



SCEMD



EMERGENCY OPERATIONS

OCTOBER 2016



Hurricane Matthew was a powerful storm, first forming off the Cape Verde islands on September 27, 2016. When the storm reached the Caribbean it had intensified to a Category 5 hurricane on October 1.

Matthew then made landfall in Cuba and Haiti causing tremendous damage and loss of life, especially in Haiti where nearly 900 were reported killed by the storm. Damages in Cuba and Haiti are estimated at \$2 billion.

After causing extensive damage in the Bahamas on October 6, Matthew moved along the East Coast of the United States for 36 hours finally making landfall in South Carolina on the morning of October 8.

County and state agency coordination in South Carolina increased as early as Friday, Sept. 30, 2016, when Hurricane Matthew intensified to a Category 2 Hurricane and was located about 520 miles southeast of Jamaica. When Matthew reached the eastern Caribbean, it rapidly intensified, with peak intensity on late Sept. 30 and early Oct. 1 as it reached Category 5 strength with sustained winds reaching 160 mph. From there, Matthew struck the Bahamas on Oct. 5-6 as a Category 3 and 4 hurricane. The southeast U.S. was impacted as it moved its way along the coasts of Florida, Georgia, South Carolina, and North Carolina. The official U.S. landfall was on Oct. 8 near McClellanville, S.C., as a Category 1 hurricane with 75 mph winds. On Oct. 9, Hurricane Matthew moved away from the U.S. coastline.

Coordination efforts during this time included twice-daily conference calls with all of the state's county emergency managers and state emergency support function staff. As the storm approached a point where large evacuation support functions were necessary, twice-daily conference calls with the Governor and select agency heads comprising the executive group were also conducted. As the storm arrived, FEMA headquarters conducted video teleconferences daily, and after the storm passed, U.S. Congressional conference calls were conducted daily.



South Carolina's State Emergency Operations Center fully activated by all agencies during the response to Hurricane Matthew.

The State Emergency Operations Center and SCEMD facility served as FEMA's Intermediate Operating Facility until a Federal Major Disaster Declaration was issued on Oct. 11. This designation triggered FEMA's and SCEMD's search and selection of a Joint Field Office in Blythewood, S.C., which officially opened on Friday, Oct. 21, 2016. A staffing plan was developed, and roughly 30 Division staff relocated to the JFO. Currently, SCEMD is seeking to hire at least 10 additional temporary grant personnel to assist with local coordination and support. FEMA staff and resources began arriving on Tuesday, Oct. 4 and continued to increase throughout the incident period, which ended as the last river moved out of flood stage on Monday, Oct. 30.

RECOVERY AFTER MATTHEW

SCEMD continues coordination with all disaster recovery partners in support of local recovery efforts for residents, local governments and private organizations to ensure that all recovery aid is available to everyone who is eligible throughout the state. The SCEMD Recovery Section began operations well before Hurricane Matthew's landfall by coordinating the disaster declaration process and providing necessary documentation to all counties statewide. SCEMD's private sector group processed more than 1,000 business requests for post-disaster reentry and provided daily updates to over 1100 commercial entities throughout the activation, response, and initial stages of recovery. Immediately following the storm, SCEMD deployed six damage assessment teams to survey the entire state and assist county emergency managers in determining eligibility for federal disaster recovery programs.

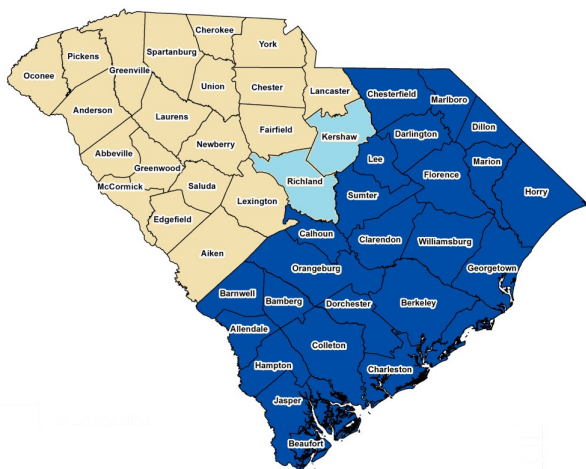


SCEMD recovery specialists conduct a site visit in Florence County to inspect damage caused by Hurricane Matthew.

