

NWS Form E-5  
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(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  
April 2016

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

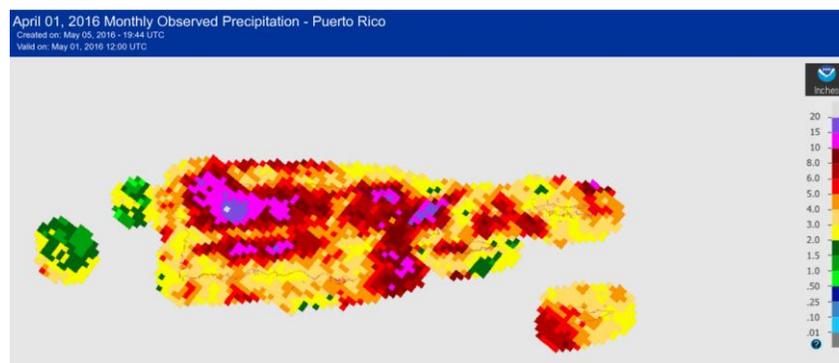
SIGNATURE  
Amaryllis Cotto - Met Intern  
Odalys Martinez - FIC  
DATE  
05/15/2016

*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:** A generally fair and mainly dry weather pattern prevailed across the forecast area the first half of the month with just light morning showers across the windward side of the local islands and limited afternoon convection across the interior and western portions of Puerto Rico. By the end of the month, rainy conditions were observed across the area, when a mid-level perturbation and abundant low level moisture brought widespread shower and thunderstorm activity. Due to the impressive rainfall amounts received in a short period of time, several flash flood warnings were issued across Eastern Puerto Rico as well as across the northwest tip of the island during the last week of the month.

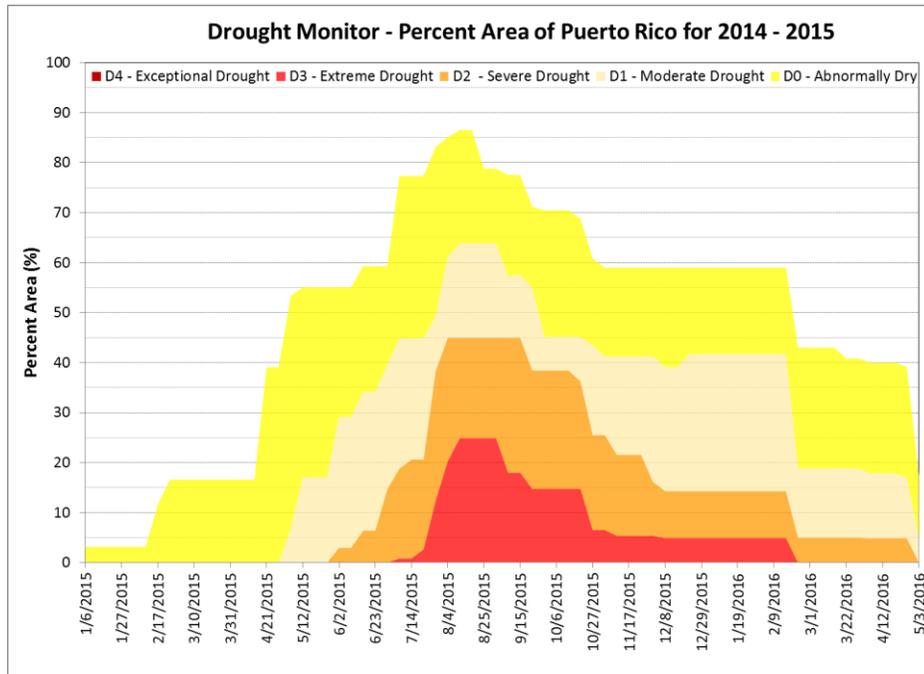
Based on the Cooperative Observer Network Data (COOP), 118 % of the normal rainfall was observed across Puerto Rico. Preliminarily, an average rainfall total of 5.52 inches was measured, which is 0.84 inches above normal. Across St. Croix, an average rainfall total of 3.60 inches was observed, which is 1.13 inches above normal. At the primary climatological data sites, a rainfall total of 3.22 and 2.84 inches was observed at Henry E. Rohlsen Airport in Saint Croix (TISX) and Cyril E King Airport in St Thomas (TIST) respectively. This is 1.09 and 0.10 inches above the normal rainfall at TISX and TIST. At the San Juan Metro Area, April 2016 ended as the 6th wettest April on record.



**April 2016 rainfall totals based on AHPS data.**

Please also see April's Climate Report:  
([http://www.srh.noaa.gov/images/sju/climo/monthly\\_reports/2016/Apr2016.pdf](http://www.srh.noaa.gov/images/sju/climo/monthly_reports/2016/Apr2016.pdf)).

**River and Drought Conditions:** Based on the 28-day average streamflow from the USGS, the majority of streamflows are running between the 25th and the 90th percentile, which is in the normal to above normal range. A few locations across Eastern Puerto Rico are now running much above the normal range. Rainfall during the last week of April lead to major improvements in drought conditions across the forecast area.



**Water Supply:** Lake levels at water supply reservoirs continue at optimum levels. However aquifer and ground water levels are still struggling in the Salinas area along the south coast of the island, where groundwater levels remain below normal.

**Flood Conditions:** Flash flooding was reported through the period, especially across the Eastern half of Puerto Rico as well as the northwest tip of the island. The approximate amounts of Hydrologic Products issued during the month of April are as follows:

Non-Routine Hydrologic Products Issued:	Approximate number of Products for the month
Hydrologic Outlooks (SJUESFSJU)	0
Flood Watches (SJUFFASJU)	1
Flood Warnings (SJUFLWSJU)	0
Flash Flood Warnings (SJUFFWSJU)	12
Flash Flood Statements (SJUFFSSJU)	14
Urban/Small Stream Flood Advisories (SJUFLSSJU)	51

**General Hydrology Information:** El Niño peaked in November 2015 and has weakened to a moderate state by the end of April. Most models suggest a rapidly weakening, likely disappearing by May-June-July 2016. It is expected that either neutral or La Niña conditions will prevail during August-September-October, with 50-65% probability for La Niña, versus 30-40% for neutral. Warm sea surface temperatures north and east of the islands may lead to above-average humidity for May-June-July and August-September-October throughout the region. However, due to cooling further out in the Atlantic around the equator and west of Africa during May-June-July, a pattern of drier air may be observed to reach into the Eastern Caribbean towards July.