



## CHAPTER 1 - INTRODUCTION

### BACKGROUND AND AUTHORITY

The first comprehensive water resources study for the Missouri River Basin was conducted by the Missouri Basin Inter-Agency Committee prior to the establishment of the Missouri River Basin Commission. The report on the study was published in December 1971. This seven-volume report, The Missouri River Basin Comprehensive Framework Study, presented the results of the first effort in the Missouri River Basin to assess and address the major current and future water resources needs and opportunities of the entire basin.

The Missouri River Basin Commission was established in 1972 under the authority of the Water Resources Planning Act of 1965 (P.L. 89-80), which states in part that each river basin commission shall:

Serve as the principal agency for the coordination of Federal, State, interstate, local, and nongovernmental plans for the development of water and related land resources in its area, river basin, or group of river basins; and prepare and keep up-to-date, to the extent practicable, a comprehensive, coordinated, joint plan for Federal, State, interstate, local, and nongovernmental development of water and related land resources...

The Commission began preparing its first basinwide water resources management plan in 1975 in an effort coordinated with the Commission's participation in the U.S. Water Resources Council's 1975 National Water Assessment. A report summarizing the plan, titled Missouri River Basin Water Resources Plan, was published in August 1977.

The Commission's planning process is continuous, producing an ever evolving and responsive plan of action for the Missouri River Basin. However, the Commission also perceives a need for taking long and regular strides

forward in the planning process and periodically reporting on the major steps taken. To this end, the Commission conducts a major update and prepares a revised report on the approved regional plan every two years. Work on updating the 1977 report began in the fall of 1978. The update effort emphasized formulating planning objectives, better defining the basin's water resources problems and opportunities, and acquiring better information on ongoing and planned water resources programs throughout the basin. This report presents the results of the Commission's update effort, the approved regional plan for the Missouri River Basin.

#### **PURPOSE OF THE PLAN**

The purpose of the regional plan is to provide decisionmakers and planners at all levels of government a documented comprehensive, flexible, and balanced plan. It provides firm direction to agencies for the conservation, utilization, development, and management of the basin's water and related land resources. The recommended programs and additional conclusions and recommendations in Chapters 2 through 10 are supported for implementation by all Commission members. Evolutionary in nature, the plan is intended to be consistent with changing regional and national economic, environmental, and social goals. More specifically, the plan is intended to serve the following purposes:

- o provide better access to Federal programming for State, local, and nongovernmental entities;
- o identify and display the relationships between Federal, State, regional, and major local water and related land resources activities;
- o assist in avoiding conflicts and duplication in planning by utilizing a centralized review and analysis of all prospective regional projects and programs;

