



US Army Corps  
of Engineers®

# Emergency Management

*Value to the Nation*

THERE WHEN YOU NEED US



# RESTORING HOPE

*Disasters can change our lives in an instant.*



Although emergency preparedness, response and recovery are primarily the responsibilities of states and local communities, some disasters are too large for them to handle alone. That's when the Corps steps in to provide assistance.

In the wake of the tragic events of September 11, 2001, the Corps now plays a critical role in protecting the nation's homeland security.

The Corps emergency management efforts are built on the three R's: Readiness, Response and Recovery.

## *Did you know that?*

- + There were 90 weather-related disasters in the U.S. between 1988 and 2008 with over \$1 billion in damages, for a total exceeding \$700 billion.
- + The Corps installed more than 36,000 temporary roofs in the aftermath of Hurricanes Gustav and Ike, which struck portions of Louisiana and Texas in late summer 2008.
- + 1215 truckloads of bottled water and 1071 truckloads of ice were provided by the Corps to 90 points of distribution after Hurricane Ike.

A tornado, hurricane, flood, earthquake or other disaster can tear through our communities in moments destroying homes and businesses, uprooting families and leaving behind a path of destruction and broken dreams.

Disasters can strike anywhere and anytime. No matter where or when they strike, though, the U.S. Army Corps of Engineers stands ready to respond.



We can't prevent disasters, but we can reduce their impact and help people and communities recover more quickly.

Each year, the Corps responds to numerous Presidential Disaster declarations and state and local emergencies, including manmade and natural disasters.



# READINESS

The Corps is committed to ensuring that its emergency management teams are well-prepared, well-equipped and ready to respond instantly. When disaster strikes our response teams can be onsite within hours providing immediate relief and support.

This rapid response, which saves countless lives and millions of dollars in damage every year, is possible because of the many hours spent planning and preparing.

The Corps maintains 43 Planning and Response Teams, stationed around the country to facilitate a rapid response to disasters no matter where they occur. To prepare these teams, the Corps continually conducts disaster training simulations and participates in regional training exercises with other agencies.

The Corps has developed a sophisticated method for analyzing previous disasters, geological conditions, weather and other factors. This system allows us to target potential disaster areas nationwide. Our state-of-the-art computer tracking system helps us to position personnel, supplies and equipment in areas where they will be able to respond most quickly to disasters.

For example, our national fleet of self-sustaining emergency response vehicles are strategically stationed around the country so they can be onsite at virtually any disaster within 18 hours. These vehicles contain cutting-edge communications systems and computer systems.



## *Working with Others*

Under the National Emergency Preparedness Program the Corps and other federal partners conduct regular catastrophic disaster response exercises involving numerous federal, state, tribal and local agencies. During these exercises, emergency responders refine their ability to handle worst-case catastrophic disaster situations, including chemical, biological, and nuclear weapons attacks.

# RESPONSE

Whenever disaster strikes, the Corps' first goal is to get to the scene as quickly as possible to provide immediate services that will help save lives and prevent property damage. The Corps ability to respond quickly is particularly important with two types of disasters that occur almost every year.



## Floods

Perhaps the Corps is most well-known for its response to the Great Floods of 1993, which affected parts of nine states and 75 communities, destroyed 22,000 homes and lasted three months. Over 1,500 Corps personnel helped battle the floods. Their constant inspections of levees and floodwalls and quick responses when problems were spotted helped keep the damage from being much worse. They participated in search and rescue operations and aided in recovery efforts. Each year, the Corps undertakes similar efforts to help many cities throughout the country deal with floods.

In 2008, record-breaking storms resulted in flooding in a six-state region within the Midwest, an event more intense than the 1993 floods but of shorter duration. High-water records were set at 47 gage stations along tributaries in the Upper and Middle Mississippi River Basin. Although some overtopped, the levees worked as intended, allowing local emergency management officials to safely evacuate residents and providing much needed time to reinforce and improve levees to protect lives and property.



After the floods, the Corps worked closely with state and local emergency managers to inspect, advise and assist communities, including:

- deploying experts to monitor and assess Mississippi River levees
- supplying more than 100 pumps, 3,000 rolls of plastic sheeting and 13 million sandbags for flood fighting
- carrying out FEMA-mandated missions for debris removal and commodity distribution
- establishing temporary housing and emergency power

## Hurricanes

Hurricane Gustav threatened portions of the Gulf Coast in August 2008 nearly three years to the day after Hurricane Katrina. The work the Corps has done to repair, restore and ensure a resilient Hurricane and Storm Damage Risk Reduction System in the greater New Orleans area was put to the test. The system performed as designed.

In September 2008, Hurricane Ike followed close on the heels of Gustav, primarily impacting the Texas Gulf Coast communities of Galveston, Houston and surrounding counties. Nearly 900 Corps employees were engaged in hurricane emergency support missions that included:

- supplying temporary power for critical public facilities
- performing debris management and infrastructure assessments
- providing temporary roofing and temporary housing technical assistance
- procuring drinking water and ice
- providing technical assistance to establish commodity distribution points

# RECOVERY

Once a disaster is over, communities and individuals face the difficult task of picking up the pieces and moving forward. The Corps can provide vital help in the recovery process by:

- Restoring critical public services or facilities;
- Clearing debris to reopen transportation routes, drainage channels, water supply intakes, sewer outfalls, etc;
- Supplying drinkable water and emergency power;
- Repairing or rebuilding flood control and shore protection structures, such as levees;
- Creating temporary housing; and
- Providing technical assistance, including structural evaluations of buildings, and damage assessments.



