

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>ATLANTIC NORTH</b>				
<b>TANGIER SOUND AND THE INLAND WATERS SURROUNDING BLOODSWORTH ISLAND COUNTY --- CRISFIELD CG (CRS) [37.97, -75.88]</b>				
	07/01/16 09:59 EST	0		Marine Thunderstorm Wind (MG 68 kt)
	07/01/16 10:14 EST	0		Source: Buoy
Wind gusts of 38 to 68 knots were reported at Crisfield.				
<b>TANGIER SOUND AND THE INLAND WATERS SURROUNDING BLOODSWORTH ISLAND COUNTY --- CRISFIELD CG (CRS) [37.97, -75.88]</b>				
	07/01/16 14:29 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/01/16 14:29 EST	0		Source: Buoy
A wind gust in excess of 30 knots was reported at Crisfield.				
<b>TANGIER SOUND AND THE INLAND WATERS SURROUNDING BLOODSWORTH ISLAND COUNTY --- CRISFIELD CG (CRS) [37.97, -75.88]</b>				
	07/01/16 14:48 EST	0		Marine Thunderstorm Wind (MG 35 kt)
	07/01/16 14:54 EST	0		Source: Buoy
Wind gusts up to 35 knots were measured at Crisfield.				
<b>CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- TOLCHESTER MD (TCBM2) [39.32, -76.25]</b>				
	07/01/16 16:30 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/01/16 16:30 EST	0		Source: Mesonet
A wind gust in excess of 30 knots was Tolchester.				
<b>CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- PATAPSCO BUOY (44043) [39.15, -76.39]</b>				
	07/01/16 16:50 EST	0		Marine Thunderstorm Wind (MG 37 kt)
	07/01/16 16:50 EST	0		Source: Buoy
A wind gust of 37 knots was reported at the Patapsco Buoy.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- TOLLY POINT (TOL) [38.94, -76.44]</b>				
	07/01/16 17:11 EST	0		Marine Thunderstorm Wind (MG 36 kt)
	07/01/16 17:46 EST	0		Source: Mesonet
Wind gusts up to 36 knots were reported at Tolly Point.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- 0.5 E GREENBERRY POINT (GBY) [38.97, -76.45]</b>				
	07/01/16 17:20 EST	0		Marine Thunderstorm Wind (MG 36 kt)
	07/01/16 17:30 EST	0		Source: Buoy
Wind gusts up to 36 knots were reported at the Annapolis Buoy and also Greenberry Point.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- SANDY POINT (SPT) [39.01, -76.40]</b>				
	07/01/16 17:31 EST	0		Marine Thunderstorm Wind (MG 36 kt)
	07/01/16 17:41 EST	0		Source: Buoy
Wind gusts of 34 to 36 knots were reported at Sandy Point.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- THOMAS POINT (TPLM2) [38.90, -76.44]</b>				
	07/01/16 17:55 EST	0		Marine Thunderstorm Wind (MG 39 kt)
	07/01/16 17:55 EST	0		Source: Buoy
A wind gust of 39 knots was reported at Thomas Point Lighthouse.				
<b>CHESAPEAKE BAY N BEACH TO DRUM PT MD COUNTY --- GOOSES REEF BUOY (44062) [38.56, -76.41]</b>				
	07/01/16 19:30 EST	0		Marine Thunderstorm Wind (MG 35 kt)
	07/01/16 19:30 EST	0		Source: Buoy
A wind gust of 35 knots was reported Gooses Reef.				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>CHESAPEAKE BAY N BEACH TO DRUM PT MD COUNTY --- 3.1 N ROD N REEL CHESAPEAKE BEACH (CHSRL) [38.73, -76.54]</b>				
	07/01/16 21:35 EST		0	Marine Thunderstorm Wind (MG 65 kt)
	07/01/16 21:45 EST		0	Source: Buoy
Wind gusts of 38 to 65 knots were reported at Herring Bay.				
<b>A cold front passed through the area on July 1st. A southerly flow ahead of the boundary caused warm and humid air in place, which led to an unstable atmosphere. The instability combined with lift from the cold front caused thunderstorms to develop. Some thunderstorms produced gusty winds due to stronger sheer profiles from an upper-level trough overhead along with the unstable atmosphere.</b>				
<b>TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- MONROE CREEK (MON) [38.23, -76.95]</b>				
	07/04/16 17:32 EST		0	Marine Thunderstorm Wind (MG 34 kt)
	07/04/16 17:32 EST		0	Source: Buoy
A wind gust of 34 knots was reported at Monroe Creek.				
<b>An isolated thunderstorm produced gusty winds.</b>				
<b>TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- 1.5 E BABAR POINT (BAB) [38.31, -77.00]</b>				
	07/08/16 17:20 EST		0	Marine Thunderstorm Wind (MG 37 kt)
	07/08/16 17:20 EST		0	Source: Mesonet
A wind gust of 37 knots was reported at Pylons.				
<b>TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- POTOMAC LIGHT 33 (LT3) [38.34, -76.99]</b>				
	07/08/16 17:20 EST		0	Marine Thunderstorm Wind (MG 42 kt)
	07/08/16 17:25 EST		0	Source: Buoy
Wind gusts of 36 to 42 knots were reported at Potomac Lighthouse.				
<b>TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- CUCKOLD CREEK (CCK) [38.31, -76.93]</b>				
	07/08/16 17:24 EST		0	Marine Thunderstorm Wind (MG 39 kt)
	07/08/16 17:29 EST		0	Source: Buoy
Wind gusts up to 39 knots were reported at Cuckold Creek.				
<b>A cold front passed through the area triggering a few showers and thunderstorms. A few thunderstorms produced gusty winds.</b>				
<b>TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- 3.3 ESE LEESYLVANIA STATE PARK (LSLVN) [38.64, -77.20]</b>				
	07/09/16 15:15 EST		0	Marine Thunderstorm Wind (MG 37 kt)
	07/09/16 15:20 EST		0	Source: Mesonet
Wind gusts up to 37 knots were reported at Occoquan.				
<b>TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- QUANTICO (KNYG) [38.51, -77.30]</b>				
	07/09/16 15:57 EST		0	Marine Thunderstorm Wind (MG 51 kt)
	07/09/16 15:59 EST		0	Source: AWOS
Wind gusts of 34 to 51 knots were reported at Quantico.				
<b>CHESAPEAKE BAY N BEACH TO DRUM PT MD COUNTY --- GOOSSES REEF BUOY (44062) [38.56, -76.41]</b>				
	07/09/16 16:50 EST		0	Marine Thunderstorm Wind (MG 37 kt)
	07/09/16 17:00 EST		0	Source: Buoy
Wind gusts of 35 to 37 knots were reported at Gooses Reef.				
<b>TANGIER SOUND AND THE INLAND WATERS SURROUNDING BLOODSWORTH ISLAND COUNTY --- RACCOON POINT (RAC) [38.14, -75.79]</b>				
	07/09/16 18:59 EST		0	Marine Thunderstorm Wind (MG 39 kt)
	07/09/16 19:04 EST		0	Source: Buoy
Wind gusts of 36 to 39 knots were reported at Raccoon Point.				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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A cold front passed through the area triggering a few showers and thunderstorms. A few thunderstorms produced gusty winds.

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**TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- QUANTICO (KNYG) [38.51, -77.30]**

07/16/16 16:47 EST			0	Marine Thunderstorm Wind (MG 41 kt)
07/16/16 17:02 EST			0	Source: AWOS

Wind gusts of 38 to 41 knots were reported at Quantico.

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**TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- 0.3 SE UPPER POTOMAC BUOY (44061) [38.79, -77.04]**

07/16/16 17:00 EST			0	Marine Thunderstorm Wind (MG 35 kt)
07/16/16 17:00 EST			0	Source: Buoy

A wind gust of 35 knots was reported.

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**CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- HART MILLER ISLAND (HRT) [39.25, -76.37]**

07/16/16 17:08 EST			0	Marine Thunderstorm Wind (MG 39 kt)
07/16/16 17:08 EST			0	Source: Buoy

A wind gust of 39 knots was reported at Hart Miller Island.

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**CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- PATAPSCO BUOY (44043) [39.15, -76.39]**

07/16/16 17:10 EST			0	Marine Thunderstorm Wind (MG 47 kt)
07/16/16 17:30 EST			0	Source: Buoy

Wind gusts up to 47 knots were reported at the Patapsco Buoy.

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**TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- 1.5 E BABAR POINT (BAB) [38.31, -77.00]**

07/16/16 17:25 EST			0	Marine Thunderstorm Wind (EG 34 kt)
07/16/16 17:25 EST			0	Source: Mesonet

Wind gusts in excess of 30 knots were reported at Pylons.

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**TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- 1.5 E BABAR POINT (BAB) [38.31, -77.00]**

07/16/16 17:29 EST			0	Marine Thunderstorm Wind (EG 34 kt)
07/16/16 17:29 EST			0	Source: Mesonet

A wind gust in excess of 30 knots was reported at Pylons.

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**CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- TOLCHESTER MD (TCBM2) [39.32, -76.25]**

07/16/16 17:36 EST			0	Marine Thunderstorm Wind (MG 40 kt)
07/16/16 17:42 EST			0	Source: Buoy

Wind gusts of 37 to 40 knots were reported at Tolchester Beach.

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**CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- TOLLY POINT (TOL) [38.94, -76.44]**

07/16/16 17:36 EST			0	Marine Thunderstorm Wind (MG 36 kt)
07/16/16 17:56 EST			0	Source: Buoy

Wind gusts up to 36 knots were reported at Tolly Point.

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**TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- POTOMAC LIGHT 33 (LT3) [38.34, -76.99]**

07/16/16 17:40 EST			0	Marine Thunderstorm Wind (EG 34 kt)
07/16/16 17:40 EST			0	Source: Mesonet

Wind gusts in excess of 30 knots were reported at the Potomac Lighthouse.

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**CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- GUNPOWDER (GUN) [39.36, -76.37]**

07/16/16 17:44 EST			0	Marine Thunderstorm Wind (EG 34 kt)
07/16/16 17:44 EST			0	Source: Buoy

Wind gusts in excess of 30 knots were reported at Gunpowder.

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- GREENBERRY POINT (GBY) [38.97, -76.46]</b>				
	07/16/16 17:44 EST	0		Marine Thunderstorm Wind (MG 35 kt)
	07/16/16 17:44 EST	0		Source: Buoy
Wind gusts up to 35 knots were reported at Greenbury Point.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- THOMAS POINT (TPLM2) [38.90, -76.44]</b>				
	07/16/16 17:45 EST	0		Marine Thunderstorm Wind (MG 34 kt)
	07/16/16 17:45 EST	0		Source: Buoy
A wind gust of 34 knots was reported at Thomas Point Lighthouse.				
<b>Southerly flow ushered in hot and humid conditions around high pressure centered in the Atlantic. High amounts of instability led to some thunderstorms, and some were severe with strong winds.</b>				
<b>PATAPSCO RIVER INCLUDING BALTIMORE HARBOR COUNTY --- BALTIMORE (BLTM2) [39.27, -76.58]</b>				
	07/18/16 15:09 EST	0		Marine Thunderstorm Wind (MG 35 kt)
	07/18/16 15:19 EST	0		Source: Buoy
Wind gusts up to 35 knots were reported at the Baltimore Key Bridge.				
<b>CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- GUNPOWDER (GUN) [39.36, -76.37]</b>				
	07/18/16 15:14 EST	0		Marine Thunderstorm Wind (MG 41 kt)
	07/18/16 15:34 EST	0		Source: Buoy
Wind gusts of 34 to 41 knots were reported at Gunpowder.				
<b>CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- TOLCHESTER MD (TCBM2) [39.32, -76.25]</b>				
	07/18/16 15:18 EST	0		Marine Thunderstorm Wind (MG 39 kt)
	07/18/16 15:18 EST	0		Source: Buoy
A wind gust of 39 knots was reported at Tolchester Beach.				
<b>PATAPSCO RIVER INCLUDING BALTIMORE HARBOR COUNTY --- BALTIMORE KEY BRIDGE (FSKM2) [39.22, -76.53]</b>				
	07/18/16 15:18 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/18/16 15:18 EST	0		Source: Buoy
Wind gusts in excess of 30 knots were reported at the Key Bridge.				
<b>TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- 0.2 NNW WASHINGTON DC (WASD2) [38.87, -77.02]</b>				
	07/18/16 15:18 EST	0		Marine Thunderstorm Wind (MG 37 kt)
	07/18/16 15:30 EST	0		Source: Mesonet
Wind gusts up to 37 knots were reported.				
<b>TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- QUANTICO (KNYG) [38.51, -77.30]</b>				
	07/18/16 15:19 EST	0		Marine Thunderstorm Wind (MG 48 kt)
	07/18/16 15:19 EST	0		Source: AWOS
A wind gust of 48 knots was reported at Quantico.				
<b>CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- (KMTN)MARTIN STATE AIRPORT [39.33, -76.42]</b>				
	07/18/16 15:20 EST	0		Marine Thunderstorm Wind (MG 35 kt)
	07/18/16 15:20 EST	0		Source: AWOS
A wind gust of 35 knots was reported at Martin State.				
<b>TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- 3.3 ESE LEESYLVANIA STATE PARK (LSLVN) [38.64, -77.20]</b>				
	07/18/16 15:20 EST	0		Marine Thunderstorm Wind (MG 38 kt)
	07/18/16 15:25 EST	0		Source: Mesonet
Wind gusts up to 38 knots were reported at Occoquan.				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- (DCA)REAGAN NATIONAL AIRPORT [38.86, -77.03]</b>				
	07/18/16 15:20 EST	0		Marine Thunderstorm Wind (MG 40 kt)
	07/18/16 15:34 EST	0		Source: ASOS
Wind gusts up to 40 knots were reported at Reagan National.				
<b>CHESAPEAKE BAY N OF POOLES IS MD COUNTY --- GROVE POINT (GVP) [39.40, -76.04]</b>				
	07/18/16 15:30 EST	0		Marine Thunderstorm Wind (MG 35 kt)
	07/18/16 15:30 EST	0		Source: Mesonet
Wind gusts up to 35 knots were reported at Grove Point.				
<b>TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- 0.3 SE UPPER POTOMAC BUOY (44061) [38.79, -77.04]</b>				
	07/18/16 15:30 EST	0		Marine Thunderstorm Wind (MG 41 kt)
	07/18/16 15:40 EST	0		Source: Buoy
Wind gusts up to 41 knots were reported at the Upper Potomac Buoy.				
<b>TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- BABAR POINT (BAB) [38.31, -77.03]</b>				
	07/18/16 15:40 EST	0		Marine Thunderstorm Wind (MG 45 kt)
	07/18/16 15:55 EST	0		Source: Buoy
Wind gusts up to 45 knots were reported at Baber Point.				
<b>TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- POTOMAC LIGHT 33 (LT3) [38.34, -76.99]</b>				
	07/18/16 15:50 EST	0		Marine Thunderstorm Wind (MG 45 kt)
	07/18/16 16:00 EST	0		Source: Mesonet
Wind gusts of 36 to 45 knots were reported.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- TOLLY POINT (TOL) [38.94, -76.44]</b>				
	07/18/16 16:01 EST	0		Marine Thunderstorm Wind (MG 35 kt)
	07/18/16 16:06 EST	0		Source: Buoy
A wind gust of 35 knots was reported at Tolly Point.				
<b>CHESAPEAKE BAY N BEACH TO DRUM PT MD COUNTY --- ROD N REEL CHESAPEAKE BEACH (CHSRL) [38.69, -76.53]</b>				
	07/18/16 16:05 EST	0		Marine Thunderstorm Wind (MG 38 kt)
	07/18/16 16:05 EST	0		Source: Mesonet
A wind gust of 38 knots was reported at Chrisfield.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- HERRING BAY (HRB) [38.73, -76.54]</b>				
	07/18/16 16:05 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/18/16 16:20 EST	0		Source: Buoy
Wind gusts in excess of 30 knots were reported at Herring Bay.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- THOMAS POINT (TPLM2) [38.90, -76.44]</b>				
	07/18/16 16:05 EST	0		Marine Thunderstorm Wind (MG 40 kt)
	07/18/16 16:05 EST	0		Source: Buoy
A wind gust of 40 knots was reported at Thomas Point.				
<b>EASTERN BAY COUNTY --- 3.2 SSE STEVENSVILLE (D2030) [38.92, -76.28]</b>				
	07/18/16 16:11 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/18/16 16:11 EST	0		Source: Mesonet
Wind gusts in excess of 30 knots were reported at Crab Alley Bay.				
<b>CHOPTANK RIVER TO CAMBRIDGE MD AND THE LITTLE CHOPTANK RIVER COUNTY --- BLACKWALNUT HARBOR (BWH) [38.68, -76.33]</b>				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/18/16 16:15 EST		0	Marine Thunderstorm Wind (MG 35 kt)
	07/18/16 16:30 EST		0	Source: Buoy

Wind gusts up to 35 knots were reported at Black Walnut Harbor.

