A little fertilizer goes a long way.

Many modern agricultural practices depend on synthetic fertilizers that are high in nitrates to produce crop yields that will support a growing population. Unfortunately, those nitrates can be harmful to human health and the environment when they run off into waterways. From July 2017 to June 2018, Iowa distributed 4,486,121 tons of fertilizer. Runoff from rain and snow may carry the nitrates from fertilizers into groundwater or into drainage systems which empty into streams. About 80% of the nitrogen in fertilizers is lost from the fields where they are applied. Iowa has more than 22 million acres of row crop agriculture, and most of it remains incompletely or inadequately treated for nitrate pollution.

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 nitrate include methemoglobinemia (blue baby syndrome), cancer, thyroid disease, respiratory issues, and birth defects. Only about 10% of public water suppliers in Iowa treat their water for nitrate, and private water supplies, such as groundwater wells, are not regulated and do not have standards for contaminants. Together, that means that about one third of the households in Iowa are at high risk of nitrate exposure.

**[add data from your Nitrate Watch testing and/or share why this issue is important to you personally]**

As an Iowan, I understand the responsibility that our state has for providing food for our people and country. However, our current farming practices can be modernized to improve soil health and reduce runoff so fertilizers applied to fields don’t poison our water. Our agriculture systems must evolve so that we can continue to feed a growing population without harming our waters. 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*.