## Hurricanes Katrina and Rita

The Corps of Engineers was instrumental in providing emergency relief for the Gulf Coast in the wake of Hurricane Katrina, which made landfall on August 29, 2005.

The Corps responded with key rescue and repair personnel who were instrumental in providing restoration of critical public services and facilities, including: provision of temporary emergency electrical power and emergency housing; structural evaluation of buildings; hazards response plan development; emergency clearance of debris to enable reconnaissance and movement of emergency personnel and equipment; construction of emergency access routes; supply of drinking water; temporary restoration of water supply systems; provision of water for fire fighting; emergency demolition or stabilization of damaged structures and facilities; and technical assistance.

While still dealing with the aftereffects of Katrina, the Corps was called on to respond in Texas as Hurricane Rita, having already struck south Florida and the Florida Keys, made landfall between Sabine Pass, Texas and Johnson's Bayou, Louisiana as a category 3 storm on September 24. In New Orleans, the Corps prepositioned teams for possible levee breaches and responded quickly to Rita-related flooding that overtopped levees. In Texas, the Corps prepositioned a three-day supply of ice and water. The Corps set up a command cell in Beaumont with specialists in engineering, real estate, and environmental remediation. Corps teams led the debris removal mission in affected areas, removing over 100,000 cubic yards of vegetation debris. Engineers at the Corps Sam Rayburn Powerhouse jumpstarted power in Rita-ravaged Jasper County one week after landfall to meet urgent requirements for power at critical-need facilities.

# VALUE TO COMMUNITIES

**E**mergencies can take many forms ranging from sudden natural disasters (hurricanes, earthquakes and severe snow and ice storms) to slower-developing disasters (droughts), to manmade emergencies (such as the events of September 11, 2001).



The effects of these disasters on individuals and communities, though, are the same: people die, property is damaged, livelihoods and neighborhoods are destroyed.

In the wake of such disasters, communities numbed by grief face the almost overwhelming challenge of rebuilding. In these difficult times, the Corps provides a source of hope and practical support.

Working in partnership with state and local officials and other federal agencies the Corps is able to clear away debris and help begin the slow process of rebuilding. By restoring basic services and functions the Corps and its partners are able to help communities accelerate the process of getting back on their feet again.



# VALUE TO THE ECONOMY

**T**he economic impact of a disaster can be tremendous, destroying or disabling businesses, crippling critical infrastructure and causing untold property damage. Floods alone are estimated to cause up to \$6 billion in damage a year in the United States.

It is impossible to prevent disasters, but the Corps plays a vital role in minimizing their economic impact by responding quickly to limit damage and by helping businesses and communities get up and running again promptly. By restoring vital water and power supplies, assessing structural damage and reopening transportation routes, the Corps can help communities get back to "business as usual."



One example of the economic impact of the Corps efforts is the Mississippi Floods in the 1990s. The Corps used its reservoirs to impound millions of gallons of water, preventing an estimated \$3 billion in damages. The Corps rapid response to natural and man-made disasters plays a significant role in minimizing their impact on local and state economies.



# WHAT LIES AHEAD

The potential for disasters continues to grow each year. More people are living in flood plains and coastal areas that are susceptible to earthquakes and hurricanes, and the possibility of manmade disasters related to terrorist incidents has grown.

The Corps is committed to maintaining its readiness to respond to these disasters by:

- Hiring the best people;
- Providing top quality training;
- Building agile, flexible response teams; and
- Upgrading equipment.

The Corps has retooled its emergency response efforts to address these new challenges and to build the capability to sustain longer response campaigns. The Corps works closely with its many federal, state and local partners to increase coordination and communication to better prepare for terrorist threats.

*“In the emergency management business, you are either progressing or regressing. There’s no sustaining the status quo.”*

**Edward Hecker**

Chief, Civil Emergency Management Branch,  
U.S. Army Corps of Engineers.



## *Interagency Levee Task Force: Innovation for Flood Water Management*

As a result of the 2008 Midwest Floods, federal agencies in cooperation with state agencies in the impacted areas of Wisconsin, Indiana, Illinois, Iowa, and Missouri have joined forces to find solutions on how to manage flood waters to reduce future risks. The task force is an umbrella organization designed to look at floodplain management at a regional level, providing a “one-stop shop” for applicants seeking federal assistance for levee restoration, repair and other assistance. The Corps of Engineers is leading the collaborative regional approach. The task force has enhanced communication and coordination among agencies, employed collaborative problem-solving where issues overlap agency authorities, and worked to fashion best practices for the future.

### **Learn More**

To learn more about the Corps emergency management efforts visit [www.CorpsResults.us](http://www.CorpsResults.us).



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