

Matthew Brown

Mrs. Willson

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Michigan Waters and Agricultural Runoff

Michigan is home to some of the most nutrient-rich farmland in the entire world. Vast amounts of apples, blueberries, onions, potatoes, and of course, cherries, all are exported from Michigan every harvest season. But the natural irrigation and nutrients of Michigan farmland aren't always enough to foster the growth of these crops. Thousands of tons of pesticides and fertilizers are sprayed on crops every year in Michigan. They seep into rivers, lakes, and underground reservoirs, and cause immeasurable harm. Action needs to be taken to protect our wildlife, our agriculture, and ourselves before the problem of water pollution becomes worse and even more rooted in our society and economy.

Restrictions on runoff are needed to prevent further environmental damage. Farmland runoff contributes to the growth of massive algae blooms in bodies of water as large as Lake Erie. This bacteria absorbs vital nutrients in the water that other species need to live and blocks out the sun from reaching below the water, effectively starving other wildlife. The Michigan Right to Farm Act, which is Michigan's current set of laws regarding agriculture, is not sufficient. Supporters of the act cite fear of restricting farmers from new technologies (pesticides, herbicides, and fertilizers) to justify the loose nature of the restrictions. This ignores the drastic consequences of excessive fertilizing. In 2009, one runoff alone led to over 200,000 fish deaths in the Blue Water Area, nearly wiping out the local populations of trout and walleye (Ervin). It compromises the balance of watershed ecosystems across Michigan and threatens to create irreversible damage.

Instituting repercussions for this type of pollution is critical to protect our waters and environment.

While many lawmakers fear regulating the spraying of pesticides, herbicides, and fertilizers because of potential economic harm to Michigan farms, they actually can harm agriculture output in the long term. One of the most important factors in large crop output is pollinators. Through the destruction of local ecosystems and wildlife, farms may harm this important asset. Michigan has seen a 30% decline in its local pollinators every year, twice what is considered economically sustainable (vanEngelsdorp). While agriculture runoff may not be the sole factor in this trend, controlling it would help reduce the decline and boost future harvest output. Additionally, local water reservoirs that are drawn upon to water crops are losing vital nutrients from agricultural runoff and leading to decreased crop growth (Environmental Protection Agency). Runoff needs regulation, to both protect our water and local farms.

Regulation also needs to be instituted to protect communities' local water supplies from agricultural runoff. Pine River Michigan is one example of towns that have suffered greatly from runoff. Pine River saw one of the largest increases in detrimental bacteria in its local waterways because of this water pollution. The fertilizer fosters an environment that promotes bacterial growth and drains the river of its vital nutrients, making it non-potable and unusable for humans. Pine River residents have also seen abnormal rises in lymphoma cases and birth defects that have been linked to this pollution (Beggin). Towns across Michigan have faced compromised water reservoirs that have led to the need to import water to stay alive. This is not an isolated case. Action needs to be taken.

Michigan's water is invaluable. Ensuring the safety of the water, in turn, protects the inhabitants of Michigan and its businesses. Agriculture runoff is irresponsible and preventing it

is one of the most feasible steps that can be taken to improve and safeguard our most invaluable resource.

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