

AGRICULTURE AND WATER QUALITY HAS FARMING BECOME PUBLIC ENEMY NUMBER ONE?

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The Federal Water Pollution Control Act of 1972 was the first serious attempt by Congress to address the nation's water pollution problems. Congress reauthorized the Act in 1987 and renamed it the Clean Water Act (CWA). The fundamental premise of the Act was to make it unlawful for anyone to discharge any pollutant from a "point source." Understanding the impractical and impossible goal of "no discharge," Congress fashioned the bulk of the CWA as a detailed road map so regulatory agencies had a method of regulating the discharge of a pollutant to get around the unattainable "no discharge" rule. To achieve this, Congress focused primarily on "point source pollution," and enacted a scheme known as the "National Pollution Discharge Elimination System" (NPDES). The CWA prohibits the discharge of pollutants into navigable waters without an NPDES permit. The NPDES is a federally mandated and supervised permit system.

The U.S. Environmental Protection Agency (EPA) has primary authority for implementing the CWA. The CWA grants EPA the authority to regulate any discharge of a pollutant from a discrete point source. But there are limits to EPA's authority that are outlined by the definition of two key CWA terms: "discharge of a pollutant" and "point source."

"Discharge of a Pollutant" is defined in Section 1362(12) as: *"Any addition of a pollutant to navigable waters from any point source."*

"Point source" is defined in Section 1362(14) as:

Any "discernible, confined and discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural storm water discharges and return flows from irrigated agriculture." (Emphasis added.)

These definitions make it clear that Congress, with the exception of concentrated animal feeding operations, exempted agricultural runoff from the federal NPDES permit system. Congress did not give the federal government any direct or indirect authority to require states to regulate agricultural nonpoint sources. EPA is, however, directed under the CWA to develop guidelines for identifying and controlling nonpoint sources of pollution. This simply means that nonpoint sources are subject to EPA analysis, study and suggestions.

The most significant aspect of the 1972 Act, from an agricultural perspective, was that "nonpoint source pollution" was left primarily for states to address. Congress specifically identified water pollution from agricultural activities as a significant problem when it enacted the Federal Water Pollution Control Act Amendments of 1972 and chose to address it through

"Areawide Waste Treatment Management" (Section 208 and subsequently Section 319.) The Amendments make specific reference to "agriculturally...related...sources of pollution," but only encourage and facilitate the development and implementation, by states, of nonpoint source management plans. The federal government has only loose oversight authority through the Section 208 and Section 319 planning processes. Each state is responsible for developing and implementing Section 208 and 319 programs to manage, control and/or regulate agricultural nonpoint sources. Section 319 is clear -- state programs can include either regulatory or non-regulatory approaches. Therefore, if nonpoint sources are regulated, it is done under state authority. The primary reason the federal Clean Water Act took this approach is that nonpoint source pollution can be managed, but not controlled, through land use or land-based farming practices. Therefore, it cannot be efficiently or effectively controlled at the federal level. Land use

decisions have historically been viewed as a state sovereignty, local zoning, and individual property owner issue.

Much of the justification for greater federal regulation and oversight of agriculture is drawn largely from the National Water Quality Inventory¹. The 1998 Inventory sends the message that agriculture is largely responsible for 70 percent of the pollution in our Nation's surface water. The report is not only deceiving, but also, scientifically indefensible and results in a strong bias against agriculture.

The U.S. Geological Survey in its 1993 scientific assessment of national water quality trends indicated that the National Water Quality Inventory (state 305(b) reports) is so severely flawed and scientifically invalid that it could not be used to summarize water quality conditions and trends (U.S. Geological Survey, article published in *Environment*²). The EPA readily admits the existence of biased data, but appears to not only be unconcerned, but undaunted about fueling the perception that there is a national water quality crisis, that state programs are inadequate, and that agriculture pollutes 70 percent of the nation's streams despite major federal efforts. However, close analysis of the National Water Quality Inventory shows that what the EPA doesn't tell, and/or glosses over, is more revealing than the perception left with the casual observer.