<b>CHESAPEAKE BAY N BEACH TO DRUM PT MD COUNTY --- GOOSSES REEF BUOY (44062) [38.56, -76.41]</b>				
	07/18/16 16:20 EST		0	Marine Thunderstorm Wind (MG 43 kt)
	07/18/16 16:40 EST		0	Source: Buoy

A wind gust of 43 knots was reported at Gooses Reef.

<b>EASTERN BAY COUNTY --- 1.5 WNW US-50 (MD040) [38.98, -76.28]</b>				
	07/18/16 16:25 EST		0	Marine Thunderstorm Wind (MG 37 kt)
	07/18/16 16:25 EST		0	Source: Mesonet

A wind gust of 37 knots was measured at Chesterhaven.

<b>TIDAL POTOMAC COBB IS MD TO SMITH PT VA COUNTY --- PINEY POINT (PPTM2) [38.13, -76.53]</b>				
	07/18/16 16:30 EST		0	Marine Thunderstorm Wind (MG 38 kt)
	07/18/16 16:42 EST		0	Source: Buoy

A wind gust of 38 knots was reported at Piney Point.

<b>CHESAPEAKE BAY DRUM PT TO SMITH PT VA COUNTY --- 3.4 SE SOLOMONS ISLAND (SLIM2) [38.29, -76.40]</b>				
	07/18/16 16:42 EST		0	Marine Thunderstorm Wind (MG 37 kt)
	07/18/16 16:42 EST		0	Source: AWOS

A wind gust of 37 knots was reported at Patuxent River.

<b>CHESAPEAKE BAY DRUM PT TO SMITH PT VA COUNTY --- POINT LOOKOUT (PTL) [38.04, -76.32]</b>				
	07/18/16 16:55 EST		0	Marine Thunderstorm Wind (MG 37 kt)
	07/18/16 16:55 EST		0	Source: Buoy

A wind gust of 37 knots was reported at Point Lookout.

<b>TIDAL POTOMAC COBB IS MD TO SMITH PT VA COUNTY --- POTOMAC POINT LOOKOUT BUOY (44042) [38.03, -76.34]</b>				
	07/18/16 17:00 EST		0	Marine Thunderstorm Wind (EG 34 kt)
	07/18/16 17:10 EST		0	Source: Buoy

A wind gust in excess of 30 knots was reported at Point Lookout.

<b>TANGIER SOUND AND THE INLAND WATERS SURROUNDING BLOODSWORTH ISLAND COUNTY --- RACCOON POINT (RAC) [38.14, -75.79]</b>				
	07/18/16 17:44 EST		0	Marine Thunderstorm Wind (EG 34 kt)
	07/18/16 17:44 EST		0	Source: Buoy

A wind gust in excess of 30 knots was reported Raccoon Point.

**A cold front passed through the area. Ahead of the front, hot and humid conditions led to an unstable atmosphere. The forcing from the cold front combined with the instability to trigger thunderstorms. Stronger shear from an upper-level trough caused some thunderstorms to produce gusty winds.**

<b>TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- 1.1 NNW GEORGE WASHINGTON UNIVERSITY (GWUNI) [38.91, -77.05]</b>				
	07/19/16 21:55 EST		0	Marine Thunderstorm Wind (MG 40 kt)
	07/19/16 21:59 EST		0	Source: Mesonet

Wind gusts up to 40 knots were reported.

<b>TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- 0.5 SSE GEORGE WASHINGTON UNIVERSITY (GWUNI) [38.89, -77.04]</b>				
	07/19/16 21:59 EST		0	Marine Thunderstorm Wind (MG 45 kt)
	07/19/16 21:59 EST		0	Source: Mesonet

Wind gusts up to 45 knots were reported at the Ellipse.

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- (DCA)REAGAN NATIONAL AIRPORT [38.86, -77.03]</b>				
	07/19/16 22:04 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/19/16 22:09 EST	0		Source: ASOS
Wind gusts in excess of 30 knots were reported at Reagan National.				
<b>TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- NATIONALS PARK (WSHNP) [38.87, -77.01]</b>				
	07/19/16 22:04 EST	0		Marine Hail (1.00 in)
	07/19/16 22:09 EST	0		Source: Public
Quarter sized hail was reported.				
<b>TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- 0.7 ESE NATIONALS PARK (WSHNP) [38.87, -77.00]</b>				
	07/19/16 22:08 EST	0		Marine Hail (0.88 in)
	07/19/16 22:08 EST	0		Source: Public
Nickel sized hail was reported.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- GREENBERRY POINT (GBY) [38.97, -76.46]</b>				
	07/19/16 22:10 EST	0		Marine Thunderstorm Wind (MG 40 kt)
	07/19/16 22:49 EST	0		Source: Buoy
Wind gusts of 40 knots were reported at Greenbury Point.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- TOLLY POINT (TOL) [38.94, -76.44]</b>				
	07/19/16 22:11 EST	0		Marine Thunderstorm Wind (MG 40 kt)
	07/19/16 22:16 EST	0		Source: Buoy
Wind gusts of 40 knots were reported at Tolly Point.				
<b>TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- 0.7 SSW PEPSCO (PEPCO) [38.89, -77.02]</b>				
	07/19/16 22:40 EST	0		Marine Thunderstorm Wind (EG 50 kt)
	07/19/16 22:40 EST	0		Source: Unknown
Wind gusts up to 50 knots were estimated based on thunderstorm wind damage nearby.				
<b>CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- PATAPSCO BUOY (44043) [39.15, -76.39]</b>				
	07/19/16 23:40 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/19/16 23:40 EST	0		Source: Buoy
Wind gust in excess of 30 knots was reported at the Patapsco Buoy.				
<b>TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- UPPER POTOMAC BUOY (44061) [38.79, -77.04]</b>				
	07/19/16 23:40 EST	0		Marine Thunderstorm Wind (MG 37 kt)
	07/19/16 23:50 EST	0		Source: Buoy
A wind gust of 37 knots was reported. at the Upper Potomac Buoy.				
<b>CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- 4.1 SW SANDY POINT (SPT) [38.96, -76.45]</b>				
	07/20/16 00:40 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/20/16 00:40 EST	0		Source: Buoy
Wind gusts in excess of 30 knots were reported at the Annapolis Buoy.				
<b>A boundary stalled over the area. Warm and humid conditions led to an unstable atmosphere while an upper-level trough passed through the area. The forcing from the boundary front combined with the instability to trigger thunderstorms. Stronger shear from the upper-level trough caused some thunderstorms to produce gusty winds.</b>				
<b>CHESAPEAKE BAY N OF POOLES IS MD COUNTY --- SUSQUEHANNA RIVER BUOY (44057) [39.54, -76.07]</b>				
	07/23/16 16:40 EST	0		Marine Thunderstorm Wind (MG 39 kt)
	07/23/16 16:50 EST	0		Source: Buoy

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
Wind gusts up to 39 knots were reported at the Susquehanna Buoy.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- ANNAPOLIS (KNAK) [38.98, -76.48]</b>				
	07/23/16 19:18 EST		0	Marine Thunderstorm Wind (MG 38 kt)
	07/23/16 19:18 EST		0	Source: ASOS
A wind gust of 38 knots was reported at Annapolis.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- GREENBERRY POINT (GBY) [38.97, -76.46]</b>				
	07/23/16 19:29 EST		0	Marine Thunderstorm Wind (MG 39 kt)
	07/23/16 19:40 EST		0	Source: Buoy
Wind gusts up to 39 knots were reported at Greenberry Point.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- TOLLY POINT (TOL) [38.94, -76.44]</b>				
	07/23/16 19:31 EST		0	Marine Thunderstorm Wind (MG 54 kt)
	07/23/16 19:41 EST		0	Source: Buoy
Wind gusts up to 54 knots were reported at Tolly Point.				
<b>An upper-level disturbance in a northwest flow aloft triggered a few thunderstorms. Some thunderstorms produced gusty winds due to an unstable atmosphere that was in place.</b>				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- HERRING BAY (HRB) [38.73, -76.54]</b>				
	07/25/16 00:00 EST		0	Marine Thunderstorm Wind (MG 40 kt)
	07/25/16 00:25 EST		0	Source: Buoy
Wind gusts up to 40 knots were reported at Herring Bay.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- SHADY SIDE ES (SHADY) [38.84, -76.51]</b>				
	07/25/16 00:06 EST		0	Marine Thunderstorm Wind (EG 50 kt)
	07/25/16 00:06 EST		0	Source: Unknown
Wind gusts around 60 knots were estimated based on thunderstorm wind damage nearby.				
<b>CHESAPEAKE BAY N BEACH TO DRUM PT MD COUNTY --- ROD N REEL CHESAPEAKE BEACH (CHSRL) [38.69, -76.53]</b>				
	07/25/16 00:25 EST		0	Marine Thunderstorm Wind (EG 34 kt)
	07/25/16 00:25 EST		0	Source: Buoy
Wind gusts in excess of 30 knots were reported at Chesapeake Beach.				
<b>CHESAPEAKE BAY N BEACH TO DRUM PT MD COUNTY --- 9.1 NNE GOOSSES REEF BUOY (44062) [38.68, -76.33]</b>				
	07/25/16 00:35 EST		0	Marine Thunderstorm Wind (MG 43 kt)
	07/25/16 00:55 EST		0	Source: Buoy
A wind gust of 43 knots was reported at Black Walnut Harbor.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- 5.9 SSE KENT POINT MD (KPTM2) [38.76, -76.32]</b>				
	07/25/16 00:40 EST		0	Marine Thunderstorm Wind (MG 42 kt)
	07/25/16 00:40 EST		0	Source: Mesonet
A wind gust of 42 knots was reported at Lowes Wharf.				
<b>CHOPTANK RIVER TO CAMBRIDGE MD AND THE LITTLE CHOPTANK RIVER COUNTY --- CAMBRIDGE (CAMM2) [38.57, -76.07]</b>				
	07/25/16 01:12 EST		0	Marine Thunderstorm Wind (MG 41 kt)
	07/25/16 01:42 EST		0	Source: Mesonet
Wind gusts up to 41 knots were reported at Cambridge.				
<b>CHESAPEAKE BAY N OF POOLES IS MD COUNTY --- GROVE POINT (GVP) [39.40, -76.04]</b>				
	07/25/16 19:20 EST		0	Marine Thunderstorm Wind (MG 40 kt)
	07/25/16 19:30 EST		0	Source: Buoy



## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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Wind gusts up to 40 knots were reported at Grove Point.

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**TIDAL POTOMAC KEY BRIDGE TO INDIAN HD MD COUNTY --- UPPER POTOMAC BUOY (44061) [38.79, -77.04]**

07/25/16 21:40 EST	0	Marine Thunderstorm Wind (EG 34 kt)
07/25/16 21:40 EST	0	Source: Buoy

Wind gusts in excess of 30 knots were reported at the Upper Potomac Buoy.

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**CHESAPEAKE BAY N BEACH TO DRUM PT MD COUNTY --- ROD N REEL CHESAPEAKE BEACH (CHSRL) [38.69, -76.53]**

07/25/16 22:10 EST	0	Marine Thunderstorm Wind (EG 34 kt)
07/25/16 22:10 EST	0	Source: Mesonet

Wind gusts in excess of 30 knots were reported.

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**CHESAPEAKE BAY N BEACH TO DRUM PT MD COUNTY --- GOOSSES REEF BUOY (44062) [38.56, -76.41]**

07/25/16 22:40 EST	0	Marine Thunderstorm Wind (MG 35 kt)
07/25/16 23:00 EST	0	Source: Buoy

A wind gust of 35 knots was reported at Gooses Reef.

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**CHESAPEAKE BAY N BEACH TO DRUM PT MD COUNTY --- 2.6 S MID BAY BUOY [38.43, -76.39]**

07/25/16 23:00 EST	0	Marine Thunderstorm Wind (MG 45 kt)
07/25/16 23:24 EST	0	Source: Buoy

Wind gusts up to 45 knots were measured at Cove Point.

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**CHESAPEAKE BAY DRUM PT TO SMITH PT VA COUNTY --- LOWER HOOPERS ISLAND (HPR) [38.26, -76.18]**

07/25/16 23:33 EST	0	Marine Thunderstorm Wind (EG 34 kt)
07/25/16 23:33 EST	0	Source: Buoy

Wind gusts in excess of 30 knots were reported at Hooper Island.

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**TANGIER SOUND AND THE INLAND WATERS SURROUNDING BLOODSWORTH ISLAND COUNTY --- BISHOPS HEAD (BISM2) [38.22, -76.04]**

07/25/16 23:42 EST	0	Marine Thunderstorm Wind (EG 34 kt)
07/25/16 23:42 EST	0	Source: Buoy

Wind gusts in excess of 30 knots were reported at Bishops Head.

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**TIDAL POTOMAC COBB IS MD TO SMITH PT VA COUNTY --- PINEY POINT (PPTM2) [38.13, -76.53]**

07/25/16 23:48 EST	0	Marine Thunderstorm Wind (EG 34 kt)
07/25/16 23:48 EST	0	Source: Buoy

Wind gusts in excess of 30 knots were reported at Piney Point.

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**TANGIER SOUND AND THE INLAND WATERS SURROUNDING BLOODSWORTH ISLAND COUNTY --- CRISFIELD CG (CRS) [37.97, -75.88]**

07/26/16 00:59 EST	0	Marine Thunderstorm Wind (EG 34 kt)
07/26/16 01:10 EST	0	Source: Buoy

Wind gusts in excess of 30 knots were reported at Crisfield.

