



# National Weather Service

## Storm Data and Unusual Weather Phenomena



July 2004

| Location                          | Date | Time<br>Local/<br>Standard | Path<br>Length<br>(Miles) | Path<br>Width<br>(Yards) | Number of<br>Persons<br>Killed | Number of<br>Persons<br>Injured | Estimated<br>Damage<br>Property | Estimated<br>Damage<br>Crops | Character of Storm   |
|-----------------------------------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--|
| <b><u>ATLANTIC NORTH</u></b>      |      |                            |                           |                          |                                |                                 |                                 |                              |  |
| ANZ531<br>7 N Millers Island      | 01   | 1625EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (EG34)  |
| ANZ532<br>5 SE Annapolis          | 05   | 1551EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG34)  |
| ANZ531<br>3.5 NW Millers Island   | 05   | 1736EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (EG45)<br>Sailboat capsized off Strawberry Point on the Middle River. |
| ANZ530<br>6 NW Pooles Island      | 05   | 1800EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG38)  |
| ANZ534<br>16 SE Patuxent River Na | 05   | 1830EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG42)  |
| ANZ534<br>Smith Island            | 05   | 1900EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG34)  |
| ANZ537<br>Lewisetta               | 07   | 1342EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG36)  |
| ANZ537<br>Lewisetta               | 07   | 1354EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (EG34)  |
| ANZ537<br>Point Lookout           | 07   | 1400EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG36)  |
| ANZ534<br>Solomons Island         | 12   | 1800EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (EG34)  |
| ANZ537<br>Point Lookout           | 12   | 1815EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG35)  |
| ANZ534<br>17 E Patuxent River Nas | 12   | 1830EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG42)  |
| ANZ530<br>Aberdeen Proving Grnd   | 14   | 1400EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (EG40)  |
| ANZ535<br>2 SW Rnld Reagan Natl   | 14   | 1400EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG36)  |
| ANZ535<br>Rnld Reagan Natl Arpt   | 14   | 1402EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG36)  |
| ANZ536<br>Quantico                | 14   | 1440EST<br>1748EST         |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (EG34)  |
| ANZ534<br>Solomons Island         | 14   | 1553EST<br>1605EST         |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG64)  |
| ANZ534<br>Patuxent River Nas      | 14   | 1605EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG74)  |
| ANZ533<br>Drum Pt                 | 14   | 1605EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (EG35)  |
| ANZ534<br>16 SE Patuxent River Na | 14   | 1615EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG46)  |
| ANZ537<br>Point Lookout           | 14   | 1615EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG39)  |
| ANZ534<br>13 NE Crisfield         | 14   | 1645EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG48)  |
| ANZ534<br>Crisfield               | 14   | 1700EST                    |                           |                          | 0                              | 0                               |                                 |                              | Marine Tstm Wind (MG34)  |



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|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|
|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|

### ATLANTIC NORTH

|                         |   |         |  |  |   |   |  |  |                         |
|-------------------------|---|---------|--|--|---|---|--|--|-------------------------|
| ANZ537                  | Tidal Potomac Cobb Is Md To Smith Pt Va |         |  |  |   |   |  |  |                         |
| Point Lookout           | 14                                      | 1715EST |  |  | 0 | 0 |  |  | Marine Tstm Wind (MG34) |
| ANZ534                  | Chesapeake Bay Drum Pt To Smith Pt Va   |         |  |  |   |   |  |  |                         |
| 16 SE Patuxent River Na | 17                                      | 1845EST |  |  | 0 | 0 |  |  | Marine Tstm Wind (MG36) |
| ANZ536                  | Tidal Potomac Indian Hd To Cobb Is Md   |         |  |  |   |   |  |  |                         |
| Quantico                | 22                                      | 1645EST |  |  | 0 | 0 |  |  | Marine Tstm Wind (EG34) |

### DISTRICT OF COLUMBIA

|  |    |         |  |  |   |   |  |  |            |
|--|----|---------|--|--|---|---|--|--|------------|
| District Of Columbia   |    |         |  |  |   |   |  |  |            |
| Northeast Portion  | 01 | 1755EST |  |  | 0 | 0 |  |  | Hail(0.88) |
| A warm front lifted north of the District on the 1st. The afternoon airmass was very moist and unstable. Scattered showers and thunderstorms developed over the region. Nickel size hail was reported in the Northeast |    |         |  |  |   |   |  |  |            |

|   |    |                    |  |  |   |   |  |  |             |
|---|----|--------------------|--|--|---|---|--|--|-------------|
| District Of Columbia  |    |                    |  |  |   |   |  |  |             |
| Us Capitol  | 04 | 1510EST<br>1710EST |  |  | 0 | 0 |  |  | Flash Flood |
| Showers and thunderstorms developed along a stalled frontal boundary in the Washington, DC Metropolitan area on the 4th of July. Record rainfall occurred in the District, flooding many downtown streets. The 2.18" of rain lead to the cancellation of many outdoor activities, including the National Independence Day Parade. |    |                    |  |  |   |   |  |  |             |