SCEMD's Individual Assistance (IA) team has been instrumental in the opening of nearly two dozen disaster recovery centers with FEMA for residents throughout the state. The IA program has worked with the voluntary organizations statewide to help disaster survivors with finding solutions to any unmet needs following the storm. Individual Assistance staff continue to coordinate relief efforts with local long-term recovery groups, the state's crisis counseling teams and South Carolina's Disaster Case Management Program.

The Public Assistance program is currently working with more than 250 applicants for federal reimbursement for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain private non-profit organizations. Through the Public Assistance program, eligible applicants could be eligible for no less than 75 percent of certain costs resulting from Hurricane Matthew. SCEMD Public Assistance also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process. SCEMD's Public Assistance team supports this federal program by hosting applicant briefings, kick-off meetings, providing technical assistance and working long-term with each approved applicant.

Public Assistance & Individual Assistance Declarations



Federal disaster declarations for Public Assistance, Categories A-G, (governments and some private entities) have been made for the following counties:

Allendale, Bamberg, Barnwell, Beaufort, Berkeley, Calhoun, Charleston, Chesterfield, Clarendon, Colleton, Darlington, Dillon, Dorchester, Florence, Georgetown, Hampton, Horry, Jasper, Kershaw, Lee, Marion, Marlboro, Orangeburg, Richland, Sumter, and Williamsburg.

Once a county has been declared, the first step in receiving Public Assistance is to submit the Request for Public Assistance (RPA). RPAs must be filed within 30 days of the designation of the county as eligible for Public Assistance. SCEMD is working closely with FEMA to process requests for private property debris removal.

Federal disaster declarations for Individual Assistance (to individuals who have sustained losses due to the storm) have been made for Allendale, Bamberg, Barnwell, Beaufort, Berkeley, Calhoun, Charleston, Chesterfield,

Clarendon, Colleton, Darlington, Dillon, Dorchester, Florence, Georgetown, Hampton, Horry, Jasper, Lee, Marion, Marlboro, Orangeburg, Sumter, and Williamsburg.

Individual Assistance can include money for temporary rental assistance and essential home repairs for primary homes, low-cost loans to cover uninsured property losses and other programs to help survivors recover from the effects of the disaster.

PUBLIC INFORMATION



Governor Nikki Haley and agency leaders conducted ten emergency news conferences from the state Emergency Operations Center.

During the approach of Hurricane Matthew and in its aftermath, the state's emergency public information team maintained continuous engagement with residents through all multimedia resources available. In coordination with the Adjutant General's Office, the Governor's Office, the Federal Emergency Management Agency, and local governments, state public information officers coordinated media availabilities, published more than 66 media advisories, news releases and fact sheets to date.

SCEMD's website and social media channels became the central focal point for all agencies to share information with the media and residents. The site scemd.org received more than 6.7 million hits when the Governor announced the evacuation of zones along the entire coast. More than 84,000 people followed the Division's primary social channels, @SCEMD on Twitter and Facebook, with top

posts being viewed by more than 10 million people. More than 263,000 people downloaded the online version of the 2016 South Carolina Hurricane Guide.

The state's Public Information Phone System, or PIPS, was operational around the clock while the SEOC was activated. PIPS operators answered calls from more than 16,500 people with questions about the ongoing emergency.

LEGAL AFFAIRS

SCEMD, in conjunction with FEMA, coordinated and hosted eight "Procurement-During-Disaster" seminars around the state during the two weeks immediately following Hurricane Matthew. In addition, SCEMD Legal Affairs provided continuous updates to members of the State Legislature.

OPERATIONS SUPPORT & LOGISTICS



Relief supplies being loaded onto a National Guard vehicle at the SCEMD staging area in North, S.C.

- 817 total resource requests were made to the state Emergency Operations Center.
- 100,848 MREs distributed
- 3,900 tarps distributed
- 58 generators employed
- 21 missions were completed through the Emergency Management Assistance Compact (EMAC).
- 10 States supported S.C. through EMAC: NC, LA, TN, WA, MD, PA, AL, AK, KY, OH
- Total Estimated EMAC Cost: \$3,416,171
- Missions included: Army National Guard helicopter support, mass casualty bus, water rescue teams, incident management team, debris management and damage assessment expertise, and recovery assistance, to include both individual and public assistance support.