**A boundary remained overhead on the 25th of July. Warm and humid conditions led to an unstable atmosphere. The instability along with the boundary caused some storms to produce gusty winds.**

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**CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- TOLCHESTER MD (TCBM2) [39.32, -76.25]**

07/28/16 15:30 EST	0	Marine Thunderstorm Wind (MG 57 kt)
07/28/16 15:36 EST	0	Source: Buoy

Wind gusts up to 57 knots were reported at Tolchester.

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**CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- TOLLY POINT (TOL) [38.94, -76.44]**

07/28/16 16:06 EST	0	Marine Thunderstorm Wind (MG 36 kt)
07/28/16 16:36 EST	0	Source: Buoy

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
Wind gusts of 36 knots were reported at Tolly Point.				
<b>CHESAPEAKE BAY SANDY PT TO N BEACH MD COUNTY --- THOMAS POINT (TPLM2) [38.90, -76.44]</b>				
	07/28/16 16:30 EST	0		Marine Thunderstorm Wind (MG 37 kt)
	07/28/16 16:30 EST	0		Source: Buoy
Wind gusts of 37 knots were reported at Thomas Point Lighthouse.				
<b>CHESAPEAKE BAY DRUM PT TO SMITH PT VA COUNTY --- LOWER HOOPERS ISLAND (HPR) [38.26, -76.18]</b>				
	07/28/16 16:48 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/28/16 16:48 EST	0		Source: Buoy
Wind gusts in excess of 30 knots were measured at Hooper Island.				
<b>TIDAL POTOMAC INDIAN HD TO COBB IS MD COUNTY --- MONROE CREEK (MON) [38.23, -76.95]</b>				
	07/28/16 17:04 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/28/16 17:09 EST	0		Source: Buoy
Wind gusts in excess of 30 knots were reported at Monroe Creek.				
<b>TIDAL POTOMAC COBB IS MD TO SMITH PT VA COUNTY --- 6.7 E MONROE CREEK (MON) [38.24, -76.83]</b>				
	07/28/16 17:23 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/28/16 17:33 EST	0		Source: Buoy
Wind gusts in excess of 30 knots were reported at Cobb Point.				
<b>TIDAL POTOMAC COBB IS MD TO SMITH PT VA COUNTY --- POINT LOOKOUT (PTL) [38.04, -76.32]</b>				
	07/28/16 17:35 EST	0		Marine Thunderstorm Wind (MG 35 kt)
	07/28/16 17:35 EST	0		Source: Buoy
A wind gust of 35 knots was reported at Point Lookout.				
<b>TANGIER SOUND AND THE INLAND WATERS SURROUNDING BLOODSWORTH ISLAND COUNTY --- CRISFIELD CG (CRS) [37.97, -75.88]</b>				
	07/28/16 18:40 EST	0		Marine Thunderstorm Wind (MG 57 kt)
	07/28/16 19:14 EST	0		Source: Buoy
Wind gusts up to 57 knots were reported at Crisfield.				
<b>CHESAPEAKE BAY POOLES IS TO SANDY PT MD COUNTY --- 32.8 NNE ROD N REEL CHESAPEAKE BEACH (CHSRL) [39.15, -76.39]</b>				
	07/28/16 23:40 EST	0		Marine Thunderstorm Wind (EG 34 kt)
	07/28/16 23:40 EST	0		Source: Buoy
Wind gusts in excess of 30 knots were reported at the Patapsco Buoy.				
<b>A boundary remained overhead on the 28th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused a few severe thunderstorms to produce gusty winds.</b>				
<b>DISTRICT OF COLUMBIA</b>				
<b>DISTRICT OF COLUMBIA COUNTY --- 0.2 N WALTER REED [38.98, -77.03]</b>				
	07/18/16 15:12 EST	0		Thunderstorm Wind (EG 50 kt)
	07/18/16 15:12 EST	0		Source: 911 Call Center
A tree was down in the 7700 Block of 13th Street Northwest.				
<b>DISTRICT OF COLUMBIA COUNTY --- 0.3 N TENLEYTOWN [38.95, -77.07]</b>				
	07/18/16 15:19 EST	0		Thunderstorm Wind (EG 50 kt)
	07/18/16 15:19 EST	0		Source: Broadcast Media
A large tree was uprooted in the 3600 Block of Everett Street Northwest.				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>DISTRICT OF COLUMBIA COUNTY --- 1.3 WSW BROOKLAND [38.92, -77.02]</b>				
	07/18/16 15:24 EST	0		Thunderstorm Wind (EG 50 kt)
	07/18/16 15:24 EST	0		Source: 911 Call Center
A tree was down in the 700 Block of Barry Place Northwest.				
<b>A cold front passed through the area. Ahead of the front, hot and humid conditions led to an unstable atmosphere. The forcing from the cold front combined with the instability to trigger thunderstorms. Stronger shear from an upper-level trough caused some thunderstorms to become severe.</b>				
<b>DISTRICT OF COLUMBIA COUNTY --- 1.5 SW TENLEYTOWN [38.94, -77.09]</b>				
	07/19/16 21:40 EST	0		Thunderstorm Wind (EG 50 kt)
	07/19/16 21:40 EST	0		Source: Broadcast Media
A large tree was down on a home and vehicle in the 4700 Block of Quebec Street.				
<b>DISTRICT OF COLUMBIA COUNTY --- 1.1 SE GEORGETOWN [38.91, -77.04]</b>				
	07/19/16 21:57 EST	0		Hail (1.50 in)
	07/19/16 21:57 EST	0		Source: Newspaper
Ping Pong sized hail was reported about one mile north of the White House.				
<b>DISTRICT OF COLUMBIA COUNTY --- 1.8 S BROOKLAND [38.90, -77.00]</b>				
	07/19/16 21:58 EST	0		Hail (1.00 in)
	07/19/16 21:58 EST	0		Source: Emergency Manager
Quarter sized hail was reported at the intersection of 6th Street Northeast and L Street Northeast.				
<b>DISTRICT OF COLUMBIA COUNTY --- 1.2 NE LINCOLN MEMORIAL [38.89, -77.04]</b>				
	07/19/16 21:59 EST	0		Thunderstorm Wind (EG 50 kt)
	07/19/16 21:59 EST	0		Source: Public
Several trees were down near the Ellipse of the White House.				
<b>DISTRICT OF COLUMBIA COUNTY --- 1.1 N US CAPITOL [38.90, -77.02]</b>				
	07/19/16 22:02 EST	0		Hail (1.00 in)
	07/19/16 22:02 EST	0		Source: Trained Spotter
Quarter sized hail was reported near the intersection of 9th street Northwest and E Street Northwest.				
<b>DISTRICT OF COLUMBIA COUNTY --- 1.2 ENE US CAPITOL [38.89, -77.00]</b>				
	07/19/16 22:02 EST	0		Hail (1.75 in)
	07/19/16 22:02 EST	0		Source: Newspaper
Golf ball sized hail was reported about one mile east-southeast of the US Capitol.				
<b>DISTRICT OF COLUMBIA COUNTY --- 1.8 S BROOKLAND [38.90, -77.00]</b>				
	07/19/16 22:03 EST	0		Hail (1.25 in)
	07/19/16 22:03 EST	0		Source: Trained Spotter
Half dollar sized hail was reported .				
<b>DISTRICT OF COLUMBIA COUNTY --- 0.8 SE US CAPITOL [38.87, -77.01]</b>				
	07/19/16 22:05 EST	0		Hail (1.00 in)
	07/19/16 22:05 EST	0		Source: Trained Spotter
Quarter sized hail was reported at Nationals Park.				
<b>DISTRICT OF COLUMBIA COUNTY --- 0.7 N US CAPITOL [38.89, -77.02]</b>				
	07/19/16 22:40 EST	0		Thunderstorm Wind (EG 52 kt)
	07/19/16 22:40 EST	0		Source: Public

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
A straight path of tree damage was reported across the Mall near the Washington Monument.				
A boundary stalled over the area. Warm and humid conditions led to an unstable atmosphere while an upper-level trough passed through the area. The forcing from the boundary front combined with the instability to trigger thunderstorms. Stronger shear from the upper-level trough caused some thunderstorms to become severe.				
<b>DISTRICT OF COLUMBIA COUNTY --- 0.6 N MOUNT PLEASANT [38.94, -77.05], 0.5 N MOUNT PLEASANT [38.94, -77.05], 0.6 N MOUNT PLEASANT [38.94, -77.05], 0.6 N MOUNT PLEASANT [38.94, -77.05], 0.8 N MOUNT PLEASANT [38.94, -77.05], 1.0 N MOUNT PLEASANT [38.94, -77.05], 0.9 N MOUNT PLEASANT [38.94, -77.05]</b>				
	07/19/16 22:15 EST		0	Flash Flood (due to Heavy Rain)
	07/20/16 01:30 EST		0	Source: Broadcast Media

Beach Drive was closed between Broad Branch Road and Piney Branch Parkway due to flooding.

<b>DISTRICT OF COLUMBIA COUNTY --- 1.4 SW BROOKLAND [38.91, -77.02], 1.5 SW BROOKLAND [38.91, -77.02], 1.4 SW BROOKLAND [38.91, -77.02], 1.4 SW BROOKLAND [38.91, -77.02]</b>				
	07/19/16 22:40 EST		0	Flash Flood (due to Heavy Rain)
	07/20/16 01:30 EST		0	Source: Emergency Manager

Rhone Island Avenue was closed at the 400-500 block of Rhode Island Avenue due to high water.

<b>DISTRICT OF COLUMBIA COUNTY --- 1.4 SW BROOKLAND [38.91, -77.02], 1.4 SW BROOKLAND [38.91, -77.02], 1.5 SW BROOKLAND [38.91, -77.02], 0.6 NNW MOUNT PLEASANT [38.94, -77.05], 1.0 N MOUNT PLEASANT [38.94, -77.05], 0.9 N MOUNT PLEASANT [38.94, -77.05]</b>				
	07/20/16 01:30 EST		0	Flood (due to Heavy Rain)
	07/20/16 07:30 EST		0	Source: Emergency Manager

Flooding continued from heavy rainfall that caused flash flooding on Beach Drive and Rhode Island Avenue.

<b>DISTRICT OF COLUMBIA COUNTY --- 0.2 NNW US CAPITOL [38.88, -77.02], 0.2 NW US CAPITOL [38.88, -77.02], 0.2 N US CAPITOL [38.88, -77.02], 0.2 N US CAPITOL [38.88, -77.02]</b>				
	07/20/16 05:30 EST		0	Flood (due to Heavy Rain)
	07/20/16 07:30 EST		0	Source: 911 Call Center

Interstate 395 eastbound ramp from 7th street was closed due to high water from previous night heavy rainfall.

A boundary stalled over the area. Warm and humid conditions led to an unstable atmosphere while an upper-level trough passed through the area. The forcing from the boundary front combined with the instability to trigger thunderstorms. Stronger shear from the upper-level trough caused some thunderstorms to become severe. Thunderstorms produced heavy rainfall.

<b>(DC-Z001) DISTRICT OF COLUMBIA</b>				
	07/23/16 14:00 EST		0	Heat
	07/23/16 16:00 EST		0	

A southwesterly flow around high pressure over the Atlantic pumped in plenty of moisture while hot conditions persisted due to an upper-level ridge of high pressure. The heat and humidity caused heat indices to top off around 105 degrees.

<b>(DC-Z001) DISTRICT OF COLUMBIA</b>				
	07/25/16 12:00 EST		0	Excessive Heat
	07/25/16 15:00 EST		0	

A southwesterly flow around high pressure over the Atlantic pumped in plenty of moisture while hot conditions persisted due to an upper-level ridge of high pressure. The heat and humidity caused dangerous heat indices.

### MARYLAND, Central

<b>ANNE ARUNDEL COUNTY --- 0.8 N EARLEIGH HGTS [39.11, -76.55]</b>				
	07/01/16 16:43 EST		0	Thunderstorm Wind (EG 52 kt)
	07/01/16 16:43 EST		0	Source: 911 Call Center

Trees down at the Intersection of Catherine Avenue and Harlem Avenue.

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>ANNE ARUNDEL COUNTY --- 0.7 S PASADENA [39.09, -76.57]</b>				
	07/01/16 16:46 EST		0	Thunderstorm Wind (EG 52 kt)
	07/01/16 16:46 EST		0	Source: 911 Call Center
Trees down at the intersection of Truck House Road and Swaying Oak Court.				
<b>ANNE ARUNDEL COUNTY --- 0.8 SSE JACOBVILLE [39.11, -76.52]</b>				
	07/01/16 16:51 EST		0	Thunderstorm Wind (EG 52 kt)
	07/01/16 16:51 EST		0	Source: 911 Call Center
Trees were down at the intersection of Woods road and 11th Street.				
<b>ANNE ARUNDEL COUNTY --- 1.0 NW LAKE SHR [39.11, -76.49]</b>				
	07/01/16 16:54 EST		0	Thunderstorm Wind (EG 52 kt)
	07/01/16 16:54 EST		0	Source: 911 Call Center
Trees down at the intersection of Garland Road and Mountain Road.				
<b>PRINCE GEORGE'S COUNTY --- 2.1 NE MITCHELLVILLE [38.94, -76.73]</b>				
	07/01/16 17:24 EST		0	Hail (1.00 in)
	07/01/16 17:24 EST		0	Source: Trained Spotter
Quarter sized hail was reported near Bowie.				
<b>ANNE ARUNDEL COUNTY --- 2.2 SE FAIR HAVEN [38.73, -76.54]</b>				
	07/01/16 21:40 EST		0	Thunderstorm Wind (MG 65 kt)
	07/01/16 21:40 EST		0	Source: Mesonet
A wind gust of 65 knots was measured nearby at Herring Bay.				
<b>ANNE ARUNDEL COUNTY --- 2.6 SE FAIR HAVEN [38.73, -76.53]</b>				
	07/01/16 21:41 EST		0	Thunderstorm Wind (EG 52 kt)
	07/01/16 21:41 EST		0	Source: Department of Highways
Large tree down at Route 261 and Catalpa Avenue.				
<b>ANNE ARUNDEL COUNTY --- 2.9 ESE FRIENDSHIP [38.71, -76.53]</b>				
	07/01/16 21:42 EST		0	Thunderstorm Wind (EG 50 kt)
	07/01/16 21:42 EST		0	Source: 911 Call Center
Tree down on power lines at Walnut Avenue and Birch Avenue.				
<p><b>A cold front passed through the area on July 1st. A southerly flow ahead of the boundary caused warm and humid air in place, which led to an unstable atmosphere. The instability combined with lift from the cold front caused thunderstorms to develop. Some thunderstorms were severe due to stronger sheer profiles from an upper-level trough overhead along with the unstable atmosphere.</b></p>				
<b>CALVERT COUNTY --- 0.5 NNW NORTH BEACH [38.71, -76.53], 0.4 NNW NORTH BEACH [38.71, -76.53], 0.6 N NORTH BEACH [38.71, -76.53], 0.6 NNW NORTH BEACH [38.71, -76.53]</b>				
	07/01/16 22:00 EST		5K	Flood (due to Heavy Rain)
	07/02/16 01:00 EST		0	Source: 911 Call Center
There was a vehicle stuck in high water near Chesapeake Ave and Fourth Street . There were also reports of high water on Route 261. This area is a flood prone area.				
<p><b>A cold front passed through the area on July 1st. A southerly flow ahead of the boundary caused warm and humid air in place, which led to an unstable atmosphere. The instability combined with lift from the cold front caused thunderstorms to develop. Some thunderstorms were severe due to stronger sheer profiles from an upper-level trough overhead along with the unstable atmosphere. Thunderstorms produced heavy rainfall.</b></p>				
<b>BALTIMORE COUNTY --- 0.6 SSW MIDDLE RIVER [39.32, -76.45]</b>				
	07/16/16 16:15 EST		0	Hail (1.00 in)
	07/16/16 16:15 EST		0	Source: Trained Spotter

