

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  
May                2011

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  
06/10/2011

*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 10.89 inches of rain for the month of May; 5.60 inches greater than the normal of 5.29 inches. The ASOS rainfall report from Cyril E. King Airport in St. Thomas was 8.04 inches for the month of May; 4.68 inches greater than the normal of 3.36 inches.

*"May 2011 began with an upper level trough combining with deep tropical moisture to produce scattered showers and isolated thunderstorms across the local area. At this point, the transition to the wet season was evident across the local islands. However, days after limited shower activity prevailed each afternoon across the interior and western portions of Puerto Rico. This tranquil weather pattern dominated until mid-month, when a wetter pattern once again emerged across the forecast area.*

*During the second and third week of May, showers and thunderstorms prevailed each afternoon across Puerto Rico. On May 14th, a strong thunderstorm was noted across Canovanas and Trujillo Alto, where strong winds and hail were detected. On May 20th, deep tropical moisture combined with favorable upper level dynamics and local effects to produce widespread rainfall across Puerto Rico and the Virgin Islands. As a result, widespread flooding was noted, especially across the eastern third of Puerto Rico. Statistically, May 2011 was a rainy month with 3 inches or more above normal across the local islands. As a result, May 2011 ended as the fifth and eighth wettest May on record across St Thomas and St Croix respectively." Excerpt from the monthly climate report... see (<http://www.srh.noaa.gov/sju/?n=may2011cr>)*

A wet April transitioned into a wet May which left its mark across the region with flash floods, urban flooding, extreme flow from lakes and reservoirs and mud and landslides. While none of the forecast area was spared from significant rainfall during the month of May, the heaviest rainfall did occur across the Eastern third of Puerto Rico and the US Virgin Islands. The information in the following tables show both the rainfall totals from May 16<sup>th</sup> to May 23<sup>rd</sup> with totals in the double digits and the impact of that rainfall (LSRs). Moderate flooding occurred along the Rio Grande de Loiza on May 21<sup>st</sup> from two day rainfall amounts of 5 to 8 inches that capped of a week of steady rain. The runoff from this rainfall caused the Carraizo Dam to open gates that increased flows downstream of the dam to between 60,000 and 70,000 cfs; resulting in flooding in the communities of Canovanas, Trujillo Alto and Loiza. Significant flooding was also reported on St. Croix where their week's rainfall totals were on the order of 6 to 7 inches. The consistent rainfall continued to result in landslides across the Islands.

THIS IS THE RAINFALL ACCUMULATIONS ... GREATER THAN 5 INCHES ...  
 ENDING AT 12Z EACH DAY FOR THE FOLLOWING DAYS. FOR INFO ON THE  
 INDIVIDUAL REPORTING STATIONS BELOW SEE ... [HADS DATABASE](#) ...