|   |          |                    |  |  |   |   |  |  |             |
|---|----------|--------------------|--|--|---|---|--|--|-------------|
| District Of Columbia  |          |                    |  |  |   |   |  |  |             |
| Countywide  | 27<br>28 | 2200EST<br>0500EST |  |  | 0 | 0 |  |  | Flash Flood |
| A very slow moving frontal system came through the region on the 27th. Moisture ahead of the front was plentiful. Two to five inches of rain fell, and produced wide spread flash flooding in District of Columbia and the surrounding suburbs. US Park Police and DC Fire crews rescued occupants of three vehicles trapped in flooding water. |          |                    |  |  |   |   |  |  |             |

### MARYLAND, Central

|  |    |         |  |  |   |   |    |  |                          |
|--|----|---------|--|--|---|---|----|--|--------------------------|
| Baltimore County   |    |         |  |  |   |   |    |  |                          |
| Parkville  | 01 | 1525EST |  |  | 0 | 0 | 1K |  | Thunderstorm Wind (EG55) |
| Large limbs down on powerlines.                          |    |         |  |  |   |   |    |  |                          |
| Baltimore County   |    |         |  |  |   |   |    |  |                          |
| White Marsh  | 01 | 1525EST |  |  | 0 | 0 | 2K |  | Thunderstorm Wind (MG55) |
| Trees down.  |    |         |  |  |   |   |    |  |                          |
| Baltimore County   |    |         |  |  |   |   |    |  |                          |
| Essex  | 01 | 1550EST |  |  | 0 | 0 |    |  | Hail(2.75)               |
| Baseball size hail reported by law enforcement officers. |    |         |  |  |   |   |    |  |                          |
| Baltimore County   |    |         |  |  |   |   |    |  |                          |
| Essex  | 01 | 1559EST |  |  | 0 | 0 | 3K |  | Thunderstorm Wind (EG58) |
| Trees and powerlines down.                               |    |         |  |  |   |   |    |  |                          |
| Montgomery County  |    |         |  |  |   |   |    |  |                          |
| Glenmont   | 01 | 1716EST |  |  | 0 | 0 |    |  | Hail(0.88)               |
| Nickel size hail reported by emergency workers           |    |         |  |  |   |   |    |  |                          |
| Montgomery County  |    |         |  |  |   |   |    |  |                          |
| Glenmont   | 01 | 1716EST |  |  | 0 | 0 | 2K |  | Thunderstorm Wind (EG58) |
| Trees down on powerlines.                                |    |         |  |  |   |   |    |  |                          |



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|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|
|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|

### MARYLAND, Central

#### Montgomery County

**Silver Spg**      **01**      **1720EST**                     **0**      **0**                     **Hail(0.75)**  
Public reported penny size hail.

#### Montgomery County

**White Oak**      **01**      **1720EST**                     **0**      **0**                     **Hail(1.00)**  
Public reported quarter size hail.

#### Prince George'S County

**Beltsville**      **01**      **1745EST**                     **0**      **0**                     **Hail(0.88)**  
Nickel size hail reported by train spotter.

#### Prince George'S County

**Hyattsville**      **01**      **1748EST**                     **0**      **0**                     **Hail(1.75)**  
Golfball size hail reported by NWS employee.

#### Prince George'S County

**2 W Bladensburg**      **01**      **1755EST**                     **0**      **0**                     **Hail(1.75)**  
Golfball size hail reported by NWS employee.

#### Prince George'S County

**Hyattsville**      **01**      **1800EST**                     **0**      **0**                     **Hail(1.25)**  
Half dollar size hail reported by the media.

#### Prince George'S County

**Forestville**      **01**      **1814EST**                     **0**      **0**      **200K**           **Thunderstorm Wind (EG65)**  
Office building damaged and trees down along Route 4.

#### Prince George'S County

**Landover**      **01**      **1818EST**                     **0**      **0**      **0.50K**           **Thunderstorm Wind (EG57)**  
Large tree down.

#### Prince George'S County

**Seat Pleasant**      **01**      **1827EST**                     **0**      **0**      **1K**           **Thunderstorm Wind (EG55)**  
A warm front lifted north into Southern Pennsylvania on the 1st. The airmass was very moist and unstable by the afternoon. Scattered showers and thunderstorms developed over the region. Some of the storms produced large hail ranging from a penny to baseball size in Baltimore, Montgomery and Prince Georges Counties. The storms were also accompanied by strong winds that downed trees and power lines.