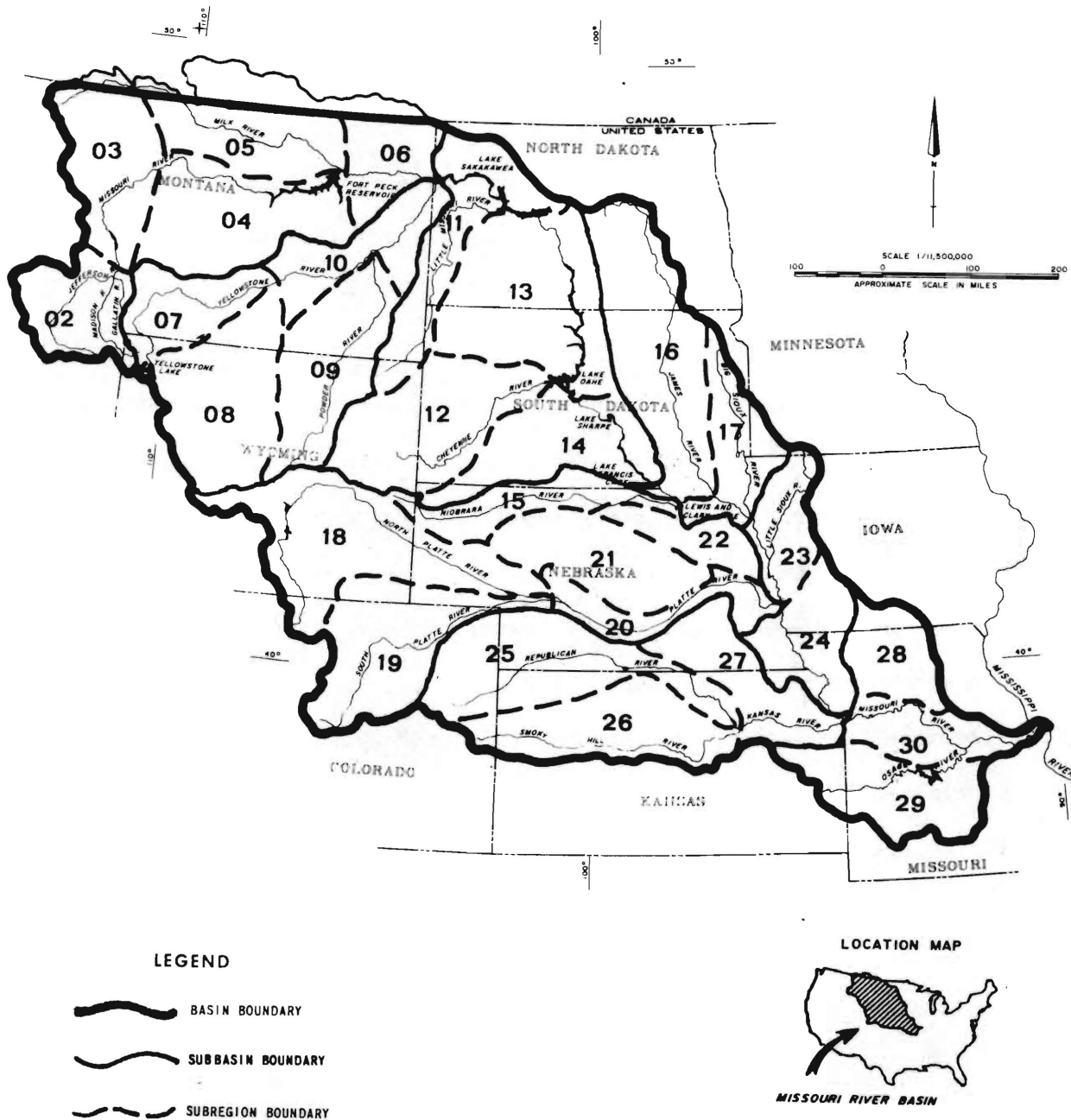
- o provide the potential for assessing regional economic and environmental effects of implementing the plan, effects not apparent through project-by-project evaluation;
- o inform Federal agencies, the Federal administration, and the Congress of regional needs for program budgeting and funding;
- o communicate to State legislatures and administrations the need for State and regional programs; and
- o assist Congress and the Federal Government in setting regional priorities for budgeting and funding water resources programs in the Missouri River Basin.

#### **CONTINUOUS PLANNING PROCESS**

The Commission's preparation and maintenance of the regional plan follows a dynamic and continuous process, a process necessitated by continually changing legal and institutional structures, resource conditions, social values, and planning information. Changes in the regional plan are introduced on a regular and progressive basis. Information and recommendations from regional planning studies, along with legal and policy changes which affect natural resources planning, are continually recorded and summarized.

The principal sources of planning information and bases for change in the regional plan are: (1) water planning studies conducted by each of the Commission member States; (2) federally funded level B and special studies, especially the level B studies already completed by the Commission for the Platte River Basin in Nebraska and the Yellowstone River Basin and adjacent coal areas in Montana, Wyoming, and South Dakota; (3) level C and other studies conducted by the Commission's Federal member agencies; (4) the Commission's continuing planning program; and (5) other relevant studies, including those of private entities.

Figure 1-1- Missouri River Basin, Subbasins and Subregions



The Commission's comprehensive planning activities are conducted principally by State and water resources activities in each subbasin. The basin is divided into eight subbasins, each one of which is a distinct drainage area. The subbasins, which are shown on figure 1-1, are the Upper Missouri, Yellowstone, Western Dakotas, Eastern Dakotas, Platte-Niobrara, Middle Missouri, Kansas, and Lower Missouri. For planning purposes each subbasin is further divided into water resources subregions. The 29 subregions in the Missouri Basin, which are also shown on figure 1-1, are a part of a national hydrologic unit network utilized by all Federal water resource agencies.

