## September 2008

Temperature: Well above normal temperatures prevailed across the Washington/Baltimore area for the first month of meteorological autumn. The major airports recorded positive departures of $+3.4^{\circ} \mathrm{F}$ at $\mathrm{DCA},+2.0^{\circ} \mathrm{F}$ at BWI and $+2.1^{\circ} \mathrm{F}$ at IAD, resulting in the $15^{\text {th }}$ month out of the past 17 with above normal readings. DCA recorded 6 days with highs at or above $90^{\circ} \mathrm{F}$; the $4^{\text {th }}$ equaled a record set in 1985 of $95^{\circ} \mathrm{F}$. This was DCA's $5^{\text {th }}$ warmest September since 1980. BWI and IAD observed four $90^{\circ} \mathrm{F}$ or higher days for the month when the area was impacted with hot conditions from the $2^{\text {nd }}-5^{\text {th }}$ as well as on the $13^{\text {th }}-14^{\text {th }}$. Minimum temperatures were quite warm as well. DCA noted 9 days with lows at or above $70^{\circ} \mathrm{F}$, including a minimum of $75^{\circ} \mathrm{F}$ on the $14^{\text {th }}$. The months' coolest temperatures occurred on the $25^{\text {th }}$ when highs held in the 60s throughout the area. Many suburban locations observed lows in the 40 s on the $21^{\text {st }}$ including $46^{\circ} \mathrm{F}$ at IAD.

Precipitation: September brought a mix of very wet and very dry weather. Despite a long dry period with less than $1 / 4^{\prime \prime}$ of rain falling between the $7^{\text {th }}$ and $24^{\text {th }}$, the area recorded well above normal rainfall with monthly totals generally in the $6^{\prime \prime}-10^{\prime \prime}$ range. DCA observed $6.41^{\prime \prime}\left(+2.62^{\prime \prime}\right)$, BWI, $7.22^{\prime \prime}\left(+3.24\right.$ "), and IAD, $7.18^{\prime \prime}\left(+3.36^{\prime \prime}\right)$. Two major events brought most of the rain. The first event was Tropical Storm Hanna, which passed over the area on the $5^{\text {th }}-6^{\text {th }}$. The second major event was a coastal storm that brought needed rain from the $25^{\text {th }}-28^{\text {th }}$.

Tropical Storm Hanna brought the region torrential downpours with the highest amounts from Washington DC into Northern Virginia. Some the heaviest totals include 8.35" in Woodbridge, VA (Prince William County); $7.83^{\prime \prime}$ in Oakton, VA, and $7.53^{\prime \prime}$ in Burke Lake (Fairfax County). Maryland totals were lower; the greatest amounts were $5.0^{\prime \prime}$ in Nanjemoy (Charles County) and 4.63 " in Point of Rocks (Frederick County). Storm totals at the three major airports were 5.41 " at IAD ( 5.11 " on $6^{\text {th }}$ was $2^{\text {nd }}$ greatest daily September total and $4^{\text {th }}$ greatest daily total) and $3.90^{\prime \prime}$ at DCA ( $3.5^{\prime \prime}$ on $6^{\text {th }}$ was eighth greatest daily September total. See cover graphic). BWI storm total was 1.72 ". The copious rainfall caused flooded roads and resulted in numerous water rescues. Winds gusted to 54 mph at Thomas Point Light in Annapolis, MD, and 50 mph at Solomons Island, MD (Calvert County).

A more localized event impacted some locations in Maryland on the $12^{\text {th }}$ with heavy rainfall. Totals included $1.82^{\prime \prime}$ in Westminster (Carroll County) and $1.54^{\prime \prime}$ in Hamilton (Baltimore County). The widespread heavy rainfall resulting from a coastal system from the $25^{\text {th }}-28^{\text {th }}$ included areas that missed the heaviest downpours from Hanna. Totals included 6.03" in Owings Mills, 5.36" in Towson (Baltimore County); 5.80" in Pasadena, MD (Ann Arundel County) and 4.15 " at BWI. Although Mt. Vernon observed 3.04" (Fairfax County), amounts in Northern Virginia were generally below $2^{\prime \prime}$ with $0.95^{\prime \prime}$ recorded at IAD.

The month ended on a wet note with evening thunderstorms on the $30^{\text {th }}$. Some severe storms were reported in Prince William and Fauquier Counties in Virginia with $3 / 4$ " hail and wind gusts to 60 mph near Haymarket. Calvert County, MD, recorded thunderstorm wind damage and 1.08 " rainfall at Marlton.
SEPTEMBER 2008 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA

| Location | Station Temperatures ( ${ }^{\circ} \mathrm{F}$ ) |  |  |  |  | Extreme/Day |  | Precipitation (Inches) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AvMx | AvMn | AvgT | NmIT | DepNmI | MaxT | MinT | Total | Norm | DepNmI | Year to Date |
| National (DCA) | 81.6 | 66.0 | 73.9 | 70.5 | +3.4 | 95/3,4 | 56/20,21 | 6.41 | 3.79 | +2.62 | 39.96 |
| Baltimore (BWI) | 78.9 | 59.9 | 69.4 | 67.4 | +2.0 | 93/3,4 | 49/21 | 7.22 | 3.98 | +3.24 | 37.90 |
| Dulles (IAD) | 79.4 | 59.3 | 69.4 | 67.3 | +2.1 | 93/4 | 46/21 | 7.18 | 3.82 | +3.36 | 38.06 |

Looking Ahead to October: The first freeze! October traditionally marks the first freeze in suburban locations. When will the Washington/Baltimore area record its first freeze in 2007? Below is a list of the first $32^{\circ} \mathrm{F}$ or lower readings at DCA and IAD in the last 10 years.

| Year | First $32{ }^{\circ} \mathrm{F}$ (or lower) reading |  | Year |
| :---: | :---: | :---: | :---: |
|  | DCA | IAD |  |
| 2007 | November 24 | October 29 | 2002 |
| 2006 | November 4 | October 15 | 2001 |
| 2005 | November 17 | November 11* | 2000 |
| 2004 | December 4 | October 18 | 1999 |
| 2003 | November 10 | October 3 | 1998 |

*Latest date for first freeze ever recorded

