American Sustainable Business Council

Water Runoff Pollution Threatens Missouri Economy

Clean Water is Good for Business

Runoff polution damages Missouri businesses, including agriculture. 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

- Over 5,700 miles of Missouri's rivers and streams and over 70,400 acres of Missouri's lakes, reservoirs, and ponds have been found by the EPA to be "impaired" — too polluted for human use.
- More than half (58%) of the state's lakes and reservoirs are impaired by nitrogen and phosphorus pollution from nutrient (fertilizer) products used in agriculture.
- In a survey, 70% of farmers said lowering crop insurance premiums would influence them to plant cover crops that filter and recycle pollutants, protecting the soil.
- Farmers should earn tax credits for installing and utilizing a pipe-drainage system that diverts runoff to the side of fields so it does not reach streams. Farmers in the Delta have installed more than 1,000 of these systems with good results. University of Missouri research finds that properly installed subsurface drainage systems can boost crop yields by 20% to 40%.

Runoff Pollution Costs Missouri 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. All other Missouri businesses are also vulnerable to water pollution: All need a healthy workforce, healthy customers and an uncontaminated supply chain to survive.

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

Runoff pollution endangers thousands of Missouri businesses and the livelihoods of our citizens. 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.

Non-point runoff pollution (from a combination of agricultural, industrial, and urban sources) is the biggest source of water pollution in Missouri, 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 5,700 miles of Missouri's rivers and streams and over 70,400 acres of Missouri's lakes, reservoirs, and ponds were impaired. Over half (58%) of the state's lakes and reservoirs are impaired by nitrogen and phosphorus pollution from nutrient (fertilizer) products used in agriculture.

Missouri has more than 108,000 farms that employ about 250,000 people in the state. These farms produce $10 billion worth of agricultural product each year, and all of these farms get their water from Missouri waterways. Runoff pollution must be reduced quickly to avoid severe damage to Missouri's agriculture and all of the other businesses around the state.

To safeguard our economy and wellbeing, Missouri must:

- **Reform crop insurance programs** to incentivize cover crops. Cover crops can help filter and recycle pollutants, guarding against soil erosion and other damage, but cover crops are used on only about 2% of agricultural land in the massive Mississippi River Basin. Current crop insurance programs actually dis-incentivize cover crops by putting difficult-to-meet guidelines on crop termination dates. In a SARE survey, 70% of farmers said reducing crop insurance premiums would influence them to plant cover crops. Offering farmers tax deductions, subsidies or other incentives to plant cover crops would reduce runoff pollution and preserve the long-term viability of our water and soil.
- **Support 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. Farmers in the Mississippi River Delta have installed more than 1,000 pipe-drainage systems that collect water runoff on the side of fields. This solution has led to higher crop yields, consistent production, and efficient use and allocation of water. University of Missouri research finds that properly installed subsurface drainage systems can boost crop yields by 20% to 40%.
- **Develop Missouri's own criteria** to quantify nitrogen and phosphorous pollution levels. Robust agriculture in Missouri is essential to the state, 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, Missouri should develop numeric criteria for nitrogen and phosphorous levels as part of a demonstrable control program.
- **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." ★

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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.

To take action on clean water issues, please visit asbcouncil.org

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