

**Forest Service Manual
National Headquarters - Washington Office
Washington, DC**

**Forest Service Manual 3500 – Cooperative Watershed Management
Chapter 3570 - Hydrologic Surveys And Analyses**

Amendment: 3500-2000-1

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Duration: This amendment is effective until superseded or removed.

Approved by: Mike Dombeck, Chief

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Responsible Staff:

Last Change:

Superseded Document(s): 3500 Table of Contents, Amendment 3500-90-1; 3500 Zero Code, Amendment 3500-90-1; 3510, Amendment 3500-90-1; 3520, Amendment 3500-90-1; 3530, Amendment 3500-90-1; 3540, Amendment 3500-90-1; 3560, Amendment 3500-90-1; 3570, Amendment 3500-90-1

Posting Instructions: This is a technical amendment that converts the format and style of this FSM title from Applixware to the current corporate word processing application. Since this amendment replaces all text except Interim Directives (ID's), do not check for the last transmittal received for this title; instead place this transmittal sheet at the front of the title. DO NOT remove ID's when posting this amendment. ID's are not being reformatted at this time.

Digest: Following is an explanation of the changes throughout the directive by section.

Please read the new posting instructions (above) carefully.

3500: The entire amendment text has been reformatted and replaced, so that the amendment text on the Service-wide Directives Home Page in the Forest Service Web/Intranet (<http://fsweb.wo.fs.fed.us/directives/index.html>) corresponds with the amendment text on the Forest Service Directives Home Page in the Forest Service World Wide Web/Internet (<http://www.fs.fed.us/im/directives>).

Although some minor typographical and technical errors have been corrected, substantive direction has not been changed.

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3570.1 - Authority

The authority for conducting hydrologic surveys and analyses is 7 CFR, Subtitle A, Subpart G, 2.60(3).

3570.2 - Objectives

1. To develop storm hydrographs, erosion rates, sediment-source areas, and sediment delivery rates for tributary drainages of watershed under investigation.

2. To develop a cost effective plan to reduce storm runoff, erosion, and sediment production and to show the costs and benefits of the plan.

3570.3 - Policy

Provide hydrologic data and analyses for lands where the Forest Service has watershed planning responsibilities.

3570.4 - Responsibility

3570.41 - Washington Office

The Director, Cooperative Forestry Staff shall:

1. Provide technical guidelines for standards, procedures and quality of work.
2. Develop and maintain cooperative relations with other staffs and agencies involved in hydrology and sedimentation.

3570.42 - Regional Foresters and the Area Director

The Regional Foresters and the Area Director shall:

1. Provide technical guidance and technical training necessary for hydrologic survey, analyses, and studies undertaken by the Forest Service and State Foresters.
2. Correlate and secure uniformity of work throughout the Region or Area and inspect samples of field work for conformity with standards and application of results.
3. Participate with appropriate research personnel especially in training.
4. Evaluate and interpret data.
5. Ensure that the program progresses in a timely manner.

3570.43 - Hydrologist or Planner for Small Watersheds or River Basins

The hydrologist or the planner is responsible for hydrologic surveys and analyses. The hydrologist or the planner shall analyze the data from the field survey in accordance with section 4. Soil Conservation Service (SCS) National Engineering Handbook-Hydrology, chapter 2, SCS Engineering Field Manual, and other sources, and shall prepare a hydrologic survey analysis report.

The hydrologist or the planner may conduct administrative studies as necessary to improve present survey and analysis techniques.

3571 - Survey and Analysis

3571.1 - Hydrologic Survey and Analysis Summary

Upon completion of all analysis work, prepare a brief summary of the survey and analyses for in-Service use. Use the summary to (1) document the estimates of flood runoff and soil erosion for present and future conditions based on survey and data analyses, and (2) recommend the treatment and management needs necessary to minimize or, where satisfactory, to maintain rates of runoff and soil erosion.