



“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 1866, there was a crucial need to prevent the disintegration of the Falls of St. Anthony, and, with it, the commercial importance of the Minneapolis 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 risk management and hydroelectric power projects in the nation and, in 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.”

--Col. (Retired) Forrest T. Gay, III, 49th District Engineer, St. Paul District

Brief History

The St. Paul District traces its origins to 1866, when Congress authorized the Corps of Engineers to establish a 4-foot navigation channel on the notoriously unreliable Upper Mississippi River. Maj. Gouverneur Kemble Warren, a West Point graduate widely acclaimed for his leadership at the Battle of Gettysburg, was tasked with initiating the new program and conducting preliminary surveys of the main river and its tributaries. Warren arrived in St. Paul, Minn., and opened the first district office in August 1866.

Well known for his hard-working and diligent manner, Warren set about establishing the new district and initiating his new projects. By 1869, he had already surveyed much of the region and sketched at least 30 maps of the main stem of the Mississippi and its tributaries. Additionally, he acquired the district’s first floating plant – a dredge and snag boat – for creating and maintaining a 4-foot low-water channel between St. Paul and St. Louis and authorized the construction of the first wing and closing dams in the district.

These measures ultimately proved inadequate to the growing commercial needs of the Twin Cities, and Congress authorized the Corps of Engineers to construct six dams in the headwaters between 1880 and 1907. Flour millers at St. Anthony Falls especially pushed for reservoirs above the falls, recognizing that the release of water from the reservoirs for navigation in the later summer and fall would increase the flow of water to keep their mills turning longer and more consistently. Though Congress initially balked at the

project's pork-barrel appearance, it finally authorized an experimental dam for Lake Winnibigoshish in 1880 and authorized the remaining dams shortly afterwards. The Headwaters project provided for construction of the Winnibigoshish Dam (1883-1884) and the completion of dams at Leech Lake (1884), Pokegama Falls (1884), Pine River (1886), Sandy Lake (1895) and Gull Lake (1912). In its 1895 annual report, the Corps of Engineers reported that releasing the water from the Headwaters reservoirs had successfully raised the water level in the Twin Cities by 12 to 18 inches, helping navigation interests and the millers. Also by 1895, the St. Paul District had built more than 100 miles of wing dams and 94 miles of shore protection at a cost of nearly \$6 million.

Despite the Corps' substantive channel improvement efforts, navigation died on the upper river. By 1918, virtually no traffic moved between St. Paul and St. Louis. Fearing that the Midwest would suffer economically without a vibrant and diverse transportation system, business interests initiated another movement to revive river transportation. Around 1925 they lobbied Congress and eventually won support in 1930 for a 9-foot channel project, which authorized the construction of 23 locks and dams on the Upper Mississippi River. These were completed in 1940. The Corps built additional locks and dams at Lower and Upper St. Anthony Falls in 1956 and 1963 respectively, bringing the total in the St. Paul District to 13. With a consistently deep and reliable channel, commerce returned to the Mississippi River.

Changing Boundaries

The earliest description of the St. Paul District's boundaries included the Mississippi River drainage from the river's headwaters to the lower end of Lock and Dam 1 between St. Paul and Minneapolis, together with the Red River of the North drainage as far as the international boundary with Canada, and the Rainy River drainage in northern Minnesota, which encompasses the boundary waters area. The district was extended south in 1919 to the mouth of the Wisconsin River and again in 1940 to Lock and Dam 10 at Guttenberg, Iowa. A portion of the Upper Peninsula of Michigan draining into Lake Superior and Isle Royale were added to the district in 1941 but lost during a subsequent realignment in 1979.

Today, the district borders follow the edges of four river basins– the Mississippi River, the Red River of the North, the Souris River and the Rainy River – and cover an area of approximately 139,000 square miles. This area includes most of Minnesota, the western half of Wisconsin, the northeastern half of North Dakota and small portions of northeastern South Dakota and northeastern Iowa. The district also shares approximately 500 miles of border with three Canadian provinces.

Significant Contributions

The St. Paul District office had been in existence for only three years when the Eastman Tunnel of Nicollet Island in Minneapolis collapsed in 1869. The district responded to this disaster by designing and building several structures to save both Nicollet Island and St. Anthony Falls. Those structures are still in place, and in use, today.

In 1884, it completed America's first major reservoir system, located in the Headwaters of the Mississippi River and created the Leech, Winnibigoshish and Pokegama reservoirs. In 1910, it finished America's first national dam with a hydroelectric plant, Lock and Dam 1 in Minneapolis.

In the 1970s, the St. Paul District proposed and constructed the Corps' first nonstructural flood reduction project in Prairie du Chien, Wis., choosing to relocate structures rather than build levees.

St. Paul District personnel have continuously responded to natural disasters throughout its nearly 150-year history. Most recently, district members deployed to the Red River of the North basin to assist with record flooding in the spring of 2009, 2010, 2011 and 2013. The district also responded to historic flooding along the Souris River in North Dakota in 2011. Additionally, district personnel deployed to New York following Hurricane Sandy in 2012, Louisiana to assist with recovery efforts after Hurricanes Gustav and Ike in 2008, assisted with the I-35W Bridge collapse in Minneapolis in 2007 and deployed to Louisiana and Mississippi to assist with recovery efforts after Hurricane Katrina in 2005. The district recently contributed to rebuilding the St. Bernard Parish portion of the New Orleans hurricane protection system, too.

District personnel are supporting the reconstruction efforts in Middle East, too. More than 100 district members have voluntarily deployed to the Iraq and Afghanistan to assist those countries rebuild.

Major Awards

The district has received eight Chief of Engineer's Awards – one in 1983 for the rehabilitation of Lock and Dam 1; one in 1989 for the building of Weaver Bottoms Island in Lower Pool 8 of the Mississippi River; one in 1996 for a flood risk management project in Rochester, Minn.; one in 1998 for a flood risk management project in Saint Paul, Minn.; one in 2004 for the restoration of islands in Pool 8; one in 2008 for the Grand Forks, N.D./East Grand Forks, Minn. flood damage reduction project; and two in 2008 for the Water Level Management for Ecosystem Restoration in Pool 5 of the Upper Mississippi River.

The Minnesota Society of Professional Engineers has presented the district with 17 Seven Wonders of Engineering Awards since 1963.