

MONTHLY REPORT OF HYDROLOGIC CONDITIONS

REPORT FOR:
MONTH YEAR
August 2011

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

SIGNATURE
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Service Hydrologist
DATE
09/09/2011

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 18.56 inches of rain for the month of August; 13.10 inches greater than the normal of 5.46 inches. The ASOS rainfall report from Cyril E. King Airport in St. Thomas was 9.14 inches for the month of August; 5.40 inches greater than the normal of 3.74 inches.

"August 2011 began with numerous showers and thunderstorms associated with the proximity of Tropical Storm Emily (Aug 2nd-3rd). This system tracked approximately 100 miles south of the local islands and left rainfall accumulations between 4 to 6 inches with locally higher amounts up to 10 inches. The higher rainfall accumulations were observed across the eastern half of Puerto Rico as well as portions of the southwestern quadrant of the island. By mid-month, normal weather conditions returned to the region, with passing trade wind showers observed across the windward side of the local islands each morning, and afternoon showers and thunderstorms observed across western Puerto Rico each afternoon. By the end of the month, Hurricane Irene made landfall across the local islands on Sunday 21st through Monday 22nd impacting the region with heavy rainfall. The rainfall continued to accumulate in the wake of its passage leaving behind 72 hour maximum totals on the order of 15 to 22 inches."

Excerpt from Climate Report... Please see (<http://www.srh.noaa.gov/sju/?n=aug2011cr>) for more climate statistics.

As expected with tropical systems during Hurricane Season, widespread flooding was noted across the entire region during the month of August ... from Emily at the beginning to Irene towards the end of the month; with a small reprieve in between. During both tropical events, the Rio Grande de Loiza basin had significant flooding especially below the Carraizo Dam. More widespread flooding was noted with Hurricane Irene than Tropical Storm Emily. Rainfall from Hurricane Irene resulted in major flooding in the headwaters of Rio de la Plata at Comerio and moderate flooding downstream, resulting in evacuations along the Rio de la Plata. Moderate and major flooding was also reported along the Rio Grande de Arecibo, Rio Grande de Manati, Rio Gurabo, Rio Canovanas, Rio Inabon, Rio Majada and Rio Piedras in Hato Rey.

Unfortunately there was one flood related death of a woman around noon on August 23 as her vehicle was washed away after she tried to drive across PR-857 in Barrio Canovanillas. In addition, approximately 1000 people were placed in shelters in Carolina, Fajardo, Ponce and San Juan.

For specific river crests ... see the [Flood Stage Report for August](#).

**Rainfall Associated with Hurricane Irene
Greater than 13 inches**

Location	08/22	08/23	08/24	SUM
GURABO ABAJO RAINGAG PR	4.91	7.28	9.85	22.05
R CANOVANAS-CAMPO RI PR	5.78	5.60	9.20	20.58
QUEB GUABA/NAGUABO PR	10.51	3.90	4.41	18.82
QUEB BLANC/SAN LOREN PR	4.45	6.99	6.57	18.01
LAGO DE MATRULLAS PR	5.31	6.66	5.86	17.83
PUEBLITO DEL R RAING PR	7.77	3.21	6.46	17.44
BISLEY MET STATION PR	8.34	5.71	3.16	17.22
R BAYAMON @ ARENAS PR	3.04	8.70	4.97	16.71
R CAYAGUAS@CERRO GOR PR	4.01	5.72	6.85	16.58
RIO GR DE PATILLAS PR	2.97	4.21	7.81	14.99
LAGO ICACOS DAMSITE PR	7.94	2.42	4.46	14.83
BARRIO BEATRIZ PCPN PR	2.45	6.20	4.88	13.53
LAGO CIDRA NR CIDRA PR	3.00	6.67	3.35	13.03

**Flooding and Landslide Reports for August 2011
(Not all reports are posted here)**

Arecibo: Routes PR-605 and PR-612 closed due to flooding.
 Arroyo: Highway PR-3 KM 130 flooded.
 Barceloneta: sections of Highways PR-2, PR-666, and PR-684 flooded due to Manati River out of its banks.
 Canovanas: Route 907 in sector Cubuy washed out from flooding.
 Carolina: urban flooding at the junction of Baldority de Castro and Campo Rico Avenue.
 Cayey: Highways PR-1 and PR-743 flooded.
 Cidra: Highway PR-173 KM 6.5 flooded due near "Ceiba" neighborhood.
 Coamo: Highway PR-556 KM 1.0 flooded due to Coamo River out of its banks.
 Dorado: PR-659 flooded at the junction with PR-694 due to La Plata River out of its banks.
 Fajardo: PR-53 flooded due to Fajardo River out of its banks.
 Guayama: sections of PR-3 and PR-179 flooded due to Guamani River out of its banks.
 Manati: flooding on PR-2, PR-667, and PR-6635 due to Manati River out of its banks.
 Orocovis: flooding on Routes PR-568 and PR-155 in sector Los Sandovalos.
 Patillas: flooding on Highway PR-3 due to the small stream "Guardarraya" out of its banks.
 Ponce: flooding on Highway PR-1 due to Inabon River out of its banks.
 San Juan: urban flooding on Baldorioty Ave. at the entrance of Minillas Tunnel. Avenue Jesus T. Pinero also closed due to Puerto Nuevo River out of its banks. Route PR-865 at KM 4.6 sector El Hoyo flooded.
 San Lorenzo: expressway "Chayanne" flooded.
 Toa Alta: PR-824 sector Los Cocos flooded.
 Toa Baja: PR-2 at junction with PR-165 sector la Virgencita flooded due to La Plata: River out of its banks.
 Trujillo Alto: Routes PR-175, PR-848, and PR-881 closed due to flooding.
 Utuado: PR-611, 6 meter landslide due to water laden hill.
 Vega Alta: Highways PR-2, PR-620, PR-647, PR-675, PR-676, and PR-690 closed due to Cibuco River out of its banks.

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

Non-Routine Hydrologic Products Issued:	Approximate number of Products for the month
Hydrologic Outlooks (SJUESFSJU)	0
Flood Watches (SJUFFASJU)	16
Flood Warnings (SJUFLWSJU)	43
Flash Flood Warnings (SJUFFWSJU)	70
Flash Flood Statements (SJUFFSSJU)	35
Urban/Small Stream Flood Advisories (SJUFLSSJU)	132

For monthly “radar totals” use the archive of the Advanced Hydrologic Prediction Service (AHPS) - click on the Precipitation interface for San Juan, 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 2011 totals](#).