POST TROPICAL CYCLONE REPORT

Storm Name Debby

NWS Office Wakefield, VA

Begin/End Date 08/07/2024-08/09-2024

Fatalities 0 - Direct

0 - Indirect

Tornadoes 1 confirmed so far

Event Summary

Tropical Cyclone Debby impacted the Wakefield CWA from 8/7-8/9 as it transitioned into a post tropical cyclone and tracked to the west of the local area. One tornado was confirmed just before 7 PM on 8/8 as a high-end EF-1 with 100-110 mph winds tracked across Lake Caroline. Cells continued to exhibit transient moderate rotation through the night and into the early morning of 8/9 (no additional confirmed tornadoes as of this writing).

In addition to the tornadoes, between 2 and 4 inches of rain (locally 5") fell across our portion of the VA Piedmont on 8/8, prompting a few Flash Flood Warnings from Farmville to Clarksville/South Hill. A nearly stationary band of very heavy rain set up across western portions of Prince Edward County between 11:30 PM and 1:30 AM (on 8/9). This produced another 3 to 5 inches of rain, so storm totals in that portion of the county ranged from 7-10" (which was verified by gages). Multiple roads were impassable, and there was a swift water rescue on route 608 near the Appomattox River west of Farmville.

Given the track of Debby, wind impacts were not as much as we have seen in the past with other transitioning tropical systems, but some trees were downed (especially in the Piedmont). Minor to locally moderate tidal flooding was observed across parts of the area (highest impacts were in Dorchester County where the tidal flooding stranded a couple of vehicles). Last but not least, several area rivers exceeded flood stage, and the Appomattox near Farmville crested close to 22 ft (which is above moderate flood stage).

NOTE: It is unlikely that the point-based observations provided in this report sampled the peak values for the event.

Highest 10 Land Winds (kts)*

| ingrest 10 Lana Winas (kts) | | | | |
|-----------------------------|-------|--------|-----------|------|
| Station | State | Туре | Sustained | Gust |
| Sandbridge | VA | WxFlow | 30 | 40 |
| New Point Comfort | VA | WxFlow | 26 | 35 |
| Rudee Inlet | VA | WxFlow | 24 | 29 |
| Poquoson | VA | WxFlow | 22 | 31 |

| Elizabeth City Cgas | NC | ASOS | 21 | 34 |
|-------------------------------|----|--------|----|----|
| Norfolk Intl Ap | VA | ASOS | 21 | 31 |
| Onancock | VA | WxFlow | 21 | 33 |
| Oceana Nas | VA | ASOS | 20 | 31 |
| Tangier Island | VA | | 19 | 29 |
| Wallops Is Nasa Test Facility | VA | ASOS | 19 | 26 |

^{*} Anemometer heights < 20 m

Highest 10 Marine Winds (kts)*

| Station | Туре | Sustained | Gust |
|--|--------------|-----------|------|
| Plantation Flats | WxFlow | 29 | 38 |
| 3rd Island | WxFlow | 29 | 40 |
| 8632200 - Kiptopeke VA | NOS | 28 | 38 |
| Silver Beach | WxFlow | 26 | 36 |
| First Landing VA | IOOS Partner | 25 | 31 |
| 8638511 - Dominion Terminal Associ | 25 | 35 | |
| Assateague South Point | WxFlow | 25 | 32 |
| Lafayette River | WxFlow | 24 | 34 |
| York Spit VA | IOOS Partner | 23 | 31 |
| 8638901 - Chesapeake Bay Bridge Tunr NOS | | 23 | 30 |

^{*} Anemometer heights < 20 m

Highest 10 Rainfall Totals

| Station | State | Туре | Inches |
|----------------|-------|----------|--------|
| Elam 1 SE | VA | Public | 9.61 |
| Five Forks 2 E | VA | Public | 7.50 |
| HEBRON 3.6 W | MD | CoCoRaHS | 3.95 |
| Blackwater | MD | RAWS | 3.71 |
| Toddville | MD | CWOP | 3.51 |
| Cambridge | MD | CWOP | 3.46 |
| Princess Anne | MD | CWOP | 3.41 |
| Powellville | MD | RAWS | 3.31 |
| Salisbury | MD | CWOP | 3.21 |
| Delmar 0.2 NE | MD | COCORAHS | 3.19 |

Highest NOAA Tide Gage Observations

| Station | State | Datum | Water Level (ft) |
|----------------|-------|-------|------------------|
| Cambridge | MD | MHHW | 1.86 |
| Lewisetta | VA | MHHW | 1.53 |
| Bishops Head | MD | MHHW | 1.51 |
| Windmill Point | VA | MHHW | 1.32 |

| Yorktown USCG Training Center | VA | MHHW | 1.17 |
|-------------------------------|----|------|------|
| Sewells Point | VA | MHHW | 0.94 |
| Money Point | VA | MHHW | 0.83 |
| Wachapreague | VA | MHHW | 0.70 |
| Ocean City Inlet | MD | MHHW | 0.66 |
| CBBT, Chesapeake Channel | VA | MHHW | 0.62 |

Lowest 10 Pressures

| Station | State | Туре | Millibars |
|------------------------|-------|--------|-----------|
| Chesapeake Light Tower | VA | WxFlow | 1005.3 |
| Blackstone | VA | ASOS | 1006.0 |
| 3rd Island | VA | WxFlow | 1006.2 |
| New Point Comfort | VA | WxFlow | 1007.1 |
| Plantation Flats | VA | WxFlow | 1007.2 |
| Creeds | VA | WxFlow | 1007.5 |
| Lafayette River | VA | WxFlow | 1007.6 |
| Poquoson | VA | WxFlow | 1007.6 |
| Silver Beach | VA | WxFlow | 1007.7 |
| Wakefield Muni Ap | VA | ASOS | 1007.9 |

Report Last Updated on 08/11/2024:

Preliminary PSH complete for Debby