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
Quarter sized hail fell near Essex.				
<b>BALTIMORE COUNTY --- 0.8 W (MTN)MARTIN ARPT BAL [39.32, -76.43]</b>				
	07/16/16 16:23 EST		0	Hail (1.00 in)
	07/16/16 16:23 EST		0	Source: Trained Spotter
Quarter sized hail fell near Martin State Airport.				
<b>BALTIMORE COUNTY --- 3.2 SSE ESSEX [39.28, -76.46]</b>				
	07/16/16 16:52 EST		0	Thunderstorm Wind (EG 52 kt)
	07/16/16 16:52 EST		0	Source: 911 Call Center
Roof damage to a home was reported due to strong winds.				
<b>BALTIMORE COUNTY --- 0.3 S LYNCH PT [39.23, -76.43]</b>				
	07/16/16 17:06 EST		0	Thunderstorm Wind (EG 52 kt)
	07/16/16 17:06 EST		0	Source: Trained Spotter
Trees were down along North Road.				
<b>BALTIMORE COUNTY --- 2.8 SSE (MTN)MARTIN ARPT BAL [39.28, -76.40]</b>				
	07/16/16 17:06 EST		0	Thunderstorm Wind (EG 52 kt)
	07/16/16 17:06 EST		0	Source: Broadcast Media
Trees were down and boats on land were flipped.				
<b>Southerly flow ushered in hot and humid conditions around high pressure centered in the Atlantic. High amounts of instability led to some thunderstorms, and some were severe with strong winds.</b>				
<b>BALTIMORE COUNTY --- 0.1 SSW BALTIMORE MARTIN ST [39.33, -76.42], 0.4 WSW BALTIMORE MARTIN ST [39.33, -76.43], 0.4 W BALTIMORE MARTIN ST [39.33, -76.43], 0.3 WNW BALTIMORE MARTIN ST [39.33, -76.43]</b>				
	07/16/16 17:00 EST		0	Flash Flood (due to Heavy Rain)
	07/16/16 19:30 EST		0	Source: 911 Call Center
Wilson Point Road at Dark Head Cove Road was closed due to flooding.				
<b>Southerly flow ushered in hot and humid conditions around high pressure centered in the Atlantic. High amounts of instability led to some thunderstorms, and some were severe with strong winds. Thunderstorms produced heavy rainfall capable of flooding.</b>				
<b>ALLEGANY COUNTY --- 0.2 SSW CUMBERLAND [39.65, -78.77]</b>				
	07/18/16 12:23 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 12:23 EST		0	Source: 911 Call Center
Tree fell onto a house in the 300 Block of Avirett Avenue.				
<b>ALLEGANY COUNTY --- 0.6 W EVITTS CREEK [39.63, -78.76]</b>				
	07/18/16 12:23 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 12:23 EST		0	Source: 911 Call Center
Tree down near the intersection of Industrial Boulevard and Seymour Street.				
<b>ALLEGANY COUNTY --- 0.9 NW EVITTS CREEK [39.64, -78.76]</b>				
	07/18/16 12:23 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 12:23 EST		0	Source: 911 Call Center
Tree down along roadway of the 900 block of Grand Avenue.				
<b>ALLEGANY COUNTY --- 1.1 N EVITTS CREEK [39.65, -78.75]</b>				
	07/18/16 12:23 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 12:23 EST		0	Source: 911 Call Center
Tree down along the roadway of the 600 Block of William Street.				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>ALLEGANY COUNTY --- 2.7 S RIDGELEY [39.59, -78.66]</b>				
	07/18/16 12:27 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 12:27 EST		0	Source: 911 Call Center
Tree down in roadway along the 15000 Block of Cresap Mill Road.				
<b>ALLEGANY COUNTY --- 3.0 SE RIDGELEY [39.60, -78.61]</b>				
	07/18/16 12:34 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 12:34 EST		0	Source: 911 Call Center
Tree down in roadway in the 14000 Block of Ruby Road.				
<b>BALTIMORE COUNTY --- 0.9 SW LUTHERVILLE [39.41, -76.63]</b>				
	07/18/16 14:57 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 14:57 EST		0	Source: 911 Call Center
Telephone pole was snapped in half by high winds near the intersection of Joppa Road and Abell Ridge Circle.				
<b>BALTIMORE COUNTY --- 1.1 N SWEET AIR [39.54, -76.53]</b>				
	07/18/16 15:05 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 15:05 EST		0	Source: Trained Spotter
One 3-foot diameter tree was down on power lines.				
<b>BALTIMORE COUNTY --- 1.0 WNW PARKVILLE [39.38, -76.57]</b>				
	07/18/16 15:06 EST		0	Thunderstorm Wind (EG 52 kt)
	07/18/16 15:06 EST	2	0	Source: 911 Call Center
Multiple trees and wires down. Two individuals were struck by the falling tree.				
<b>BALTIMORE COUNTY --- 1.2 WSW ROGERS FORGE [39.40, -76.62]</b>				
	07/18/16 15:06 EST		0	Thunderstorm Wind (EG 52 kt)
	07/18/16 15:06 EST		0	Source: 911 Call Center
Numerous trees were down in Towson.				
<b>MONTGOMERY COUNTY --- 0.6 WNW CARDEROCK SPGS [39.00, -77.18]</b>				
	07/18/16 15:10 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 15:10 EST		0	Source: 911 Call Center
A tree was down near the intersection of River Road and Bradley Boulevard.				
<b>MONTGOMERY COUNTY --- 0.2 NNW BETHESDA [38.97, -77.12]</b>				
	07/18/16 15:14 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 15:14 EST		0	Source: 911 Call Center
A tree was down near the intersection of Goldsboro Road and River Road.				
<b>MONTGOMERY COUNTY --- 0.2 NNW BETHESDA [38.97, -77.12]</b>				
	07/18/16 15:15 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 15:15 EST		0	Source: Department of Highways
A tree was down near the intersection of River Road and Goldsboro Road. The road was partially blocked.				
<b>MONTGOMERY COUNTY --- 0.6 E BETHESDA [38.97, -77.11]</b>				
	07/18/16 15:15 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 15:15 EST		0	Source: 911 Call Center
A tree was down near the intersection of River Road and Westbard Avenue.				
<b>MONTGOMERY COUNTY --- 1.0 NW FRIENDSHIP HGTS [38.98, -77.09]</b>				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/18/16 15:16 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 15:16 EST		0	Source: 911 Call Center

A tree was down near the intersection of Wisconsin Avenue and Woodmont Avenue.

<b>MONTGOMERY COUNTY --- 0.3 W SOMERSET [38.95, -77.10]</b>				
	07/18/16 15:18 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 15:18 EST		0	Source: Broadcast Media

A tree was down on wires along the 5200 Block of Duvall Drive.

<b>CHARLES COUNTY --- 1.3 W POMONKEY [38.62, -77.09]</b>				
	07/18/16 15:37 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 15:37 EST		0	Source: 911 Call Center

Multiple trees were down near the intersection of Indian Head Highway and Laurel Drive.

<b>PRINCE GEORGE'S COUNTY --- 0.6 SSE NAYLOR [38.71, -76.75]</b>				
	07/18/16 15:55 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 15:55 EST		0	Source: Trained Spotter

Large tree limbs were snapped near the intersection of Candy Hill road and Croom Road.

<b>CHARLES COUNTY --- 0.1 NNW GALLANT GREEN [38.60, -76.78]</b>				
	07/18/16 16:00 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 16:00 EST	1	0	Source: Trained Spotter

Large tree limb fell onto a house in the 15000 Block of Woodville Road.

<b>CALVERT COUNTY --- 1.9 ENE BARSTOW [38.54, -76.59]</b>				
	07/18/16 16:10 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 16:10 EST		0	Source: Public

A tree was down across the roadway on Gray Inn Court.

<b>ST. MARY'S COUNTY --- 1.2 NW OAKVILLE [38.39, -76.67]</b>				
	07/18/16 16:15 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 16:15 EST		0	Source: 911 Call Center

A tree was down along the intersection of Loveville Road and Kavanagh Road.

<b>ST. MARY'S COUNTY --- 1.3 SSE RIDGE [38.10, -76.36]</b>				
	07/18/16 16:52 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 16:52 EST		0	Source: Public

Several trees were down near Buzzs Marina.

**A cold front passed through the area. Ahead of the front, hot and humid conditions led to an unstable atmosphere. The forcing from the cold front combined with the instability to trigger thunderstorms. Stronger shear from an upper-level trough caused some thunderstorms to become severe.**

<b>MONTGOMERY COUNTY --- 0.3 ESE KEMP MILL [39.03, -77.01]</b>				
	07/19/16 21:20 EST		0	Thunderstorm Wind (EG 50 kt)
	07/19/16 21:20 EST		0	Source: NWS Employee

Multiple large oak trees were down.

<b>MONTGOMERY COUNTY --- 0.7 S PARKWOOD [39.01, -77.08]</b>				
	07/19/16 21:28 EST		0	Hail (1.00 in)
	07/19/16 21:28 EST		0	Source: Public

Quarter sized hail was reported.



## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>MONTGOMERY COUNTY --- 1.3 WSW GEORGETOWN JCT [38.99, -77.07]</b>				
	07/19/16 21:29 EST		0	Thunderstorm Wind (EG 50 kt)
	07/19/16 21:29 EST		0	Source: 911 Call Center
Numerous trees were down in near Chevy Chase.				
<b>MONTGOMERY COUNTY --- 0.2 NNW BETHESDA [38.97, -77.12]</b>				
	07/19/16 21:35 EST		0	Thunderstorm Wind (EG 50 kt)
	07/19/16 21:35 EST		0	Source: Broadcast Media
Two large trees were down at the intersection of River Road and Goldsboro Road.				
<b>MONTGOMERY COUNTY --- 0.9 SE WOODHAVEN [38.99, -77.12]</b>				
	07/19/16 22:16 EST		0	Thunderstorm Wind (EG 50 kt)
	07/19/16 22:16 EST		0	Source: Emergency Manager
Multiple trees were down near Bethesda.				
<b>PRINCE GEORGE'S COUNTY --- 2.1 SSE MEADOWS [38.79, -76.84]</b>				
	07/19/16 23:00 EST		0	Thunderstorm Wind (EG 50 kt)
	07/19/16 23:00 EST		0	Source: 911 Call Center
A tree was down on Woodyard Road at Sherwood Drive.				
<b>CALVERT COUNTY --- 0.1 SW HUNTINGTOWN [38.62, -76.62]</b>				
	07/19/16 23:32 EST		0	Thunderstorm Wind (EG 52 kt)
	07/19/16 23:32 EST		0	Source: 911 Call Center
Trees were down near the intersection of Hunting Creek Road and Huntingtown Road.				
<b>A boundary stalled over the area. Warm and humid conditions led to an unstable atmosphere while an upper-level trough passed through the area. The forcing from the boundary front combined with the instability to trigger thunderstorms. Stronger shear from the upper-level trough caused some thunderstorms to become severe.</b>				
<b>MONTGOMERY COUNTY --- 0.0 SW GLEN ECHO [38.97, -77.13], 0.1 SW GLEN ECHO [38.97, -77.13], 0.1 W GLEN ECHO [38.97, -77.13], 0.1 WNW GLEN ECHO [38.97, -77.13]</b>				
	07/19/16 22:40 EST		5K	Flash Flood (due to Heavy Rain)
	07/20/16 01:30 EST		0	Source: Fire Department/Rescue
A car stalled in high water at the intersection of Massachusetts Ave and Goldsboro Road. The water was estimated to be 8 inches deep.				
<b>A boundary stalled over the area. Warm and humid conditions led to an unstable atmosphere while an upper-level trough passed through the area. The forcing from the boundary front combined with the instability to trigger thunderstorms. Stronger shear from the upper-level trough caused some thunderstorms to become severe. Thunderstorms produced heavy rainfall.</b>				
<b>(MD-Z011) SOUTHERN BALTIMORE, (MD-Z013) PRINCE GEORGES, (MD-Z014) ANNE ARUNDEL, (MD-Z016) CHARLES, (MD-Z017) ST. MARY'S, (MD-Z018) CALVERT, (MD-Z504) CENTRAL AND SOUTHEAST MONTGOMERY</b>				
	07/23/16 12:00 EST		0	Heat
	07/23/16 18:00 EST		0	
<b>A southwesterly flow around high pressure over the Atlantic pumped in plenty of moisture while hot conditions persisted due to an upper-level ridge of high pressure. The heat and humidity caused heat indices to top off around 105 degrees.</b>				
<b>HARFORD COUNTY --- 3.5 E NORRISVILLE [39.70, -76.47]</b>				
	07/23/16 17:15 EST		0	Thunderstorm Wind (EG 52 kt)
	07/23/16 17:15 EST		0	Source: 911 Call Center
Trees were down near Route 136 between Telegraph and Onion Road.				
<b>HARFORD COUNTY --- 0.2 NE ADY [39.63, -76.33]</b>				
	07/23/16 17:25 EST		0	Thunderstorm Wind (EG 50 kt)
	07/23/16 17:25 EST		0	Source: 911 Call Center

