

PREFACE

In many respects this is a book about water. In fact, most of the scenes shown in the illustrations of the book have water in them. Water is a vital factor in sustaining human life and determining the quality of human existence. Water is not a dependable factor, however, especially in the upper Mississippi Valley. There have been periods of extreme drought and times when the heavens have sent death and destruction. A steady water supply is essential to daily living, for growing crops, satisfying thirst, and providing sanitation; it is a major component of our industrial, recreational and urban development. The Corps of Engineers has been the primary federal agency responsible for water resource development and management in this country.

Because this book is about water, it is also about conflict and controversy. Many individuals, corporations, governmental bodies, and special interest groups have made vigorous attempts to control and utilize our water resources. These struggles have not diminished over the past 100 years. Conflicts and controversies have intensified as population increased, technology expanded and problems connected with the municipal, industrial, agricultural and recreational uses of water became more complex. In the following chapters the author does not attempt to simplify or resolve these controversies, but rather, to provide background for understanding the complicated issues of water resource management.

The objective of this book has been to write a narrative history of the St. Paul District Corps of Engineers in a larger setting. The main concern has been to evaluate the part the Corps has played in the urban and technological growth of the metropolitan network centered in Minneapolis and St. Paul, Minnesota. These were the parameters established when the St. Paul District authorized the research and publication. In the past ten years most of the Corps districts have commissioned qualified persons to research and write their histories. These histories will be the first in-depth studies of the civil works activities of the Corps. The current popular image of the Corps—good, bad, or indifferent—is largely myth. Ideas about the Corps are often the result of hasty journalistic accounts of selected events. One cannot make an intelligent appraisal of the contributions of the Corps of Engineers without an adequate historical perspective. When these district histories are available such an appraisal will be possible.

Urbanization, water resource management, government regulation, conflict, and controversy are not the only themes of this study, however. Another important factor considered in this text is the function of the Corps within the decision-making process in a democratic society. During the past 100 years the St. Paul District office has been under pressure from mining magnates, lumber barons, flour millers, steamboat captains, railroad financiers, municipal officials, lake-shore residents, commercial fishermen, Indian tribes, flooded farmers, weekend campers, land speculators, duck hunters, power companies, sanitary engineers, environmentalists, soil conservationists, forest rangers, newspaper publishers, park managers, historical societies, bridge builders, and special interest groups of every size, political persuasion, and socio-economic background. Two aspects of this process of pressure politics are worthy of note. First of all, despite all attempts to influence decisions, no serious scandal has ever been associated with the actions of the district office at St. Paul. Second, and more important, in spite of the controversy and conflict which have been integral parts of water resource management, the public continues to play a strong role in the decision-making process. Federal policies regarding water resource regulation have been significantly modified over the years, but broad democratic participation in the resolution of conflicting views is as important today as it was in 1866 when the St. Paul District office was opened. Thus a study of the public works activities of the Corps of Engineers is also a study in participatory democracy.

The title of this book contains the word "creativity." Unique projects and creative energies have emanated from the St. Paul District. A few can be enumerated here. The first large-scale system of water reservoirs in the United States was built in northern Minnesota under the direction of the Corps. The first hydroelectric dam designed and built by the Corps of Engineers was in this district. The first prototype structure for the twenty-six locks and dams of the nine-foot channel was constructed on the Mississippi River at Hastings, Minnesota. Federal regulations for bridge construction over navigable rivers originated in the St. Paul office. Though Corps activity was limited for many years to projects directly related to navigation, the St. Paul District as early as 1866 became involved in assisting private industry in a non-navigational project to preserve the Falls of St. Anthony. Later in the nineteenth century the St. Paul office was responsible for protecting Yellowstone Park from private exploitation. One of the most recent accomplishments of the district engineers has been the first federally approved plan for flood plain evacuation at Prairie du Chien.

The aim of this book, however, is not to extol the virtues of the Corps of Engineers, or to enumerate significant Corps contributions to the quality of life in the upper Mississippi Valley. The study attempts to tell about the wide variety of services the Corps has been asked to provide citizens of the region. It describes how, when authorized to meet public needs, the Corps has been given opportunities for service far beyond its original mandated concern for routine navigation and flood control.

Writing this book has been a real challenge. The research was exciting and enjoyable. However, it was a time-consuming task to study the many volumes of government reports, the 100 years of district correspondence in the National Archives, the thousands of pages of public hearings, and an overwhelming amount of published and unpublished supporting material. Two problems were especially troublesome. First of all, the geographic boundaries of this large district have been in flux from the beginning. The district now incorporates portions of the old Milwaukee District, the Rock Island District, and the Omaha District, and in 1955 was expanded to include the complete area of the Duluth District. Consequently, the book includes data on five districts, although Chapter Eight on Lake Superior is only a general survey of the work of the Duluth District. Actually there is need for fuller separate histories of both the Duluth and Milwaukee districts.