- Five contracts were activated for on-site support: Transportation, Disaster Technical Support and Generator Services, Recovery Personnel and Programmatic Expertise, Transportation Operational Management and an After-Action Review Team.
- One staging area was established and operated for 10 days. SCEMD co-located the staging area with FEMA at North Auxiliary Airfield in North, S.C. This staging area supported reception of the FEMA Alpha Pack, distribution of commodities, and served as the emergency generator operations maintenance and management site.

OPERATIONS SUPPORT & LOGISTICS CONT'D.



SCEMD Operations Support works with partner agencies to supply resources and maintain emergency operations facilities.

Communications

- SCEMD deployed three communications assets to provide internet and phone connectivity to two counties and the Town of Nichols.
- These assets gave EOCs the ability to communicate critical information and needs to SCEMD when normal communication systems were down during the hurricane.

Geographic Information Systems

- 73 total Geographic Information Systems products were created.
- 82 GIS maps were developed and distributed.
- Hosted over 1,200 Civil Air Patrol photos on ArcGIS Online and displayed in a WebApp.
- Hosted four days of NOAA Aerial Oblique Images on ArcGIS Online.

Information Technology

- SCEMD's website sustained unprecedented traffic, especially following the Governor's press conferences.
- During peak times, website traffic was approximately 100 times greater than experienced during the 2015 October Flood event.
- Peak usage was approximately 1.5 million hits per minute.
- SCEMD IT worked directly with FEMA and state vendors to stand up a fully functional JFO within a week's time. They provided internet, network connectivity, and print capability for over 40 SCEMD recovery employees. IT even provided for access control and movement of staff equipment.

Facilities

- SCEMD operated a functional State Emergency Operations Center for 16 days.
- Security was provided 24/7 by the State Guard and SC PRT.
- 6,297 total meals were served to SERT personnel who staffed the SEOC.



SCEMD's online resources became the central point for all internet communications during Hurricane Matthew.

FINANCE & ADMINISTRATION

The finance and procurement supporting operations ran smoothly for the response to Hurricane Matthew. According to plan, the S.C. Emergency Management Division initiated actions to put in place an internal order number for all state agencies to use to capture all costs associated with emergency operations. The Emergency Support Function Seven (ESF-7) was superbly staffed with procurement specialists from the State Fiscal Accountability Authority Materials Management Office. Fifty-four emergency resource requests were processed through ESF-7 resulting in purchase orders with vendors totaling over \$8.3 million. Purchase orders included: logistical operations contractor, mass transportation management, transportation functions, Meals Ready to Eat, water, tarps, pallets, sandbags, riprap, chainsaws, interpreter services, portalets, ice, and personnel support. SCEMD also used in-place blanket purchase orders for State Emergency Operations Center requirements for food, repairs, supplies, and janitorial services. Additionally, Emergency Management Assistance Compact missions and orders for federal resource requests made by the SCEMD Operations Support team resulted in state financial obligations.

Total Obligations:

SCEMD Response Purchase Orders	\$8,370,917.52
EMAC Approved Missions	\$3,416,171.63
Federal RRF's \$1,912,232,30 (25% State Share)	\$478,058.00
Other (SEOC Operations, Personnel overtime, travel, etc.)	\$208,588.17
TOTAL	\$12,473,735.32

THE SOUTH CAROLINA EMERGENCY OPERATIONS CENTER

TIMELINE OF EVENTS

Friday, Sept. 30: The events surrounding the preparation for and execution of operations in response to Hurricane Matthew began with telephonic coordination and discussions with key members of the State Emergency Response Team as early as Friday, Sept. 30, and continued through the weekend as the hurricane developed and strengthened. Twice-daily conference calls with counties for coordination and information sharing also began on Sept. 30.

Sunday, Oct. 2: The storm was recognized as a possible threat to the state, and the State Emergency Operations Center raised the threat level to OPGON 4 at 7 a.m. on Sunday, 2 October.

Monday, Oct. 3: The SEOC was initially staffed by selected ESFs; 1, 6, 8, 13, 16 and 19 and SCEMD staff on Monday, Oct. 3. This afforded increased opportunity for coordination and monitoring of the situation. A warning order for a full deployment of the Regional Emergency Managers to pre-prepositioned locations in the coastal and near-coastal counties was issued. The Oconee County director deployed to Beaufort County in support. The SEOC remained at OPGON 4 with selected staffing. Executive conference calls with the Governor and state agency leadership began. SEOC staff planning continued. Coordination with county personnel outside of the potential affected areas began in order to solicit volunteers for forward movement to assist in coastal counties. FEMA Region 4 Liaison Officer arrived.

