American Sustainable Business Council

Water Runoff Pollution Threatens Minnesota Economy

Clean Water is Good for Business

The land of sky-blue waters is imperiled by runoff pollution that damages Minnesota industries, including agriculture and food production. Handled poorly, runoff pollution costs businesses and other taxpayers billions of dollars every year.

What is Runoff Pollution?

Runoff water is rain and snowmelt not immediately absorbed and filtered by the ground that instead runs off the surface, seeping into streams, ponds, rivers, lakes, and oceans. Byproducts of modern agriculture, urbanization and industry all contaminate runoff water.

Agricultural runoff comes from livestock waste and chemical products such as fertilizers and synthetic pesticides. All contain high levels of nitrogen, phosphorous, and other compounds that rain sluices into bodies of water, where they cause pollution and fertilize algae blooms that kill fish.

Urban runoff results from oil, grease, antifreeze, brake fluid and other polluting products deposited by motor vehicles on roads, in parking lots and other impervious paved surfaces, and from improper disposal of products such as paint and lawn care chemicals. All mix with rainwater that carries them directly into bodies of water before topsoil can absorb them.

Industrial runoff is caused by inadequate disposal of industrial waste. Every year, coal-burning power plants emit millions of tons of coal ash; fine particles infused with toxins like sulfur dioxide, nitrogen oxide and carbon monoxide. These fall on waterways and on the ground, to mix with rainwater as runoff pollution.

IN A SNAPSHOT

- When a body of water is too polluted for human use, it is labeled as "impaired." In 2012, the EPA found over 12,600 miles of Minnesota rivers and streams and over 3.6 million acres of Minnesota lakes, reservoirs, and ponds were impaired.
- Offering Minnesota farmers tax credits to upgrade to newer pipe-drainage systems can lead to higher crop yields, more consistent production, and efficient use and allocation of water.
- Studies conducted throughout Minnesota show that including cover crops in corn and soybean crop rotations reduce nitrate leaching into water by 11 to 30% Offering farmers tax deductions, subsidies or other incentives to plant cover crops would reduce runoff pollution and preserve the viability of our valuable water and soil.
- Biopesticides, made from microorganisms instead of synthetic compounds, are targeted, cost-effective, long-lasting, less toxic, and quick to biodegrade. Regulations must be updated to distinguish biopesticides from synthetic pesticides and incentivize biopesticides in the marketplace.

Runoff Pollution Costs Minnesota Businesses

Runoff pollution from fertilizers and pesticides used in farming contaminate water sources and cause erosion and soil degradation that make land unfit for growing crops. Runoff pollution also hurts tourism and recreation business by damaging lakes and streams in state parks and other outdoor areas throughout our state. All other businesses are also vulnerable to water pollution: All need a healthy workforce, healthy customers and an uncontaminated supply chain to survive.

Non-point runoff pollution (from a combination of agricultural, industrial, and urban sources) is the biggest source of water pollution in Minnesota, with agricultural runoff the primary cause. When a body of water is too polluted for human use, it is labeled as "impaired." In 2012, the EPA found over 12,600 miles of Minnesota rivers and streams and over 3.6 million acres of Minnesota lakes, reservoirs, and ponds were impaired.

Water Pollution, Especially from Agriculture, Endangers Minnesota's Economic Potential

Runoff pollution endangers thousands of Minnesota businesses and the livelihoods of millions. Agriculture is one of the biggest sources of runoff pollution but is also one of the industries that will lose the most if runoff pollution is not controlled. Minnesota has over 74,542 farms employing more than 340,000 Minnesotans. These farms generate $75 billion in economic activity every year, and every one of these farms relies on clean water.

Runoff pollution puts Minnesota's tourism and fishing industries on the line too. It can infect local fish populations and make Minnesota's waterways unfit for recreation, including beautiful, popular sites such as Voyageurs National Park.

Runoff pollution must be reduced quickly to avoid severe damage to Minnesota's agriculture, fishing, recreation and other businesses.

What Can Be Done?

To safeguard our economy and overall wellbeing, Minnesota must make it a priority to:

- **Reform crop insurance programs** to incentivize cover crops. In Minnesota, at least 79% of nitrogen pollution and 38% of phosphorous pollution contaminating the Mississippi River comes from non-point sources, especially agriculture. Cover crops can help filter and recycle these pollutants, guarding against soil erosion and other damage, but cover crops are used on only 1.5% of agricultural land in Minnesota. Current crop insurance programs actually dis-incentivize cover crops by putting difficult-to-meet guidelines on crop termination dates. Many farmers throughout the Corn Belt indicate they would be more willing to plant cover crops if cost-sharing assistance at a modest $23 per acre were available.

  Studies conducted throughout Minnesota show that including cover crops in corn and soybean crop rotations reduces nitrate leaching into water by 11 to 30%. Offering farmers tax deductions, subsidies or other incentives to plant cover crops would reduce runoff pollution and preserve the long-term viability of our valuable water and soil.

- **Reform market entry barriers** to incentivize biopesticides. Biopesticides are made from microorganisms instead of synthetic compounds, and alter the biological mechanism of the pest they are engineered for rather than directly killing all pests. This targeted approach keeps pests and disease organisms from easily mutating or building resistance, ensuring the treatment has long-term effectiveness, which also holds down application costs. Biopesticides are also inherently less toxic, biodegrade quickly and are cheaper than chemical pesticides when locally produced. To make this environmentally-friendly type of pesticide easily available to farmers, we need to update regulations to set biopesticides apart from synthetic pesticides and incentivize the biopesticide industry rather than burden it.

- **Support federal tax credits** for farmers who divert runoff water away from streams. USDA research has found that slowing runoff and rerouting it into the ground significantly reduces nitrogen flow into larger streams. Farmers should earn tax credits for installing and utilizing pipe-drainage systems that divert runoff. Drainage systems are already common in the state, but the Minnesota Department of Agriculture indicates that they are also outdated. Offering farmers tax credits to upgrade to newer systems can lead to higher crop yields, more consistent production, and efficient use and allocation of water.

- **Prevent new sources of pollution**, especially in problem areas. Where water quality is already impaired, control of non-point source pollution must be utilized to prevent new sources of pollution in those areas. (Anti-degradation policy makes an exception only for significant social or economic development in those areas). The EPA would need to define what counts as "existing nonpoint source control compliance issues."

- **Develop Minnesota's own criteria** to quantify nitrogen and phosphorous pollution levels. Robust agriculture in Minnesota is essential to the state and the nation, but agriculture also plays a major role in contaminating water quality throughout the Mississippi River Basin. Farming itself is also endangered by runoff pollution that erodes and contaminates soil. In advance of eventual regulation and potential selectivity in federal grant awards, Minnesota should develop numeric criteria for nitrogen and phosphorous levels as part of a demonstrable control program. ★

American Sustainable Business Council

The American Sustainable Business Council is a growing coalition of business organizations and companies committed to advancing market solutions and policies to support a sustainable economy. ASBC and its organizational members represent more than 250,000 businesses and more than 325,000 business leaders across the U.S.

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