#### Montgomery County

**Countywide**      **04**      **1400EST**  
**1730EST**                     **0**      **0**                     **Flash Flood**

#### Prince George'S County

**West Portion**      **04**      **1400EST**  
**1700EST**                     **0**      **0**                     **Flash Flood**

Showers and thunderstorms developed along a stationary front over Washington, DC Metropolitan area on 4th of July. In Prince Georges County record rainfall was reported in Oxon Hill. Roads throughout the western portion of the county were flooded and presented hazardous conditions for drivers. Flooding was occurred along Interstate-495, and high water was also blamed for many accidents in Montgomery County.

#### Montgomery County

**Germantown**      **05**      **1517EST**                     **0**      **0**                     **Hail(0.88)**  
Nickel size hail reported by a trained spotter.

#### Prince George'S County

**Bowie**      **05**      **1517EST**                     **0**      **0**      **10K**           **Thunderstorm Wind (EG55)**  
Tree down on a house in Bowie.



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|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|
|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|

### MARYLAND, Central

#### Washington County

**Smithsburg**      **05**    **1554EST**      **0**      **0**      **0**      **0**      **Hail(1.50)**  
Walnut size hail reported by emergency personnel.

#### Anne Arundel County

**Shady Side**      **05**    **1600EST**      **0**      **0**      **0.50K**      **0**      **Thunderstorm Wind (EG55)**  
Large tree and branches down around the area.

#### Frederick County

**Thurmont**      **05**    **1605EST**      **0**      **0**      **0.50K**      **0**      **Thunderstorm Wind (EG55)**  
Large tree down at Route 15 and Stull Road.

#### Carroll County

**Manchester**      **05**    **1658EST**      **0**      **0**      **2K**      **0**      **Thunderstorm Wind (EG60)**  
Several trees down in Manchester and Linesboro.

#### Baltimore County

**Parkville**      **05**    **1710EST**      **0**      **0**      **4K**      **0**      **Thunderstorm Wind (EG60)**  
Widespread trees and wires down in northeast Baltimore County.

#### Baltimore County

**5 N Perry Hall**      **05**    **1715EST**      **0**      **0**      **20K**      **0**      **Thunderstorm Wind (EG60)**  
Showers and thunderstorms developed ahead of an approaching cold front on the 5th. Some storms produced heavy rainfall, strong winds and nickel to walnut size hail over North Central and Northeast Maryland. The winds downed trees and power lines. In Baltimore County alone, 25 to 35 trees were downed at the intersection of Harford and Hutschenreuter Roads in Perry Hall. At the height of the storms thousands of customers in Anne Arundel, Harford, and Baltimore Counties were without power.

#### Anne Arundel County

**(Bwi)Baltmor-Wshngtn**      **07**    **1355EST**      **0**      **0**      **0**      **0**      **Funnel Cloud**  
BWI control tower reported a funnel cloud.

#### Baltimore County

**Reisterstown**      **07**    **1500EST**      **0**      **0**      **0**      **0**      **Lightning**  
Lightning struck a church steeple.

#### Anne Arundel County

**Linthicum Hgts**      **07**    **1545EST**      **0**      **0**      **0**      **0**      **Lightning**  
Lightning struck a church.

#### Baltimore County

**Countywide**      **07**    **1435EST**  
**2035EST**      **0**      **0**      **25K**      **0**      **Flash Flood**  
Many roads closed across the county due to high water...especially in Reisterstown, Woodlawn, and Owings Mills.

#### Montgomery County

**Gaithersburg**      **07**    **1435EST**      **0**      **0**      **3K**      **0**      **Thunderstorm Wind (EG60)**  
Several downed trees in the Gaithersburg area.

#### Baltimore County

**Reisterstown**      **07**    **1441EST**      **0**      **0**      **0**      **0**      **Hail(0.75)**  
Penny size hail reported by the EOC.

#### Baltimore City (C)

**Woodberry**      **07**    **1445EST**  
**2000EST**      **0**      **0**      **1M**      **0**      **Flash Flood**  
Stores and businesses along Jones Fall were damaged due to flooding

#### Prince George'S County

**Bowie**      **07**    **1527EST**      **0**      **0**      **2K**      **0**      **Thunderstorm Wind (EG55)**  
Large tree limbs down on powerlines in several locations.



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|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------|---------------------------------|-------|--------------------|
|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------|---------------------------------|-------|--------------------|

### MARYLAND, Central

#### **Anne Arundel County**

|                 |           |                |  |  |          |          |             |  |                                 |
|-----------------|-----------|----------------|--|--|----------|----------|-------------|--|---------------------------------|
| <b>Ft Meade</b> | <b>07</b> | <b>1545EST</b> |  |  | <b>0</b> | <b>0</b> | <b>2.5K</b> |  | <b>Thunderstorm Wind (EG57)</b> |
|-----------------|-----------|----------------|--|--|----------|----------|-------------|--|---------------------------------|

Several trees and powerlines down countywide.

