

CHAPTER ONE

Introduction

The U.S. Army Corps of Engineers, St. Paul District, is one of forty-one districts in the Corps' organization. As the northernmost district in the Mississippi Valley Division, it centers on the headwaters of the Mississippi River and the uppermost section of the river's nine-foot navigation channel. The St. Paul District oversees civil works projects and conducts disaster relief within the geographic boundaries of the district, implements the Corps' regulatory program in the states of Minnesota and Wisconsin and assists with other Corps' missions wherever needed. The following history updates the book *Creativity, Conflict & Controversy: A History of the St. Paul District, U.S. Army Corps of Engineers*, published in 1979.¹ It describes how the St. Paul District responded to enormous changes in the Corps' missions and organization in the last quarter of the twentieth century.

The St. Paul District in the Environmental Era

The U.S. Army Corps of Engineers has been the federal government's leading civil works agency for more than two centuries. It built its reputation largely on river and harbor improvements, such as the nine-foot navigation channel in the Mississippi River and dikes and dams for flood control and hydroelectric power. In the 1960s and 1970s, the environmental movement fundamentally altered the public outlook on the Corps' works. Many people recognized rivers and lakes and wetlands to be some of the most vulnerable elements of the natural environment. Dams, some argued, were perhaps the most egregious example of heavy-handed transformations of the landscape. Engineering projects that were unquestioningly termed "improvements" in the past were condemned by environmentalists as misguided and destructive. Moreover, the public developed a more skeptical attitude toward government and technocracy and demanded greater participation in public land management decisions. In response, the Corps reinvented its public image, evolving from the nation's leading dam builder to its principal steward of water resources. Seeking to win public confidence, it navigated through a changed political landscape of environmental impact studies and public review. More than a few social scientists and environmentalists marveled at the Corps' success, though many still contended that the Corps wrought environmental damage wherever it worked.

The St. Paul District has played a significant role in the "greening" of the Corps. It embraced the Corps' new mission of environmental management on the Upper Mississippi River – a project that Congress has continually funded since 1986. When the Corps performed maintenance on the nine-foot channel, it placed dredged material so as to create islands and back channels that would provide new wildlife habitat. The Corps came to occupy a key role in interagency administration

of the river, mediating between environmentalists and recreational-use interests on the one hand and flood-prone communities and commercial-navigation interests on the other.

The St. Paul District similarly embraced the Corps' expanded mission in regulatory matters, particularly its role in protecting wetlands. The district took initiative in redrawing regulatory boundaries to conform to state lines so that it could work more effectively with state regulatory programs in Minnesota and Wisconsin. Since these states had two of the most aggressive wetlands protection programs in the nation, the St. Paul District forged ahead of many other districts in proving the Corps' commitment to the protection of this resource.

The St. Paul District demonstrated environmental sensitivity in other areas, from new project designs such as the \$115-million Rochester, Minnesota, Flood Control Project to restoration efforts such as the Weaver Bottoms Rehabilitation, both of which were recognized with the Chief of Engineers Award of Excellence – the most prestigious award given to civil works projects. Since 1975, the St. Paul District has received four Awards of Excellence, an outstanding record. The professionalism the district has cultivated in the course of improving its environmental standing extends to other programs, including innovations in the development of recreational facilities and the making of one of the Corps' strongest district history programs.