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
Trees were down near the intersection of St. Ann Drive and MD-543.				
<b>HARFORD COUNTY --- 1.1 W BEL AIR [39.53, -76.37]</b>				
	07/23/16 17:35 EST		0	Thunderstorm Wind (EG 52 kt)
	07/23/16 17:35 EST		0	Source: 911 Call Center
Trees were down along North Tollgate Road.				
<b>HARFORD COUNTY --- 0.8 ENE VALE [39.54, -76.39]</b>				
	07/23/16 17:54 EST		0	Thunderstorm Wind (EG 52 kt)
	07/23/16 17:54 EST		0	Source: 911 Call Center
Trees were down along Grafton Shop Road.				
<b>HARFORD COUNTY --- 1.4 NE VALE [39.54, -76.38]</b>				
	07/23/16 17:58 EST		0	Thunderstorm Wind (EG 52 kt)
	07/23/16 17:58 EST		0	Source: 911 Call Center
Trees were down at the intersection of Red Pump Road and Ennis Way.				
<b>An upper-level disturbance in a northwest flow aloft triggered a few thunderstorms. Some thunderstorms became severe due to an unstable atmosphere that was in place.</b>				
<b>ANNE ARUNDEL COUNTY --- 1.0 NNW SHADYSIDE ARPT [38.83, -76.54]</b>				
	07/25/16 00:06 EST		0	Thunderstorm Wind (EG 50 kt)
	07/25/16 00:06 EST		0	Source: Trained Spotter
A tree was down in the roadway on Chalk Point Road a half mile north of Muddy Creek Road.				
<b>An isolated thunderstorm produced strong winds during the early morning of the 25th.</b>				
<b>(MD-Z003) WASHINGTON, (MD-Z004) FREDERICK, (MD-Z005) CARROLL, (MD-Z006) NORTHERN BALTIMORE, (MD-Z011) SOUTHERN BALTIMORE, (MD-Z013) PRINCE GEORGES, (MD-Z016) CHARLES, (MD-Z017) ST. MARY'S, (MD-Z018) CALVERT, (MD-Z503) NORTHWEST MONTGOMERY, (MD-Z505) NORTHWEST HOWARD, (MD-Z506) CENTRAL AND SOUTHEAST HOWARD, (MD-Z507) NORTHWEST HARFORD, (MD-Z508) SOUTHEAST HARFORD</b>				
	07/25/16 10:00 EST		0	Heat
	07/25/16 17:00 EST		0	
<b>(MD-Z014) ANNE ARUNDEL, (MD-Z504) CENTRAL AND SOUTHEAST MONTGOMERY</b>				
	07/25/16 12:00 EST		0	Excessive Heat
	07/25/16 15:00 EST		0	
<b>A southwesterly flow around high pressure over the Atlantic pumped in plenty of moisture while hot conditions persisted due to an upper-level ridge of high pressure. The heat and humidity caused dangerous heat indices.</b>				
<b>(MD-Z017) ST. MARY'S</b>				
	07/28/16 13:00 EST		0	Heat
	07/28/16 16:00 EST		0	
<b>A southwesterly flow around high pressure over the Atlantic pumped in plenty of moisture while hot conditions persisted due to an upper-level ridge of high pressure. Heat indices around 105 degrees were reported in southern Maryland.</b>				
<b>MONTGOMERY COUNTY --- 0.5 ENE BROOKEVILLE [39.18, -77.06], 0.4 ENE BROOKEVILLE [39.18, -77.06], 0.4 ENE BROOKEVILLE [39.18, -77.06], 0.5 ENE BROOKEVILLE [39.18, -77.06]</b>				
	07/28/16 15:10 EST		0	Flood (due to Heavy Rain)
	07/29/16 03:30 EST		0	Source: 911 Call Center
Brookeville Road was closed at route 97 due to high water. There was about a foot of flowing water at intersection. This intersection is a flood prone area.				
<b>ST. MARY'S COUNTY --- 0.6 SSE VALLEY LEE [38.19, -76.52], 0.4 S VALLEY LEE [38.19, -76.52], 0.3 ENE VALLEY LEE [38.20, -76.51], 0.6 E VALLEY LEE [38.20, -76.51]</b>				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/29/16 01:17 EST		0	Flood (due to Heavy Rain)
	07/29/16 07:00 EST		0	Source: Public

There were at least two roads flooded and impassible between Callaway and Piney Point near Valley Lee.

**A boundary remained overhead on the 28th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused a few severe thunderstorms to develop. Thunderstorms produced heavy rainfall.**

**FREDERICK COUNTY --- 1.7 S CATOCTIN FURNACE [39.55, -77.43], 1.7 NNW LEWISTOWN [39.55, -77.43], 1.7 NNW LEWISTOWN [39.55, -77.43], 1.7 S CATOCTIN FURNACE [39.55, -77.43]**

07/30/16 16:02 EST	0	Flood (due to Heavy Rain)
07/31/16 21:30 EST	0	Source: 911 Call Center

Auburn Road was closed near to Baugher Road due to flooding.

**MONTGOMERY COUNTY --- 1.2 N BURDETTS [39.22, -77.32], 1.6 NNE BURDETTS [39.22, -77.31], 1.8 N BURDETTS [39.23, -77.32], 2.0 N BURDETTS [39.23, -77.32], 1.7 N BUCK LODGE [39.22, -77.33]**

07/30/16 18:48 EST	0	Flood (due to Heavy Rain)
07/30/16 20:02 EST	0	Source: River/Stream Gage

The stream gauge on Ten Mile Creek in Boyds exceeded their 7 foot flood stage. The peak was 8.55 feet at 19:15 EST. Agricultural fields near Ten Mile Creek flooded.

**HOWARD COUNTY --- 0.6 SE BRINKLEIGH MANOR [39.28, -76.82], 0.9 ESE PINE ORCHARD [39.28, -76.85], 0.8 ENE PINE ORCHARD [39.28, -76.86], 0.7 WNW BRINKLEIGH MANOR [39.28, -76.84], 0.4 ESE BRINKLEIGH MANOR [39.28, -76.82]**

07/30/16 18:52 EST	0	Flash Flood (due to Heavy Rain)
07/30/16 20:30 EST	0	Source: County Official

Route 40 was closed at Route 29 in Ellicott City. There was a home at 3239 Brookmeade Road with high water marks about 2 feet high on the garage doors.

**HOWARD COUNTY --- 0.3 ESE ELLICOTT CITY [39.27, -76.79], 0.3 SE ELLICOTT CITY [39.27, -76.79], 0.3 SSE ELLICOTT CITY [39.27, -76.80], 0.3 SSW ELLICOTT CITY [39.27, -76.80], 0.1 SW ELLICOTT CITY [39.27, -76.80], 1.0 W ELLICOTT CITY [39.27, -76.82], 0.8 ESE BRINKLEIGH MANOR [39.28, -76.82]**

07/30/16 19:06 EST	2	22.40M	Flash Flood (due to Heavy Rain)
07/31/16 03:15 EST	0		Source: NWS Storm Survey

The survey revealed clear signs of flooding both from the Patapsco River and from flash flooding within Ellicott City. Signs of flooding, including damaged pavement, were observed as far up as the intersection of Rogers Avenue and Frederick Road, where Hudson Branch came out of its banks. From this location, eyewitnesses reported seeing water not only in the creek, but moving swiftly down Main Street beginning "just after dark". The intersection of Rogers Avenue and Frederick Road is about 140 feet higher in elevation than the lower part of Old Town Ellicott City. Erosion was noted on both the street side and the creek side of homes along Main Street in a portion of the 8500 block.

The next signs of damage were in the 8300 block of Main Street, with damage again observed both on the creek/river side and the street side of Main Street. The creek/river side is where the most vehicles were impacted, in "Lot D".

In the 8200 block, surveys and surveillance footage show water anywhere from 6 inches to two feet inside buildings on Main Street along with substantial damage to sidewalks and infrastructure outside the buildings.

The most significant damage observed was near 8100 Main Street, where the street curves slightly. Video surveillance footage reviewed after the event clearly indicates that water from the Tiber River was flowing through buildings on the south side of Main Street in this area, toward the street.

Closer to the Patapsco, damage continued with water marks observed 6-8 feet high on and in most buildings. The force of the floodwaters swept away the iconic Ellicott City clock as well as the historical flood marker that was attached to the railroad bridge.

Direct Fatalities: F35IW, M38IW

**MONTGOMERY COUNTY --- 1.2 ESE CLARKSBURG [39.22, -77.26], 1.3 ESE CLARKSBURG [39.22, -77.26], 1.2 ESE CLARKSBURG [39.22, -77.26], 1.1 ESE CLARKSBURG [39.22, -77.26]**

07/30/16 19:18 EST	5K	Flash Flood (due to Heavy Rain)
07/31/16 03:15 EST	0	Source: Emergency Manager

There was 10 inches of flowing water near 22300 North Frederick Road. There was a person assisted from a car.

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>HOWARD COUNTY --- 1.7 NW ELKRIDGE [39.24, -76.74], 1.6 SE ILCHESTER [39.24, -76.75], 0.7 ESE ILCHESTER [39.25, -76.76], 0.4 SE ILCHESTER [39.25, -76.76], 0.8 SE ELLICOTT CITY [39.26, -76.79], 0.9 ESE ELLICOTT CITY [39.26, -76.78], 0.7 E ILCHESTER [39.25, -76.76]</b>				
	07/30/16 19:26 EST		0	Flash Flood (due to Heavy Rain)
	07/30/16 23:01 EST		0	Source: River/Stream Gage
The stream gauge on the Patapsco River at Catonsville reached their flood stage of 20 feet. It peaked at 27.14 at 20:15 EST. Significant flooding was occurring along the river.				
<b>HOWARD COUNTY --- 0.3 ESE ELLICOTT CITY [39.27, -76.79], 0.1 SE ELLICOTT CITY [39.27, -76.80], 0.1 WSW ELLICOTT CITY [39.27, -76.80], 0.1 SW ELLICOTT CITY [39.27, -76.80], 0.2 S ELLICOTT CITY [39.27, -76.80], 0.3 SSE ELLICOTT CITY [39.27, -76.80], 0.4 ESE ELLICOTT CITY [39.27, -76.79]</b>				
	07/30/16 19:30 EST		0	Flash Flood (due to Heavy Rain)
	07/30/16 22:02 EST		0	Source: River/Stream Gage
The stream gauge on the Patapsco River at Ellicott City reached their flood stage of 124 feet. It peaked at 128.05 feet at 20:00 EST. Major flooding occurred across Old Town Ellicott City and became more significant due to local rainfall of about 6 inches of rain. Old Town Ellicott City experienced catastrophic damage from flooding.				
<b>MONTGOMERY COUNTY --- 1.7 WSW DAVIS ARPT [39.24, -77.18], 1.7 WSW DAVIS ARPT [39.24, -77.18], 2.0 WSW DAVIS ARPT [39.24, -77.18], 2.0 WSW DAVIS ARPT [39.24, -77.19]</b>				
	07/30/16 19:44 EST		5K	Flash Flood (due to Heavy Rain)
	07/31/16 03:15 EST		0	Source: Emergency Manager
There were multiple people rescued from a car by a boat near the 8900 block of Watkins Road.				
<b>BALTIMORE COUNTY --- 0.9 SW MILFORD [39.36, -76.76], 0.9 SSW MILFORD [39.36, -76.76], 0.8 SSW MILFORD [39.36, -76.76], 0.8 SW MILFORD [39.36, -76.76], 0.9 SW MILFORD [39.36, -76.76], 0.9 SW MILFORD [39.36, -76.76]</b>				
	07/30/16 19:46 EST		0	Flash Flood (due to Heavy Rain)
	07/30/16 21:01 EST		0	Source: River/Stream Gage
The stream gauge on Scotts Level Branch at Rockdale reached their flood stage of 7 feet. It peaked at 7.83 feet at 20:20 EST. Water entered backyards of homes near the stream.				
<b>BALTIMORE COUNTY --- 0.9 SE HALETHORPE [39.24, -76.69], 0.8 SSE HALETHORPE [39.24, -76.69], 0.4 ESE HALETHORPE [39.25, -76.69], 0.5 E HALETHORPE [39.25, -76.69]</b>				
	07/30/16 19:48 EST		0	Flash Flood (due to Heavy Rain)
	07/30/16 20:16 EST		0	Source: River/Stream Gage
The stream gauge on East Branch Herbert Run reached their flood stage of 7 feet. It peaked at 8.13 feet at 19:55 EST. Water approached structures along the creek and approached the top of a culvert at Sulphur Spring Road.				
<b>HOWARD COUNTY --- 2.1 NNE NORMANDY HGTS [39.31, -76.79], 2.5 N NORMANDY HGTS [39.32, -76.79], 2.5 N NORMANDY HGTS [39.32, -76.79], 2.4 N NORMANDY HGTS [39.31, -76.79], 2.2 N NORMANDY HGTS [39.31, -76.79]</b>				
	07/30/16 19:48 EST		0	Flash Flood (due to Heavy Rain)
	07/30/16 21:33 EST		0	Source: River/Stream Gage
The stream gauge on the Patapsco River at Hollofield reached their flood stage of 11 feet. It peaked at 14.05 feet at 20:30 EST. Hollofield Road began to flood.				
<b>MONTGOMERY COUNTY --- 1.4 E LAYTONSVILLE [39.22, -77.13], 1.5 ESE LAYTONSVILLE [39.21, -77.12], 1.3 ESE LAYTONSVILLE [39.21, -77.13], 1.0 E LAYTONSVILLE [39.22, -77.13]</b>				
	07/30/16 19:52 EST		15K	Flash Flood (due to Heavy Rain)
	07/31/16 03:15 EST		0	Source: Emergency Manager
Five people were rescued from three cars near 5700 Sundown Road.				
<b>MONTGOMERY COUNTY --- 0.5 ENE BROOKEVILLE [39.18, -77.06], 0.5 E BROOKEVILLE [39.18, -77.06], 0.4 ENE BROOKEVILLE [39.18, -77.06], 0.4 ENE BROOKEVILLE [39.18, -77.06]</b>				
	07/30/16 19:53 EST		5K	Flash Flood (due to Heavy Rain)
	07/31/16 03:15 EST		0	Source: Emergency Manager
There were two people rescued from a car by boat near 19800 Georgia Ave.				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>MONTGOMERY COUNTY --- 1.2 W LAYTONSVILLE [39.22, -77.17], 1.1 NNE GOSHEN [39.22, -77.17], 1.1 NNE GOSHEN [39.22, -77.17], 1.3 W LAYTONSVILLE [39.22, -77.17]</b>				
	07/30/16 19:53 EST		0	Flash Flood (due to Heavy Rain)
	07/31/16 03:15 EST		0	Source: Emergency Manager
There was a road closed near the intersection of Woodfield Road and Churchill Downs Road due to a foot of water flowing across the road.				
<b>HOWARD COUNTY --- 0.8 NW ELKRIDGE [39.23, -76.73], 1.5 NW ELKRIDGE [39.23, -76.74], 1.4 NW ELKRIDGE [39.23, -76.74], 0.5 ENE ELKRIDGE [39.22, -76.71], 0.9 E ELKRIDGE [39.22, -76.70], 0.8 ESE ELKRIDGE [39.22, -76.71]</b>				
	07/30/16 19:55 EST		0	Flash Flood (due to Heavy Rain)
	07/31/16 00:31 EST		0	Source: River/Stream Gage
The stream gauge on the Patapsco River at Elkridge reached their flood stage of 15 feet. It peaked at 23.58 feet at 21:15 EST. Water began to approach structures, Washington Boulevard began to flood at the Elkridge/Halethorpe border, water covered the entrance park at Patapsco Valley State Park and a low spot near the end of Levering Avenue began to flood.				
<b>BALTIMORE COUNTY --- 0.8 NNE CATONSVILLE MANOR [39.31, -76.71], 0.8 SE WOODLAWN [39.31, -76.72], 0.7 SE WOODLAWN [39.31, -76.72], 0.6 SSE WOODLAWN [39.31, -76.72], 0.7 SSE WOODLAWN [39.31, -76.72]</b>				
	07/30/16 20:12 EST		0	Flash Flood (due to Heavy Rain)
	07/30/16 20:53 EST		0	Source: River/Stream Gage
The stream gauge at Dead Run at Franklinton reached their flood stage of 10 feet. It peaked at 10.57 at 20:40 EST. Kernan Road began to flood including portions of Dead Run Park.				
<b>BALTIMORE CITY (C) COUNTY --- 0.5 W WESTPORT [39.27, -76.64], 0.5 WSW WESTPORT [39.27, -76.64], 0.4 E MT WINANS [39.27, -76.64], 0.1 E MT WINANS [39.27, -76.65], 0.2 ENE MT WINANS [39.27, -76.65], 0.5 W WESTPORT [39.27, -76.64]</b>				
	07/30/16 20:13 EST		0	Flash Flood (due to Heavy Rain)
	07/30/16 23:00 EST		0	Source: River/Stream Gage
The stream gauge on Gwynn Falls at Washington Boulevard reached their flood stage of 13 feet. It peaked at 17.72 feet at 21:05 EST. Water covered the bike path alongside the stream and approached the end of Berlin Street.				
<b>MONTGOMERY COUNTY --- 0.5 NNW UNITY [39.24, -77.05], 0.7 N UNITY [39.24, -77.05], 1.1 NNW UNITY [39.24, -77.06], 1.0 NW UNITY [39.24, -77.06]</b>				
	07/30/16 20:13 EST		0	Flash Flood (due to Heavy Rain)
	07/31/16 00:11 EST		0	Source: River/Stream Gage
The stream gauge on Patuxent River at Unity reached their flood stage of 8 feet. It peaked at 9.83 feet at 21:15 EST. The parking lot for the Patuxent River State Park at Maryland Route 97 began to flood.				
<b>BALTIMORE COUNTY --- 0.3 SW LOCHEARN [39.35, -76.73], 0.4 SW LOCHEARN [39.35, -76.73], 0.4 WSW LOCHEARN [39.35, -76.74], 0.2 WSW LOCHEARN [39.35, -76.73], 0.2 SW LOCHEARN [39.35, -76.73]</b>				
	07/30/16 20:15 EST		0	Flash Flood (due to Heavy Rain)
	07/31/16 00:20 EST		0	Source: River/Stream Gage
The stream gauge on Gwynn Falls reached their flood stage of 11 feet twice. It was flooding from 20:15 EST until 22:19 EST. It peaked at 11.48 feet at 21:15 EST. The second time it flooded was from 23:49 EST until 00:20 EST. It peaked at 11.07 feet at 00:00 EST. Queen Anne Road began to flood between Essex Road and Villa Nova Road.				
<b>MONTGOMERY COUNTY --- 0.9 SSW PURDUM [39.27, -77.23], 0.9 SSW PURDUM [39.27, -77.24], 0.8 SSW PURDUM [39.27, -77.24], 0.8 SSW PURDUM [39.27, -77.23], 0.9 SSW PURDUM [39.27, -77.23]</b>				
	07/30/16 20:16 EST		0	Flash Flood (due to Heavy Rain)
	07/31/16 03:15 EST		0	Source: COOP Observer
There was about one foot deep of water flowing about 100 feet south of the intersection of Kings Valley Road and Kingstead Road.				
<b>MONTGOMERY COUNTY --- 1.9 WSW UNITY [39.22, -77.08], 2.2 WSW UNITY [39.22, -77.09], 2.4 WSW UNITY [39.22, -77.09], 2.2 WSW UNITY [39.22, -77.09]</b>				
	07/30/16 20:20 EST		5K	Flash Flood (due to Heavy Rain)
	07/31/16 03:15 EST		0	Source: Emergency Manager
There was eight inches of water flowing across the road near the intersection of Sundown Road and Zion Road. A person was rescued from a car near 22200 Zion Road.				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>MONTGOMERY COUNTY --- 1.3 ESE CLARKSBURG [39.22, -77.26], 1.3 ESE CLARKSBURG [39.22, -77.26], 1.2 ESE CLARKSBURG [39.22, -77.26], 1.2 ESE CLARKSBURG [39.22, -77.26]</b>				

