Watershed management contributions to land stewardship: A literature review

Malchus B. Baker, Jr., Peter F. Ffolliott, Carleton B. Edminster, Karen L. Mora, and Madelyn C. Dillon

Abstract

An international conference to increase people's awareness of the contributions that watershed management can make to future land stewardship was held in Tucson, Arizona, March 13-16, 2000. This bibliography is a compilation of the synthesis and poster papers presented at the conference along with the literature cited in these papers on watershed research projects, applied watershed management activities, and technology transfer mechanisms. This publication furnishes a literature basis for researchers, managers, decision-makers, educators, students, and lay persons with a keen interest in watershed management and better land stewardship in the future. The proceedings from this conference, entitled “Land Stewardship in the 21st Century: The Contributions of Watershed Management,” may be found on the Rocky Mountain Research Station’s World Wide Web pages at www.fs.fed.us/rm/pubs/stewardship.html.

Keywords: Watershed management, ecosystem management, watershed research, applied watershed management

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Introduction

The effectiveness of land stewardship must be enhanced to meet a growing population’s need for conservation, sustainable development, and use of natural resources. Ecosystem-based, multiple-use oriented land stewardship is necessary when considering the present and future uses of land, water, and other natural resources on an operationally efficient scale. Holistically planned and carefully implemented watershed management practices and programs will always be needed to meet the increasing demands for commodities and amenities, clear water, open space, and uncluttered landscapes.

An international conference was held in Tucson, Arizona, on March 13 to 16, 2000, to examine this need. The primary purpose of the conference was to increase people’s awareness of the contributions that watershed management can make to future land stewardship in the United States and internationally. Invited synthesis papers were presented by 35 speakers from research institutes, management agencies, and educational organizations in the United States and internationally. More than 50 poster papers on watershed research projects, applied watershed management activities, and technology transfer mechanisms complemented the synthesis papers to broaden the conference scope.

Proceedings of the conference, entitled “Land Stewardship in the 21st Century: The Contributions of Watershed Management,” were published by and are available from the USDA Forest Service, Rocky Mountain Research Station, 240 West Prospect Road, Fort Collins, CO 80526. These proceedings are also available on the Rocky Mountain Research Station’s World Wide Web pages at www.fs.fed.us/rm/pubs/stewardship.html. This bibliography is a compilation of the synthesis and poster papers presented at the conference along with the literature cited in these papers. This publication furnishes a literature basis for researchers, managers, decision-makers, educators, students, and lay persons with a keen interest in watershed management and better land stewardship in the future.

Citations of the bibliography are listed alphabetically by author in categories corresponding to the plenary sessions of the conference. These sessions included the following topics:

- Watershed management perspectives,
- Issues to be confronted in the 21st century,
- A retrospective viewpoint of past lessons learned,
- Case studies,
- Watershed management contributions to future land stewardship, and
- Future protocols.

Technical themes of the poster papers included the following categories:

- Watershed-related research projects,
- Applied watershed management activities,
- Technology transfer mechanisms.

Watershed Management Perspectives


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A Retrospective Viewpoint


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Research Support Programs


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**World Wide Web**


Watershed Management Council web site: http://watershed.org/wmchome


The Rocky Mountain Research Station develops scientific information and technology to improve management, protection, and use of forests and rangelands. Research is designed to meet the needs of National Forest managers, federal and state agencies, public and private organizations, academic institutions, industry, and individuals.

Studies accelerate solutions to problems involving ecosystems, range, forests, water, recreation, fire, resource inventory, land reclamation, community sustainability, forest engineering technology, multiple use economics, wildlife and fish habitat, and forest insects and diseases. Studies are conducted cooperatively, and applications can be found worldwide.

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