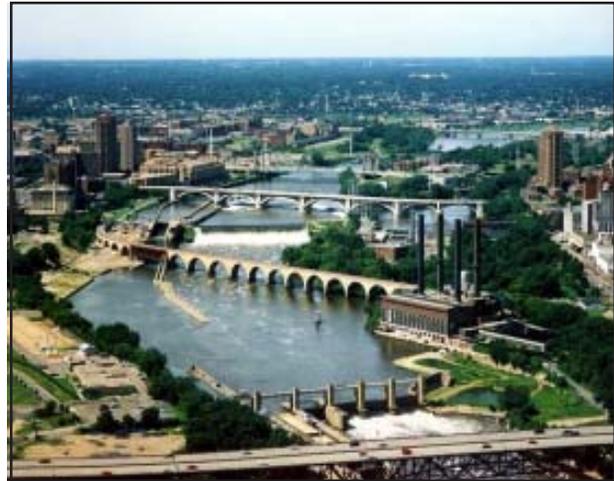
Unlike most districts, the St. Paul District does not participate in military programs, but rather focuses exclusively on civil works. This is one factor that encourages the district to excel in its areas of specialization. Moreover, it is said that the individuals who comprise the St. Paul District tend to be less mobile within the organization, less inclined to seek or accept a reassignment, more loyal to their sense of place than is characteristic of most district staff. Longevity has both advantages and disadvantages for the organization, but one of its advantages is producing people with a greater commitment to quality of living. Many people in the St. Paul District are reluctant to transfer elsewhere because they like St. Paul and the region – they have a personal stake in the environment. Yet, the human resource may be less significant than the geographic and political setting in explaining the St. Paul District's orientation.

Most of this region is flat. The major exception is the "Driftless Area" of southwest



Lock and Dam 3, Mississippi River: The river is seen here in high water, October 1995. (Photo courtesy of St. Paul District, Corps of Engineers)

Wisconsin, so-named because it escaped glaciation during the Ice Ages and is lacking glacial “drift” or deposit, therefore exhibiting a much older geologic imprint of uplift and dissection by water erosion. Other hills include the Mesabi Range and the Vermillion Range in northeast Minnesota, which form the divide with the Great Lakes Basin. Generally, the topography of the St. Paul District shows the marks of past continental glaciers, which left behind thousands of natural lakes and prairie potholes, as well as low, rounded hills, kettle moraines, ancient flood plains, and dry river channels.³ The Red River Valley, the flattest area in a region known for its flatness, is the bed of the gigantic glacial Lake Agassiz. Its rich, black soil is extraordinarily fertile.



Upper and Lower Locks at St. Anthony Falls, Minneapolis: The falls were the highest point of navigation on the Mississippi River when the Corps of Engineers opened an office in St. Paul in 1866. (Photo courtesy of St. Paul District, Corps of Engineers)

Indeed, most of the area within the St. Paul District features soil that is highly productive for agriculture – another consequence of past glaciation. The continental glaciers not only covered the original land surface with a deep, flat layer of glacial till, they also imported and deposited limestone and other minerals that made good soil-building material. Deposits of loess in some areas and lacustrine materials of old lakebeds in others formed additional mantles of good soil. Most of the St. Paul District, from North Dakota’s Red River Valley in the west to Wisconsin’s central counties in the east, has yielded rich farm crops for more than a century.⁴

The climate of this region is continental, marked by temperature extremes from winter to summer, as well as by dramatic temperature shifts within each season. For its mid-continent location it is also relatively humid, with 30 to 40 inches of annual precipitation. Rainfall is generally highest in the summer, with much of it occurring in torrential thunderstorms. These climatic conditions, added to the flat topography and the abundance of water, make large areas of the St. Paul District particularly flood prone.

Because the region is mid-continent and devoid of mountain barriers, the rivers and lakes have provided pathways of commerce for centuries. Since the nineteenth century, the Mississippi River has served as the main artery of commerce with the outside world. The Twin Cities of Minneapolis and St. Paul, formed at the river’s farthest point of navigation at St. Anthony Falls, became the region’s largest metropolitan area very early. The U.S. Army Corps of Engineers opened an office in St. Paul in 1866 for the purpose of surveying the Upper Mississippi and its

tributaries – a permanent presence that eventually became the St. Paul District.

