

**US Army Corps  
of Engineers**  
Mississippi River Commission  
Mississippi Valley Division



## Geographic Boundary

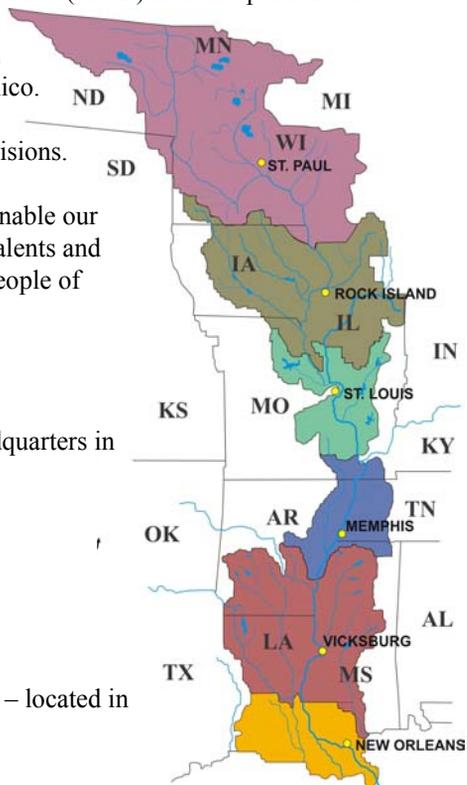
The Mississippi Valley Division (MVD) includes portions of 12 states and encompasses 370,000 square miles from Canada to the Gulf of Mexico.

It is one of eight Corps divisions.

We operate regionally to enable our districts to combine their talents and assets to better serve the people of the valley.

MVD is comprised of:

- Six Districts – with headquarters in
  - St. Paul, Minnesota
  - Rock Island, Illinois
  - St. Louis, Missouri
  - Memphis, Tennessee
  - Vicksburg, Mississippi
  - New Orleans, Louisiana
- a Division Headquarters – located in Vicksburg, Miss.





## Mississippi River Commission

Our division has a dual mission – as the Mississippi Valley Division and the Mississippi River Commission.

The Mississippi River Commission was established by an act of Congress in 1879 to give the civilian engineering community a greater voice in developing a flood control and navigation plan for the Mississippi River.

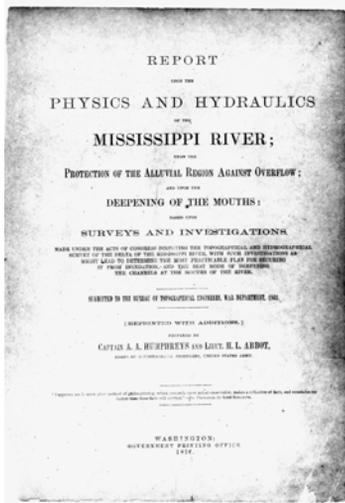


The commission consists of seven members –

- 3 officers of the Corps, one of them its president
- 1 member from the National Oceanic and Atmospheric Administration, and
- 3 civilians, two must be civil engineers

All members are nominated by the President, subject to confirmation by the Senate, and serve as advisers to the Secretary of the Army and the Chief of Engineers.

## Our Past



The Corps has worked in the Mississippi Valley since 1824 – primarily surveying and removing snags from the Mississippi and Ohio rivers.

The first comprehensive effort to gain some understanding of the river’s characteristics was made when Congress authorized a survey of the delta of the Mississippi River.

This effort resulted in a report entitled Physics and Hydraulics of the Mississippi River, prepared in

1861 by Captain A.A. Humphreys and Lieutenant H.L. Abbot. The report recommended that levees could be relied upon to protect all the alluvial valley lands subject to flooding.

This approach became known as the “levees only” plan and it shaped the direction of flood control efforts in the lower valley for the next seven decades.



## Our Past

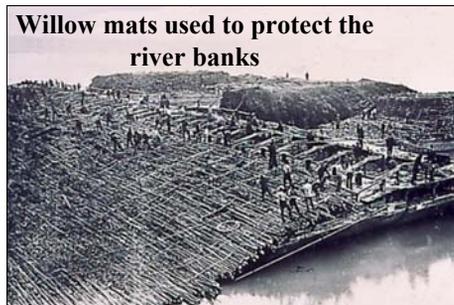
Throughout the 1800's, several different philosophies on how best to manage the Mississippi River arose from both the Army and civilian engineering communities.

Shortly after the famous debate between Major General A.A. Humphreys and James B. Eads over the use of jetties at the mouth of the river, the need for improvement of the Mississippi River and the coordination of engineering operations through one centralized organization was widely recognized.

In 1879, Congress established the Mississippi River Commission and charged it with developing a comprehensive plan to facilitate navigation and prevent destructive floods.

The river became somewhat of a laboratory for developing river engineering techniques borrowed from nations around the world.

