

Policy Objectives and Economic Incentives for Controlling Agricultural Sources of Nonpoint Pollution

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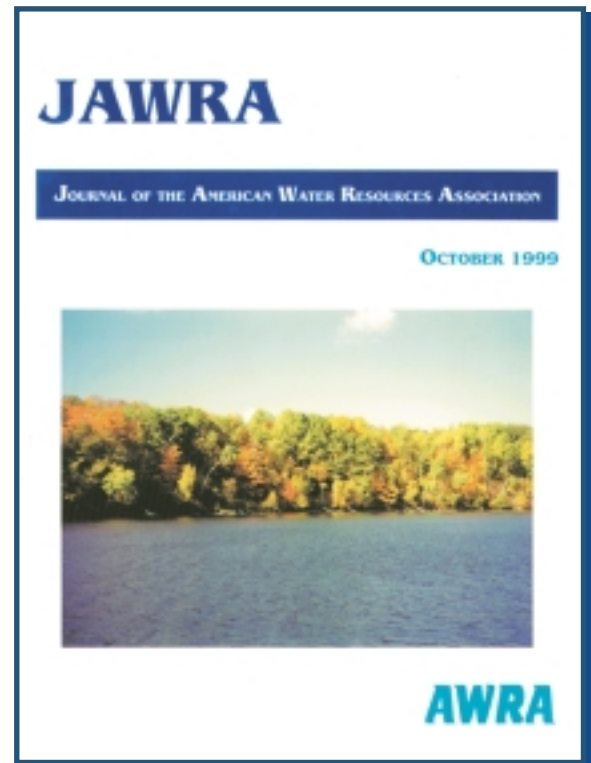
“Policy Objectives and
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Agriculture nonpoint source pollution is an important source of water quality impairment in the United States. Nonpoint source pollution has some important physical characteristics that have implications for setting

appropriate pollution control objectives and designing incentive-based pollution control policies (policies that use taxes or subsidies). Nonpoint source pollution is diffuse, in that runoff does not emanate from a single point. It is also a function of random processes, such as weather.

Design-based incentives (i.e. incentives based on variable input use, management practices, and land use) provide a better opportunity for controlling nonpoint pollution than do performance-based incentives (incentives based on runoff or water quality) because it is often difficult to measure runoff quality and link it to producers' actions. For design-based incentives to be cost-effective, the incentives must induce producers to use variable inputs at appropriate levels, to adopt appropriate management practices, and to make appropriate land use decisions at the extensive margin of production. Cost-effectiveness concerns also require that incentives be site-specific and applied to those inputs and practices most closely correlated with water quality. A review of existing programs suggests that greater program coordination and improved targeting of incentives are needed for further water quality improvements.