EPA. In light of the mounting evidence of a public health crisis as reiterated by the IEC-Harkin Report, EPA must take emergency action as requested by the Petition to protect Iowa's drinking water supplies.

Action #2: Exercise Your Public Health Emergency Authorities to Reduce Nitrate Contamination

The IEC-Harkin Report indicates that even communities served by public drinking water systems are at an increased risk of cancer when source waters have elevated nitrate levels. The science is now clear that nitrate in drinking water well below the current maximum contaminant level (MCL) of 10 mg/L presents health risks. As the IEC-Harkin Report explains, studies indicate increased risk of colorectal cancer, ovarian cancer, bladder cancer, kidney cancer, thyroid and prostate cancer associated with consuming water with nitrate concentrations over 5 mg/L, 3 mg/L, or as low as 2 mg/L, five times less than the current MCL.[6] Therefore, we further request that both EPA and HHS use your existing authorities to address public health emergencies, such as 42 U.S.C. § 247d and 33 U.S.C. § 1364, to identify and eliminate sources of nitrate pollution affecting drinking water and provide funds to communities to reduce nitrate levels in finished drinking water.

One of the largest population-based cohort studies evaluated 1.7 million adults in Denmark. It found increased colorectal cancer risk at nitrate concentrations at or above ~2.1 mg/L NO_3-N (9.3 mg/L NO_3) in public waterworks and private wells. Statistically significant increased risk was also observed at concentrations as low as ~0.87 mg/L NO_3-N (3.87 mg/L NO_3), which is approximately one-tenth of the U.S. drinking water standard.[7]

The long-term health risks from elevated nitrate go beyond just cancer. A 2018 review of studies found positive associations between higher drinking water nitrate exposure during pregnancy and neural tube or central nervous system defects in children, such as spina bifida and oral cleft defects.[8] Other studies have suggested possible connections between maternal exposure to nitrate in drinking water and increased risks of adverse birth outcomes including limb deficiency and preterm birth.[9]

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[6] IEC-Harkin Report at 45-46 (citing findings of individual studies with effects between 2-3 mg/L), 48 ("many studies have reported association between nitrate and cancer at concentrations below the current MCL of 10mg/L").
[7] Schullehner, J. et al. (2018). Nitrate in drinking water and colorectal cancer risk: A nationwide population-based cohort study. International Journal of Cancer, 143(1), 73–79. https://doi.org/10.1002/ijc.31306
[8] Ward, M. H. et al. (2018). Drinking Water Nitrate and Human Health: An Updated Review. International Journal of Environmental Research and Public Health, 15(7), 1557. https://doi.org/10.3390/ijerph15071557
[9] Brender, J. D. et al. (2013). Prenatal Nitrate Intake from Drinking Water and Selected Birth Defects in Offspring of Participants in the National Birth Defects Prevention Study. Environmental Health Perspectives, 121(9), 1083–1089. https://doi.org/10.1289/ehp.1206249; Blaisdell, J. et al. (2019). Prenatal exposure to nitrate in drinking water and the risk of congenital anomalies. Environmental Research, 176, 108553. https://doi.org/10.1016/j.envres.2019.108553;

These risks further underscore the inadequacy of current source water protections and drinking water standards to fully protect American's drinking water, especially for vulnerable populations such as pregnant mothers and newborns.

Conclusion

As the IEC-Harkin Report shows, it is imperative that EPA and HHS act now to address this public health emergency in Iowa and across the country. Your agencies should immediately identify and eliminate sources of nitrate pollution in drinking water and provide funds to communities to reduce nitrate to safe levels.

We look forward to your response and to working with you to identify additional ways that EPA and HHS should take urgent action to address the health emergency posed by nitrate levels in drinking water that affects Americans across the country.

Sincerely,

Albert Ettinger
Mississippi River Collaborative

Tyler Lobdell
Food & Water Watch

Mike Schmidt
Iowa Environmental Council

Nancy Stoner
Environmental Law & Policy Center

Stacy E. Woods
Union of Concerned Scientists

On behalf of the following organizations:

Semprini, J. (2025). Early prenatal nitrate exposure and birth outcomes: A study of Iowa's public drinking water (1970–1988). PLOS Water, 4(6), e0000329. https://doi.org/10.1371/journal.pwat.0000329.

Alliance for the Great Lakes
Alliance of Nurses for Healthy Environments
Amigos Bravos
Animal Legal Defense Fund
Bayou City Waterkeeper
Bitterroot River Protection Association
Black Warrior Riverkeeper
Campaign for Lead Free Water
Cape Fear River Watch
Center for Biological Diversity
Center for Environmental Health
Center for Food Safety
Center for Water Security and Cooperation
Chuatuauqa-Conewango Consortium, Inc.
Clean Water Action
Climate Action Evanston
Columbia Riverkeeper
Committee on the Middle Fork Vermilion River
Community Water Justice
Environmental Law & Policy Center
Flow Water Advocates
Food & Water Watch
Food Animal Concerns Trust
Freshwater Future
Friends of the Earth
Friends of Toppenish Creek
Grassroots Environmental Education
Grateful Graze
GreenLatinos
Harford County Climate Action
Harpeth Conservancy
Harrington Investments, Inc.
Illinois Stewardship Alliance
Inland Empire Waterkeeper
Iowa Citizens for Community Improvement
Iowa Environmental Council
Izaak Walton League of America
Kentucky Waterways Alliance
Latino Farmers & Ranchers International, Inc.
League of Women Voters of Illinois
League of Women Voters of Minnesota (LWVMN)
League of Women Voters of WI
League of Women Voters Upper Mississippi River Region ILO

Little River Watershed Association
Long Beach Gray Panthers
Long Island South Shore Waterkeeper
Los Jardines Institute
LWV of Iowa
Midwest Environmental Advocates
Milwaukee Riverkeeper
Minnesota Center for Environmental Advocacy
Mint Creek Farm
Mississippi River Collaborative
Mississippi River Collaborative
MoveOn.org HobokenRESIST!
MS Communities United for Prosperity (MCUP)
NYC H2O
Ohio Environmental Council
Ohio River Foundation
One Mississippi
Orange County Coastkeeper
Oregon Rural Action
Penobscot Bay Waterkeeper
People's Water Board Coalition
Protect Our Aquifer
San Luis Valley Ecosystem Council
ShoreRivers
Sierra Club
Socially Responsible Agriculture Project
Terra Advocati
The Center for Water Security and Cooperation
Three Rivers Waterkeeper
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United Native Americans
Wabash Riverkeeper Network
Waterkeeper Alliance
Waterkeepers Chesapeake
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WERA
WESPAC Foundation, Inc.
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