

OPERATIONS & MAINTENANCE

US ARMY CORPS OF ENGINEERS

MISSISSIPPI VALLEY DIVISION

★ BUILDING STRONG_®

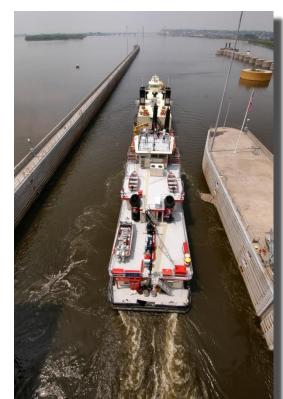
O&M MVD NAVIGATION PROGRAM BENEFITS

 \star

- Annual tonnage:
 - o 669 million tons
- Annual transportation savings:
 - o \$6.2 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: \$1.27 trillion since 1928 (MR&T project).
- 80:1 return on each dollar invested.
- The Mississippi River and Tributaries project (extends from Cape Girardeau, Missouri, to Venice, Louisiana) protects
 23 million acres and a population of 4.5 million.
- The MR&T system prevented \$206.5 billion in 2018.









O&M HYDROPOWER PROGRAM BENEFITS

- Within MVD, four hydropower plants have a nameplate capacity of 226 megawatts:
 - o Clarence Cannon Dam at Monroe City, Missouri
 - Narrows Dam at Murfreesboro, Arkansas
 - o Blakely Mountain Dam near Mountain Pine, Arkansas
 - o DeGray Dam, near Arkadelphia, Arkansas
- 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: 27+ million visitors each year
- Economic Impacts:
 - o \$986 million in visitor spending
 - \$385 million in value added (wages & salaries, payroll benefits, profits, rents and indirect business taxes).
 - o \$257 million in labor income
- Recreation Activities:
 - HikingFlying model planesHuntingSkiingFishingCanoeingBoatingHorseback ridingATV ridingPicnickingSailingSwimmingBikingBird watchingCamping

MVD STATISTICS

- Navigation
 - o 4,267 miles of commercial waterways
 - o 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
 - 669 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
 - o 400 drainage structures
 - o 1,144 miles of revetment
 - o 59 pumping stations
 - ~8,400 miles of levee
- Recreation
 - o 2+ million acres
 - o 11,775 camping sites
 - o 3,627 picnic areas
 - \circ 875 recreation sites
 - o 563 boat ramps
 - o 304 playgrounds
 - o 112 swimming areas
 - o 397 number of trails
- Hydroelectric Power
 - o 4 plants, 10 units
 - \circ 226.5 megawatts capacity









- Property / Plant
 - o 5750 structures
 - o 341 miscellaneous buildings
 - o 6 dredges
 - o 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; most structures are over 70 years old (44 of 59 locks). The age of the infrastructure, along with many years of constrained funding, have resulted in structures which are in generally poor condition.
 - o Increased use of facilities.
 - Flat or declining funding levels.
 - o 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.
 - Öutdated 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, unrepaired wastewater treatment systems, and closed visitor centers, decreases overall public enjoyment and satisfaction.











July 2019