

POST TROPICAL CYCLONE REPORT...TROPICAL STORM GASTON...UPDATED
NATIONAL WEATHER SERVICE CHARLESTON SC
955 AM EDT FRI SEP 03 2004

TROPICAL DEPRESSION SEVEN WHICH LATER BECAME GASTON WAS FIRST IDENTIFIED DURING THE LATE AFTERNOON HOURS ON THE 27TH OF AUGUST. AT THAT TIME A TROPICAL STORM WATCH WAS ISSUED FROM SURF CITY NORTH CAROLINA TO FERNANDINA BEACH FLORIDA. THE DEPRESSION REMAINED NEARLY STATIONARY ABOUT 130 MILES SOUTHEAST OF CHARLESTON AND STRENGTHENED. THE DEPRESSION WAS UPGRADED TO TROPICAL STORM GASTON LATE IN THE MORNING ON THE 28TH. A TROPICAL STORM WARNING AND A HURRICANE WATCH WAS ISSUED LATE IN THE AFTERNOON HOURS ON THE 28TH FROM LITTLE RIVER INLET SOUTH CAROLINA TO THE SAVANNAH RIVER AS GASTON CONTINUED TO STRENGTHEN. DURING THE EVENING HOURS ON THE 28TH...GASTON STARTED MOVING SLOWLY NORTH NORTHWEST AND MADE LANDFALL NEAR BULLS BAY AROUND 930 AM ON AUGUST 29TH. GASTON MOVED SLOWLY NORTH NORTHWEST AFTER LANDFALL PRODUCING HEAVY RAINS AND STRONG WINDS.

THIS REPORT INCLUDES THE FOLLOWING COUNTIES IN SOUTH CAROLINA...
BERKELEY...CHARLESTON...DORCHESTER...COLLETON...BEAUFORT...
ALLENDALE...HAMPTON AND JASPER AND IN GEORGIA...CHATHAM...
EFFINGHAM...SCREVEN...JENKINS...BULLOCH...BRYAN...LIBERTY...
MCINTOSH...LONG...TATTNALL...EVANS AND CHANDLER.

A. HIGHEST WINDS...

OFFICIAL SITES...NWS OR FAA:

CHARLESTON SC AIRPORT (CHS)...

MAX 2 MINUTE 37 KT FROM 290 DEGREES AT 1457 UTC ON 8/29/04
PEAK WIND 48 KT FROM 290 DEGREES AT 1421 UTC ON 8/29/04

SAVANNAH GA AIRPORT (SAV)...

MAX 2 MINUTE 15 KT FROM 310 DEGREES AT 1802 UTC ON 8/29/04
PEAK WIND 19 KT FROM 330 DEGREES AT 1922 UTC ON 8/29/04

COASTAL WATERS:

NDBC 41004 EDISTO BUOY...

8 MINUTE AVG MISSING
PEAK WIND MISSING

NDBC 41008 GRAYS REEF BUOY...

8 MINUTE AVG 20 KT FROM 020 DEGREES AT 2250 UTC ON 8/28/04
PEAK WIND 23 KT FROM 020 DEGREES AT 2250 UTC ON 8/28/04

CMAN STATION:

FBIS1 FOLLY BEACH:

10 MIN AVG WIND 32 KT FROM 320 DEGREES AT 1200 UTC ON 8/29/04
PEAK WIND 44 KT FROM 320 DEGREES AT 1100 UTC ON 8/29/04

UNOFFICIAL SITES:

DOWNTOWN CHARLESTON SOUTH CAROLINA (CHL)...

SUSTAINED 10 MIN AVG 28 KT FROM 340 DEGREES AT 0818 UTC ON 8/29/04

PEAK WIND 42 KT FROM 290 DEGREES AT 1248 UTC ON 8/29/04

PINEVILLE SC...

10 MINUTE AVG 37 KT FROM 320 DEGREES AT 1820 UTC ON 8/29/04

PEAK WIND 51 KT FROM 320 DEGREES AT 1740Z ON 8/29/04

ISLE OF PALMS SC...

SUSTAINED WIND MISSING

PEAK WIND 70 KT FROM 270 DEGREES AT 1239Z UTC 8/29/04

B. LOWEST PRESSURE...

OFFICIAL SITES:

CHARLESTON SC AIRPORT (CHS)...999 MB (8/29 AT 1330 UTC)

SAVANNAH GA AIRPORT (SAV)...1010 MB (8/29 AT 0853 UTC)

NDBC 41004...996 MB (8/29 AT 0850 UTC)

NDBC 41008...1009 MB (8/29 AT 0950 UTC)

CMAN FBIS1...998 MB (8/29 AT 1200 UTC)

SABSOON TOWER (R2)...1003 MB (50 METER OB) 8/29 EST AT 0800 UTC

SOUTH CAPERS ISLAND...985 MB 8/29 AT 1400 UTC

UNOFFICIAL SITES:

ISLE OF PALMS SC...987 MB AT 1350 UTC ON 8/29/04

C. RAINFALL (00 UTC 8/29 TO 00 UTC 8/30 TOTAL)...

JAMESTOWN SC....7.05 INCHES

FORT MOULTRIE SC...5.05 INCHES

PINEVILLE SC...5.01 INCHES

DOWNTOWN CHARLESTON SC (CHL)... 4.63 INCHES

CHARLESTON SC AIRPORT (CHS)... 4.05 INCHES

D. STORM TIDES...

CHARLESTON HARBOR HIGHEST TIDE 7.03 FT MLLW AT 0000 UTC ON

8/29...APPROXIMATELY 1 FT STORM SURGE...WHICH OCCURRED THREE HOURS
AFTER HIGH TIDE.