#### **Baltimore City (C)**

|                  |           |                |  |  |          |          |           |  |                                 |
|------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Baltimore</b> | <b>07</b> | <b>1605EST</b> |  |  | <b>0</b> | <b>0</b> | <b>5K</b> |  | <b>Thunderstorm Wind (EG58)</b> |
|------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Trees down.

#### **Baltimore County**

|              |           |                |  |  |          |          |           |  |                                 |
|--------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Essex</b> | <b>07</b> | <b>1609EST</b> |  |  | <b>0</b> | <b>0</b> | <b>1K</b> |  | <b>Thunderstorm Wind (EG57)</b> |
|--------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Downed trees.

Scattered showers and thunderstorms developed over the region on the 7th as a warm front lifted north into southern Pennsylvania. The thunderstorms across Northeast Maryland produced strong winds that downed trees and power lines, penny size hail, and flooding. Two to four inches of rain fell in Northeast Maryland with local amounts up to six inches. Dozens of water rescues were performed throughout the county, several motorists were trapped/stranded in stalled cars. A cyclist was rescued from a fence after he emerged his bike in the fast moving, deep waters

In the City of Baltimore, stores and businesses along the Jones Falls closed early to allow clients, shoppers and employees to get out before the waters started to rise. A portion of the historic Meadow Mill building in the Woodberry neighborhood was flooded, and nearly 30 cars in the parking lot were almost submerged. The Mount Washington neighborhood also witnessed some impressive flooding. The Meadow Hill Athletic Club reported a loss of 500,000 dollars in exercise equipment. A newly opened men clothing store reported damages around 400,000 dollars.

In Southern Baltimore County, a mechanic in Catonsville barely escaped injury when the roof of his Auto repair shop collapsed due to the weight of the water.

In north Anne Arundel County, lightning struck the historical Linthicum Heights United Methodist Church in Linthicum. Fire and water damaged a hand painted fresco on the ceiling of the church. Pieces of the building dated back to the 19th-century. Several other minor house fires were reported and attributed to lightning according to fire and rescue personnel, but no other major damage or injuries were cited.

#### **Baltimore County**

|                    |           |                |  |  |          |          |             |  |                                 |
|--------------------|-----------|----------------|--|--|----------|----------|-------------|--|---------------------------------|
| <b>White Marsh</b> | <b>12</b> | <b>1020EST</b> |  |  | <b>0</b> | <b>0</b> | <b>1.5K</b> |  | <b>Thunderstorm Wind (EG60)</b> |
|--------------------|-----------|----------------|--|--|----------|----------|-------------|--|---------------------------------|

Trees down along Route 40.

#### **Harford County**

|                      |           |                |  |  |          |          |           |  |                                 |
|----------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Jarrettsville</b> | <b>12</b> | <b>1055EST</b> |  |  | <b>0</b> | <b>0</b> | <b>1K</b> |  | <b>Thunderstorm Wind (EG55)</b> |
|----------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Several trees downed by thunderstorm winds.

#### **Harford County**

|                      |           |                            |  |  |          |          |             |  |                    |
|----------------------|-----------|----------------------------|--|--|----------|----------|-------------|--|--------------------|
| <b>South Portion</b> | <b>12</b> | <b>1116EST<br/>1615EST</b> |  |  | <b>0</b> | <b>0</b> | <b>900K</b> |  | <b>Flash Flood</b> |
|----------------------|-----------|----------------------------|--|--|----------|----------|-------------|--|--------------------|

A quasi-stationary boundary over the area provided a focus for shower and thunderstorm activity on the 12th. The thunderstorms produced very heavy rainfall and strong gusty winds. Baltimore and Harford Counties had downed trees and power lines. Portions of southern Harford County were drenched from the heavy down pours, especially Aberdeen and Harve de Grace. Several roads and streets were completely covered by high water. Route 40 between Aberdeen and Harve de Grace was closed for several hours. The Union Hotel in Port Deposit sustained significant flood damage. Over 20 homes were damaged, mostly by basement flooding. At least 32 people were rescued from stranded cars and flooded homes. Fifteen Amtrak passenger trains had delays due to water flowing over the tracks. Reports from the Harford EOC cited several feet of standing water in many areas. Some roads were completely washed out, causing the Governor to declare a limited State of Emergency.



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|----------|------|----------------------------|---------------------------|--------------------------|----------------------|---------|---------------------|-------|--------------------|
|          |      |                            |                           |                          | Killed               | Injured | Property            | Crops |                    |

### MARYLAND, Central

#### Frederick County

**Frederick**      **14**      **1336EST**                **0**      **0**                **Hail(0.75)**  
Penny size hail reported by emergency workers.

#### Frederick County

**Walkersville**      **14**      **1338EST**                **0**      **0**      **7K**           **Thunderstorm Wind (EG55)**  
Tree down on house.

