



OPERATIONS & MAINTENANCE

US ARMY CORPS OF ENGINEERS ★ MISSISSIPPI VALLEY DIVISION ★ BUILDING STRONG®

O&M MVD NAVIGATION PROGRAM BENEFITS

- Annual Tonnage:
 - 670 million tons
- Annual Transportation Savings:
 - \$5.6 billion
- 95% of overseas trade is via ship.
- Inland navigation provides a safe and cost efficient alternative to truck and train and provides billions in transportation savings annually. It also reduces highway congestion and pollution.
- Key component of world trade.
- The Port of South Louisiana is the #1 port in the United States based on tonnage.



O&M MVD FLOOD DAMAGE REDUCTION PROGRAM BENEFITS

- Damages prevented: \$666 billion since 1928 (MR&T project)
- 45:1 return on each dollar invested.
- Nationally, Corps projects prevent \$47+ billion in damages annually (2005-2014).
- The Mississippi River and Tributaries Project (extends from Cape Girardeau, Mo., to Venice, La.) protects 23 million acres and a population of more than four million.



O&M HYDROPOWER PROGRAM BENEFITS

- Within MVD, four hydropower plants have a nameplate capacity of 226 megawatts:
 - Clarence Cannon Dam at Monroe City, Mo.
 - Narrows Dam at Murfreesboro, Ark.
 - Blakely Mountain Dam near Mountain Pine, Ark.
 - DeGray Dam, near Arkadelphia, Ark.
- Average annual revenue = \$10.6 million.



O&M RECREATION PROGRAM BENEFITS

The Corps is one of the largest providers of outdoor recreation in the federal government. One out of every 10 Americans visit a Corps recreation site each year.

- Visits: 47+ million visitors each year
- Jobs: 16,870
- Economic Impacts:
 - \$1.6 billion in visitor spending
 - \$690 million in value added (wages benefits, profits, rents and indirect business taxes).
- Recreation Activities:

Hiking	Flying model planes
Hunting	Skiing
Fishing	Canoeing
Boating	Horseback riding
ATV riding	Picnicking
Sailing	Swimming
Biking	Bird watching
Camping	



MVD STATISTICS

- Navigation
 - 4,267 miles of commercial waterways
 - 62 locks (70 chambers)
 - 3 locks in caretaker status (Pearl River)
 - 7 deep draft harbors
 - 51 shallow draft harbors
 - 700 miles of wing dams
 - Material dredged: ~100 million cubic yards
 - 670 million tons of cargo move on the Mississippi River system each year



- Flood Damage Reduction
 - 36 flood control reservoirs
 - ~3,700 miles of flood control channels
 - 400 drainage structures
 - 1,144 miles of revetment
 - 59 pumping stations
 - ~8,400 miles of levee



- Recreation
 - 1.9 million acres
 - 12,194 camping sites
 - 3,482 picnic areas
 - 853 recreation sites
 - 422 boat ramps
 - 240 playgrounds
 - 103 swimming areas
 - 230 number of trails



- Hydroelectric Power
 - 4 plants, 10 units
 - 226.5 megawatts capacity



- Property / Plant
 - 5750 structures
 - 341 miscellaneous buildings
 - 6 dredges
 - 565 floating plant (vessels)
 - 1141 passenger vehicles



O&M PROGRAM CHALLENGES

These challenges have led to an ever-growing backlog of needed maintenance:

- Aging infrastructure – beyond design life. Most structures are more than 70 years old (44 of 59 locks). The age of the infrastructure along with many years of constrained O&M funding have resulted in structures which are in generally poor condition.
- Increased use of facilities.
- Declining O&M funding levels after adjusting for inflation.
- Increased environmental and security requirements.
- Variable dredging requirements. May fluctuate as much as \$40 million annually, and takes funds from maintenance programs to fund critical dredging.
- Outdated components at hydropower plants reduce the capability and efficiency of power generation.
- The age and condition at many recreational areas such as deteriorated and poorly maintained sites, un-repaired wastewater treatment systems, and closed visitor centers, decreases the overall public enjoyment and satisfaction.



February 2016