The second problem is that no detailed study has been made of the historical relationship between the districts, divisions and the Office of the Chief of Engineers in Washington. Chapter Two, an attempt to clarify some of these inter-departmental relationships of the Corps, also serves as an overview of Corps activities in civil works and water resource management. A full account of these relationships and activities could well fill another book.

Many individuals aided me in my research and writing. James Braatz and Rosemarie Vezina Braatz of the public affairs section in the district office have supported my insistence on high professional standards in research, writing, design and printing. They have had strong support from Corps officers, especially Colonel Max W. Noah and Lieutenant Colonel Norman C. Hintz at the beginning of the work and Colonel Forrest T. Gay III and Lieutenant Colonel Walter L. Heme at its conclusion. Others of the district staff, including Delores Sudeith, Jo Banz, Leonard Lohmann, Robert Calton, Bob Fletcher and John Seeman have given freely of their time to answer my questions and locate needed records. Franklin J. Ryder, chief of the permit section when this study began, was the unofficial historian of the district. His counsel and writings, and most of all his sense of history, contributed to this book. Mary Taylor Johnson, district librarian and her successor, Howard Epstein, have also cheerfully assisted me in my research. George Fasteland, Leo Zygmanski, Voltaire Serra and Courtland Mueller found old Duluth District records for my use. Dr. Jesse Remington and Lenore

Fine of the historical division of the Office of the Chief of Engineers warmly encouraged me during the research period. Dr. Albert Cowdry and Dr. Harold K. Kanarek read a draft of the manuscript for accuracy and clarity, making many helpful suggestions, as did Margarete Bevacqua of the North Central Division Public Affairs office. Three research trips were made to the National Archives Federal Records Center in Kansas City. Reed Whitaker, Robert Knecht and Rosemarie Wiess were interested in my project and efficient in providing needed resource materials. I am especially grateful to them for their assistance during my twelve-and fourteen-hour work days at the center. Christine Missoff of the New York State Library helped to sort out relevant documents in the Warren Collection. I was also able to compare notes and receive assistance from Dr. Fredrick Dobney, who has just completed a history of the St. Louis district. Helen McCann White, Taylors Falls, Minnesota, served as an outside reader. Her dedication to detail, conceptual criticisms and questioning spirit have become an integral part of this work.

One of the most important resources for this book has been the Minnesota Historical Society. The society has an excellent collection of regional records, manuscripts, and photographs and a resourceful staff. The director, Russell W. Fridley, took a personal interest in this project and introduced me to society facilities and staff. In off hours Alan Ominsky helped with the initial design and layout of the book. Carolyn Gilman spent many evenings and weekends editing the manuscript. The consistencies in style are the result of her diligence. Most of the illustrations accompanying the text are from photographs found by John Guthmann in the society's audio-visual collections.

Final layout and cover design for the book were done by Charles T. Morse and Peter W. Preksto, Jr., of Guild House Associates. Their knowledge of graphics, their background in printing processes, and their commitment to excellence have made the final stage of this project a genuine pleasure.

Finally, I owe a sincere word of appreciation to others who have supported me during the last three years. The staff of the Cultural and Technological Studies Program at the University of Wisconsin-Milwaukee have had to adjust their work schedules to accommodate this research project. Donald Drake has taken over many administrative duties to free my time for research and writing. Our program assistants, Jean Smith Bauer, Liane High, Jay Zierhut, and Judith Gottlieb, wore a path to the library on my behalf. Our secretary, Chris La Sota, hit the keys close to four million times in typing the draft copy and final manuscript. She is not only the most competent typist I have ever met, but a wonderful human being. In addition, many friends and colleagues—the Helmers, the Nelsons, the Thorsbakkens, the Halls, the Thompsons—have given me encouragement and support. To my wife, LaDonna, I say, "thanks, again. You know best how to relieve the pressures and frustrations that are integral to the publication of another book."

FOREWORD

The history of the St. Paul District is the history of the upper midwest and its growth over more than a century. When the District was established in 1867 there was a crucial need to prevent the disintegration of the Falls of St. Anthony and, with it, the commercial importance of this milling center. After solving that engineering problem the District saw and influenced the growth and demise of the lumber industry, the rise of the flour industry, the development and operation of Yellowstone National Park, the change from steamboats to diesel powered towboats on the Mississippi, the first flood control and hydroelectric power projects in the nation and, in the most recent years, the creation of a very popular outdoor recreation program. No stranger to controversy, the District has, nevertheless, strived to respond to the needs of this important region. Thousands of dedicated public servants, past and present, have served in the District. Their record of service and their landmark contribution to the national welfare are chronicled here. It is, indeed, a proud record.

FORREST T. GAY, III
Colonel, Corps of Engineers
District Engineer

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HUDSON
BAY

RED RIVER

ST. LAWRENCE

ST. PAUL

MISSISSIPPI RIVER

ATLANTIC
OCEAN

GULF
OF
MEXICO