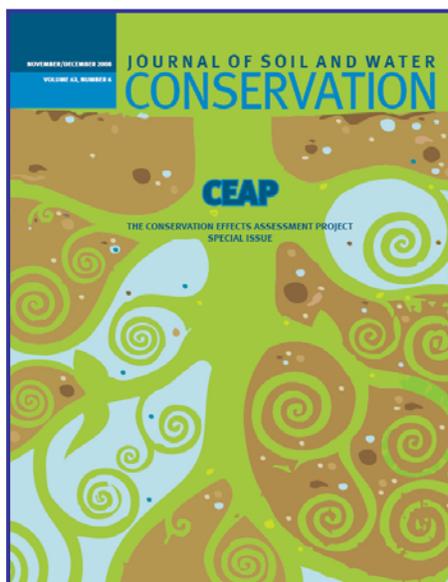


ARS Nation-wide CEAP Watershed Assessment Study



The Conservation Effects Assessment Project (CEAP) was established to define the environmental benefits of USDA conservation programs. CEAP involves a national assessment and multiple watershed assessment studies designed to provide a scientific basis for the national assessment. The Agricultural Research Service (ARS) established 14 research sites -- the ARS Benchmark watersheds -- to measure region-specific effects of conservation practices on environmental quality and to improve and validate models used by the Natural Resources Conservation Service (NRCS) in the national assessment. On these watersheds, preliminary data were collected that provide insight into the effects of specific conservation practices implemented under programs such as EQIP and CRP. A data storage and management system, STEWARDS, was developed that provides easy accessibility to these data for analysis. Models were validated using data from many of the watersheds, and the models were shown to be valuable tools for

extrapolating the results in the national assessment. The physical process models were combined with economic models to provide a system for optimizing trade-offs among environmental and economic objectives of conservation practices. The ARS Benchmark watershed studies have provided preliminary indication of the effects of selected conservation practices. Additional data are required to provide definitive results. Improved models are needed to provide new tools for future assessments. A prototype of a new modular modeling system has been developed that will provide a more powerful tool for future analyses. These early findings and initial products indicate progress toward the overall goals of quantifying effects of conservation practices and providing tools to transfer the knowledge to points where they are applied. This information can be used by NRCS and other agencies for use in developing future conservation policy.

Richardson, C.W., Bucks, D.A., and Sadler, E. J.

The Conservation Effects Assessment Project benchmark watersheds: Synthesis of preliminary findings. *J. Soil & Water Cons.* 63(6):590-604. 2008. <http://www.jswnonline.org/content/63/6/590.full.pdf+html>

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