The fundamental problem with the information contained in state 305(b) reports is the overall low priority which states place on water quality monitoring. The data ranges from some high quality monitored data to some very poor quality evaluative data. When poor quality data is mixed with high quality data, the result is a collection of poor quality data. The reasons the National Water Quality Inventory Report's numbers are contentious and

irresponsible are because³:

- 1) There is no scientific, national random sample taken to assess river miles.
- 2) States tend to assess water bodies with suspected problems.
- 3) In-stream monitoring accounts for less than 40% of the reported data and almost all monitoring is in conjunction with municipal waste water discharges.
- 4) More than 42% of the data is based on visual evaluation of the water body.
- 5) Data may be several years old.
- 6) Data is often double and triple counted (one mile of stream, reported as impaired by two or more sources, is reported as two or more miles of impairment).
- 7) Existence of unscientific source attribution.
- 8) No assessment is made of stream morphology and/or other natural background levels of pollutants.
- 9) EPA's reporting of impaired waters are very deceptive . . . Please look very closely - (The following bullets are based on the 1996 inventory which was released in April of 1998)

AGRICULTURAL IMPAIRMENTS

- ▶ There are 3.6 million total miles of rivers and streams in the U.S.;
- ▶ EPA and State Water Quality Agencies readily admit that they survey where they suspect problems - and only surveyed 693,905 miles in 1994;
- ▶ Of the 693,905 miles surveyed, EPA found 248,028 miles impaired - or 6.9 percent of total river and stream miles;
- ▶ Of the 248,028 impaired miles, 173,629 were determined to be impaired by agriculture - or 4.8 percent of the total river and stream miles in the United States.

¹ The EPA inventory is a summary of state reports more commonly known as the 305(b) reports. These reports are required every two years by section 305(b) of the Clean Water Act.

² *Environment*, 35(1) January/February, 1993, pages 19-20

³ *By the Numbers: A Review of EPA's National Water Quality Inventory Report, A Crisis in the Making*, Jim Porterfield and Don Parrish, American Farm Bureau Federation, Park Ridge, IL 60068. January 1999. Available at (847)685-8600

LIVESTOCK SPECIFIC IMPAIRMENT

- ▶ EPA and State Water Quality Agencies found 75,081 miles⁴ where rangeland⁵, pastureland⁶, feedlots, animal operations⁷ and animal holding areas⁸ (livestock) resulted in water quality impairments – 2.1 percent of the total river and stream miles in the United States
- ▶ Of the 693,905 miles surveyed, EPA found 75,081 miles impaired by livestock- or 10.8 percent of total surveyed river and stream miles;

- ▶ Of the 248,028 impaired miles, 75,081 were determined to be impaired by livestock - or 30.3 percent of the total impaired river and stream miles in the United States.

In other words, it is just as accurate to report that 96 percent of the rivers and streams are not impaired by agriculture.

Unfortunately, as with many issues, perception and reality often tend to reach different conclusions. Despite the perceptions, all indications are that surface water quality is improving and the trend will more than likely continue in that direction for some time⁹.

⁴ 2% or 14,075 of all the surveyed miles of streams and rivers were reported as having **major** water quality impairments due to livestock.

⁵ Rangeland Impaired Miles = 20,316

⁶ Pastureland Impaired Miles = 19,765

⁷ Animal Operations Impaired Miles = 12,835

⁸ Animal Holding Areas Impaired Miles = 8,170

⁹ "Stream Water Quality in the Conterminous United States—Status and Trends of Selected Indicators During the 1980's," by Richard A. Smith, Richard B. Alexander, and Kenneth J. Lanfear, U.S. Geological Survey, 1993.

EPA's National Water Quality Inventories 1990-1996

Table 1.

<u>Rivers & Streams</u>	<u>1990</u>	<u>1992</u>	<u>1994</u>	<u>1996</u>
Total Miles in U.S.	1,800,000	3,500,000	3,500,000	3,600,000
Total Miles Assessed	646,223	642,881	615,806	693,905
Total Miles Impaired	196,690	241,407	224,236	248,028
Total Miles Impaired by AG	118,997	159,353	134,541	173,629
Total Miles Impaired by Livestock				75,081
Total Miles Impaired by Animal Feeding Operations				35,000
Percent of Total River Miles Impaired by All Sources	10.9%	6.9%	6.4%	6.9%
Percent of Total River Miles Impaired by AG	6.6%	4.6%	3.8%	4.8%
Percent of Total River Miles Impaired by Livestock				2.1%
Percent of Total River Miles Impaired by Animal Feeding Operations				1.0%
Percent of Total Assessed River Miles Impaired by AG	18.4%	24.8%	21.8%	25.0%
Percent of Total Impaired River Miles Impaired by AG	60.5%	66.0%	60.0%	70.0%