#### Carroll County

**1 N Union Bridge**      **14**      **1400EST**                **0**      **0**      **2K**           **Thunderstorm Wind (EG60)**  
Trees and powerlines down.

#### Harford County

**4 SW Aberdeen**      **14**      **1400EST**                **0**      **0**                **Hail(1.00)**  
Quarter size hail reported by trained spotter.

#### Charles County

**Nanjemoy**      **14**      **1455EST**                **0**      **0**      **1.5K**           **Thunderstorm Wind (EG55)**  
Trees down.

#### Charles County

**3 S Faulkner**      **14**      **1510EST**                **0**      **0**      **2.5K**           **Thunderstorm Wind (EG55)**  
Trees down and windows blown out of a structure.

#### St. Mary'S County

**.5 NW California to  
2.5 ESE California**      **14**      **1550EST  
1555EST**      **3**      **250**      **0**      **0**      **5K**           **Tornado (F1)**

A tornado touched down just northwest of California and traveled east southeast. The tornado uprooted, snapped and twisted many medium and large trees. Maximum wind speeds were estimated at 80 mph.

#### St. Mary'S County

**(Nhk)Nas Patuxent Ri**      **14**      **1605EST**                **0**      **0**                **Hail(1.00)**  
Quarter size hail reported by NWS employee.

#### St. Mary'S County

**(Nhk)Nas Patuxent Ri**      **14**      **1605EST**                **0**      **0**                **Thunderstorm Wind (MG64)**

#### St. Mary'S County

**Hollywood**      **14**      **1615EST**                **0**      **0**      **40K**           **Thunderstorm Wind (EG65)**

A cold front moved through the area on the 14th and triggered numerous showers and thunderstorms over Maryland. The stronger storms were concentrated over Northeast and Lower Southern Maryland. These storms produced tornadoes, waterspouts, damaging winds and penny to quarter size hail. In St. Mary's County, an F1 tornado touched down just northwest of California and moved east-southeast. The tornado uprooted, twisted, and snapped several medium and large trees. Strong thunderstorm winds moved a single engine plane in Hollywood. The plane was lifted and tossed upon another plane, totally destroying one and causing significant damage to the other. A waterspout also was spotted on the Potomac River adjacent to St. Mary's County.

#### Harford County

**Bel Air**      **27**      **1745EST**                **0**      **0**                **Flash Flood**  
**28**      **0600EST**  
Several roads closed along Highway 7 and 136.

#### St. Mary'S County

**Great Mills**      **27**      **2000EST**                **0**      **0**                **Flash Flood**  
**28**      **0200EST**  
Several roads closed around the county.



# National Weather Service

## Storm Data and Unusual Weather Phenomena



July 2004

| Location | Date | Time<br>Local/<br>Standard | Path<br>Length<br>(Miles) | Path<br>Width<br>(Yards) | Number of<br>Persons<br>Killed | Number of<br>Persons<br>Injured | Estimated<br>Damage<br>Property | Estimated<br>Damage<br>Crops | Character of Storm |
|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|
|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|

### MARYLAND, Central

#### Baltimore City (C)

|                      |    |         |  |  |   |   |  |  |                    |
|----------------------|----|---------|--|--|---|---|--|--|--------------------|
| <b>North Portion</b> | 27 | 2048EST |  |  | 0 | 0 |  |  | <b>Flash Flood</b> |
|                      | 28 | 0900EST |  |  |   |   |  |  |                    |

Streets flooded with water covering roadways

#### Prince George'S County

|                          |    |         |  |  |   |   |  |  |                    |
|--------------------------|----|---------|--|--|---|---|--|--|--------------------|
| <b>Northwest Portion</b> | 27 | 2048EST |  |  | 0 | 0 |  |  | <b>Flash Flood</b> |
|                          | 28 | 0700EST |  |  |   |   |  |  |                    |

Creeks and streets flooded.

#### Montgomery County

|                          |    |         |  |  |   |   |  |  |                    |
|--------------------------|----|---------|--|--|---|---|--|--|--------------------|
| <b>Southeast Portion</b> | 27 | 2127EST |  |  | 0 | 0 |  |  | <b>Flash Flood</b> |
|                          | 28 | 0900EST |  |  |   |   |  |  |                    |

A very slow moving frontal system came through the region on the 27th. Moisture ahead of the front was plentiful. Two to five inches of rain produced wide spread flash flooding in Montgomery and Prince Georges Counties.

In Montgomery County the areas hardest hit were Chevy Chase, Bethesda, Silver Spring and Colesville. Several people were trapped in cars prompting numerous water rescues. In Silver Spring, on Sligo Creek Parkway near New Hampshire Avenue, several vehicles were halfway submerged by water. Cars were also stranded in Rock Creek Park and in low lying areas near the Potomac River. Four feet of water flooded the automatic train control room in Silver Spring. The Carol Avenue Bridge was damaged by flooding and the road was closed. Several structures were also struck by lightning

In Prince Georges County the communities hardest hit were Delphi, Beltsville and Laurel. Drivers were rescued from flooded vehicles at New Hampshire Avenue and Piney Branch Road. Five families were evacuated from an apartment in Laurel because water flooded the building. Flights to all three of the Washington region's major airports were delayed or cancelled.