The Commission's continuous planning process currently involves preparing and keeping up to date (1) reference material for recommended and potential plan elements; (2) a description of geographical characteristics and natural resources development; (3) a set of State planning objectives; and (4) definitive descriptions of water and related land resources problems and opportunities. The plan itself consists of (1) the planning objectives; (2) recommended water resources programs; and (3) conclusions and additional recommendations.

Upon completion of any major update of the regional plan, a revised plan is transmitted for official 90-day review to the head of each Federal department or agency, the Governor of each State, and each interstate agency from which a member of the Commission has been appointed. This official review is mandated by P. L. 89-80. Following the review and comment period, the approved plan and official comments are forwarded, as required by law, to the Governors and legislators of the participating States and to the U.S. Water Resources Council for transmission to the President and by him to the Congress.

Because the plan must be flexible and responsive to changing needs and conditions, the plan may be updated by the Commission at any regularly

scheduled quarterly meeting. While such changes will not ordinarily affect the general thrust of the plan presented in this report, it is important to recognize that such changes are likely to occur.

The Commission's annual priorities program is an integral part of the regional planning process. Through the priorities program, the Commission annually develops a set of regional priorities for Federal water and related land resources programs and projects. All priorities are elements of the approved regional plan. Regional priorities for fiscal years 1981 and 1982 are listed in appendix E.

#### **PREPARATION AND SCOPE OF PLAN UPDATE**

The process followed by the Commission in updating the initial regional plan was aimed at making three improvements. First, in order to better address regional goals and policies, a set of planning objectives was prepared by each member State. These planning objectives provide a means for evaluating the alternative water resource programs. The second advancement in the update was the compilation of the basin's major water resources problems and opportunities. Documentation of problems serves as an aid in assessing the relevance and need for programs. The third major improvement implemented during the update was the collection of more information about ongoing, planned, and potential programs. Collectively these improvements provided a firm basis for updating the plan and for making the approved regional plan more useful to aid in water resources programming, budgeting, and funding.

The update was conducted in the following steps, outlined below:

- a. Each State formulated its planning objectives for fourteen water-related functions.
- b. Commission staff compiled an initial list of water resources problems and opportunities for each of the eight subbasins.

- c. Information was compiled about ongoing, planned, and potential water resources programs in the basin. The information included program purpose, location, facilities, conduct, funding requirements, functions addressed, status, and agency involvement.
- d. Eight subbasin planning teams, with help from broader subbasin review groups, reviewed the State planning objectives, the initial list of problems and opportunities, and applied a set of Planning Committee approved criteria to the large initial listing of water-related programs. The criteria were used to select programs for the plan which: are water related; have broad impacts; funding exceeds \$75,000 annually; are conducted after fiscal year 1980; and are not merely regulatory or administrative.  
  
A Basinwide Programs Subcommittee evaluated programs with basinwide application.
- e. Each water resources program was further evaluated for its compatibility with other programs and planning objectives, and with respect to identified problems and opportunities. The programs judged to be most effective in addressing problems and realizing opportunities are those recommended in this plan.
- f. All of the recommended programs were evaluated with respect to their collective adequacy and effectiveness for addressing identified problems and opportunities. Where necessary, additional actions were recommended.
- g. A draft update report was prepared, reviewed by the Commission, and approved by the Commission.
- h. The report presenting the Commission's approved regional plan was transmitted to the heads of the Federal, State, and interstate



members of the Commission and to the public for official 90-day review. After the review, all comments were considered by the Commission and adjustments in the report were made as needed.

- i. The final report was transmitted to State and Federal agencies, basin State Governors, State legislatures, Congress, and the U.S. Water Resources Council.

#### **THE REPORT**

This report presents the current water resources management plan for the Missouri River Basin with a minimal amount of background and support material intended to facilitate understanding the plan, its purposes, objectives, and origin. The plan focuses only on water and related land resources planning objectives, problems and opportunities, and recommendations as required by law.

Just as the Commission's planning activities are conducted principally by water resources subbasin, this report is organized by subbasin. With certain qualifications, the plan for each subbasin is presented in a separate chapter. Since there are numerous basinwide and statewide plan elements which apply to all or most of the subbasins, these are presented in a separate chapter, chapter 2, which deals with the entire Missouri River Basin. The plan for each subbasin consists, therefore, of both the plan elements presented in the subbasin's respective chapter and the relevant plan elements from the basinwide chapter. The reason for presenting each subbasin's plan in two parts is that there are many basinwide and statewide programs which relate to several or all of the subbasins. To include each of the programs with all of the subbasins to which they relate would have required repeating most of the elements throughout the report. This organization serves, therefore, to eliminate a large amount of duplication and significantly shortens the report.

