

Developing Missouri's Approach to Nonpoint Pollution

James M. Steichen
 Department of Agricultural Engineering
 College of Agriculture

The most comprehensive program ever enacted to clean up the nation's waters became law October 18, 1972. Known as the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500), the law mandated a sweeping federal-state-community campaign to prevent, reduce and eliminate water pollution.

The law proclaims two general goals for the United States:

1. To achieve wherever possible by July 1, 1983, water that is clean enough for swimming and other recreational uses, and clean enough for the protection and propagation of fish, shellfish and wildlife.
2. To have no discharges of pollutants into the nation's waters by 1985.

These goals reflect a deep national concern about the condition of the nation's waters and a strong commitment to end water pollution. But, they are subject to interpretation. All rivers will not be cleaned up to the same degree. The Missouri River was known as the "Big Muddy" to the Indians and will, of course, never be a trout stream.

The level of cleanup required will depend on the use of water in a given stream. An acceptable water quality in a north Missouri stream that naturally carries silt would not be acceptable in the Ozarks, where stream beds are lined with rock.

What Effect Has the Act Had?

During the first few years of the Act, emphasis was placed on point sources of pollution. A point source is usually a discharge from a pipe into a stream, generally from a city sewage treatment plant or an industry. Some concentrated animal feedlots are considered point sources.

Point sources are controlled by permits and are monitored to insure they are complying with the regulations. Point sources received early attention because they were easy to identify and the public could see, and often smell, that there was a real problem.

Billions of tax dollars have been spent and more are budgeted to build sewage treatment plants for towns and cities. Industries are required to clean up their wastes as well and are spending large sums of money. Feedlot design now includes waste collection facilities to prevent discharge into a stream.

By 1975 many people began to observe that even with

these large expenditures water quality sometimes was not improved very much. Considerable pollution comes from other sources. For example, the National Commission on Water Quality estimates that, if 1977 goals for point source control are met, nonpoint sources will be responsible for these pollution levels:

- 92 per cent of suspended solids
- 79 per cent of nitrogen loading
- 53 per cent of phosphorus loading
- 98 per cent of coliform bacteria count

The significance of these figures is clear—the nonpoint source pollution problem cannot be ignored.

What Are Nonpoint Sources?

Nonpoint pollution is difficult to define. It is sometimes said that it includes everything that *is not* point pollution.

Major sources of nonpoint pollution include:

- Agricultural run-off—rain washing topsoil, fertilizers and pesticides into water.
- Construction run-off—earth washed into streams, rivers and lakes from erosion.
- Acid mine drainage—water seeping through mined areas.
- Forestry run-off—water washing sediments from areas where the earth has been disturbed by logging and timber operations.
- Urban stormwater—water running off buildings and streets, carrying with it oil, grease, trash, salts, lead and other pollutants.

Nonpoint pollution also comes from septic tanks, poor landfills or underground waste areas where water seeps through the soil, picking up pollutants and carrying them into waterways and ground water. These sources of pollution generally cannot be collected and treated; they can only be reduced by greater care in the management of water and land resources.

This preventive approach will encourage the adoption of best management practices. The term "best management practices" refers to a practice or combination of practices that is acceptable, practical and effective in solving a local area's nonpoint pollution problems. These practices may include those that have been used for years, such as terraces, contour strips and minimum tillage.

What Is Section 208?

Section 208 of P.L. 92-500 provides for developing an area-wide water quality management plan to deal with water pollution control. The legislation is designed to help state and local officials gather information, make decisions and implement programs.

One of the major purposes of 208 planning is to determine how best to approach solving the problems of nonpoint pollution.

What Will Happen in Missouri?

The Governor has designated the Missouri Department of Natural Resources as the agency responsible for conducting and coordinating the 208 program. It will consist of two phases:

- Inventory the problems as they may exist today.
- Identify and evaluate alternatives for reducing or eliminating these problems.

Work has started on the problem identification process. A conservation needs inventory committee is conducting a statistical survey to estimate the amount of land that needs conservation treatment to control erosion or improve drainage. This data will be the basis of erosion and sediment predictions for the 208 program.

Technical committees have been appointed to study such topics as amounts of run-off and sedimentation, effects of such sedimentation and alternative practices for erosion control.

These committees have wide representation from private and public groups.

How Will the Public Be Involved?

The 208 legislation specifically requires a high degree of public involvement in identifying problems and developing solutions.

A public involvement committee has the responsibility to develop an involvement program that will make it convenient for local citizens to provide suggestions and evaluation. Included will be public meetings, news media stories and a system of soliciting comments from the public.

Is More Information Available?

The national source of information is the Office of Public Affairs, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460. It has information on water quality planning, nonpoint pollution and the Section 208 program, as well as copies of Public Law 92-500.

Contact the Missouri Department of Natural Resources, P.O. Box 1368, Jefferson City, MO 65101, for information concerning statewide water quality programs. For information in your local area concerning nonpoint pollution, call your University of Missouri Extension Center or Soil Conservation Service Office.

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