

The University of California at Davis has issued an important new study assessing the public health hazards associated with nitrates in California drinking water. The study, led by U.C. Davis Professors Thomas Harter and Jay Lund, contains some important and disturbing findings. The full study can be found [here](#), the Executive Summary [here](#).

✖ The new U.C. Davis study is a result of [2008 legislation](#) directing the State Water Resources Control Board to prepare a report for the California Legislature to “improve understanding of the causes of [nitrate] groundwater contamination, identify potential remediation solutions and funding sources to recover costs expended by the State...to clean up or treat groundwater and ensure the provision of safe drinking water to all communities.” The Board, in turn, contracted with U.C. Davis scientific experts to prepare the recently-released study in order to inform the Board’s own report to the Legislature.

Key findings of the U.C. Davis study include the following:

- Nitrate is one of California’s most widespread groundwater contaminants and, in excessive amounts, poses a serious threat to the state’s groundwater supply and to the health of California residents who depend on groundwater for their drinking water;
- Agricultural fertilizers and animal wastes applied to cropland are by far the largest regional sources of nitrate found in California groundwater;
- Nitrate contamination is a particular problem for groundwater basins in the Salinas Valley and the Tulare Lake Basin area of the San Joaquin Valley, where 2.6 million Californians rely on local groundwater aquifers for their drinking water and where, for over half a century, nitrate from fertilizer and animal waste have infiltrated those aquifers;
- Direct remediation to remove nitrate from large groundwater basins is extremely costly and often not technically feasible; and
- Many communities in the affected areas are among the poorest in California, having limited economic means or technical capacity to maintain safe drinking water given threats from nitrate and other contaminants.

The U.C. Davis study paints an alarming picture, and provides notice to California regulators and legislators that nitrate contamination represents a clear and present danger to state groundwater resources and those who depend upon them for one of the basic necessities of life—drinking water. Nitrate contamination is a major environmental justice concern in California, inasmuch as those most affected by this form of pollution are poor rural communities heavily populated by people of color.

Let’s hope that the solid science developed and reported by U.C. scientists serves as an

overdue wake-up call for California policymakers, regulators and public health officials.