07/30/16 20:22 EST	0	Flash Flood (due to Heavy Rain)
07/31/16 03:15 EST	0	Source: Emergency Manager

North Frederick Road was closed in both direction at New Cut road near a bridge crossing over Little Seneca Creek.

<b>HOWARD COUNTY --- 0.5 E SAVAGE [39.13, -76.82], 1.2 SE SAVAGE [39.12, -76.81], 2.6 SE SAVAGE [39.11, -76.79], 4.7 SE SAVAGE [39.08, -76.77], 4.5 SSE JESSUP [39.09, -76.76], 1.6 S JESSUP [39.13, -76.78], 0.8 W JESSUP [39.15, -76.80]</b>				
07/30/16 21:45 EST	0	Flood (due to Heavy Rain)		
07/31/16 08:36 EST	0	Source: River/Stream Gage		

The stream gauge on Little Patuxent River at Savage reached their flood stage of 10 feet. It peaked at 18.04 feet at 02:45 EST. Laurel Fort Meade Road was covered by water.

<b>HOWARD COUNTY --- 1.3 NW GUILFORD [39.18, -76.85], 1.3 NW GUILFORD [39.18, -76.85], 1.5 E SIMPSONVILLE [39.18, -76.85], 1.4 E SIMPSONVILLE [39.18, -76.85], 1.2 E SIMPSONVILLE [39.18, -76.86], 1.3 E SIMPSONVILLE [39.18, -76.86]</b>				
07/30/16 22:08 EST	0	Flash Flood (due to Heavy Rain)		
07/31/16 05:19 EST	0	Source: River/Stream Gage		

The stream gauge on Little Patuxent River at Allview reached their flood stage of 280 feet (elevation). It peaked at 284 feet at 00:15 EST. Carlinda Avenue began to flood at its lowest point.

<b>CARROLL COUNTY --- 0.6 N MAYBERRY [39.64, -77.10], 0.6 NNW MAYBERRY [39.64, -77.10], 0.7 NNW MAYBERRY [39.64, -77.10], 0.7 N MAYBERRY [39.64, -77.10]</b>				
07/30/16 22:29 EST	0	Flood (due to Heavy Rain)		
07/31/16 22:29 EST	0	Source: Emergency Manager		

Mayberry and Bear Run roads were closed due to flooding.

<b>HOWARD COUNTY --- 0.7 S OAKLAND MILLS [39.21, -76.85], 0.6 SW OAKLAND MILLS [39.21, -76.86], 0.9 SW OAKLAND MILLS [39.21, -76.86], 1.1 E CLARKSVILLE [39.20, -76.86], 1.4 S OAKLAND MILLS [39.20, -76.85]</b>				
07/30/16 22:54 EST	0	Flash Flood (due to Heavy Rain)		
07/31/16 06:47 EST	0	Source: River/Stream Gage		

The stream gauge on Little Patuxent River at Guilford reached their flood stage of 11 feet. It peaked at 14.97 feet at 1:15 EST. Water covered the bridge at South Entrance Road and several trail bridges also began to flood. Water approached US 29 in Columbia.

**A boundary remained overhead on the 30th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused a few severe thunderstorms to develop. Thunderstorms merged across Montgomery, Howard and Baltimore counties and led very heavy rainfall that led to flash flooding. Catastrophic flash flooding occurred in Ellicott City, MD the night of July 30th.**

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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*The power of the water rushing downhill ripped out the sloped brick sidewalk in front of buildings on 8200 Block of Main Street in Ellicott City, Maryland. Credit: NWS Survey Team*

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### FREDERICK COUNTY --- 1.1 WNW JOHNSVILLE [39.53, -77.25]

07/30/16 16:14 EST	0	Thunderstorm Wind (EG 50 kt)
07/30/16 16:14 EST	0	Source: 911 Call Center

A tree was down on Etzler Mill Road near Renner Road.

A boundary remained overhead on the 30th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused an isolated thunderstorm to become severe.

## VIRGINIA, North

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### CULPEPER COUNTY --- 0.7 S CULPEPER [38.47, -78.00]

07/01/16 16:00 EST	0	Thunderstorm Wind (EG 50 kt)
07/01/16 16:00 EST	1K	Source: 911 Call Center

Portion of tree fell on power lines.

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### ORANGE COUNTY --- 1.5 ENE MONTPELIER [38.24, -78.15]

07/01/16 16:01 EST	1K	Thunderstorm Wind (EG 50 kt)
07/01/16 16:01 EST	0	Source: 911 Call Center

Tree down near Route 20 and 675.

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### SPOTSYLVANIA COUNTY --- 0.9 NW PARTLOW [38.04, -77.64]

07/01/16 17:37 EST	0	Thunderstorm Wind (EG 50 kt)
07/01/16 17:37 EST	0	Source: 911 Call Center

Large tree down across the road at the intersection of Mt. Olive Road and Partlow Road.

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>SPOTSYLVANIA COUNTY --- 1.5 SW MARYE [38.06, -77.60]</b>				
	07/01/16 17:38 EST		0	Thunderstorm Wind (EG 50 kt)
	07/01/16 17:38 EST		0	Source: 911 Call Center
Large tree down across the road at the intersection of Sassafras Lane and Blanton Road.				
<b>WARREN COUNTY --- 1.6 SW BETHEL [38.91, -78.29]</b>				
	07/01/16 19:36 EST		0	Thunderstorm Wind (EG 50 kt)
	07/01/16 19:36 EST		0	Source: Amateur Radio
Tree down near the intersection of Steel Lane and Mountain Road.				
<b>A cold front passed through the area on July 1st. A southerly flow ahead of the boundary caused warm and humid air in place, which led to an unstable atmosphere. The instability combined with lift from the cold front caused thunderstorms to develop. Some thunderstorms were severe due to stronger sheer profiles from an upper-level trough overhead along with the unstable atmosphere.</b>				
<b>PRINCE WILLIAM COUNTY --- 0.7 N (NYG)MCAS QUANTICO [38.51, -77.30]</b>				
	07/09/16 16:00 EST		0	Thunderstorm Wind (MG 51 kt)
	07/09/16 16:00 EST		0	Source: AWOS
A wind gust of 51 knots was reported at Quantico.				
<b>A cold front passed through the area triggering a few showers and thunderstorms. An isolated thunderstorm became severe with strong winds.</b>				
<b>ALBEMARLE COUNTY --- 0.6 ENE KESWICK [38.02, -78.36]</b>				
	07/14/16 13:05 EST		0	Thunderstorm Wind (EG 50 kt)
	07/14/16 13:05 EST		0	Source: Broadcast Media
Tree was down in Keswick.				
<b>ALBEMARLE COUNTY --- 0.9 WSW COBHAM [38.06, -78.30]</b>				
	07/14/16 13:10 EST		0	Thunderstorm Wind (EG 50 kt)
	07/14/16 13:10 EST		0	Source: 911 Call Center
Tree down on Zion Hill Road.				
<b>ROCKINGHAM COUNTY --- 3.1 N MC GAHEYSVILLE [38.42, -78.73]</b>				
	07/14/16 18:44 EST		0	Thunderstorm Wind (EG 50 kt)
	07/14/16 18:44 EST		0	Source: Fire Department/Rescue
Pair of trees fell into houses, and one was blocking the roadway along Ashby Court.				
<b>An upper-level trough shifted toward the region from the Great Lakes while a surface trough remained overhead. Scattered thunderstorms developed and a few were severe with strong winds.</b>				
<b>AUGUSTA COUNTY --- 0.6 NNE SANGERVILLE [38.39, -79.08]</b>				
	07/16/16 13:15 EST		0	Thunderstorm Wind (EG 50 kt)
	07/16/16 13:15 EST		0	Source: 911 Call Center
Tree down near the intersection of North River Road and Millers Saw Mill Road.				
<b>ROCKINGHAM COUNTY --- 2.3 NNE COOTES STORE [38.66, -78.83]</b>				
	07/16/16 13:38 EST		0	Thunderstorm Wind (EG 50 kt)
	07/16/16 13:38 EST		0	Source: 911 Call Center
Tree down on power lines along North Mountain Road.				
<b>ROCKINGHAM COUNTY --- 1.1 E COOTES STORE [38.63, -78.83]</b>				
	07/16/16 13:39 EST		0	Thunderstorm Wind (EG 50 kt)
	07/16/16 13:39 EST		0	Source: 911 Call Center
Tree down in roadway near the intersection of Brocks Gap Road and Hisers Lane.				



## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>AUGUSTA COUNTY --- 0.8 SSE KNIGHTLY [38.22, -78.92]</b>				
	07/16/16 14:39 EST		0	Thunderstorm Wind (EG 50 kt)
	07/16/16 14:39 EST		0	Source: 911 Call Center
Tree was down along the 1700 Block of Knightly Mill Road.				
<b>PRINCE WILLIAM COUNTY --- 1.5 WSW HOADLY [38.67, -77.40]</b>				
	07/16/16 16:34 EST		0	Thunderstorm Wind (EG 50 kt)
	07/16/16 16:34 EST		0	Source: 911 Call Center
Tree was down near the intersection of Hoadly Road and Dale Boulevard.				
<b>Southerly flow ushered in hot and humid conditions around high pressure centered in the Atlantic. High amounts of instability led to some thunderstorms, and some were severe with strong winds.</b>				
<b>AUGUSTA COUNTY --- 0.5 NNE SANGERVILLE [38.39, -79.08], 0.5 NNE SANGERVILLE [38.39, -79.08], 0.7 N SANGERVILLE [38.39, -79.08], 0.7 NNE SANGERVILLE [38.39, -79.08]</b>				
	07/16/16 15:20 EST		0	Flash Flood (due to Heavy Rain)
	07/16/16 17:00 EST		0	Source: 911 Call Center
North River Road was closed at Grindstone Road due to flooding.				
<b>Southerly flow ushered in hot and humid conditions around high pressure centered in the Atlantic. High amounts of instability led to some thunderstorms, and some were severe with strong winds. Thunderstorms produced heavy rainfall capable of flooding.</b>				
<b>SHENANDOAH COUNTY --- 0.4 NE EDINBURG [38.82, -78.56]</b>				
	07/18/16 13:32 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 13:32 EST		0	Source: Emergency Manager
Two trees were down in Edinburg.				
<b>LOUDOUN COUNTY --- 1.0 WSW LOUDOUN HGTS [39.32, -77.72]</b>				
	07/18/16 13:41 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 13:41 EST		0	Source: 911 Call Center
Two trees were down on Harpers Ferry Road near Loudoun Heights Lane.				
<b>LOUDOUN COUNTY --- 0.7 NW NEERSVILLE [39.28, -77.73]</b>				
	07/18/16 13:46 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 13:46 EST		0	Source: 911 Call Center
Tree down near the intersection of Arnold Lane and Sawmill Lane.				
<b>WARREN COUNTY --- 0.4 NW FRONT ROYAL [38.92, -78.18]</b>				
	07/18/16 13:47 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 13:47 EST		0	Source: Emergency Manager
Trees were down in roadway at the 2900 Block of Bentonville Road.				
<b>WARREN COUNTY --- 1.6 N KARO [38.89, -78.25]</b>				
	07/18/16 13:48 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 13:48 EST		0	Source: Emergency Manager
Trees down along Poca Bella Drive and Rosa Court.				
<b>LOUDOUN COUNTY --- 2.3 N LOVETTSVILLE [39.30, -77.63]</b>				
	07/18/16 13:50 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 13:50 EST		0	Source: 911 Call Center
A tree was down on 287 near the Maryland state line.				
<b>WARREN COUNTY --- 0.4 NW FRONT ROYAL [38.92, -78.18]</b>				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/18/16 13:50 EST		0	Thunderstorm Wind (EG 52 kt)
	07/18/16 13:50 EST		0	Source: Emergency Manager
Trees were down US Route 340 between Skyline Vista and Snake Drive.				
<hr/>				
<b>WARREN COUNTY --- 1.9 SW FRONT ROYAL [38.90, -78.21]</b>				
	07/18/16 13:51 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 13:51 EST		0	Source: Emergency Manager
A tree was down on power lines along the 7100 Block of Browntown Road.				
<hr/>				
<b>RAPPAHANNOCK COUNTY --- 1.2 N BEU VENUE [38.74, -78.08]</b>				
	07/18/16 14:17 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 14:17 EST		0	Source: 911 Call Center
A tree was down in the roadway along the 490 Block of Ben Venue Road.				
<hr/>				
<b>RAPPAHANNOCK COUNTY --- 0.6 SW ESTES [38.61, -78.08]</b>				
	07/18/16 14:18 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 14:18 EST		0	Source: 911 Call Center
A tree was down in the roadway along Castle Mountain Road.				
<hr/>				
<b>CULPEPER COUNTY --- 3.3 W MONUMENT MILLS [38.60, -78.06]</b>				
	07/18/16 14:21 EST		0	Thunderstorm Wind (EG 52 kt)
	07/18/16 14:21 EST		0	Source: 911 Call Center
Numerous trees and wires were down near the intersection of Eggbornsville road and Riverside Farm Lane.				
<hr/>				
<b>CULPEPER COUNTY --- 1.7 NW WHITE SHOP [38.45, -78.09]</b>				
	07/18/16 14:26 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 14:26 EST		0	Source: Public
A large tree limb six inches in diameter was down near the intersection of White Shop Road and James Monroe Highway.				
<hr/>				
<b>CULPEPER COUNTY --- 1.0 E CULPEPER [38.48, -77.98]</b>				
	07/18/16 14:31 EST		0	Thunderstorm Wind (EG 52 kt)
	07/18/16 14:31 EST		0	Source: 911 Call Center
Numerous trees and wires were down in the vicinity of Highview Court.				
<hr/>				
<b>LOUDOUN COUNTY --- 0.3 N LEESBURG MUNI [39.08, -77.55]</b>				
	07/18/16 14:34 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 14:34 EST		0	Source: Public
Large branches were down and the siding was blown off a house near Galloway Drive Southeast.				
<hr/>				
<b>FAUQUIER COUNTY --- 0.8 NNW WARRENTON ARPT [38.66, -77.79]</b>				
	07/18/16 14:38 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 14:38 EST		0	Source: 911 Call Center
A tree was down near the intersection of Beach Road and Old Mill Estates Lane.				
<hr/>				
<b>FAIRFAX COUNTY --- 2.4 S CLIFTON [38.75, -77.38]</b>				
	07/18/16 15:06 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 15:06 EST		0	Source: 911 Call Center
A tree was down on a car in the 12000 Block of Old Yates Ford Road.				
<hr/>				
<b>STAFFORD COUNTY --- 0.5 NW GARRISONVILLE [38.48, -77.43]</b>				
	07/18/16 15:13 EST		0	Thunderstorm Wind (EG 52 kt)
	07/18/16 15:13 EST		0	Source: 911 Call Center

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
Multiple trees were down near the intersection of Garrisonville and Onville Road.				
<b>FAIRFAX COUNTY --- 0.7 E CHESTERBROOK GARDENS [38.90, -77.19]</b>				
	07/18/16 15:15 EST	0		Thunderstorm Wind (EG 50 kt)
	07/18/16 15:15 EST	0		Source: NWS Employee
Tree down near West Falls Church Metro.				
<b>ARLINGTON COUNTY --- 0.8 NNE ROSSLYN [38.89, -77.08]</b>				
	07/18/16 15:21 EST	0		Thunderstorm Wind (EG 50 kt)
	07/18/16 15:21 EST	0		Source: 911 Call Center
Tree limb was blocking the roadway at the intersection of North Fort Myer Drive and Arlington Boulevard.				
<b>FAIRFAX COUNTY --- 0.8 NW GUM SPGS [38.74, -77.09]</b>				
	07/18/16 15:30 EST	0		Thunderstorm Wind (EG 50 kt)
	07/18/16 15:30 EST	0		Source: 911 Call Center
A tree was down near the intersection of Buckman Road and Richmond Highway.				
<b>GREENE COUNTY --- 0.6 SSE STANDARDSVILLE [38.29, -78.43]</b>				
	07/18/16 15:48 EST	0		Thunderstorm Wind (EG 52 kt)
	07/18/16 15:48 EST	0		Source: Emergency Manager
Multiple trees were down near Ice House Road and Holmes Run.				
<b>GREENE COUNTY --- 0.7 SSE STANDARDSVILLE [38.29, -78.43]</b>				
	07/18/16 15:48 EST	0		Hail (1.25 in)
	07/18/16 15:48 EST	0		Source: Broadcast Media
Half dollar sized hail was reported near Stanardsville.				
<b>GREENE COUNTY --- 1.1 SSE STANDARDSVILLE [38.29, -78.42]</b>				
	07/18/16 15:48 EST	0		Hail (1.00 in)
	07/18/16 15:48 EST	0		Source: Emergency Manager
Quarter sized hail was reported near Stanardsville.				
<b>GREENE COUNTY --- 1.1 SSE STANDARDSVILLE [38.29, -78.42]</b>				
	07/18/16 15:48 EST	0		Thunderstorm Wind (EG 52 kt)
	07/18/16 15:48 EST	0		Source: Trained Spotter
Numerous trees were down in Stanardsville.				
<b>GREENE COUNTY --- 1.1 E STANDARDSVILLE [38.30, -78.41]</b>				
	07/18/16 15:50 EST	0		Thunderstorm Wind (EG 50 kt)
	07/18/16 15:50 EST	0		Source: Broadcast Media
A tree 5 feet in diameter was uprooted and the roof of a barn was partially blown off on Old Durette Road.				
<b>ORANGE COUNTY --- 2.4 SSW PIERCES SHOP [38.20, -78.07]</b>				
	07/18/16 16:40 EST	0		Thunderstorm Wind (EG 50 kt)
	07/18/16 16:40 EST	0		Source: 911 Call Center
A tree was down on power lines and a power pole was snapped at the 18000 Block Monrovia Road.				
<b>A cold front passed through the area. Ahead of the front, hot and humid conditions led to an unstable atmosphere. The forcing from the cold front combined with the instability to trigger thunderstorms. Stronger shear from an upper-level trough caused some thunderstorms to become severe.</b>				
<b>CULPEPER COUNTY --- 1.8 NNE WHITE SHOP [38.45, -78.06]</b>				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/19/16 13:00 EST		0	Hail (1.00 in)
	07/19/16 13:00 EST		0	Source: Public
Quarter sized hail was reported.				
<hr/>				
<b>CULPEPER COUNTY --- 2.5 S CULPEPER [38.44, -78.00]</b>				
	07/19/16 13:05 EST		0	Hail (1.00 in)
	07/19/16 13:05 EST		0	Source: Trained Spotter
Quarter sized hail was reported on Route 686 and Highway 15.				
<hr/>				
<b>FAUQUIER COUNTY --- 2.3 WSW OPAL [38.61, -77.84]</b>				
	07/19/16 13:24 EST		0	Hail (1.00 in)
	07/19/16 13:24 EST		0	Source: Public
Quarter sized hail was reported near Opal.				
<hr/>				
<b>MADISON COUNTY --- 1.1 ENE HAYWOOD [38.45, -78.25]</b>				
	07/19/16 13:24 EST		0	Hail (1.75 in)
	07/19/16 13:24 EST		0	Source: Trained Spotter
Golf Ball sized hail was reported in Haywood. Numerous trees were down as well.				
<hr/>				
<b>MADISON COUNTY --- 1.3 WNW LEON [38.46, -78.17]</b>				
	07/19/16 13:25 EST		0	Thunderstorm Wind (EG 50 kt)
	07/19/16 13:25 EST		0	Source: 911 Call Center
Trees were down at Ridgeview Road and West Hoover Road.				
<hr/>				
<b>MADISON COUNTY --- 0.8 ENE BRIGHTWOOD [38.42, -78.19]</b>				
	07/19/16 13:33 EST		0	Thunderstorm Wind (EG 50 kt)
	07/19/16 13:33 EST		0	Source: 911 Call Center
Trees were down at the 500 Block of North Seminole Trail.				
<hr/>				
<b>ORANGE COUNTY --- 0.5 W LOCUSTGROVE [38.30, -77.83]</b>				
	07/19/16 13:43 EST		0	Hail (1.00 in)
	07/19/16 13:43 EST		0	Source: Public
Quarter sized hail was reported at Locust Grove Elementary School.				
<hr/>				
<b>SPOTSYLVANIA COUNTY --- 0.5 NNW PARKER [38.28, -77.75]</b>				
	07/19/16 13:45 EST		0	Hail (1.00 in)
	07/19/16 13:45 EST		0	Source: Public
Quarter sized hail was reported along Orange Plank Road.				
<hr/>				
<b>SPOTSYLVANIA COUNTY --- 1.2 W PAYTES [38.22, -77.84]</b>				
	07/19/16 13:52 EST		0	Thunderstorm Wind (EG 50 kt)
	07/19/16 13:52 EST		0	Source: 911 Call Center
Tree down on power lines at Tatum Road and Lawyers Road.				
<hr/>				
<b>MADISON COUNTY --- 1.1 SE RUTH [38.39, -78.30]</b>				
	07/19/16 13:55 EST		0	Thunderstorm Wind (EG 52 kt)
	07/19/16 13:55 EST		0	Source: 911 Call Center
About eight trees were down along Ruth Road in scattered locations near the intersection of Ruth and Thrift Roads.				
<hr/>				
<b>SPOTSYLVANIA COUNTY --- 2.6 NE MT PLEASANT [38.12, -77.64]</b>				
	07/19/16 14:22 EST		0	Hail (1.00 in)
	07/19/16 14:22 EST		0	Source: Public

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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Quarter sized hail was reported along Block House Road.

A boundary stalled over the area. Warm and humid conditions led to an unstable atmosphere while an upper-level trough passed through the area. The forcing from the boundary front combined with the instability to trigger thunderstorms. Stronger shear from the upper-level trough caused some thunderstorms to become severe.

**(VA-Z052) PRINCE WILLIAM, (VA-Z053) FAIRFAX, (VA-Z054) ARLINGTON, (VA-Z055) STAFFORD, (VA-Z056) SPOTSYLVANIA, (VA-Z057) KING GEORGE, (VA-Z502) SOUTHERN FAUQUIER**

07/23/16 12:00 EST	0	Heat
07/23/16 16:00 EST	0	

A southwesterly flow around high pressure over the Atlantic pumped in plenty of moisture while hot conditions persisted due to an upper-level ridge of high pressure. The heat and humidity caused heat indices to top off around 105 degrees.

**ROCKINGHAM COUNTY --- 0.4 SSW KEEZLETOWN [38.42, -78.80]**

07/24/16 18:04 EST	0	Thunderstorm Wind (EG 50 kt)
07/24/16 18:04 EST	0	Source: Broadcast Media

A large tree and branches were down.

**FREDERICK COUNTY --- 0.1 WSW MT PLEASANT [39.17, -78.30]**

07/24/16 18:55 EST	0	Thunderstorm Wind (EG 50 kt)
07/24/16 18:55 EST	0	Source: 911 Call Center

A large tree was down near the 2000 Block of Wardensville Road.

**FREDERICK COUNTY --- 0.2 NNW MT PLEASANT [39.17, -78.30]**

07/24/16 18:56 EST	0	Thunderstorm Wind (EG 50 kt)
07/24/16 18:56 EST	0	Source: 911 Call Center

A large tree was knocked down onto the road near the 19000 Block of Wardensville Grade.

**FREDERICK COUNTY --- 1.3 NE FAWCETT GAP [39.14, -78.28]**

07/24/16 18:57 EST	0	Thunderstorm Wind (EG 50 kt)
07/24/16 18:57 EST	0	Source: 911 Call Center

A large tree fell onto power lines near the 3400 Block of Cedar Creek Grade.

**FREDERICK COUNTY --- 1.0 E MT PLEASANT [39.17, -78.28]**

07/24/16 18:59 EST	0	Thunderstorm Wind (EG 50 kt)
07/24/16 18:59 EST	0	Source: 911 Call Center

A large tree fell into a house along Shields Drive.

**LOUDOUN COUNTY --- 1.0 NE BRITAIN [39.26, -77.67]**

07/24/16 20:00 EST	0	Thunderstorm Wind (EG 52 kt)
07/24/16 20:00 EST	0	Source: Fire Department/Rescue

Numerous trees were down along Snowbird Court.

A boundary remained overhead on the 24th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused a few severe thunderstorms to develop during the early evening hours.

**(VA-Z036) NELSON, (VA-Z037) ALBEMARLE, (VA-Z038) GREENE, (VA-Z040) RAPPAHANNOCK, (VA-Z050) ORANGE, (VA-Z051) CULPEPER, (VA-Z052) PRINCE WILLIAM, (VA-Z053) FAIRFAX, (VA-Z055) STAFFORD, (VA-Z056) SPOTSYLVANIA, (VA-Z057) KING GEORGE, (VA-Z501) NORTHERN FAUQUIER, (VA-Z502) SOUTHERN FAUQUIER, (VA-Z505) WESTERN LOUDOUN, (VA-Z506) EASTERN LOUDOUN**

