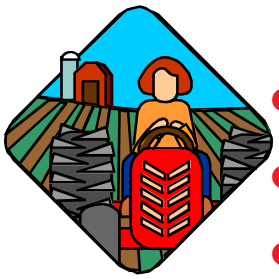
IOWA FACT SHEET

Q. What is nonpoint source pollution?

A. We all live in a watershed. A watershed is an area of land that drains to a nearby river, lake, or stream. As it rains, for example, water falls to earth and moves along the ground to a nearby river, lake, or stream, taking with it whatever happens to be on the soil in a farm field, a construction site, or your lawn. This is called nonpoint source pollution. Nonpoint pollutants and sources include:



- Sediment (silt, suspended solids), pathogens (animal waste) from agriculture, improperly managed construction sites, eroding stream banks, residential and urban areas, and forest lands;
- Fertilizer (nutrients), herbicides and insecticides from agricultural, residential, and urban areas;
- Oil, grease, and toxic chemicals from urban runoff and energy production;
- Bacteria and nutrients from livestock operations, pet wastes and faulty septic systems, and
- Atmospheric deposition, stream channelization and habitat alteration.

Q. What can agriculture do about nonpoint source pollution?

A. Agriculture contributes more to nonpoint source pollution at certain times of the year, such as spring when there is less crop vegetation and when there also may be more rainfall. That's why farmers use "best management practices" or BMPs to reduce agriculture's impact on water quality while also producing the food and fiber we need to live.

Q. What are some BMPs that agriculture uses?

A. There are several accepted BMPs that have been developed by scientists and other professionals that are frequently used in controlling soil erosion, and protecting environmental and human health. BMPs range from better use of the natural environment to the construction of artificial devices, but all can be effective in minimizing runoff and protecting water quality. Farmers often pay for the cost of implementing these BMPs because they receive a direct economic, environmental, or human health benefit. In other cases, farmers also may receive "cost-share" funds from the state and federal governments to help pay a portion of the cost of adopting the BMP because there is not a clear financial benefit to the farmer although there is an environmental benefit. Your tax dollars help protect water quality by helping farmers implement these BMPs.

Agriculture and Water Quality

Some popular Iowa BMPs include:

- Soil testing;
- Nutrient (including manure and commercial fertilizer) management planning;
- Tillage and crop residue management;
- Crop rotation;
- Establishment of proven yields;
- Spring application of nitrogen fertilizer;
- Use of nutrient management planning tools, such as the phosphorus index;
- Calibration of nutrient distribution equipment;
- Enrollment of environmentally sensitive land in the Conservation Reserve Program (CRP);
- Slowing soil runoff by use of riparian buffers and stream bank stabilization techniques; and
- Various "precision agriculture" management techniques, including variable rate application and field mapping.

Q. What else is agriculture doing to protect water quality?

A. Farmers, agribusiness and government work together with scientists to promote the use of BMPs and other voluntary programs that protect water quality. These efforts include:

- Establishment of voluntary guidelines for fall application of anhydrous ammonia fertilizer, reducing potential losses to the environment and surface waters;
- Development of environmental risk assessment programs;
- Development of insurance programs that may reduce fertilizer use;
- Management of local watersheds and water quality protection programs;
- Support for many state and federal voluntary water quality protection and soil conservation programs; and
- Support for research to develop new and improved BMPs.

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