Much of the material presented in this report is broken down into 14 water resources functions. These are categories which are intended to characterize the main thrust of specific planning objectives, problems or opportunities, and recommended programs. The functions used are the following:

- o Comprehensive Planning and Support Activities
- o Flooding
- o Fish and Wildlife
- o Irrigation
- o Land Conservation and Management
- o Municipal, Industrial, and Rural Domestic Water Supply
- o Natural, Historic, and Cultural Resources
- o Power and Energy
- o Water-Associated Outdoor Recreation
- o Transportation
- o Water Quality
- o Legal and Institutional Factors
- o Instream Flows
- o Weather Modification

Chapter 2 of the report, "Missouri River Basin," describes the Missouri Basin's physical, biological, socioeconomic, water resources, and legal and institutional characteristics, an overview of the basinwide plan, recommended basinwide and statewide programs, and a set of conclusions and additional recommendations which apply to the entire Missouri Basin. The recommended programs in this and each subbasin chapter are presented in a tabular format. The listing for each recommended program shows the lead agency, major functions, status, type, schedule, location, main features, and cost.

The conclusions and additional recommendations provided in the basinwide chapter and each subbasin chapter generally address actions which need to be

The conclusions and additional recommendations provided in the basinwide chapter and each subbasin chapter generally address actions which need to be taken in addition to implementing the recommended programs. Where the needed action is not clear at this time or where no additional action is needed, only conclusions are drawn.

Each of the eight subbasin chapters, chapters 3 through 10, is divided into six sections: subbasin description; water resources problems and opportunities; planning objectives; plan overview; recommended programs; and conclusions and additional recommendations. The description of each subbasin is a summary, highlighting its unique and more pertinent characteristics. More complete information on subbasin characteristics is available in The Missouri River Basin Comprehensive Framework Study and Missouri River Basin Water Resources Plan.

Each section on water resources problems and opportunities is also a summary and serves only to focus attention on the more serious and urgent problems and the most important opportunities in the subbasin. A more complete statement of each subbasin's water resources problems and opportunities is given in appendix H, published under separate cover.

The third section in each subbasin chapter summarizes the State planning objectives for the subbasin. This section highlights the State water resources policies, goals, and objectives of special significance to water resources planning in the subbasin. A more complete statement of State planning objectives is printed in appendix G, published under separate cover.

A plan overview is provided for each subbasin in order to relate recommended programs and conclusions and additional recommendations to their need and to planning objectives.

As indicated above, the recommended programs for each subbasin are presented in tabular form, providing summary information concerning each program. The conclusions and additional recommendations are intended to supplement the recommended programs, bridging the gap between what the recommended programs can accomplish and the sum of identified water resources needs of the subbasin.

#### **APPENDICES**

Six appendices are bound into this report: appendix A, Draft Environmental Impact Statement; appendix B, Membership of Subbasin Planning Teams and Review Groups; appendix C, Index of Recommended Programs by Lead Agency; appendix D, Index of Recommended Programs by State; appendix E, Regional Priorities; and appendix F, Official Comments on the Plan.

Appendix A, Draft Environmental Impact Statement, prepared in accordance with the terms of the National Environmental Policy Act of 1969, summarizes the environmental impacts associated with implementing the plan. Appendix B lists the names and agency affiliations of those persons who worked directly on preparing the updated plan. Appendix C gives the recommended programs to be conducted by each agency, permitting the reader to locate each program in the basinwide, statewide, and subbasin recommended program sections. Appendix D lists programs by State and lead agency, giving the reader a composite of plan recommendations for each of the 10 member States. The Commission's adopted regional priorities for water related programs for fiscal years 1981 and 1982 and priority process are presented in appendix E. Appendix F presents the comments received through the official 90-day review of this report.

A complete statement of current State planning objectives is given in appendix G, which is published under separate cover. A second separately published document, appendix H, presents a more complete listing of subbasin problems and opportunities than is given in this report.