Storm Analysis
As of 05/29/2016 06:00 EDT, water levels from Georgia to Beaufort, NC are slightly elevated and range from 0.6 to 1.6 ft. above normal tide levels. Winds are steady at most stations across the region, with gusts ranging from 15 to 30 kts. Barometric pressure across the region has decreased in the last few hours.
Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst: CRD

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SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM BONNIE ADVISORY NUMBER 7
NWS NATIONAL HURRICANE CENTER MIAMI FL
500 AM EDT SUN MAY 29 2016

...BONNIE WEAKENS SLIGHTLY WHILE IT MOVES NORTHWARD...
...SIGNIFICANT RAINS AFFECTING MUCH OF EASTERN GEORGIA...SOUTH CAROLINA...AND SOUTHEASTERN NORTH CAROLINA...

SUMMARY OF 500 AM EDT INFORMATION
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LOCATION...32.1N 79.4W
ABOUT 60 MI... SE OF CHARLESTON SOUTH CAROLINA
ABOUT 115 MI...SSW OF MYRTLE BEACH SOUTH CAROLINA
MAXIMUM SUSTAINED WINDS...40 MPH
PRESENT MOVEMENT...N OR 360 DEGREES AT 8 MPH
MINIMUM CENTRAL PRESSURE...1009 MB

WATCHES AND WARNINGS
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CHANGES WITH THIS ADVISORY:

The Tropical Storm Warning has been discontinued from Edisto Beach South Carolina southwestward to the Savannah River.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm Warning is in effect for...
* East of Edisto Beach to Little River Inlet South Carolina

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area, in this case within the next 12 hours.

For storm information specific to your area, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office.

DISCUSSION AND 48-HOUR OUTLOOK

2
At 500 AM EDT, the center of Tropical Storm Bonnie was located near latitude 32.1 North, longitude 79.4 West. Bonnie is moving toward the north near 8 mph, and this general motion is expected to continue today. On the forecast track, the center of Bonnie is expected to move near the coast in the warning area later today. A slow northeastward motion near the central and northern coast of South Carolina is expected by tonight and on Monday.

Maximum sustained winds have decreased to near 40 mph with higher gusts. Little change in strength is forecast during the next 24 hours, followed by slow weakening on Monday.

Tropical-storm-force winds extend outward up to 45 miles, mainly to the northwest of the center.

The estimated minimum central pressure is 1009 mb.

HAZARDS AFFECTING LAND
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RAINFALL: Bonnie is expected to produce total rainfall accumulations of 2 to 4 inches with isolated maximum amounts of 6 inches from central and eastern South Carolina to the Georgia border, and 1 to 3 inches farther north across southeastern North Carolina. Heavy rain is expected to develop well north of Bonnie's main circulation into parts of the Mid-Atlantic region and the Northeast with total accumulations of 1 to 2 inches through Monday and isolated maximum amounts of 4 inches.

WIND: Tropical storm conditions are expected to reach the coast within the warning area later this morning or afternoon.

STORM SURGE: Storm surge inundation of 1 to 2 feet above ground level is possible within the tropical storm warning area during the next high tide this afternoon.

SURF: Bonnie is expected to produce life-threatening surf and rip current conditions along portions of the southeastern United States coast through the weekend. Please consult products from your local weather office.

TORNADOES: An isolated tornado is still possible through this afternoon over the immediate South Carolina coastal region.

NEXT ADVISORY
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Next intermediate advisory at 800 AM EDT.
Next complete advisory at 1100 AM EDT.

Forecaster Stewart
For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Charleston - Water Level, Charleston - Winds, Charleston - Barometric, Oyster Landing (N Inlet Estuary) - Water Level, Springmaid Pier - Water Level, Springmaid Pier - Winds, Wrightsville Beach - Water Level, Wrightsville Beach - Winds, Wilmington - Water Level, Wilmington - Barometric, Fort Pulaski - Water Level, Fort Pulaski - Winds, Beaufort - Water Level, Beaufort - Winds, Duck - Water Level, Duck - Winds
Last Observed Sample: 05/29/2016 05:48 (EDT). Data relative to MHHW
Historical Maximum Water Level: Sep 21 1989, 6.76 ft.
Next High Tide: 05/29/2016 14:22 (EDT), -0.63 ft.