Tuesday, Oct. 4: The Governor declared a State of Emergency, activating the Emergency Operations Plan, the National Guard and authorizing the Dual Service Commander. The potential threat to the State increased to the point that the SEOC was transitioned directly to OPGON 2 at 3 p.m. and increased staffing with the remainders of the ESFs. Planning was conducted in all support functions, with focus of life safety foremost; key issues were preparation for sheltering operations, evacuation of selected zones along the coastline, and operations support. The REMs deployed forward into coastal and near-coastal county EOCs. The Governor ordered schools to be closed in selected counties in support of shelter operations and the closure of state, county and municipal offices for non-essential personnel through Friday, Oct. 7. Additionally, as requested by the Department of Health and Environmental Control, she ordered the mandatory evacuation of certain health-care facilities from areas along the coast. Two-hundred-thirty-six regular school busses and 108 special-needs busses reported to the Charleston Area Convention Center at noon. This was for the mass evacuation of Charleston residents who lacked transportation. Twenty-four counties were in varying degrees of Operational Condition levels 1 through 4. FEMA's Incident Management Team arrived. The Edgefield County Emergency Management Director deployed to Dillon County in support.

Wednesday, Oct. 5: The Governor's Executive Order directed the evacuation of the Southern and Central Conglomerate counties. This included the first-ever lane reversal of Interstate 26 from Charleston to Columbia. The SEOC moved to OPGON 1 at noon. Thirty-seven shelters were reported open for 294 evacuees. More than 2,000 National Guardsmen were on duty in support of operations. Thirty counties were in varying degrees of operational state, ranging from OPGONs 1 through 4. FEMA support team and vehicles arrived.

Thursday, Oct. 6: The Governor's Executive Order directed the evacuation of the Northern Conglomerate counties and added two additional zones in Jasper and Colleton counties. Sixty-one shelters were reported open for 978 evacuees. More than 2,000 National Guardsmen continued in support of operations. Thirty-one counties were in an advanced operational state ranging OPGONs 1 through 4. The Federal Coordinating Officer arrived at SCEMD.

Friday, Oct. 7: State agencies anticipated I-26 lane reversal ending and the beginning of the termination of evacuation support. Seventy-four shelters were open with 3,209 evacuees. SEOC operations monitored actions and needs in counties, and planned for storm arrival and immediate actions post-storm.

Saturday, Oct. 8: Matthew made landfall between McClellanville and Georgetown. Some 6,637 evacuees were in 76 shelters, and 54 occupants were reported in nine Special Medical Needs shelters. More than 308,000 power outages were reported, and the number was expected to increase throughout the next few days. Responders and participants in evacuation support were all in positions of safety pending the diminishment of storm effects. The SEOC focused on life-safety issues, the preparation for immediate post-storm needs, and communications. ESF4/9 continued the prepositioning of assets outside of the impacted area, planning for Search and Rescue efforts with the Air Operations Branch, and coordination of support. Communications had been affected, causing several locations to be on generator power and disruptions in cell phone service.

Continued on page 6...

TIMELINE OF EVENTS CONTINUED

Saturday, Oct. 8 continued: ESF-2 continued to monitor the situation and provide updates on repairs. The SEOC remained in contact with counties. Eight counties or municipalities posted curfews. More than 2,400 National Guard members were committed to the operation. Interstate 95 was closed near the Georgia border due to debris.

Sunday, Oct. 9: Thirty-two counties were in an advanced operational states ranging from OPCONs 1 through 4, including 16 at OPCON 1. Some 5,043 occupants were in 75 shelters and 73 occupants were in eight Special Medical Needs Shelters. The highest number of power outages was reported as 861,700. The counties were conducting assessments of their situations and needs, and began reporting the results to ESFs. More than 500 roads were closed, including parts of I-95. Communication issues continued to be resolved. The SEOC remained in contact with counties through various means. DHEC began monitoring at least four dam failures or breaches. Seventeen counties or municipalities posted curfews. At the request of local officials, the Governor rescinded the evacuation order for Berkeley, Dorchester, Colleton, Charleston, Hampton, Jasper and Beaufort counties.

