# RESILIENCE AND ADAPTATION PROGRAM

#### PROGRAM SUCCESS:

- Increased the national Pre-Disaster Mitigation Grant (PDM) Program from \$22 million to \$100 million two cycles in a row, FY 2016, 2017;
- Engaged with FEMA and ten states to create a multi-state PDM Grant option;
- Successfully enacted a National Drought Council, now administered by NOAA

he Mississippi River Cities & Towns Initiative (MRCTI) disaster resilience and adaptation program is a the result of hard lessons learned over the short history of the Association. The Mississippi River Valley has sustained considerable disaster impacts from droughts, floods, extreme heat, and tornadoes totaling over \$50 billion since 2011.

Our cities have experienced a 1,000-year rain event only five years after a 500-year flood. Disasters along the Mississippi River have cost nearly 10 percent of the region's economy in some cases and at least 3 percent annually.

Our program is comprised of five parts: 1) fund the national PDM Grant at \$100 million or greater annually;

- 2) increase the resilience capacity of Mississippi River infrastructure and economy development projects;
- 3) restore the ecological infrastructure of the Corridor to better protect near-water communities from floods, droughts, and other impacts that devastate the region at unprecedented levels;
- 4) Work with the ten States to complete a multi-state disaster vulnerability assessment that aggregates and knowledge basis data at the corridor level:
- 5) Work with the private sector to increase mitigation and response capabilities throughout the Valley.

The natural infrastructure provided by the River ecology provides one of the most important protections from disasters for our cities.















#### **Natural Infrastructure is Key** to Our Economy

Natural infrastructure can play a heightened role in cleaning and moving water. Nature can move and manage more water more efficiently, to more benefit than our built infrastructure ever can. For instance, across the nation, inland wetlands provide an estimated \$237 billion in water flow regulation services annually. The natural infrastructure of the Mississippi River Delta alone provides \$12 to \$47 billion in benefits to the economy annually.

### **Programs Essential to Disaster Mitigation and** Recovery

There are critical federal programs that help cities and towns prepare and recover from disasters. However, MRCTI takes an expansive approach seeing value in programs that improve our natural infrastructure thereby offering greater protection from accumulating climate risk at a corridor scale.

- **Pre-Disaster Mitigation Grants**
- **Hazard Mitigation Grants**
- Land & Water Conservation Fund
- **Conservation Innovation Grants**
- Section 319 Water Pollution Grants
- Water State Revolving Loans Funds
- **Upper River Restoration Program**

#### **Partners**

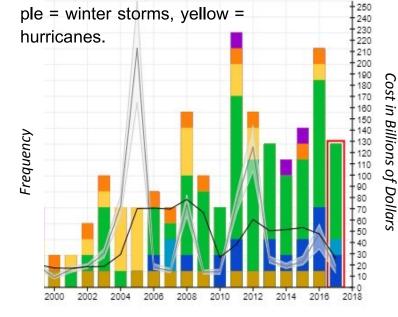
Working with the Geos Institute, EcoAdapt, and FEMA, MRCTI proposes a multi-state disaster vulnerability assessment for the entire corridor. This assessment is designed to assemble state and federal data into determining where the most vulnerable areas along the river taking into account impacts along the whole length of the Valley from Minnesota to Louisiana. This tool will enable states and cities to target mitigation funds for greater resilience using less resources.

# Billion-Dollar **Disasters**

From 2005 to 2017, the Mississippi River Valley has sustained over \$200 billion in disaster impacts with each state incurring a minimum of \$5 billion in damages as listed on the map pictured right.

## Cost is due to a

variety of factors including: frequency, intensity, concentration of infrastructure, resilience, >\$100 larger population and economic disturbances such as displacement and global ripple effects. The chart below aggregates this data. Green = storms, blue = flooding, brown = drought, orange = fires, pur-













\$5-10

\$10-20

\$20-50

\$10-20

\$5-10

\$5-10

\$10-20

\$10-20

\$5-10