SOUTH CAPERS ISLAND...NORTHERN CHARLESTON COUNTY...HIGHEST TIDE

UNKNOWN. HIGHEST DEPARTURE...APPROXIMATELY 2.00 AT 1400 UTC ON
8/28/04.

STORM SURGE ESTIMATED 4 TO 4.5 FEET IN BULLS BAY IN NORTHERN

CHARLESTON COUNTY...BASED ON NWS SURVEY.

E. BEACH EROSION...

FROM INFORMATION GATHERED AT THIS POINT...MINOR TO PERHAPS MODERATE
BEACH EROSION OCCURRED IN NORTHERN CHARLESTON COUNTY.

F. FLOODING...

THERE WAS MAJOR FLOODING ASSOCIATED WITH GASTON IN NORTHERN CHARLESTON COUNTY AND ESPECIALLY BERKELEY COUNTY. RADAR RAINFALL ESTIMATES INDICATED UP TO 10 INCHES OF RAIN FELL JUST SOUTHWEST OF THE TRACK OF GASTON ACROSS CHARLESTON COUNTY AND UP TO 8 TO 15 INCHES OF RAIN ACROSS NORTHERN AND EASTERN PORTIONS OF BERKELEY COUNTY. THERE WERE UNOFFICIAL REPORTS OF AROUND 13 INCHES OF RAIN IN BONNEAU AND AT LEAST 12 INCHES OF RAIN AT ST STEPHEN. IN BERKELEY COUNTY...20 STRUCTURES SUSTAINED MAJOR DAMAGE OR WERE DESTROYED BY FLOODING. DOZENS OF OTHER STRUCTURES SUSTAINED MINOR DAMAGE. IN ADDITION...THERE WERE NUMEROUS EVACUATIONS AND ROAD CLOSURES ACROSS NORTHERN PORTIONS OF BERKELEY COUNTY. IN NORTHERN CHARLESTON COUNTY...THE HEAVY RAIN RESULTED IN THE FLOODING OF SEVERAL HOMES AND BUSINESSES WITH SOME YARDS AND ROADS INUNDATED WITH UP TO 2 FEET OF WATER.

G. TORNADOES...

NONE

H. STORM EFFECTS...

NO MANDATORY EVACUATION ORDERS WERE ISSUED...HOWEVER VOLUNTARY EVACUATIONS WERE RECOMMENDED FOR THE BARRIER ISLANDS...LOW LYING AREAS...MOBILE HOMES...BEACH FRONT AREAS...AND AREAS PRONE TO FLOODING IN CHARLESTON COUNTY. IN BERKELEY...CHARLESTON...AND DORCHESTER COUNTIES...100 TO 200 PEOPLE STAYED IN THE SIX SHELTERS THAT WERE OPENED.

BECAUSE OF THE SLOW MOVEMENT...THE STRONG WINDS ASSOCIATED WITH GASTON LASTED FOR SEVERAL HOURS ACROSS CHARLESTON...BERKELEY...AND DORCHESTER COUNTIES...WITH THE MORE WIDESPREAD DAMAGE OCCURRING ALONG AND JUST SOUTHWEST OF THE TRACK OF GASTON THROUGH NORTHERN CHARLESTON COUNTY AS WELL AS NORTHERN AND EASTERN PORTIONS OF BERKELEY COUNTY.

THE WIND KNOCKED DOWN TREES OR LARGE LIMBS...RESULTING IN MAJOR DAMAGED OR THE DESTRUCTION OF ABOUT A EIGHT STRUCTURES IN CHARLESTON COUNTY. OVER 3000 STRUCTURES IN CHARLESTON...BERKELEY AND DORCHESTER COUNTIES SUSTAINED MINOR DAMAGE. DAMAGE TO STRUCTURES INCLUDED SHINGLES...SIDING AND GUTTERS AS WELL AS A FEW WINDOWS THAT WERE BROKEN OUT. TREES OR LARGE LIMBS FELL ON VEHICLES RESULTING IN MAJOR DAMAGE OR THE DESTRUCTION OF THE VEHICLE. IN ADDITION...THERE WAS DAMAGE TO POWER LINES...POWER POLES...FENCES...SIGNS... AND MAIL BOXES. THE AMOUNT OF TREE DEBRIS REMOVAL IN CHARLESTON COUNTY IS ESTIMATED AT 350 THOUSAND CUBIC YARDS. I

AT THE HEIGHT OF THE STORM...OVER 150,000 PEOPLE WERE WITHOUT POWER. ALTHOUGH SOME POWER OUTAGES OCCURRED IN DORCHESTER COUNTY...MOST OF THE POWER OUTAGES WERE ACROSS NORTHERN CHARLESTON AND NORTHERN AND EASTERN PORTIONS OF BERKELEY COUNTY.

TOTAL DAMAGE ESTIMATES INCLUDE ABOUT 7.6 MILLION DOLLARS IN CHARLESTON COUNTY AND ABOUT 9 MILLION DOLLARS IN BERKELEY COUNTY.

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RB/MTE