Publications

TR-92

An Economic Analysis of Agricultural Soil Loss in Crosby County, Texas

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- Full Text

The Federal Water Pollution Control Act Amendments of 1972, Public Law 92-500, established a national goal of eliminating the discharge of pollutants into the nation's waterways by 1985. As a step toward that goal an interim water quality standard of "fishable, swimmable waters nationwide" by July 1, 1983 was set. Under section 208 of this law, each state was required to establish a "continuing planning process" to define controls for agricultural non-point sources of water pollution.

Section 208 calls for the development of state and area-wide water quality management plans. The plans are to include "a process to (i) identify if appropriate, agriculturally and silviculturally related non-point sources of pollution, including runoff from manure disposal areas, and from land used for livestock and crop production, and (ii) set forth procedures and methods (including land use requirements) to control to the extent

feasible such sources."

In an earlier group of technical reports (TR 87, 88, 90, 93, 94) in this series, a model was developed to measure the net social benefits from controlling agricultural sediment given various policy options. This was done by contrasting benefits to be gained from reducing the sediment load in a watershed against costs involved in achieving that reduction using various voluntary or mandatory policies to accomplish the reduction. It was a major conclusion of these studies that no policy which restricted soil loss to less than that which was economically desirable from the farmers own viewpoint would generate benefits greater than the costs involved. This finding, in the watersheds of major sediment control concern lead to a decision to change the base area for this report to a county instead of a watershed and to only deal with the on-farm consequences of various management practices. These on-farm consequences would include the changes in topsoil loss and the yield losses that result from losing topsoil. Also included are profit levels that could be expected from different management practices and how the present value of a stream of these profits would vary over various planning horizons.

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