WATER QUALITY

Surfaces as Top **Environmental** Issue in North, South, East $and\ Especially$ the West.

n the early 1990s point source pollution had, for the most part, been conquered. Covernment officials and environmentalists started wringing their hands and asking, "What is the next environmental frontier?"

A bureaucratic gold mine was discovered nonpoint source pollution.

As Congress struggles with reauthorization of the Clean Water Act (CWA) and water quality focus shifts from point source to nonpoint source, agriculture is under the microscope.

Point sources are easily recognized as pollutants and toxic wastes flowing from a specific point such as a pipe from an industrial site. Industry and municipalities are the main contributors.

Over the last 25 years, point source polluters have been penalized, regulated and forced to clean up to the tune of \$75 billion. Federal and state governments have spent another \$75 billion for a total clean-up price of \$150 billion. During this time, water quality has improved dramatically. Lake Erie, for example, was in essence pronounced dead in the 1970s, but has since become a healthy body of water.

Nonpoint sources are less obvious and usually associated with agriculture, forestry, mining and urban storm water runoff.

A 1988 "Managing Nonpoint Source Pollution" report to Congress states agriculture is the largest contributor to nonpoint source pollution problems of the nation's surface waters. Water quality inventories still find agriculture the greatest source (50 to 70 percent) of problems in the United States today. Livestock is responsible for at least one-third. There are claims livestock cause as much as 60 percent of the problems.

A study conducted for the National Cattlemen's Association (NCA) by W. James Clawson, Extension range specialist emeritus, University of California, Davis, shows it is difficult to determine the actual magnitude of the impact of beef cattle on water quality. However, the potential for impairment cannot be ignored.

The shift of emphasis from "direct threat to human health and safety" to "threat to ecosystems and habitat" draws ecological

preservation, species diversity, endangered species, and biological integrity into the picture. It appears the Environmental Protection Agency (EPA) is using water quality to address environmental concerns impacted by agriculture. Those concerns drive today's policy.

Grazing of riparian and upland range or pasture and agronomic activities are potential sources of excessive sediment, nutrients and pathogens. Grazing affects water temperatures, stream bank stability and riparian habitat.

Soil erosion and sedimentation are the primary contributors to lowered water quality from rangeland. Overgrazing that eliminates a high percentage of vegetative cover and too heavy livestock use of stream banks and associated riparian zones cause instability and accelerated crosion. Nutrients and pathogens are normally associated with livestock wastes and commercial fertilizers.

Maintaining the health of livestock is crucial and proper management of the herd, its byproducts, and exposed land areas are essential to controlling non-point source pollution.

Implementation of the Clean Water Act and related regulations such as the Coastal Zone Act Reauthorization Amendments of 1990 is the responsibility of the Environmental Protection Agency (EPA) in Washington, D.C., 10 regional EPA offices and at least one designated state agency. Offices within USDA, state conservation and agricultural departments, and state universities are also involved.

Inconsistent, incomplete or inadequate data from the above agencies regarding the impact of livestock on water quality make it nearly impossible for the cattle industry to respond positively and to protect its image as environmentally responsible. To make matters worse, a lack of technical knowledge and experience exists within EPA with regard to understanding the diversity of livestock operations and the land they use.

Through federal mandates Congress and the EPA are putting pressure on individual states to enforce the Clean Water Act. However, neither the federal nor state governments have the dollars and man power to enforce mandated

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regulations. Turf battles between government agencies also slow the process.

Organizations such as NCA are taking advantage of this perplexing situation. They are fighting mandatory regulations and general mapping of bodies of water. They are lobbying for individual sitespecific inspections and recommending voluntary compliance.

Farmers and ranchers need to be given accurate and legitimate information so they can properly access their operation for non-point source pollution.

"A voluntary compliance program

should be available," says George Gough, director of government relations, California Cattlemen's Association.
"Implementation of Best Management Practices based on economic and technological feasibility will be more successful if voluntary. It is certainly better than having a state official knock on your door and say, 'I'm here to help you.'

"In California, we no longer argue about whether we will comply," Clawson says. "The argument is whether it will be voluntary or mandatory."

Here are a few recommendations for those of you who may be impacted by non-point source regulations:

- 1. Be aware of how the EPA and state does things in your area: a. Setting water quality designated beneficial uses and standards; b. Identifying problem locations and how assessments are done; c. Selecting and developing management practices and plans.
- **2.** Make contact with agency people directly related to your operation.
- **3.** Communicate with your congressmen and legislators.
- 4. Participate with your industry groups. The USDA Soil Conservation Service, Land Grant universities and Extension Services are also accessible and willing to help with non-point source water pollution questions.



