



# U.S. Army Corps of Engineers

## *Mission in the Mississippi Valley*

The mission of the U.S. Army Corps of Engineers in the Mississippi Valley is accomplished by two distinct, complementary programs. The primary focus of the Mississippi River Commission (MRC) is the Mississippi River and Tributaries Project, the flood reduction and navigation plan for the vast alluvial valley. The Mississippi Valley Division (MVD) conducts the Corps' water resource development and environmental programs not encompassed by the MRC mission. District offices located in St. Paul, Minn.; Rock Island, Ill.; St. Louis, Mo.; Memphis, Tenn.; Vicksburg, Miss.; and New Orleans, La., conduct the programs and activities overseen by MRC and MVD.

The mission of the dual headquarters and its districts is to develop and maintain flood control systems, navigation improvements, channel stabilization measures, as well as undertakings that preserve, restore, and enhance environmental resources. Meeting these public needs and expectations requires conducting engineering studies; preparing designs and specifications; constructing, operating, and maintaining facilities and installations; acquiring, managing, and disposing of real property; administering various laws and regulations; as well as mobilizing support during natural disasters and other emergencies.

### **Mississippi River Facts**

- ✓ The Mississippi River begins at Lake Itasca in northwest Minnesota and flows for 2,348 miles to the Gulf of Mexico (includes 20 for Head of Passes).
- ✓ The Mississippi River Drainage Basin covers some 1.25-million-square-miles and gathers water from 41 percent of the continental United States.
- ✓ The Mississippi River serves as the trunk of a vast inland navigable waterway system that extends for 12,350 miles.
- ✓ The Mississippi River was used to transport 504 million tons of commodities during 1998.
- ✓ The 35,000-square-mile alluvial valley of the Lower Mississippi extends from Cape Girardeau, Missouri, to the Gulf of Mexico. This natural floodplain, currently protected by the Mississippi River and Tributaries Project, is nearly equal in size to the State of Indiana.
- ✓ Each year the Mississippi River transports 230 million tons of sediment to coastal Louisiana and the Gulf of Mexico.
- ✓ Flood stage at the Vicksburg gage is 43 feet. The Mississippi River passes 1.4 million cubic feet per second of water at that stage, or a flow of about 10.5 million gallons per second.

✓ The mean daily flow of the Mississippi River at Vicksburg is 620,000 cubic feet per second, for the period 1944 to 1999.

✓ The Mississippi River and Tributaries (MR&T) Project was authorized by the 1928 Flood Control Act. In the wake of the devastating 1927 Flood, it was deemed necessary to put in place a comprehensive, unified system of public works within the Lower Mississippi Valley that would provide reliable flood control and navigation channels. Although most of the work on the main stem is done, the project is currently 87 percent complete and scheduled to be finished in the year 2032.

### **MR&T Profile**

★ Levees and floodwalls contain flood flows. The protection is provided from Cape Girardeau, Missouri, to Venice, Louisiana, approximately ten miles above the mouth of the Mississippi River. Some 3,727 miles of levees have been authorized for the MR&T and 3,466 miles are currently in place (as of March 31, 2001).

★ Floodways divert excess flows past critical reaches so that levee systems will not be unduly stressed. There are three MR&T floodways in the state of Louisiana and one in Missouri.

★ Dikes are large stone structures built perpendicular to the bank that confine the river to a single channel. Thus far, 339 miles of dikes have been authorized and 304 miles have been completed (as of March 31, 2001).

★ Revetment, consisting of small concrete block joined together by wires, are placed on the subaqueous bank of the Mississippi River to maintain the proper channel alignment and protect nearby levees by preventing bank caving. Some 1,036 miles of the 1,085 miles of bank protection have been completed (as of March 31, 2001).

★ Cutoffs of great meander loops on the Mississippi River were conducted in the 1930s and 1940s that shortened the river by some 150 miles and reduced flood stages.

★ Foreshore protection, consisting of stone structures built parallel to the bank, protect nearby levees from wavewash attack. About 142 miles of the authorized 160 miles have been completed (as of March 31, 2001).

★ Tributary improvements such as dams, reservoirs, control structures, and pumping plants provide for flood control and drainage.

★ Dredging is employed to adjust river flow patterns and maintain navigable channels by deepening shallow areas that tend to form during low water.

★ Since 1928, the MR&T project has prevented approximately \$244 billion in flood damages. The total investment for construction and maintenance has been \$10 billion.