### VIRGINIA, North

#### Augusta County

|                      |    |         |  |  |   |   |  |  |                   |
|----------------------|----|---------|--|--|---|---|--|--|-------------------|
| <b>Stuarts Draft</b> | 01 | 1601EST |  |  | 0 | 0 |  |  | <b>Hail(0.88)</b> |
|----------------------|----|---------|--|--|---|---|--|--|-------------------|

Nickel size hail reported by spotter network.

#### Waynesboro (C)

|                   |    |         |  |  |   |   |  |  |                   |
|-------------------|----|---------|--|--|---|---|--|--|-------------------|
| <b>Waynesboro</b> | 01 | 1607EST |  |  | 0 | 0 |  |  | <b>Hail(1.00)</b> |
|-------------------|----|---------|--|--|---|---|--|--|-------------------|

Quarter size hail reported by trained spotter.

#### Albemarle County

|               |    |         |  |  |   |   |    |  |                                 |
|---------------|----|---------|--|--|---|---|----|--|---------------------------------|
| <b>Crozet</b> | 01 | 1650EST |  |  | 0 | 0 | 4K |  | <b>Thunderstorm Wind (EG55)</b> |
|---------------|----|---------|--|--|---|---|----|--|---------------------------------|

A cluster of thunderstorms developed over the Central Foothills and the Central Shenandoah Valley in Virginia on July 1st. The thunderstorms produced hail and strong winds. The nickel and quarter size hail damaged business signs, and the strong winds toppled scores of trees and downed power lines. 2800 customers in the Cities of Staunton and Waynesboro, and Augusta County were without power during the height of the storms. According to local newspapers, motorists were forced to seek shelter under an over-pass due to the poor visibility as the rain come down in sheets. Water even covered portions of Lyndhurst Road in Waynesboro during the evening commute. The heavy rainfall was blamed for several minor car accidents that occurred during the storm

#### Albemarle County

|               |    |         |  |  |   |   |    |  |                                 |
|---------------|----|---------|--|--|---|---|----|--|---------------------------------|
| <b>Esmont</b> | 04 | 1810EST |  |  | 0 | 0 | 1K |  | <b>Thunderstorm Wind (EG55)</b> |
|---------------|----|---------|--|--|---|---|----|--|---------------------------------|

Trees downed by thunderstorm winds.



# National Weather Service

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July 2004

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|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|
|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|

### VIRGINIA, North

#### Orange County

|               |           |                |  |  |          |          |           |  |                                 |
|---------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Orange</b> | <b>05</b> | <b>1430EST</b> |  |  | <b>0</b> | <b>0</b> | <b>2K</b> |  | <b>Thunderstorm Wind (EG55)</b> |
|---------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Large trees felled by thunderstorm winds.

#### Loudoun County

|                         |           |                |  |  |          |          |  |  |                                 |
|-------------------------|-----------|----------------|--|--|----------|----------|--|--|---------------------------------|
| <b>Dulles Intl Arpt</b> | <b>05</b> | <b>1440EST</b> |  |  | <b>0</b> | <b>0</b> |  |  | <b>Thunderstorm Wind (MG60)</b> |
|-------------------------|-----------|----------------|--|--|----------|----------|--|--|---------------------------------|

Showers and thunderstorms developed ahead of an approaching cold front on the 5th . Some the storms produced strong winds over the Central Foothills and Northern Virginia.

#### Charlottesville (C)

|                        |           |                |  |  |          |          |           |  |                                 |
|------------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Charlottesville</b> | <b>06</b> | <b>1540EST</b> |  |  | <b>0</b> | <b>0</b> | <b>2K</b> |  | <b>Thunderstorm Wind (EG55)</b> |
|------------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Trees down on Jefferson Avenue.

#### Fauquier County

|                  |           |                |  |  |          |          |           |  |                                 |
|------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Warrenton</b> | <b>07</b> | <b>1335EST</b> |  |  | <b>0</b> | <b>0</b> | <b>1K</b> |  | <b>Thunderstorm Wind (EG60)</b> |
|------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Downed trees blocking roadways.

