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Preventing water pollution:



How Rural Landowners Can Help



Stewards of our land and water resources

Water resources belong to all of us. That means we all have responsibility to help protect and restore our water resources.

Agricultural areas can be major pollution sources for our rivers and streams. Pesticides, fertilizers, disturbance of land from plowing and tillage, manure from livestock, and septic systems all add to the stream of pollution that runs into our rivers. Without our constant vigilance, our rivers will become too polluted to save.

As a rural landowner and farm operator, you are important in this effort! Conservation practices and best management plans on your farm can go a long way toward helping to protect your land and the water resources upon which you and others depend.

This brochure identifies several ways in which you can help protect your water supply and the St. Joseph River. A list of great sources for more information on each of these topics is included in the Find Out More section.

Remember, every dollar spent on prevention will save us millions of dollars in restoration costs!

The St. Joseph River is the source of drinking water for over 200,000 people in Fort Wayne and New Haven. Each day, an average of 34 million gallons of water is drawn from the river. It is then sent for treatment, filtration and distribution through the Three Rivers Water Filtration Plant. The St. Joseph River is part of a 694,000 acre watershed in Indiana, Ohio and Michigan.

Find Out More →

- **St. Joseph River Watershed Initiative**
www.sjrwi.org
- **The Nature Conservancy**
www.tnc.org
- **Environmental Protection Agency (EPA)**
www.epa.gov/water
www.epa.gov/ebtpages/water.html
- **Purdue University Cooperative Extension Services (CES)**
www.ces.purdue.edu/HENV
- **Indiana Department of Natural Resources (IDNR)**
www.in.gov/dnr
- **Indiana State Department of Agriculture (ISDA)**
- **Indiana Conservation Partnership**
- **Indiana Division of Soil Conservation**
www.in.gov/isda
- **Indiana Department of Environmental Management (IDEM)**
www.in.gov/idem
- **United States Department of Agriculture (USDA)**
www.usda.gov
- **National Environmental Services Center (NESC)**
www.nesc.wvu.edu/
- **US Fish & Wildlife Service**
<http://www.fws.gov/>
- **US Fish & Wildlife Service—Partners for Fish & Wildlife Program**
www.fws.gov/partners



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Septic system maintenance

Problem: Poorly maintained or failing septic systems add bacteria and nutrients to the water supply, threatening both surface water and groundwater wells.

Solution: Regular pumping and maintenance (at least every three years) helps to keep your system working properly. If your system has failed, have it repaired or replaced by a certified septic installer. Call your county health department for help!



Fence in the livestock.

Problem: Livestock in or near the stream or ditch will increase bacteria and nutrient pollution, increase erosion due to damaged stream banks, and deplete the vegetation.

Solution: Fence livestock out of the stream; set up alternative watering sources; set up rotational grazing plans to keep vegetation growth strong. Contact your local USDA district conservationist for more information on farm programs that can help.



Wetlands.

Problem: Wetlands are often drained for agricultural production, increasing storm water runoff, decreasing natural habitat, and creating only marginally productive land.

Solution: Restore or create wetlands, particularly in areas near the stream or river that are naturally wet with hydric soils. Wetlands attract diverse wildlife and migratory birds, help to remove and store phosphorus and nitrogen from runoff water, and store excess water thus reducing flooding downstream. USFWS can help.



Precision spraying and pesticide application.

Problem: Double coverage on corners and end rows, excessive application rates, and spraying over tile inlets increases the amount of pesticides and fertilizers that reach the streams and rivers—and it costs you money!

Solution: Work with your Soil and Water Conservation District to create a nutrient and pesticide management plan. Use equipment with GPS guidance if possible; avoid double coverage on end rows and corners and respect 60-foot spray buffers near streams and tile inlets. Prevent excess fertilizer and pesticides from entering the drains and save money in the long run!



Water supply.

Problem: Contamination of water supply wells.
Solution: Keep livestock, septic systems and manure lagoons away from your water supply wells. Have your water well checked regularly by a certified well inspector for flow, contamination and proper mechanical function.



Conservation tillage.

Problem: Plowing and disking the field contributes to soil erosion.

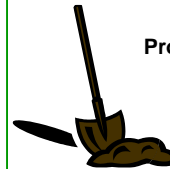
Solution: Conservation tillage and planting reduces erosion, saves fuel and time with fewer passes over the field.



Filter strips and buffer zones.

Problem: Farming right up to the stream or ditch bank increases the risk of water pollution.

Solution: Add a vegetated filter strip along the ditch or stream and around tile inlets to prevent erosion, help filter out pollutants from storm runoff and protect the banks of the stream. Check out the Conservation Reserve Program (CRP) and other USDA farm programs to help recover the cost of loss of production.



Soil testing.

Problem: Over-application of fertilizers to guarantee a good harvest.

Solution: Working with a certified crop advisor and performing regular soil testing and yield monitoring on your farm helps you to apply the right amount of fertilizer at the right time. It saves money and helps you assess the value of farming marginal land in flood plains and steep slopes.

Woodland and forests.

Problem: Most of our historic woodlands have been cleared for agriculture and development. Loss and fragmentation of woodlots decreases wildlife diversity and habitat, increases sediment and heat in storm water runoff, contributes to loss of windbreak, and decreases carbon sequestration.

Solution: Plant trees! Contiguous corridors of woodland, particularly along streams and rivers, increases infiltration of storm water, increases wildlife diversity, helps to protect the land from erosion and the stream from thermal pollution, sequesters carbon and increases the beauty of the land.