However, local interests were still saddled with the financial burden of strengthening the levee system, and, therefore, raised and strengthened segments as funds would permit.





## Our Past

Then in 1917, due to devastating floods in the Mississippi River Valley, Congress directed the Corps to begin flood control measures to protect life and property.

So, with federal help, levee designs were reviewed, modified, and much needed construction expedited. Hundreds of miles of levees on the lower river were raised and strengthened through the mid-1920s.

And during the 1930s, on the upper Mississippi River, the Corps built Locks and Dams three through 26 from Red Wing, Minn., to Alton, Ill.

These structures joined locks and dams already constructed at Keokuk, St. Paul, and Hastings, in an effort to provide a safe, reliable waterway.

The early 20<sup>th</sup> century was also the time period for one of this nation's greatest natural disasters.





## 1927 Flood



In 1927, the lower Mississippi River suffered the greatest flood in recorded history.

More than 246 people were confirmed dead, but deaths due to disease and exposure after the immediate flood were hard to tally; some estimates exceed 1,000 deaths.

The flood drove 700,000 people from their homes and inundated 26,000 square miles.

The Great Flood of 1927 forced an overhaul of the flood control plan for the lower Mississippi River.



As a direct result of the 1927 Flood, Congress authorized the Mississippi River and Tributaries Project.



## Mississippi River & Tributaries

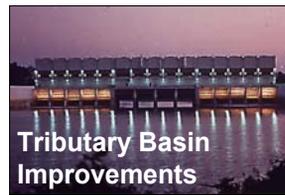
The MR&T was authorized for flood control and navigation improvements on the lower Mississippi River below Cape Girardeau, Mo.

The project has four major elements: levees, tributary basin improvements, channel stabilization and floodways.

The flood plain of the MR&T Project covers more than 35,000 square miles. Ten million acres of farmland, plus numerous urban centers, are protected from flooding.

The project is currently 87 percent complete, with an estimated completion date of 2032.

As of the end of 2002, a total of \$11 billion has been invested in planning, construction, operation, and maintenance of the MR&T project. For that investment, the MR&T project has prevented \$258 billion in flood damages.





## Water Resources Management

For more than 200 years, the Corps has met the needs of the Army and the American people. And the Corps has changed to reflect changing national priorities.



We have gone from being a builder to encompass becoming a developer, manager, and protector.

We are also changing our approach to projects. We are moving away from the traditional single project approach to a region wide approach.

Today, the Mississippi Valley Division manages a comprehensive water resources program -- working in cooperation with other federal, state, local, and private organizations.





## Meeting the Challenge

- *Navigation*

Navigation is one of the traditional missions in our water resources program, and remains one of the most important elements of the nation's commercial transportation and national defense systems.

Each year millions of tons of goods, that expand and sustain our economy, travel down the Mississippi River.



A reliable commercial navigation channel saves the nation over a billion dollars each year in fuel and shipping costs.

Maintaining this system involves the placement of 115 million cubic



yards of dredged material each year. Much of this material is used for preserving wetlands, protecting shorelines, increasing flood protection, and providing nesting habitat for migratory birds.



## Meeting the Challenge

- *Flood Protection*

During the past 70 years, billions of dollars have been invested nationwide in flood control projects -- building thousands of miles of levees, floodwalls, and channel improvements. All for the purpose of reducing damage to property and relieving human suffering and financial losses.

The Corps civil works mission has continued to evolve, and, over time, Congress added hydroelectric power generation, water supply, recreation, and environmental protection as mission areas.

This division operates 44 reservoirs for flood control, has four hydro-power plants, and serves as custodian of 1.8 million acres of land and water.





## Meeting the Challenge

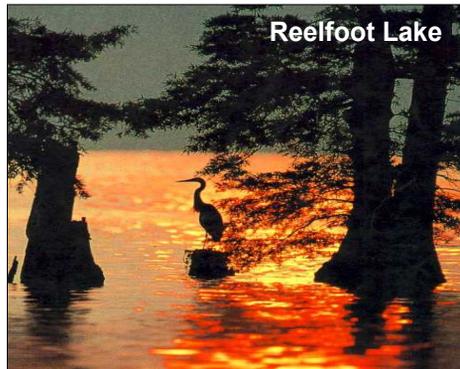
- *Environmental Stewardship*

The Mississippi Valley Division manages rivers, lakes, wetlands and coastlines to meet the needs of both human and natural communities.

We build sustainability into the planning, construction, and operation of our projects.

Our environmental restoration efforts focus on restoring ecosystems that have been degraded by previous generations and controlling the potential damage that might occur from contemporary growth and development activities.

Our Environmental Operating Principles state that our missions must be integrated with natural resource laws, values, and sound environmental practices.