07/25/16 11:00 EST	0	Heat
07/25/16 17:00 EST	0	

**(VA-Z054) ARLINGTON**

07/25/16 12:00 EST	0	Excessive Heat
07/25/16 15:00 EST	0	

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>A southwesterly flow around high pressure over the Atlantic pumped in plenty of moisture while hot conditions persisted due to an upper-level ridge of high pressure. The heat and humidity caused dangerous heat indices.</b>				
<b>FREDERICK COUNTY --- 0.5 SW NAIN [39.23, -78.21]</b>				
	07/25/16 14:16 EST	0		Thunderstorm Wind (EG 52 kt)
	07/25/16 14:16 EST	0		Source: Emergency Manager
Several large trees were snapped and uprooted. Some trees fell into homes and a Carport had wind damage. The damage occurred in Albin.				
<b>FREDERICK COUNTY --- 0.2 E WINCHESTER ARPT [39.15, -78.15]</b>				
	07/25/16 15:40 EST	0		Thunderstorm Wind (MG 50 kt)
	07/25/16 15:40 EST	0		Source: AWOS
A wind gust of 58 mph was reported at the Winchester Airport.				
<b>LOUDOUN COUNTY --- PHILOMONT [39.05, -77.73]</b>				
	07/25/16 16:15 EST	0		Thunderstorm Wind (EG 50 kt)
	07/25/16 16:15 EST	0		Source: Amateur Radio
Numerous trees and large limbs down along the Snickerville Turnpike near Jeb Stuart Road.				
<b>LOUDOUN COUNTY --- 1.7 NW MIDDLEBURG [38.99, -77.79]</b>				
	07/25/16 16:24 EST	0		Thunderstorm Wind (EG 50 kt)
	07/25/16 16:24 EST	0		Source: State Official
A tree was down on St. Louis Road.				
<b>LOUDOUN COUNTY --- 1.6 E MIDDLEBURG [38.97, -77.74]</b>				
	07/25/16 16:26 EST	0		Thunderstorm Wind (EG 52 kt)
	07/25/16 16:26 EST	0		Source: 911 Call Center
Trees were down along Foxcroft Road.				
<b>LOUDOUN COUNTY --- 0.6 NW ALDIE [38.98, -77.64]</b>				
	07/25/16 16:27 EST	0		Thunderstorm Wind (EG 52 kt)
	07/25/16 16:27 EST	0		Source: 911 Call Center
Multiple trees were down in Aldie.				
<b>A boundary remained overhead on the 25th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused a few severe thunderstorms to develop.</b>				
<b>PAGE COUNTY --- 0.6 SSE NEWPORT [38.57, -78.60]</b>				
	07/26/16 16:27 EST	0		Thunderstorm Wind (EG 50 kt)
	07/26/16 16:27 EST	0		Source: Public
Numerous trees were down and some were uprooted at Riverside Camping.				
<b>PAGE COUNTY --- 0.2 ESE NEWPORT [38.58, -78.60]</b>				
	07/26/16 16:28 EST	0		Thunderstorm Wind (EG 52 kt)
	07/26/16 16:28 EST	0		Source: Emergency Manager
Numerous trees were down in Newport.				
<b>PAGE COUNTY --- 0.8 NE NEWPORT [38.59, -78.59]</b>				
	07/26/16 16:32 EST	0		Thunderstorm Wind (EG 50 kt)
	07/26/16 16:32 EST	0		Source: Trained Spotter
Two trees were down at the intersection of US 340 and the US 340 Business.				
<b>SPOTSYLVANIA COUNTY --- 1.4 NNE BELMONT [38.17, -77.86]</b>				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/26/16 18:50 EST		0	Thunderstorm Wind (EG 52 kt)
	07/26/16 18:50 EST		0	Source: Emergency Manager
Trees were down on Belmont Road.				
<hr/>				
<b>SPOTSYLVANIA COUNTY --- 2.6 ENE BELMONT [38.16, -77.82]</b>				
	07/26/16 18:59 EST		0	Thunderstorm Wind (EG 50 kt)
	07/26/16 18:59 EST		0	Source: 911 Call Center
A tree was down on a power line at the intersection of Lawyers Road and Stubb Bridge Road.				
<hr/>				
<b>SPOTSYLVANIA COUNTY --- 3.6 NNE CDENORA [38.13, -77.78]</b>				
	07/26/16 19:15 EST		0	Thunderstorm Wind (EG 52 kt)
	07/26/16 19:15 EST		0	Source: Emergency Manager
Trees were down at the intersection of Lawyers Road and Hayleys Mill Road.				
<hr/>				
<b>SPOTSYLVANIA COUNTY --- 3.4 NNE CDENORA [38.13, -77.78]</b>				
	07/26/16 19:19 EST		0	Thunderstorm Wind (EG 52 kt)
	07/26/16 19:19 EST		0	Source: Emergency Manager
Trees were down at the intersection of Lawyers Road and Ridge Road.				
<hr/>				
<b>SPOTSYLVANIA COUNTY --- 0.7 S LEWISTON [38.06, -77.75]</b>				
	07/26/16 19:33 EST		0	Thunderstorm Wind (EG 52 kt)
	07/26/16 19:33 EST		0	Source: Public
Several large trees down along Breaknock Road.				
<b>A boundary remained overhead on the 26th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused a few severe thunderstorms to develop.</b>				
<hr/>				
<b>AUGUSTA COUNTY --- 0.5 E CRIMORA [38.15, -78.84]</b>				
	07/27/16 13:06 EST		0	Thunderstorm Wind (EG 50 kt)
	07/27/16 13:06 EST		0	Source: Broadcast Media
A tree was down on a structure off Route 340 in Crimora.				
<hr/>				
<b>AUGUSTA COUNTY --- 0.7 SE CRIMORA [38.14, -78.84]</b>				
	07/27/16 13:08 EST		0	Thunderstorm Wind (EG 52 kt)
	07/27/16 13:08 EST		0	Source: Broadcast Media
Trees were down on power lines near Crimora.				
<b>A boundary remained overhead on the 27th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused a few severe thunderstorms to develop.</b>				
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<b>FREDERICK COUNTY --- 0.9 ESE HAYFIELD [39.23, -78.28]</b>				
	07/28/16 12:59 EST		0	Thunderstorm Wind (EG 50 kt)
	07/28/16 12:59 EST		0	Source: 911 Call Center
A tree was down in the 300 Block of Mount Olive Road.				
<hr/>				
<b>FREDERICK COUNTY --- 1.5 S GRAVEL SPGS [39.06, -78.47]</b>				
	07/28/16 13:32 EST		0	Thunderstorm Wind (EG 50 kt)
	07/28/16 13:32 EST		0	Source: 911 Call Center
A tree was down on power lines in the 600 Block of Oates Road.				
<hr/>				
<b>CLARKE COUNTY --- 0.7 NW CLAYTONVILLE [39.09, -78.03]</b>				
	07/28/16 14:10 EST		0	Thunderstorm Wind (EG 50 kt)
	07/28/16 14:10 EST		0	Source: 911 Call Center

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
A tree was down across the roadway in the 2300 Block of Bishop Meade Road.				
<b>CLARKE COUNTY --- 2.8 SE MILLWOOD [39.04, -78.00]</b>				
	07/28/16 14:13 EST	0		Thunderstorm Wind (EG 50 kt)
	07/28/16 14:13 EST	0		Source: 911 Call Center
A tree was down across the roadway near the intersection of Lions Lane and Howellsville Road.				
<b>LOUDOUN COUNTY --- 1.7 WSW BLUEMONT [39.11, -77.85]</b>				
	07/28/16 14:30 EST	0		Thunderstorm Wind (EG 50 kt)
	07/28/16 14:30 EST	0		Source: 911 Call Center
A tree was down in the 21000 Block of Blue Ridge Mountain Road.				
<b>A boundary remained overhead on the 28th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused a few severe thunderstorms to develop.</b>				
<b>CULPEPER COUNTY --- 1.2 S CULPEPER [38.46, -78.00]</b>				
	07/30/16 18:25 EST	0		Thunderstorm Wind (EG 50 kt)
	07/30/16 18:25 EST	0		Source: 911 Call Center
A tree was down along the 1400 block Old Fredericksburg Road.				
<b>CHARLOTTESVILLE (C) COUNTY --- 2.1 ENE CHARLOTTESVILLE [38.04, -78.47]</b>				
	07/30/16 19:13 EST	0		Thunderstorm Wind (EG 50 kt)
	07/30/16 19:13 EST	0		Source: 911 Call Center
A tree was knocked down onto a house near the 10000 block of Sheridan Avenue.				
<b>A boundary remained overhead on the 30th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused a few severe thunderstorms to develop.</b>				
<b>RAPPAHANNOCK COUNTY --- 0.8 ESE WOODVILLE [38.59, -78.17], 0.8 SE WOODVILLE [38.59, -78.17], 0.5 ENE WOODVILLE [38.60, -78.17], 0.6 ENE WOODVILLE [38.60, -78.17]</b>				
	07/30/16 18:50 EST	0		Flash Flood (due to Heavy Rain)
	07/30/16 21:15 EST	0		Source: 911 Call Center
There was a mudslide on US 522 one mile south of Woodville. The southbound lane was closed.				
<b>RAPPAHANNOCK COUNTY --- 1.5 SSE CASTLETON [38.58, -78.11], 1.5 S CASTLETON [38.58, -78.11], 1.4 S CASTLETON [38.58, -78.12], 1.4 SSE CASTLETON [38.58, -78.11]</b>				
	07/30/16 19:02 EST	0		Flash Flood (due to Heavy Rain)
	07/30/16 21:15 EST	0		Source: 911 Call Center
Turkey Ridge Road was flooded and closed.				
<b>RAPPAHANNOCK COUNTY --- 1.1 WNW ESTES [38.63, -78.09], 1.3 WNW ESTES [38.63, -78.09], 1.5 WNW ESTES [38.63, -78.10], 1.2 W ESTES [38.62, -78.09]</b>				
	07/30/16 19:04 EST	0		Flash Flood (due to Heavy Rain)
	07/30/16 21:15 EST	0		Source: 911 Call Center
Castle Mountain Road was flooded and closed.				
<b>CULPEPER COUNTY --- 0.9 NW INLET [38.49, -77.94], 0.8 NW INLET [38.49, -77.94], 0.8 NNE INLET [38.49, -77.92], 0.9 NNE INLET [38.49, -77.92]</b>				
	07/30/16 19:12 EST	0		Flash Flood (due to Heavy Rain)
	07/30/16 21:15 EST	0		Source: 911 Call Center
Bel Pre Road was closed from Jubilee Road to Brandy Road due to flooding.				
<b>CULPEPER COUNTY --- 0.3 NE INLET [38.48, -77.93], 0.1 NE INLET [38.48, -77.93], 0.3 E INLET [38.48, -77.93], 1.5 E INLET [38.48, -77.90], 1.5 E INLET [38.48, -77.90]</b>				
	07/30/16 19:14 EST	0		Flood (due to Heavy Rain)
	07/30/16 21:15 EST	0		Source: 911 Call Center



## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
Glen Ella Road was flooded and closed.				
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<b>ALBEMARLE COUNTY --- 2.9 W SIMEON [37.98, -78.50], 3.0 W SIMEON [37.98, -78.50], 3.0 W SIMEON [37.98, -78.51], 3.0 W SIMEON [37.98, -78.50]</b>	07/30/16 19:37 EST		0	Flood (due to Heavy Rain)
	07/30/16 21:37 EST		0	Source: 911 Call Center
The 1900 Block of Scottsville Road was closed due to flooding.				
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<b>ALBEMARLE COUNTY --- 1.6 N WOODRIDGE [37.92, -78.45], 1.6 N WOODRIDGE [37.92, -78.45], 1.5 N WOODRIDGE [37.92, -78.45], 1.5 N WOODRIDGE [37.92, -78.45]</b>	07/30/16 19:57 EST		0	Flood (due to Heavy Rain)
	07/30/16 21:57 EST		0	Source: 911 Call Center
Rolling Road was closed between the 3900 and 4300 blocks due to flooding.				
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<b>CULPEPER COUNTY --- 0.5 SE RIXEYVILLE [38.57, -77.96], 0.7 SSE RIXEYVILLE [38.57, -77.96], 1.6 ESE RIXEYVILLE [38.57, -77.94], 2.0 ESE RIXEYVILLE [38.57, -77.94], 1.9 ESE RIXEYVILLE [38.57, -77.94], 1.3 ESE RIXEYVILLE [38.57, -77.95]</b>	07/30/16 22:45 EST		0	Flood (due to Heavy Rain)
	07/31/16 03:00 EST		0	Source: Department of Highways
Route 640 east of Rixeyville was closed due to flooding.				
<p><b>A boundary remained overhead on the 30th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused a few severe thunderstorms to develop. Thunderstorms merged across Montgomery, Howard and Baltimore counties and led very heavy rainfall that led to flash flooding. Catastrophic flash flooding occurred in Ellicott City, MD the night of July 30th. Thunderstorms also formed across the Central Foothills in Virginia.</b></p>				
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<b>(VA-Z025) AUGUSTA, (VA-Z026) ROCKINGHAM, (VA-Z037) ALBEMARLE, (VA-Z038) GREENE, (VA-Z039) MADISON, (VA-Z040) RAPPAHANNOCK, (VA-Z050) ORANGE, (VA-Z051) CULPEPER</b>	07/31/16 00:00 EST		0	Dense Fog
	07/31/16 07:19 EST		0	
Radiational cooling along with high amounts of low-level moisture resulted in areas of dense fog during the early morning hours.				
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<b>SPOTSYLVANIA COUNTY --- 2.3 ESE HOLLADAY [38.11, -77.83]</b>	07/31/16 14:20 EST		0	Thunderstorm Wind (EG 52 kt)
	07/31/16 14:20 EST		0	Source: Amateur Radio
Trees were down at Lake Anna State Park near cabin 1 and cabin 7.				
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<b>LOUDOUN COUNTY --- 0.7 NE HAMILTON [39.14, -77.64]</b>	07/31/16 15:00 EST		0	Thunderstorm Wind (EG 50 kt)
	07/31/16 15:00 EST		0	Source: 911 Call Center
A tree was down across Gable Farm Road near East Colonial Highway.				
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<b>LOUDOUN COUNTY --- 0.8 SE RAEONIAN SPGS [39.14, -77.61]</b>	07/31/16 15:02 EST		0	Thunderstorm Wind (EG 50 kt)
	07/31/16 15:02 EST		0	Source: Trained Spotter
A tree was down in the 17000 block of Bridge View Court.				
<p><b>A cold front approached the area on the 31st. Hot and humid conditions ahead of the front led to an unstable atmosphere. A few thunderstorms developed due to the heating of the day and the approaching cold front. Some thunderstorms became severe with strong winds due to stronger shear from an upper-level trough overhead.</b></p>				
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<b>WEST VIRGINIA, East</b>				
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<b>MORGAN COUNTY --- 0.8 E PAW PAW [39.53, -78.46]</b>				

## Storm Data and Unusual Weather Phenomena - July 2016

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	07/18/16 12:41 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 12:41 EST		0	Source: 911 Call Center

A tree was down on wires in Paw Paw.

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### BERKELEY COUNTY --- 1.1 ESE ARDEN [39.41, -78.03]

	07/18/16 13:21 EST		0	Thunderstorm Wind (EG 50 kt)
	07/18/16 13:21 EST		0	Source: 911 Call Center

Trees were down at the 4000 Block of Tabler Station Road.

**A cold front passed through the area. Ahead of the front, hot and humid conditions led to an unstable atmosphere. The forcing from the cold front combined with the instability to trigger thunderstorms. Stronger shear from an upper-level trough caused some thunderstorms to become severe.**

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### (WV-Z052) BERKELEY, (WV-Z053) JEFFERSON

	07/25/16 13:00 EST		0	Heat
	07/25/16 14:00 EST		0	

**A southwesterly flow around high pressure over the Atlantic pumped in plenty of moisture while hot conditions persisted due to an upper-level ridge of high pressure. The heat and humidity caused dangerous heat indices.**

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### MORGAN COUNTY --- 0.6 ESE JOHNSONS MILL [39.57, -78.19], 0.6 ESE JOHNSONS MILL [39.57, -78.19], 0.5 ESE JOHNSONS MILL [39.57, -78.19], 0.5 ESE JOHNSONS MILL [39.57, -78.19]

	07/28/16 16:31 EST		0	Flood (due to Heavy Rain)
	07/28/16 19:15 EST		0	Source: 911 Call Center

Johnsons Mill Road was closed due to high water in the 4700 block. This is a flood prone area.

**A boundary remained overhead on the 28th of July. Hot and humid conditions led to an unstable atmosphere. The instability along with the boundary caused a few severe thunderstorms to develop. Thunderstorms produced heavy rainfall.**