US Army Corps of Engineers®

Emergency Management

2003 Value to the Nation

There When You Need Us

Restoring Hope

Disasters can change our lives in an instant.

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.

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 also has begun to play 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 38 weather-related disasters in the U.S. between 1988 and 2000 with total damage cost exceeding $170 billion.
- Models predict an 80 percent to 90 percent probability of a 7.0 or greater earthquake in southern California before the year 2024.
- In 2002, the Corps responded to 10 Presidential Disaster Declarations, including ice storms, flooding, wildfires and hurricanes.

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. We use a state-of-the-art computer tracking system 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 communication systems and automated data processing equipment.

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 also 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. The experience of the small town of Ada, MN is typical of the important role the Corps can play in assisting communities dealing with disasters. On the evening of June 22, 2002, rain poured down on Ada, which sits on the banks of the Wild Rice River. At the worst point, nearly 10 inches of rain fell in just 12 hours.

Two weeks earlier the Corps had helped Ada residents add sandbags to the town's levee to protect against flooding from a steady rain that ultimately caused water levels to crest at 17.9 feet. Now experts were predicting that the waters would rise to over 20 feet.

City officials contacted the Corps at 4 a.m. on June 23 and by 6 a.m. personnel were on site developing plans to shore up the levee. Over the next 36 hours the Corps moved 14,000 cubic yards of dirt into place on the levee. The work was completed just in time and the levee protected the town from the worst of the flooding, even though the river crested at record levels.

Hurricanes

In September 1999, Hurricane Floyd hit the North Carolina coast with winds reaching 155 miles per hour. More than 3 million people on the East Coast were evacuated to higher ground. By the time Floyd moved back out to sea 4,000 homes had been destroyed and hundreds of thousands of people were without water and power from North Carolina to New Jersey. The Corps emergency response teams delivered over 3 million gallons of bottled water and 2.2 million pounds of ice and provided temporary power, housing, debris removal, flood fighting and technical assistance.

In Conway, SC, the Waccamaw River rose toward a record crest as Hurricane Floyd swept through. In an extremely short period of time teams from the Corps Charleston District got to the scene, assessed the situation, worked out priorities among the various agencies involved and started to work. Over the next 48 hours team members worked feverishly and successfully to protect local sewage treatment, water, and power facilities using sandbags and pumps.

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.

September 11, 2001

When word of the tragic events of September 11, 2001, reached Corps personnel, they responded instantly by ferrying more than 3,000 people safely out of Manhattan. In the aftermath of the tragedy, the Corps Prime Power group sent 31 people to New York City to help install 50 generators to power medical triage facilities, temporary structures and several buildings in the financial district including the New York Mercantile Exchange and the NASDAQ Electrical Hub.

The Corps also helped develop a debris management plan for cleaning up the World Trade Center site and used geographic information systems and thermal imaging to let emergency personnel know where fires were still burning in the rubble. In addition, Corps personnel began emergency dredging of the Hudson River to accommodate the barges needed to ferry away debris. More than 10,000 tons of debris a day was removed.

Value to Communities

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

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.

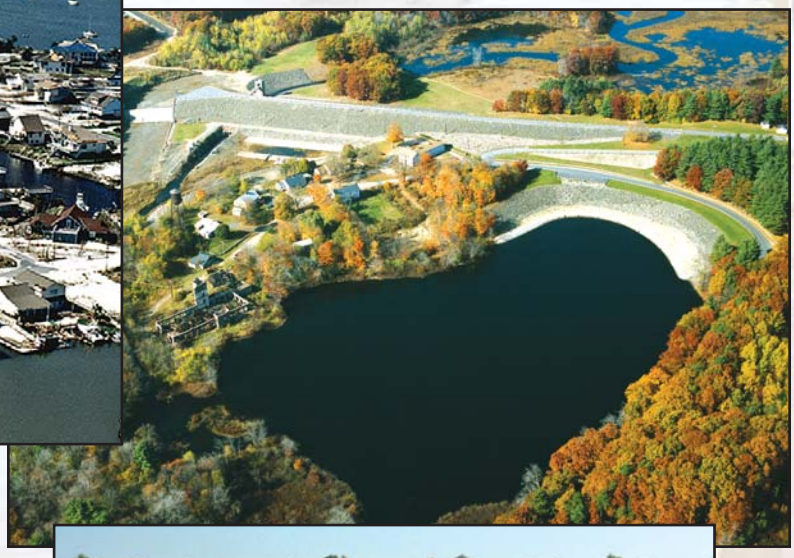
The effects of these disasters on individuals and communities, though, are the same: people die, property is damaged, livelihoods and neighborhoods are destroyed.

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.

Value to the Economy

The 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 considerably in the last decade.

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.

"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.

The terrorist attacks of 2001 also alerted the nation to the need for a new type of disaster response, incorporating the ability to assess and prepare for threats to the safety and security of water supplies, dams, and nuclear power plants. We also have come to recognize that manmade disasters can be larger in scale, longer in duration and pose more complex risks to individuals and communities than natural disasters.

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

Learn More

To learn more about the Corps emergency management efforts visit www.CorpsResults.us.

Produced by the U.S. Army Corps of Engineers: The Institute for Water Resources in partnership with the Headquarter Emergency Management Branch. To inquire about this brochure, please contact IWR publications office at (703)428-9042 or Arlene.J.Nurthen@usace.army.mil. To obtain sources for the information used in this brochure, visit www.CorpsResults.us.