Monday, Oct. 10: Shelter numbers began to decline. Forty-two general population shelters were open with 2,184 evacuees. Forty-eight evacuees were reported in seven Special Medical Needs shelters. Eighteen counties had government office closings; 23 counties had school closings or delayed-openings. Power outages had decreased by approximately 50 percent and were now at 483,222. Three-hundred-sixty-one roads and 29 bridges were closed. The Town of Nichols in Marion County was a focus for ESF 4/9. The town had evacuated due to flooding. The ESF reports that there was no imminent life threat. DHEC monitored eight dam failures or breaches. Twenty-eight counties were at elevated OPCONs. Six counties or municipalities posted curfews. At the request of local officials, the Governor rescinded the evacuation order for Horry and Georgetown counties.

Tuesday, Oct. 11: Twenty-two counties had schools closed or with delayed openings, and eight counties had county government office closures. Sixteen counties were at elevated OPCONs. Thirty-nine occupants were in five Special Needs Medical Shelters and 819 in 22 general population shelters; shelter numbers continued to improve. Power outages continued to improve with a reports of 321,329. DHEC continued to monitor failures or breaches. There were four counties or municipalities with posted curfews. The President issued a Major Disaster Declaration.

Wednesday, Oct. 12: Twenty-two counties had schools closed or delayed, No county government offices were closed. Two locations had curfews. Fifteen counties were at elevated OPCONs. Shelter operations reported 13 general population shelters with 442 occupants and three Special Medical Needs Shelters with 43 occupants. ESF 1 reported 270 road and 29 bridge closures. ESF 2 reported continued communications issues being worked. ESF 12 reported power outages down to 120,791. The National Guard reported 1,752 soldiers active in support of operations. DHEC was monitoring eight dam failures or breaches. A Forestry Type II Incident Management Team was deployed to Dillon along with the Edgefield emergency manager, the Greenville deputy emergency manager and a REM to provide assistance. Marion County had the Chester deputy emergency manager and three REMs assigned, one specifically to the town of Nichols, which additionally had the Greenville County command vehicle and the Anderson County communications trailer. DHEC continued to monitor eight dam failures or breaches. One county reported a curfew.

Thursday, Oct. 13: Nineteen counties had schools closed or delayed. No government offices were closed, and two locations had curfews. Fifteen counties were at elevated OPCONs. Shelter operations reported 11 general population shelters with 378 occupants and four Special Medical Needs Shelters with 20 occupants. ESF 1 reported 270 road and 29 bridge closures. ESF 2 reported continued communications issues being worked. ESF 12 reported power outages down to 56,111. The National Guard reported 1,752 members active in support of operations. One county reported a curfew. Horry County reported an evacuation of the Bucksport Community due to flooding. Many counties were returning to a more normal status despite continuing recovery operations. The SEOC returned to OPCON 3 at 1 p.m.

Friday, Oct. 14: No counties reported schools closed or with delayed openings; no county government offices were reported closed or delayed; two locations reported curfews. Shelter operations reported 10 general population shelters with 237 occupants and 3 Special Medical Needs shelters with 11 occupants. ESF 1 reported 155 road and 27 bridge closures. ESF 12 reported power outages down to 43,000. The National Guard reported 1,557 currently active in support of operations. Seven counties were at elevated OPCONs. Enhanced staffing support existed in Marion County, with 3 REMs, (one in Nichols), the Edgefield emergency manager and the deputy emergency manager from Chester.

Saturday, Oct. 15: Shelter operations reported six general population shelters with 194 occupants and two Special Medical Needs Shelters with nine occupants. ESF 1 reported 155 road and 27 bridge closures. ESF 12 reported power outages down to 31,105. The National Guard reported 1,193 members active in support of operations. Seven counties were at elevated OPCONs. Enhanced staffing continued to support Marion County.

Continued on page 7...

TIMELINE OF EVENTS CONTINUED

Sunday, Oct. 16: The transition of counties to a more normal state of response afforded the SEOC the opportunity to return to OPGON 4 at 6 p.m. Seven counties were at an enhanced OPGON status. ESF 2 reported 8,469 power outages. Five shelters had 163 occupants and two Special Medical Needs Shelters had nine occupants. The National Guard reported 722 members in support of operations. DHEC continued to monitor eight dams. Two REMs (one in Nichols) supported Marion County, as did the York County emergency management director.