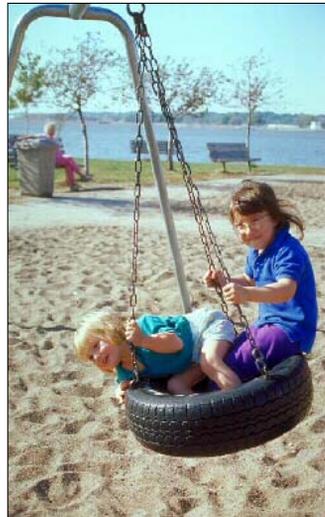


## Meeting the Challenge

- *Recreation*

The U.S. Army Corps of Engineers is the nation's largest provider of outdoor recreation. For many citizens, the rangers at the recreation sites will represent their only contact with the Department of the Army. Statistics on the Mississippi Valley Division include:

- 44 lakes
- 639 recreation sites
- 6,030 camp sites
- 32 visitor centers
- 329 boat ramps
- \$5.7 million user fees collected
- 1.2 million water acres managed.
- 597,000 land acres managed.
- \$3 billion dollars cumulative value to local economies.
- \$1.2 million dollars value of volunteer labor.





## Meeting the Challenge

- *Support to the Nation*

The Corps responds directly to natural disasters and other emergencies as the nation's primary engineering agency.

Whenever needed, MVD assists in providing emergency power, debris removal, ice, water and temporary housing following natural disasters.



Our division is capable and ready and plays a vital part in the success of our Armed Forces. Our expertise allows us to quickly assemble teams of engineering, construction and real estate experts to provide planning, design, and management of projects and programs to our military forces, other agencies and foreign governments.



As part of our homeland security efforts, we have assessed all of our critical infrastructure, and are making security improvements where needed.

<http://www2.mvr.usace.army.mil/umr-iwwsns/>

## Partnering

- *Upper Mississippi River – Illinois Waterway Navigation Study*

This study is a great example of stakeholder collaboration in developing a vision and identifying solutions to achieve economic and environmental sustainability.

We are finalizing evaluation of navigation efficiency and ecosystem restoration alternatives. Preliminary economic information for navigation efficiency alternatives was coordinated with all stakeholders in July 2003 and has been published on the study website (see URL above).



In October 2003, seven public meetings were held at various locations to present the complete evaluation of alternative plans.



Our schedule is to release the draft report for public review in April 2004 and complete the Chief of Engineers report in November '04.

Our goal is to recommend to Congress a balanced plan that both meets the needs of the navigation system as well as the needs for a sustainable ecosystem.

## Partnering

- *Louisiana Coastal Area Restoration Feasibility Study*

Louisiana is losing a parcel of wetlands the size of a football field every 30 minutes. One million acres have been lost since the 1930's and another million will be lost in the next 40 years. This loss impacts on the entire nation's economy, public and private infrastructure and public health and safety from hurricanes and other storm damage.

For almost a year-and-a-half, the Corps and its cost-sharing partner, the Louisiana Department of Natural Resources, began development of a comprehensive coastal restoration plan...it has grown to include other Federal and state partners as well as the best minds in the academic and scientific communities.

We anticipate releasing a draft comprehensive plan report and programmatic environmental impact statement for public review in September 2003.

The plan is being developed on schedule that will allow approval recommendations in an anticipated Water Resource Development Act of 2004. This goal will require a Chief's Report later than June 30, 2004.





## **It's About Balance – and National Security**

The Corps is perfectly positioned to take the lead in balancing the challenging requirements of economic, environmental, and social needs throughout the entire watershed.

It is our duty as the nation's engineer to produce the best science and engineering, to maintain our integrity and the integrity of the process, and to do what is right for the nation's water resources.

We are able to do what we do because our civil works capabilities allow us to meet military needs. It's the civil works capability that allows us to move from peace to war and back to peace again.



In addition, any agency with such a long history of service, and one that balances multiple missions, develops some lessons learned.

We've learned that a truly great nation will provide a strong economy and will protect its environment. We've learned that to meet our nation's needs, we must take a watershed approach to solving water resource problems. And we've learned that for our nation to prosper, we must produce environmentally sustainable answers.



## Securing Our Nation's Future

The Mississippi Valley Division is also taking actions to meet future challenges.

We have placed environmental values on an equal footing with economic and engineering concerns in support of environmentally sustainable development.



We have a diverse team and we are building flexibility into our organizational structure so that we are ready to meet the demands of changing times and missions and to focus our resources on wartime and other national emergencies.

We are transforming our processes to reduce costs and improve our responsiveness and quality.

There is a vigorous commitment on the part of each member of our team to integrity, quality, professionalism and caring.

- A vital part of America's Army
- Proud of our past
- Building for the future
- Providing quality, responsive engineering services
- Supporting the nation in peace and war

