

depiction Case Study



Muttshack Animal Rescue Animal Response Team

“We had to use boats to get to a flooding animal shelter north of Baton Rouge. The first thing I did was create a depiction for the area with a flood simulation. Then the city manager saw it and used for his streets, too. It gave them just enough information that they could do workarounds. Everyone was impressed. Depiction really came through for us.”



In September 2008, when Hurricane Gustav hit Louisiana, David Friedman, Disaster Response Coordinator for the Muttshack Animal Response Team, was faced with the challenge of coordinating the evacuation of 15,000 pets. He turned to Depiction mapping and simulation software to get it done.

When flying from his home in Washington State to the Emergency Operations Center in New Orleans, Friedman took about fifteen minutes to build a simulation of the situation. In the EOC, the depiction was shared over a wireless network, and updated with spreadsheets containing information such as shelter capacity and volunteer credentials.

When it came time for the evacuation itself, 15,000 animals were transferred into 133 refrigerated tractor trailers, each containing 94 cages and transport crates. Without access to the Internet, the Muttshack team had no immediate knowledge of road blockages. Using reports sent in over amateur radio frequencies, Friedman used Depiction’s ability to automatically recalculate routes around obstacles to coordinate transport between 19 different pickup points and sheltering in Shreveport.

In the city of Denaham Springs, Friedman assisted local authorities as floodwaters rose, running basic flood simulations using Depiction’s flood elements and elevation data from USGS. The results of these simulations helped identify roads, buildings and other locations at risk from flooding.

Overview

Profile

David Friedman is a Disaster Response Coordinator for the Muttshack Animal Response team, as well as a volunteer for the Red Cross and the ARES and RACES Amateur Radio emergency communications organizations.

Situation

The evacuation in the face of Hurricane Gustav was the largest evacuation in United States history, with more than 3 million people—and many of their pets—fleeing inland. Nearly 2 million of those evacuees were from south Louisiana. Overall, 34 parishes in the state were declared as disaster areas, and the winds of up to 115 mph caused 48 deaths in the US. After the thousands of pet deaths during Hurricane Katrina, special effort was put forth by organizations like Muttshack to prevent that from happening again.

Benefits

In preparation for the flooded conditions caused by Hurricane Gustav, Friedman used Depiction’s flood simulation elements to predict flood extend and respond accordingly. To plan evacuation routes in the face of multiple road blockages, Friedman used Depiction’s ability to automatically recalculate routes around obstacles.