



United States  
Department of  
Agriculture

Natural Resources  
Conservation  
Service

P.O. Box 2890  
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APR 11 1995

*Idaho - Range Technical Note No. 68*

**SUBJECT: BCS - Small Plot Rainfall Simulation:  
Background and Procedures for Rangeland Hydrology**

**TO: Regional Conservationists                      File Code: 230-15-12  
State Conservationists  
National Technical Center Directors  
Director, Pacific Basin and Caribbean  
Division Directors and Above**

In preparation for writing The Third RCA Appraisal, state-of-the-science methods and procedures for a variety of natural resource conservation topics have been gathered. The attached Technical Note, "Small Plot Rainfall Simulation: Background and Procedures for Rangeland Hydrology," thoroughly explores the background and importance of rangeland watersheds throughout the Western United States, and the response to improved management in the Western United States. Described within this Technical Note are common problems and issues associated with rangeland watershed dysfunctionality, and the use of small plot rainfall simulators to provide cost effective and meaningful ecological information concerning the many associated variables which affect the hydrologic process.

The Technical Note contains guidance on plot size, installation procedures, data collection procedures, equations, and techniques for calculating infiltration and soil erosion on rangeland sites. This release represents input from leading Agriculture Research Service (ARS) researchers on rangeland hydrology as well as leading NRCS personnel working in the field of range management and application. For additional copies contact Ken Spaeth, NRCS/ARS, Northwest Watershed Research Center, 800 Park Boulevard, Plaza 4, Suite 105, Boise, Idaho 83712-1716.

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