

NWS Form E-5
(04-2006)
(PRES. BY NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

HYDROLOGIC SERVICE AREA (HSA)
San Juan, Puerto Rico

MONTHLY REPORT OF HYDROLOGIC CONDITIONS

REPORT FOR:
MONTH YEAR
August 2010

TO: Hydrologic Information Center, W/OS31
NOAA's National Weather Service
1325 East West Highway
Silver Spring, MD 20910-3283

SIGNATURE
Althea Austin-Smith,
Service Hydrologist
DATE
09/13/2010

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

An X inside this box indicates that no flooding occurred within this hydrologic service area.

Summary: The San Juan ASOS reported 8.40 inches of rain for the month of August; 3.18 inches greater than the normal of 5.22 inches. The ASOS rainfall report from Cyril E. King Airport in St. Thomas was 5.49 inches for the month of August; 1.99 inches greater than the normal of 3.50 inches.

"August 2010 began under the synoptic influence of an upper level low (TUTT) centered over Hispaniola. This feature enhanced shower and thunderstorm coverage across the local islands, especially across western sections of Puerto Rico the first few days of the month. On August 3rd, an area of unsettled weather over the Atlantic waters was declared Tropical Storm Colin. This storm did not affect the local area as it moved west northwest and away from the region. Days after, a mid to upper level ridge established across the region, resulting in fair weather conditions across the local islands.

Tropical waves, upper level lows as well as low level troughs affected the forecast area during the second and third weeks of the month. As a result, several rounds of disturbed weather persisted across the area. The last week of the month was very active in terms of tropical cyclones. Hurricane Danielle did not have a direct impact across the local islands but brought enough deep moisture across the local islands allowing for active weather across the northern half of Puerto Rico. On August 29th, a tropical storm warning and a hurricane watch were issued for Puerto Rico and the Virgin Islands due to the proximity of Hurricane Earl. This system tracked approximately 100 miles northeast of San Juan and left rainfall accumulations up to 5.98 inches in municipality of Naguabo.

...The highest 24-hour precipitation total across Puerto Rico for the month of August was 4.26", which fell in Toro Negro over the 24 hour period ending at 8am August 31st. The highest weekly rainfall across Puerto Rico occurred in Paraiso, where 7.56" of rain accumulated the week ending August 13th. Across the U.S. Virgin Islands, the highest 24-hour precipitation total fell at the Cyril E. King Airport on Saint Thomas, where a record 3.02" fell over the 24 hour period ending at midnight on August 30th. For the week ending September 3rd, 3.28" of rain fell at Beth Upper New Works on Saint Croix, representing the highest weekly rainfall across the U.S. Virgin Islands for the month."

(Excerpts from SJU's climate reports ... for more local climate details ... see <http://www.srh.noaa.gov/sju/?n=aug2010cr>)

The most extensive flooding was in response to the rainfall that occurred with Hurricane Earl skirting the region at the end of the month. The greatest impact was to the U.S. Virgin Islands and more specifically to St. John and St. Thomas although, due to lack of gage and other official data, it is difficult to quantify the extent of the flooding. In Puerto Rico, there was some minor to moderate sporadic flooding throughout the month of August except for Rio Grande de Manati at the end of the month, where more significant flooding occurred as a result of the basin-wide 4 to 6 inches recorded in relation to the passing of Hurricane Earl to the north of the island.

(See the LSRs and E3 flood stage reports for details)

LSRs for the month of August

The most significant flood events are posted below.

0243 PM 08/19/2010	FLOOD	PENUELAS PENUELAS	18.06N 66.72W PR EMERGENCY MNGR
HOUSES WERE REPORTED FLOODED AT BARRIO CARACOLES I IN PENUELAS.			
0213 PM 08/23/2010	FLASH FLOOD	BAYAMON BAYAMON	18.38N 66.16W PR EMERGENCY MNGR
CAFETERIA EL PUENTECITO WAS REPORTED FLOODED AT URB.SIERRA LINDA ROAD 14.			
0213 PM 08/23/2010	FLASH FLOOD	BAYAMON BAYAMON	18.38N 66.16W PR EMERGENCY MNGR
A HOUSE WAS FLOODED AT URB MAGNOLIA GARDEN.			
1115 AM 08/30/2010	FLOOD	2 SSE CAGUAS CAGUAS	18.21N 66.03W PR EMERGENCY MNGR
ROAD 765 IN CAGUAS WAS REPORTED IMPASSABLE DUE TO SMALL A STREAM OUT OF ITS BANKS AND FLOODING A LOW CROSSING BRIDGE.			
0115 PM 08/30/2010	FLASH FLOOD	SAN JUAN SAN JUAN	18.41N 66.06W PR EMERGENCY MNGR
CARRETERRA MARTINEZ NADAL...HIGHWAY 22...FLOOD NEAR SAN PATRICIO PLAZA			
0235 PM 08/30/2010	AVALANCHE	3 S RIO GRANDE RIO GRANDE	18.34N 65.84W PR EMERGENCY MNGR
LANDSLIDE CLOSED HIGHWAY 191 IN OR NEAR EL YUNQUE OR THE CARIBBEAN NATIONAL FOREST			

0445 PM	FLASH FLOOD	2 SSE BARCELONETA	18.43N 66.53W
08/30/2010		MANATI	PR EMERGENCY MNGR
HIGHWAY 666 FLOODED IN SECTOR CACHETE			

The approximate amounts of Hydrologic Products issued during the month of August are as follows:

Table 1 - Hydrologic Products Issued

Non-Routine Hydrologic Products Issued:	Approximate number of Products for the month
Hydrologic Outlooks (SJUESFSJU)	0
Flood Watches (SJUFFASJU)	7
Flood Warnings (SJUFLWSJU)	10
Flash Flood Warnings (SJUFFWSJU)	12
Flash Flood Statements (SJUFFSSJU)	10
Urban/Small Stream Flood Advisories (SJUFLSSJU)	138

For monthly “radar totals” use the archive of the Advanced Hydrologic Prediction Service (AHPS) - click on Puerto Rico and request the duration you would like to view...daily or monthly remembering that the 24 hour totals are from 12z – 12z (8am to 8am in PR) - [AHPS archive of radar totals/ images](#) . Here are the [August 2010 totals](#).