DATE	16	17	18	19	20	21	22	23	TOTAL
YBUP4	1.80	3.42	1.93	0.35	2.19	4.38	0.13	0.06	14.26
MSCP4	M	3.28	1.46	0.85	2.58	4.85	0.06	0.57	13.65
VAMP4	0.70	2.06	1.82	1.12	1.22	6.22	0.03	0.47	13.64
PARP4	0.94	2.73	2.51	1.05	1.98	4.05	0.11	0.01	13.38
NGHP4	1.19	2.54	1.12	1.19	2.36	4.12	0.02	0.27	12.81
SLMP4	1.11	1.76	1.56	0.53	1.25	5.53	0.03	0.00	11.77
CEIP4	0.89	3.54	2.34	0.25	1.92	2.11	0.00	0.00	11.05
PATP4	0.92	2.82	2.10	0.40	0.70	3.06	0.04	0.01	10.05
BZCP4	0.14	1.14	1.48	0.37	1.39	4.83	0.07	0.01	9.43
PRIP4	0.00	0.03	0.17	3.95	2.96	1.95	0.01	0.00	9.07
FAEP4	0.00	M	0.96	1.26	2.98	3.69	0.06	M	8.95
BZDP4	0.13	1.13	1.49	0.05	0.96	5.06	0.01	0.00	8.83
SLEP4	0.07	0.84	0.77	1.08	1.08	4.78	0.00	0.10	8.72
SLNP4	0.12	1.49	1.34	M	M	5.38	0.00	0.02	8.35
LICP4	1.16	2.18	1.10	M	M	3.88	0.01	M	8.33
JAXP4	0.00	0.00	0.52	3.10	2.31	1.35	0.10	0.00	7.38
ALPP4	0.57	0.41	1.35	0.81	1.16	2.85	0.05	0.00	7.2
CMRP4	0.53	0.58	0.88	0.22	0.32	1.91	0.02	2.55	7.01
PASP4	1.12	2.36	2.14	0.56	0.65	M	M	0.01	6.84
UTKP4	0.01	0.03	0.25	0.74	2.29	3.33	0.05	0.00	6.7
GURP4	0.04	0.43	0.85	1.26	0.39	3.58	0.00	0.00	6.55
CIFP4	0.14	1.10	1.19	0.06	0.79	3.18	0.00	0.00	6.46
SLKP4	0.38	1.81	1.13	0.99	2.01	M	M	0.02	6.34
MELP4	0.22	1.58	0.88	0.07	0.48	2.93	0.08	0.00	6.24
CABP4	0.07	0.47	0.95	0.55	0.41	3.75	0.00	0.00	6.2
GCRP4	0.82	2.77	2.14	M	M	M	0.15	0.15	6.03
JABP4	0.13	0.00	0.25	2.08	1.05	2.21	0.09	0.19	6.0
QUEP4	1.31	0.02	1.73	0.00	1.16	1.06	0.32	0.34	5.94
GSGP4	0.00	0.24	0.12	3.54	0.19	1.69	0.02	0.00	5.8
BZBP4	M	0.43	0.68	0.28	0.82	3.51	0.00	0.06	5.78
CRRP4	M	4.68	0.85	0.01	0.06	M	M	0.00	5.6
COMP4	0.50	0.56	1.09	0.34	0.42	2.15	0.03	0.45	5.54
VINP4	1.05	0.18	0.49	0.21	2.01	1.30	0.13	0.00	5.37
NAMP4	0.18	0.23	0.45	0.17	0.34	2.09	0.02	1.79	5.27
BAUP4	0.22	0.12	0.43	1.17	1.11	1.94	0.11	0.01	5.11
CIAP4	0.15	0.00	0.16	0.73	1.14	2.66	0.06	0.15	5.05

**Flooding and Landslide Reports for May 2011**  
 (not all reports are posted here)

..TIME...	...EVENT...	...CITY LOCATION...	...LAT.LON...
..DATE...	...MAG....	..COUNTY LOCATION..ST..	...SOURCE....
	..REMARKS..		

1228 PM HEAVY RAIN MAUNABO 18.01N 65.90W  
05/20/2011 U0.00 INCH MAUNABO PR EMERGENCY MNGR

ROAD 3 NEAR SECTOR MALA PASCUA WAS IMPASSABLE.

1230 PM HEAVY RAIN PATILLAS 18.01N 66.01W  
05/20/2011 U0.00 INCH PATILLAS PR EMERGENCY MNGR

RIO LAGO CAME OUT OF ITS BANKS AND FLOODED ROAD 184.

1255 PM HEAVY RAIN PATILLAS 18.01N 66.01W  
05/20/2011 U0.00 INCH PATILLAS PR EMERGENCY MNGR

RIO MARIN CAME OUT OF ITS BANK AND FLOODED ROAD 181 NEAR INT. 7759.

0425 PM HEAVY RAIN FREDERIKSTED 17.71N 64.88W  
05/20/2011 U0.00 INCH SAINT CROIX VI EMERGENCY MNGR

SEVERAL ROADS FLOODED AND BLOCKED ACROSS THE WESTERN END OF ST CROIX.

0811 PM FLOOD VEGA BAJA 18.44N 66.40W  
05/20/2011 VEGA BAJA PR EMERGENCY MNGR

ROAD 2 WAS REPORTED IMPASSABLE NEAR NUEVO HOSPITAL AND FEW CREEKS OUT OF ITS BANKS.

0446 PM AVALANCHE HUMACAO 18.15N 65.82W  
05/20/2011 HUMACAO PR EMERGENCY MNGR

ROAD 446 IN BARRIO JUNQUITO SECTOR INVASION WAS REPORTED CLOSED DUE TO A LANDSLIDE.

0447 PM AVALANCHE SAN LORENZO 18.19N 65.97W  
05/20/2011 SAN LORENZO PR EMERGENCY MNGR

INTERSECTION BETWEEN ROAD 313 AND 5TH STREET AT URB. ROOSEVELT WAS REPORTED CLOSED DUE TO A LANDSLIDE.

0445 PM FLASH FLOOD CEIBA 18.27N 65.65W  
05/20/2011 CEIBA PR EMERGENCY MNGR

A FLOODED HOUSE IN BARRIO SACO ON ROAD 975.