#### Fauquier County

|                      |           |                |  |  |          |          |           |  |                                 |
|----------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>5 N Warrenton</b> | <b>07</b> | <b>1340EST</b> |  |  | <b>0</b> | <b>0</b> | <b>1K</b> |  | <b>Thunderstorm Wind (EG55)</b> |
|----------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Trees and powerlines down.  
Scattered showers and thunderstorms developed over the region on the 7th as a warm front lifted north into southern Pennsylvania. The thunderstorms across Fauquier County produced strong winds that downed trees and power lines in the Warrenton area

#### Culpeper County

|                       |           |                |  |  |          |          |           |  |                                 |
|-----------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>3 WSW Culpeper</b> | <b>12</b> | <b>1628EST</b> |  |  | <b>0</b> | <b>0</b> | <b>2K</b> |  | <b>Thunderstorm Wind (EG60)</b> |
|-----------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Trees down over Mountain Run Lake Road

#### Albemarle County

|                                |           |                |  |  |          |          |             |  |                                 |
|--------------------------------|-----------|----------------|--|--|----------|----------|-------------|--|---------------------------------|
| <b>4 NW Charlottesville Ar</b> | <b>12</b> | <b>1640EST</b> |  |  | <b>0</b> | <b>0</b> | <b>2.5K</b> |  | <b>Thunderstorm Wind (EG60)</b> |
|--------------------------------|-----------|----------------|--|--|----------|----------|-------------|--|---------------------------------|

Trees down.

#### Albemarle County

|                                  |           |                            |  |  |          |          |  |  |                    |
|----------------------------------|-----------|----------------------------|--|--|----------|----------|--|--|--------------------|
| <b>13 S Charlottesville Arpt</b> | <b>12</b> | <b>1855EST<br/>2155EST</b> |  |  | <b>0</b> | <b>0</b> |  |  | <b>Flash Flood</b> |
|----------------------------------|-----------|----------------------------|--|--|----------|----------|--|--|--------------------|

Scattered showers and thunderstorms produced spotty damage over portions of Northern Virginia and the Central Foothills on July 12th. Roads were closed in Albemarle County due to flooding. Trees were felled in Albemarle and Culpeper Counties.

#### Page County

|              |           |                |  |  |          |          |           |  |                                 |
|--------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Luray</b> | <b>14</b> | <b>1151EST</b> |  |  | <b>0</b> | <b>0</b> | <b>2K</b> |  | <b>Thunderstorm Wind (EG57)</b> |
|--------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Trees down.

#### Rappahannock County

|                    |           |                |  |  |          |          |  |  |                   |
|--------------------|-----------|----------------|--|--|----------|----------|--|--|-------------------|
| <b>Sperryville</b> | <b>14</b> | <b>1210EST</b> |  |  | <b>0</b> | <b>0</b> |  |  | <b>Hail(0.75)</b> |
|--------------------|-----------|----------------|--|--|----------|----------|--|--|-------------------|

Penny size hail reported by trained spotter.

#### Fauquier County

|             |           |                |  |  |          |          |              |  |                                 |
|-------------|-----------|----------------|--|--|----------|----------|--------------|--|---------------------------------|
| <b>Hume</b> | <b>14</b> | <b>1230EST</b> |  |  | <b>0</b> | <b>0</b> | <b>0.50K</b> |  | <b>Thunderstorm Wind (EG55)</b> |
|-------------|-----------|----------------|--|--|----------|----------|--------------|--|---------------------------------|

Large tree down in Hume.

#### Loudoun County

|                   |           |                |  |  |          |          |           |  |                                 |
|-------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Middleburg</b> | <b>14</b> | <b>1315EST</b> |  |  | <b>0</b> | <b>0</b> | <b>2K</b> |  | <b>Thunderstorm Wind (EG55)</b> |
|-------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Trees down.

#### Fauquier County

|                 |           |                |  |  |          |          |  |  |                   |
|-----------------|-----------|----------------|--|--|----------|----------|--|--|-------------------|
| <b>Bealeton</b> | <b>14</b> | <b>1325EST</b> |  |  | <b>0</b> | <b>0</b> |  |  | <b>Hail(1.00)</b> |
|-----------------|-----------|----------------|--|--|----------|----------|--|--|-------------------|

Quarter size hail reported by trained spotter.

#### Fairfax (C)

|                |           |                |  |  |          |          |           |  |                                 |
|----------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Fairfax</b> | <b>14</b> | <b>1330EST</b> |  |  | <b>0</b> | <b>0</b> | <b>3K</b> |  | <b>Thunderstorm Wind (EG60)</b> |
|----------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Numerous trees down.





# National Weather Service

## Storm Data and Unusual Weather Phenomena



July 2004

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|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|
|----------|------|----------------------------|---------------------------|--------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------|

### VIRGINIA, North

#### Fauquier County

|                  |           |                |  |  |          |          |  |  |                   |
|------------------|-----------|----------------|--|--|----------|----------|--|--|-------------------|
| <b>Warrenton</b> | <b>14</b> | <b>1345EST</b> |  |  | <b>0</b> | <b>0</b> |  |  | <b>Hail(1.75)</b> |
|------------------|-----------|----------------|--|--|----------|----------|--|--|-------------------|

Golfball size hail reported by amateur radio operator.

