

BACKGROUND



30 SEPTEMBER
SC. GOV NIKKI HALEY AND
S.C. EMERGENCY
MANAGEMENT DIVISION
(SCEMD) MONITORING RAIN
SYSTEM PREDICTED OVER
CAROLINAS OCT 3-4 AND
HURRICANE JOAQUIN'S
UNCERTAIN PATH IN
BAHAMAS

1 OCTOBER
GOV. HALEY DECLARES STATE
OF EMERGENCY TO BE
PREPARED TO RESPOND TO
PROJECTED RAINS AND
FLOOD. S.C. NATIONAL
GUARD PREPOSITIONS
EQUIPMENT AND
PERSONNEL STATE-WIDE.

2 OCTOBER
SCNG C2 ESTABLISHED IN
CONGLOMERATES.
RAINS IMPACT LOW
COUNTRY AND PEE DEE
AREA.

3 OCTOBER
RAINS CONTINUE AND GET
HEAVIER, IMPACTING
MIDLANDS. FIRST COUNTY
MISSIONS TASKED. FEMA
DECLARES STATE OF
EMERGENCY

4 OCTOBER
RAINS CONTINUE AND BEGIN
IMPACTING UPSTATE.

5 OCTOBER
FEDERAL STATE OF
EMERGENCY DECLARED FOR
AFFECTED COUNTIES

5 OCTOBER
DUAL-STATUS COMMAND
AUTHORITY APPROVED BUT
NEVER EXECUTED

10-25 OCTOBER
EMAC AGREEMENT WITH
NCNG

SOUTH CAROLINA NATIONAL GUARD

FLOOD RESPONSE HIGHLIGHTS OCT 1-ONGOING

The Adjutant General for South Carolina, U.S. Army Maj. Gen. Robert E. Livingston, Jr. directs priorities and phases:

Priorities

Search and Rescue
Ground/ Air Extraction
Protection of Infrastructure
Emergency Restoration

Phases

Pre-Surge Activities

Establish LNOs and Pre-position response assets
Air/ Ground evacuation
Critical Infrastructure Protection
Shelter and Distribution Point Support

Immediate Response

Search and Rescue
Air/ Ground Evacuation/Extraction
Critical Infrastructure Protection
Shelter and Distribution Point Support
Security Operations

Post-Surge Activities

Damage Assessments
Critical Infrastructure Protection
Shelter and Distribution Point Support
Security Operations
Open Lines of Communication

Emergency Restoration

Damage Assessment
Hasty Repair
Open Lines of Communication

- 1) First county mission executed: 3 OCT, more than 390 S.C. National Guard Soldiers mobilized to fill and transport 13,500 sandbags to 8 counties.
- 2) On 4 OCT, 700 S.C. National Guard personnel including swift water rescue assets from VA, TN and GA prepositioned for life saving response.
- 3) Early Afternoon 4 OCT, S.C. Helicopter Aquatic Rescue Team (SC-HART) conducts 25 hoist rescues/lives saved in 4 hours in Midlands.
- 4) From OCT 3-14+, the S.C. Military Department executed flood response operations, **peaking between 8-11 OCT with over 4,100 personnel** on the ground.

Vehicle/Aircraft Assets used:

More than 300 LMTVs
More than 170 HMMWVs
9 UH-60 Black Hawks
3 LUH-72s
3 CH-47 Chinooks
4 Bridge boats
4 Fire Trucks

More than 150 pieces Engineer Equipment



SOUTH CAROLINA NATIONAL GUARD

FLOOD RESPONSE OCT 1-ONGOING 2015

MISSIONS

218TH MANEUVER

ENHANCEMENT BRIGADE

Wellness checks
High Water Transport
Traffic Control Points
Damage Assessments
Sandbag Support
Evacuation Support
Shelter Support
Water Storage
Assist Fire Department
Security
Logistics Transport
Emergency Road Repair

59TH TROOP COMMAND

Debris Clearance
Points of Distribution
Logistics Transport
Engineer Support
Water Storage
Water Purification
(ROWPU)
Rock and Sand hauling
Security Support
Sandbag Support
Ground Evacuations
High Water Transport
Firefighter Support
Traffic Control Points
Emergency Road Repair

228TH SIGNAL BRIGADE

Wellness checks
High Water Transport
Traffic Control Points
Damage Assessments
Evacuation Support
Shelter Support
Security Support

59TH AVIATION TROOP COMMAND

Helicopter Aquatic Rescue
Damage Assessments
Search and Rescue
Sling Load operations
Personnel Transport

STATE GUARD

Point of Distribution
Shelter Security
Infrastructure assessment
Engineer Support

S.C AIR NATIONAL GUARD

Air Operations Branch
Public Affairs Support
Plans and Operations
Logistics Support