0447 PM FLASH FLOOD SAN LORENZO 18.19N 65.97W  
05/20/2011 SAN LORENZO PR EMERGENCY MNGR

A FLOODED HOUSE IN BARRIO QUEMADO ON ROAD 181 NEAR KM 3.7

1008 PM AVALANCHE UTUADO 18.27N 66.71W  
05/20/2011 UTUADO PR EMERGENCY MNGR

ROAD 603,523 AND 123 WERE REPORTED CLOSED DUE TO LANDSLIDES.

0445 PM 05/20/2011	AVALANCHE	NAGUABO NAGUABO	PR	18.21N 65.74W EMERGENCY MNGR
HIGHWAY 53 NEAR KM 12.3 WAS PARTIALLY BLOCKED DUE TO A LANDSLIDE.				
0445 PM 05/20/2011	AVALANCHE	HUMACAO HUMACAO	PR	18.15N 65.82W EMERGENCY MNGR
ROAD 189 NEAR RAMAL 914 PARTIALLY BLOCKED DUE TO A LANDSLIDE.				
0445 PM 05/20/2011	FLOOD	AGUADA AGUADA	PR	18.38N 67.19W EMERGENCY MNGR
FLOODED BRIDGE ALONG ROAD 416 NEAR PITUSA DEPARTMENT STORE.				
0312 PM 05/27/2011	FLOOD	CAGUAS CAGUAS	PR	18.23N 66.04W BROADCAST MEDIA
ROAD 763 AT BARRIO BORINQUEN IN CAGUAS WAS REPORTED FLOODED WITH A CAR STRANDED.				
0312 PM 05/27/2011	FLOOD	CAGUAS CAGUAS	PR	18.23N 66.04W BROADCAST MEDIA
ROAD 1 BETWEEN THE MUNICIPALITY OF CAYEY AND CAGUAS WAS REPORTED IMPASSABLE.				
0312 PM 05/27/2011	FLOOD	CAGUAS CAGUAS	PR	18.23N 66.04W EMERGENCY MNGR
DEGETAU AVENUE IN THE MUNICIPALITY OF CAGUAS WAS REPORTED FLOODED.				
0312 PM 05/27/2011	HEAVY RAIN E0.00 INCH	CAGUAS CAGUAS	PR	18.23N 66.04W EMERGENCY MNGR
URB. TURABO HEIGHTS IN CAGUAS WAS REPORTED FLOODED.				
0312 PM 05/27/2011	AVALANCHE	JUNCOS JUNCOS	PR	18.23N 65.92W EMERGENCY MNGR
A MUDSLIDE WAS REPORTED AT ROAD 929 BARRIO QUEBRADA NEAR COCK PIT SAN CARLOS.				
0301 PM 05/30/2011	FLOOD	CAROLINA CAROLINA	PR	18.41N 65.98W PUBLIC
URBAN FLOODING. ROUTE 3 IN FRONT OF THE CAROLINA SHOPPING COURT FLOODED.				
0400 PM 05/30/2011	FLOOD	MOROVIS MOROVIS	PR	18.33N 66.41W EMERGENCY MNGR

ROUTE 567 KM.5.9 BARRIO SAN LORENZO FLOODED.			
0400 PM 05/30/2011	FLOOD	TRUJILLO ALTO TRUJILLO ALTO	18.36N 66.02W PR EMERGENCY MNGR
ROUTE 851 BARRIO DOS BOCAS FLOODED.			
0632 AM 05/31/2011	FLOOD	QUEBRADILLAS QUEBRADILLAS	18.48N 66.94W PR NEWSPAPER
ROUTE 113 KM 12.5 FLOODED IN URB. SANTA MARINA AND VILLA JULIA.			
0632 AM 05/31/2011	FLOOD	ARECIBO ARECIBO	18.46N 66.74W PR NEWSPAPER
ROUTE PR-2 KM 68.5 IN SANTANA AND PR-2 KM 77.4 MANUEL T GUILLAN STREET FLOODED.			

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

Non-Routine Hydrologic Products Issued:	Approximate number of Products for the month
Hydrologic Outlooks (SJUESFSJU)	0
Flood Watches (SJUFFASJU)	13
Flood Warnings (SJUFLWSJU)	8
Flash Flood Warnings (SJUFFWSJU)	47
Flash Flood Statements (SJUFFSSJU)	35
Urban/Small Stream Flood Advisories (SJUFLSSJU)	239

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 [May 2011 totals](#).