

## Gulf Oil Spill Crisis

# Earth Networks Aids St. Bernard Parish with Weather Monitoring and Alerting to Protect Workers During Gulf Clean-Up

### BACKGROUND

Occupying an area of nearly 75 percent water, it is no surprise that St. Bernard Parish in southeastern Louisiana relies on the fishing industry. In a state that calls itself a “Sportman’s Paradise,” generations of families in St. Bernard Parish have made a living from harvesting the region’s fish, crab and shrimp, and the area counts on the recreational fishing industry.

The April 20, 2010 explosion of the BP Deepwater Horizon oil rig in the Gulf of Mexico would – at least temporarily – change this way of life. As more than 50,000 gallons of oil flowed each day into the fragile coastal wetlands of the area, St. Bernard Parish was quick to get involved and put its fishermen, as well as hundreds of contractors from BP and from across the country, to work laying miles of boom to contain the oil.

### CHALLENGES

Long days on the water during tropical storm season put the contractors, which totaled nearly 2,000 at the height of the clean-up efforts in St. Bernard, at serious risk. With little warning, storm systems bringing lightning and severe weather could sweep through the area, raising the possibility of injury or even death.

Further, to contain the oil spill, St. Bernard Parish was acutely aware of the need for the contractors to be out on the water and working as much as possible. False severe weather alerts would place operations at a standstill, idling work teams as precious seconds ticked away.

“One of the biggest challenges was when the weather changed, like when tropical storm Bonnie was coming into the area,” said John Rahaim, the deputy director for the St. Bernard Parish Office of Homeland Security and Emergency Preparedness. “You are in a Catch-22: Shut down too early and you lose time and work – but shut down too late, and you risk injuries and loss of life.”

Facing such an immense disaster mitigation project without sustaining injuries required a weather monitoring and alerting solution that would provide ample warning, while reducing or eliminating false alarms.

### SOLUTION

Just days after the oil spill, Rahaim was given the order to mobilize the St. Bernard Parish Mobile Command Center – a 35-foot special utility vehicle equipped with radio, satellite capabilities, and meeting room that would serve as the seat-of-command during the crisis. From this temporary outpost, Rahaim and Parish operations would assign workers, monitor clean-up activities, direct boom operations and coordinate efforts between BP and local parishes.

Weather, which proved to be an ongoing challenge, would be closely monitored by three St. Bernard Parish Oil Spill Command Centers located at Breton Sound Marina in Hopedale, Delacroix Island and Shell Beach. Each Command Center was equipped with an Earth Networks Weather Station. To track the approaching severe weather, personnel at all three Command Centers utilized StreamerRT, a web-based weather visualization tool.

StreamerRT combines live, hyper-local weather information from thousands of Earth Networks Weather Stations and public weather source information. Importantly, StreamerRT displays information from the WeatherBug Total Lightning Network™, which is the largest lightning detection network, for severe weather prediction and warning.

“Our first priority was to maintain safety,” explains Rahaim. “Before the oil spill crisis, we had been using Earth Networks for severe weather alerts and to monitor tidal surges and weather. In this particular situation, we used StreamerRT to track the weather and lightning.”

When personnel at one of the Command Centers saw severe weather approaching on StreamerRT, they would coordinate efforts to call in workers for the appropriate geographic areas. This enabled operations to continue in other parts of the Parish that were not in immediate danger from severe weather.

In addition, the tool also enabled St. Bernard to comply with OSHA standards, which require that workers must be called back whenever lightning appears within a six-mile radius. To ensure compliance, St. Bernard set StreamerRT to automatically issue an alert when lightning came within six miles. When lightning approached within this range, St. Bernard sounded sirens and contacted boats via radio.



### RESULTS

Although the underwater oil well had been capped 87 days after the crisis began, Rahaim and the operations team managed clean-up efforts until late November – nearly seven months. Throughout, the team accessed StreamerRT to keep on top of changing weather.

Fortunately, despite the thousands of hours of work put in by the contractors during the extensive and ongoing disaster mitigation effort, St. Bernard Parish had no injuries or incidents related to the weather. Says Rahaim, “For every weather event, StreamerRT was extremely helpful for the safety and health of the people involved in the clean-up effort.”

Since the crisis ended, Rahaim and his office have continued using Earth Networks and StreamerRT year round for monitoring severe weather and hurricanes. Says Rahaim, “We have found Earth Networks and StreamerRT to be user friendly and very accurate in its forecasting ability. Everyone was glad they had StreamerRT.”