130TH MANEUVER ENHANCEMENT BRIGADE

Emergency Road Repair
General Support

SOUTH CAROLINA NATIONAL GUARD RESPONSE STATISTICS TO DATE

- 28 lives saved by Helicopter Aquatic Rescue Teams
- 11 lives saved by boat rescue
- 170 lives saved by High Water Vehicle Transport
- More than 3,000 individuals evacuated using High Water Transport vehicles
- Nearly 1.8 million gallons of water purified to support 3 hospitals in Columbia, preventing patients from need to evacuate
- Responded to 77 Fire Calls with the City of Columbia
- 60,000 gallons water pumped from flooded downtown Columbia
- Transported 92,000 Red Cross Meals and MREs
- Transported 16,500 gallons bulk water
- Transported more than 70,000 bottles of water
- Transported 526,000 empty small sandbags
- Transported 80 pallets in support of operations
- Transported over 130,000 filled small sandbags to 15 counties
- Transported over 3,500 tons of raw sand
- Filled and transported 7,000 one-ton sandbags
- Manned 138 Traffic Control/Security Points
- Conducted over 2,000 Wellness Checks
- 19 Point of Distribution sites established for water and supply distribution
- Provided security for 5 shelters
- Assisted in 2 dam saves and inspected 10 dams
- Provided engineer assets and coordinated the response efforts in conjunction with the City of Columbia and FERC for the Columbia Canal repair
- Transported 35,000 tons of large rocks to Canal
- Provided security for Swift Boat assets at Fire Academy
- Sling-loaded 100 one-ton sandbags & construction equipment to Columbia canal
- Conducted more than 145 emergency road restoration missions to open roads that had been washed out by the floods in support of public safety and mobility
- 3-15OCT logged over 290 Army Aviation flight hours
- 282,236 miles from military vehicles tracked
- Conducted operations in 20 Counties (Berkley, Calhoun, Charleston, Colleton, Clarendon, Darlington, Dorchester, Florence, Greenwood, Greenville, Georgetown, Horry, Kershaw, Lee, Lexington, Marion, Newberry, Richland, Sumter, Williamsburg)
- To date more than 481 missions complete and more than 14 ongoing

“Many of us spoke of Hugo as a defining moment in our state’s history, when we demonstrated to our nation the resiliency of South Carolinians. There is no doubt generations will again speak of the strength, character and compassion South Carolinians have shown the world through this historic flood event. When your state called, you were ready . I could never be more proud of the level of response and commitment you have shown your communities.”

U.S. Army Maj. Gen. Robert E. Livingston, Jr.
The Adjutant General for South Carolina



SOUTH CAROLINA NATIONAL GUARD

FLOOD RESPONSE OCT 1-ONGOING 2015

Historic Event Significance

- Called "1,000 year flood"- Epic event
- 11 Trillion gallons of rain water impacted Carolinas (1-5 OCT)
- 19 Citizens lost their lives, mostly due to traffic accidents and flood water related incidents on roads.

City of Columbia Canal Operation

- Canal primarily used for controlled water supply to Water Treatment Facility for City of Columbia (30 MGD) and power generation
- Canal provides water for more than 80,000 people, with no real back up. The canal repair was a no fail mission.
- Levee constructed 1820s; headwater gates 1894 (Aged infrastructure)
- Levee breached 4 OCT 3.5 miles downstream of headwater gates
- Plans to construct Rock Dam upstream of levee breach
- Access to levee using aviation and dumping rock off 12th Street Bridge onto levee
- Over 16 agencies in response:
 - City of Columbia
 - South Carolina Electric and Gas (SCE&G)
 - S.C. Army National Guard
 - S.C. Air National Guard
 - N.C. Army National Guard
 - State Guard
 - S.C Department of Transportation
 - Columbia Police and Department of Public Safety
 - Chao and Associates
 - Khleinschmidt
 - McClam and Associates Inc.
 - D&J Machinery
 - FERC
 - Lockhart
 - Blanchard Mechanical
 - Patriot Construction
- 2,500 loads of rock and more than 35,000 tons of rock hauled from 5-12 OCT
- 560 1 ton rock bags filled by hand
- 600 1 ton sand bags filled
- Over 72,000 small sandbags filled
- Sandbags & temp frames blocked old headwater gates to reduce flowrate.
- Temporary pumps installed into river; multiple power distribution & data line on levee re-routed
- Canal closed Monday 12 OCT; crisis averted
- Water restrictions lifted 14 OCT

Total Estimated Cost: \$6.8M

- \$4.4M Personnel Cost
- \$997K Ground OPTEMPO
- \$1.4M Air OPTEMPO

Estimated Cost for Additional 30 Days (50 PAX for Road Repair and POD Operations): \$4.6M

When historic levels of rainfall and subsequent flooding affected the state of South Carolina in October 2015, more than 4,100 South Carolina National Guard Soldiers and Airmen, along with partnered agencies and support from the North Carolina National Guard, responded with life saving recovery efforts.



Gov. Nikki Haley declares a state of emergency Oct. 1 to prepare for projected historic amounts of rainfall to impact the state.



11 Lives were saved by boat rescue.



1.8 million gallons of water were purified and provided to support three hospitals in Columbia.



The South Carolina National Guard immediately responds. More than 130,000 filled sandbags were transported to needed areas.



28 Lives were saved by Helicopter Aquatic Rescue Teams.



170 lives saved and more than 3,000 evacuated by High Water Vehicle Transport.



More than 70,000 bottles of water were transported to 19 distribution points.



100 one-ton sandbags and equipment sling-loaded to the Columbia Canal.



138 Traffic Control and Security Points were staffed.



More than 7,000 one-ton filled sandbags were transported.



Engineer assets and construction support provided to the Columbia Canal project.



More than 125 emergency road repair missions conducted in affected counties.

16-357D – Fairfield Road – Clarendon County



BEFORE

AFTER

16-357A – Mill Branch Road – Clarendon County



16-304 – Gibbons Road – Clarendon County



BEFORE

AFTER

TF 130 / 16-295 – Tobias Road – Clarendon County



TF 130 / 16-327 – Dave Plowden Rd. – Clarendon County



BEFORE

AFTER

16-318 – River Road – Williamsburg County



TF 59 / 178 EN BN – Whitehouse Rd. – Richland County



BEFORE

AFTER