A little fertilizer goes a long way.

Many modern agricultural practices depend on synthetic fertilizers that are high in nitrates to produce quick and abundant crop yields to support a growing population. Unfortunately, those nitrates can pose a threat to human health and the environment when they run off into waterways. In 2019, the U.S. consumed 20.36 million metric tons of fertilizer, and anthropogenic production of nitrogen has increased over six-fold since 1940 in the U.S. Runoff from rain and snow carries the nitrates deposited onto fields into groundwater or into drainage systems which empty into streams. About 80% of the nitrogen in fertilizers is lost from the fields where it is applied. Agriculture contributes approximately 53% of the nitrogen pollution in the U.S., from hundreds to thousands of farms and ranches along waterways. Other contributors include runoff or leakage from landfills, failing septic systems, and industrial wastewater discharge.

**[include data from your Nitrate Watch testing and/or information about the scope and impact of nitrate pollution in your community]**

High levels of nitrates in streams can lead to unsafe drinking water. More than 118 million Americans depend on local streams for drinking water. In 1990, the Environmental Protection Agency (EPA) established the drinking water standard for nitrates as 10 mg/L. But studies have found that water with nitrate levels even lower than that may not be safe to ingest. Some health risks related to ingesting high levels of nitrates include methemoglobinemia (blue baby syndrome), cancer, thyroid disease, respiratory issues, and birth defects. Additionally, high levels of nitrates in streams can produce toxic algal blooms and dead zones, which can drastically affect fish and wildlife populations.

This problem is only getting worse. In 2016, the EPA indicated that 41% of streams and 46% of rivers surveyed between 2008 and 2009 were impaired due to excessive nitrogen and phosphorus inputs. Eutrophication costs taxpayers nearly $100 million annually in U.S. coastal areas. These costs include public health, commercial fisheries, recreation, monitoring, and management. Additionally, the U.S. racks up roughly $2.4 billion in annual costs due to nitrogen-related expenses such as lakefront property value loss, purchasing bottled water due to water taste and odor, recreation loss, and protecting endangered species.

The agriculture industry is central to our survival and wellbeing – both in the production of nutritious food and in the adoption of practices that will minimize nitrogen pollution going forward. Our current farming practices must evolve so that less fertilizer is needed and what is applied stays in the soil to be utilized by crops. The fertilizers that run off our fields are poisoning the water we rely on. Government officials and our communities need to unite to reduce chemical fertilizer use, advocate for alternative farming practices, and stop polluting our waterways.

For more information about nitrate pollution, visit *nitratewatch.org*.