Tuesday, Oct. 18: The Governor declared a State of Emergency for affected counties under the Presidential Disaster Declaration following the expiration of the initial the State of Emergency. No county governments were closed, one school was closed and three schools were delayed. Three general population shelters had 162 occupants and one in the Special Medical Needs Shelter. ESF 12 reported 2,102 power outages. The curfew continued in Nichols.

Wednesday, Oct. 19: No county governments were closed, no schools were closed and one school was delayed. Three general population shelters had 165 occupants and 1 in the Special Medical Needs Shelter. ESF 12 reports 440 power outages. 4 counties in enhanced OPGON status.

Thursday, Oct. 20: No county governments were closed, no schools were closed or delayed. Two general population shelters had 170 occupants and one in the Special Medical Needs Shelter. ESF 12 reported 1,634 power outages, with the rise attributed to long-term repair actions. Two counties were in advanced OPGON status.

Friday, Oct. 21: Two general population shelters had 120 occupants and one in the Special Medical Needs Shelter. ESF 12 reported 323 power outages. Two counties were in advanced OPGON status. FEMA/SCEMD Joint Field Office becomes operational.

Saturday, Oct. 22, and Sunday, Oct. 23: The SEOC transitioned to Duty Officer and State Warning Point monitoring. No county EOCs were staffing overnight and were only minimally staffed during the day.

Monday, Oct. 24: The SEOC was staffed with selected SCEMD personnel and ESF 6. One general population shelter reported 108 occupants and one person was in the Special Medical Needs shelter. Two counties, Horry and Marion, were at OPGON 4. All EOCs were operating with limited staff during day-only normal operations and hours. The SEOC remained at OPGON 4. Power outages returned to normal range. Two shelters accommodated 108 people; one person was in the Special Medical Need shelter.

Tuesday, October 25: The Waccamaw River continued to recede but was still in major flood stage at 14.5 feet. The Little Pee Dee was out of major flood stage and was expected to drop to moderate flooding within five days. Two counties, Horry and Marion, remained at OPGON 4. The SEOC remained at OPGON 4 and was staffed with selected SCEMD personnel and ESF 6. One general population shelter had 92 occupants and one person was in the Special Medical Needs Shelter. Focus was on response operations in support of Marion County, in particular Nichols, on damage assessment, and on planning for temporary housing. REM liaisons remained in Marion, Nichols and Dillon counties

Thursday, Oct. 27: The SEOC continued staffing with selected SCEMD personnel and ESF 6. One general population shelter housed 108 occupants and one person was in the Special Medical Needs Shelter. The Waccamaw River near Conway moved to moderate flood stage on Oct. 26 was forecast to move from moderate to minor flood stage overnight Sunday, Oct. 30. The Little Pee Dee River near Galivants Ferry was at minor flood stage and forecast to transition below minor flood stage over the next 12 hours. Horry and Marion remained at OPGON 4. All other EOCs were operating during normal hours. The SEOC remained at OPGON 4. REM liaisons remained in Marion and Dillon counties as well as the Town of Nichols.

Friday, Oct. 28: The SEOC was staffed with selected SCEMD personnel and ESF 6. One general population shelter housed 108 occupants and one person was in the Special Medical Needs Shelter. The Waccamaw River was a moderate flood stage; the Little Pee Dee moved into action state (out of flood state, but above normal). Horry and Marion counties remained at OPGON 4. The SEOC remained at OPGON 4, with SCEMD and ESF-6 staffing. REM Liaisons were in Marion, Nichols and Dillon counties. One shelter housed 83; one special medical needs shelter housed one.

Saturday, Oct. 29 and Sunday, Oct. 30: The SEOC was staffed with selected SCEMD personnel and ESF 6. One general population shelter housed 108 occupants; one person was in the Special Medical Needs Shelter.

Monday, Oct. 31: Horry County returned to OPGON 5 at 8 a.m. In recognition of the counties returning to normal operational status, the SEOC returned to OPGON 5 at noon. Marion County reported no unmet needs.



The South Carolina Emergency Management Division, a division of the Adjutant General's Office, is the coordinating agency responsible for the statewide emergency management program.

SCEMD's mission is to develop, coordinate, and lead the state emergency management program, enabling effective preparation for, response to and recovery from emergencies and disasters in order to save lives, reduce human suffering and minimize property loss.

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