Throughout its history, the St. Paul District has made the Mississippi River its central focus. In the 1930s, it oversaw dredging of a nine-foot channel for navigation as far upriver as St. Anthony Falls. This project assisted farmers and industry by facilitating the transportation of grain downstream and coal upstream. The project had unintended environmental consequences, however, as the dumping of dredge material in backwaters along the edges of the river harmed vegetation and wildlife habitat in these sensitive wetland areas. By the 1960s and 1970s, public concern for the ecological and recreational values of the Mississippi River vied with more traditional considerations of its navigability and susceptibility to flooding. In the last quarter of the century, the Corps devoted increasing attention to reclamation and preservation of the river's natural features.⁵

In addition to lakes and rivers, the region contains a vast amount of wetlands. Outside of Alaska, the St. Paul District encompasses more wetlands than any other Corps' district in the nation – much of it in the form of prairie potholes and inland fresh marshes that interface with agricultural lands. Long maligned by the general public as worthless, these areas were once converted to farmland as fast as they could be ditched and drained. In the last quarter century, however, the public value of wetlands has changed radically. The Corps of Engineers now plays an important role in preserving the nation's wetlands, and the St. Paul District occupies a strategic place in this effort.

Political Setting of the St. Paul District

The St. Paul District overlaps portions of five farm states. Agriculture built these state economies and continues to have a strong influence on state politics. In North Dakota, South Dakota and Iowa, farmers and farming-based communities are a dominating factor in most local governments. In Minnesota and Wisconsin, agricultural interests similarly control most county governments. However, in Minnesota and Wisconsin, there are large cities, as well as numerous small cities, and the state economies are more diversified, meaning that urban and nonagricultural interests have a greater influence at the state level.

Wisconsin in the last quarter of the twentieth century has remained less urban than the nation as a whole. Though highly industrialized, comparatively few of its people live in large cities. The majority of Wisconsin residents live in cities of less than 50 thousand, or towns, or in the country; about twenty percent live on farms. Minnesota, with slightly fewer people than Wisconsin, has the larger metropolitan area of the two states: the Twin Cities. Minnesota's next largest cities, Duluth and Rochester, each have fewer than 100 thousand inhabitants. Yet even Duluth and Rochester are larger than North Dakota's largest city of Fargo, which contains a population of 75 thousand.

Wisconsin, Minnesota and North Dakota received large numbers of German and Scandina-



St. Paul District boundary: The present boundaries of the St. Paul District include portions of five states. (Map courtesy of St. Paul District, Corps of Engineers)

vian immigrants in the nineteenth century. All three states developed political traditions of agrarian dissent and populism. In Wisconsin, the Republican Party embraced a persistent progressive wing. In Minnesota, the state Democratic Party fused with the leftist Farmer-Laborites in 1944 to form the Democratic-Farmer-Labor party, which occupies the left of the political spectrum to this day. In North Dakota, leftist farmers formed the Nonpartisan League, which gained control of the state government for a few years in the early twentieth century. The Nonpartisan League eventually vanished into the Democratic Party, and the Republican Party prevails in the state today. In each of these states, liberal and conservative divisions do not run along predictable fault lines, and the Corps encounters politically active citizens both in rural and urban contexts.

This district history is organized into ten chapters (including an introduction and a conclusion). Six central chapters focus on a Corps' mission or program: navigation, flood control, wetlands protection, recreation, cultural resources management and disaster relief. The two remaining chapters address organizational change: the first concentrating on internal reform and the second discussing external relationships. Since the main theme of this history is how the St. Paul District participated in the Corps' efforts to reinvent itself in the environmental era, we begin with the chapter on internal reform of the organization.

Chapter One Endnotes

¹ Raymond H. Merritt, *The Corps, the Environment, and the Upper Mississippi River Basin* (Washington, D.C.: Historical Division, Office of Administrative Services, Office of the Chief of Engineers, 1984).

² William E. Lass, *Minnesota: A Bicentennial History* (New York: W. W. Norton & Company, Inc., 1977), 3.

³ Richard Nelson Current, *Wisconsin: A Bicentennial History* (New York: W. W. Norton & Co., Inc., 1977), 12-13.

⁴ John H. Garland, ed., *The North American Midwest: A Regional Geography* (New York: John Wiley & Sons, Inc., 1955), 6.

⁵ Lass, *Minnesota*, 4-5.