Wind Speed: 5 knots Gusts: 8 knots Direction: 355° T
NOAA/NOS/CO-OPS 8665530 Charleston, SC

Barometric Pressure:

Last Observed Sample: 05/29/2016 05:48 (EDT)
Barometric Pressure: 1012.0 mb

NOAA/NOS/CO-OPS 8662245 Oyster Landing (N Inlet Estuary), SC

Preliminary Water Level, relative to Mean Higher High Water (MHHW):

Last Observed Sample: 05/29/2016 05:48 (EDT). Data relative to MHHW
Observed: -0.95 ft. Predicted: -2.49 ft. Residual: 1.54 ft.
Historical Maximum Water Level: Aug 26 2011, 2.40 ft.
Next High Tide: 05/29/2016 15:19 (EDT), -0.59 ft.
NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC

Preliminary Water Level, relative to Mean Higher High Water (MHHW)

Height in Feet (MHHW)

05/27 05/28 05/28 05/29 05/29 05/30
12:00 00:00 12:00 00:00 12:00 00:00

-6.0 -4.0 -2.0 0.0 2.0 4.0 6.0

Predicted Tide
Observed WL
(Ob-Pred)
MHHW

Last Observed Sample: 05/29/2016 05:48 (EDT).
Data relative to MHHW
Historical Maximum Water Level: Jan 1 1987, 3.65 ft.
Next High Tide: 05/29/2016 14:02 (EDT), -0.68 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC

Wind Speed / Gusts / Direction

speed  gusts  direction  +

Last Observed Sample: 05/29/2016 05:48 (EDT)
Wind Speed: 13 knots Gusts: 15 knots Direction: 32° T
Last Observed Sample: 05/29/2016 05:48 (EDT). Data relative to MHHW

**Observed:** -2.78 ft. **Predicted:** -3.47 ft. **Residual:** 0.69 ft.

**Historical Maximum Water Level:** Sep 25 2008, 2.81 ft.

**Next High Tide:** 05/29/2016 13:48 (EDT), -0.51 ft.

Last Observed Sample: 05/29/2016 05:48 (EDT)

**Wind Speed:** 11 knots  **Gusts:** 12 knots  **Direction:** 76° T
Last Observed Sample: 05/29/2016 05:48 (EDT). Data relative to MHHW
Observed: -0.45 ft. Predicted: -1.26 ft. Residual: 0.81 ft.
Next High Tide: 05/29/2016 16:03 (EDT), -0.42 ft.

Barometric Pressure: 1016.2 mb
LastObservedSample: 05/29/2016 05:42 (EDT). Data relative to MHHW

Next High Tide: 05/29/2016 14:40 (EDT), -0.62 ft.

Wind Speed: 17 knots 
Gusts: 20 knots 
Direction: 283° T
Last Observed Sample: 05/29/2016 05:42 (EDT). Data relative to MHHW

- Observed: -1.78 ft.
- Predicted: -2.42 ft.
- Residual: 0.64 ft.

Historical Maximum Water Level: Sep 14 2005, 3.01 ft.

Next High Tide: 05/29/2016 14:23 (EDT), -0.52 ft.

Last Observed Sample: 05/29/2016 05:42 (EDT)

- Wind Speed: 7 knots
- Gusts: 11 knots
- Direction: 96° T
Last Observed Sample: 05/29/2016 05:48 (EDT). Data relative to MHHW

Observed: -2.76 ft. Predicted: -2.91 ft. Residual: 0.15 ft.

Historical Maximum Water Level: Sep 18 2003, 4.13 ft.

Next High Tide: 05/29/2016 13:56 (EDT), -0.47 ft.

Last Observed Sample: 05/29/2016 05:48 (EDT)

Wind Speed: 6 knots Gusts: 7 knots Direction: 107° T
<table>
<thead>
<tr>
<th>Station ID</th>
<th>Station Name</th>
<th>Date/Time</th>
<th>Observed Water Level</th>
<th>Predicted Tide</th>
<th>Residual Water Level</th>
<th>24 Hour Maximum Storm Tide</th>
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<tr>
<td>8665530</td>
<td>Charleston, SC</td>
<td>05/29/2016 05:48 (EDT)</td>
<td>-2.40 ft</td>
<td>-3.69 ft</td>
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<td>-2.91 ft</td>
<td>0.15 ft</td>
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