#### Falls Church (C)

|                     |           |                |  |  |          |          |           |  |                                 |
|---------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Falls Church</b> | <b>14</b> | <b>1350EST</b> |  |  | <b>0</b> | <b>0</b> | <b>2K</b> |  | <b>Thunderstorm Wind (EG55)</b> |
|---------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Trees down.

#### Arlington County

|                  |           |                |  |  |          |          |           |  |                                 |
|------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Arlington</b> | <b>14</b> | <b>1355EST</b> |  |  | <b>0</b> | <b>0</b> | <b>3K</b> |  | <b>Thunderstorm Wind (EG60)</b> |
|------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Downed trees.

#### Fauquier County

|             |           |                |  |  |          |          |              |  |                                 |
|-------------|-----------|----------------|--|--|----------|----------|--------------|--|---------------------------------|
| <b>Opal</b> | <b>14</b> | <b>1405EST</b> |  |  | <b>0</b> | <b>0</b> | <b>0.50K</b> |  | <b>Thunderstorm Wind (EG60)</b> |
|-------------|-----------|----------------|--|--|----------|----------|--------------|--|---------------------------------|

Tree blown down on Route 651.

#### Stafford County

|                      |           |                |  |  |          |          |           |  |                                 |
|----------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Garrisonville</b> | <b>14</b> | <b>1408EST</b> |  |  | <b>0</b> | <b>0</b> | <b>2K</b> |  | <b>Thunderstorm Wind (EG57)</b> |
|----------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Trees down.

#### Falls Church (C)

|                     |           |                |  |  |          |          |           |  |                                 |
|---------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Falls Church</b> | <b>14</b> | <b>1412EST</b> |  |  | <b>0</b> | <b>0</b> | <b>1K</b> |  | <b>Thunderstorm Wind (EG55)</b> |
|---------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Trees down near Seven Corners.

#### Stafford County

|                 |           |                |  |  |          |          |           |  |                                 |
|-----------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Stafford</b> | <b>14</b> | <b>1425EST</b> |  |  | <b>0</b> | <b>0</b> | <b>2K</b> |  | <b>Thunderstorm Wind (EG57)</b> |
|-----------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

Trees and powerlines down.

#### King George County

|                     |           |                |  |  |          |          |             |  |                                 |
|---------------------|-----------|----------------|--|--|----------|----------|-------------|--|---------------------------------|
| <b>Passapatanzy</b> | <b>14</b> | <b>1540EST</b> |  |  | <b>0</b> | <b>0</b> | <b>2.5K</b> |  | <b>Thunderstorm Wind (EG55)</b> |
|---------------------|-----------|----------------|--|--|----------|----------|-------------|--|---------------------------------|

Trees down in several locations.

#### Spotsylvania County

|                   |           |                |  |  |          |          |           |  |                                 |
|-------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|
| <b>Massaponax</b> | <b>14</b> | <b>1545EST</b> |  |  | <b>0</b> | <b>0</b> | <b>1K</b> |  | <b>Thunderstorm Wind (EG55)</b> |
|-------------------|-----------|----------------|--|--|----------|----------|-----------|--|---------------------------------|

A cold front moved through the area on the 14th and triggered numerous showers and thunderstorms over Northern Virginia. The stronger storms were concentrated from just east of the Blue Ridge to the Northern Piedmont. These storms produced penny to golf ball size hail, damaging winds, and very heavy rainfall.

#### Frederick County

|                          |           |                |  |  |          |          |  |  |                    |
|--------------------------|-----------|----------------|--|--|----------|----------|--|--|--------------------|
| <b>2.5 SE White Hall</b> | <b>18</b> | <b>0930EST</b> |  |  | <b>0</b> | <b>0</b> |  |  | <b>Flash Flood</b> |
|--------------------------|-----------|----------------|--|--|----------|----------|--|--|--------------------|

**1130EST**

Water over roadways in a few locations.

#### Fairfax County

|                          |           |                |  |  |          |          |  |  |                    |
|--------------------------|-----------|----------------|--|--|----------|----------|--|--|--------------------|
| <b>Northeast Portion</b> | <b>27</b> | <b>2200EST</b> |  |  | <b>0</b> | <b>0</b> |  |  | <b>Flash Flood</b> |
|--------------------------|-----------|----------------|--|--|----------|----------|--|--|--------------------|

**28 0800EST**

A very slow moving frontal system came through the region on the 27th. Moisture ahead of the front was plentiful. Two to five inches of rain fell, and this produced wide spread flash flooding in Fairfax County. In Fairfax the areas hardest hit were McLean, Hunter Mill and Great Falls. Debris blocking a stormwater drain near the interchange of Interstate 66 and Route 7 created deep pools of water and caused traffic to back up for miles. The flooding was so problematic that flights to all three of the Washington region's major airports were delayed or cancelled.