

MONTHLY REPORT OF HYDROLOGIC CONDITIONS

REPORT FOR:
 MONTH YEAR
 November 2016

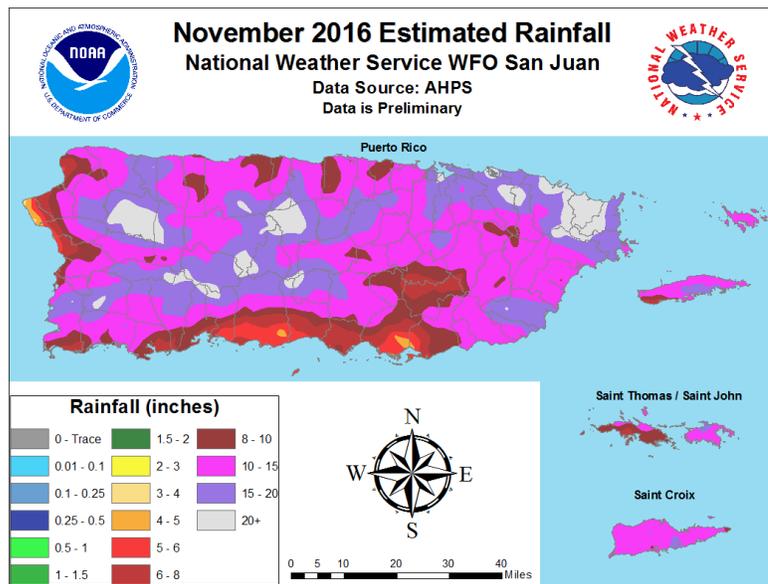
TO: Hydrologic Information Center, W/OS31
 NOAA's National Weather Service
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 Silver Spring, MD 20910-3283

SIGNATURE
 Odalys Martinez – FIC
 Amaryllis Coto - Intern
 DATE
 12/15/2016

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: Although November is a climatologically wet month across the local islands, November 2016 can be described as extremely wet with a significant surplus across most of the area. An active weather pattern was observed across the islands during most of the month as frequent trofiness and abundant low to mid-level moisture prevailed. Based on the **Advance Hydrologic Prediction Service (AHPS)**, there is a rainfall surplus of about 4 to 8 inches across most of Puerto Rico including Vieques and Culebra. This means about 150 to 300 percent above the normal rainfall. These showers and thunderstorms produced urban as well as river flooding across most of Puerto Rico. Minor flooding was reported across the outlying islands. Based on the Cooperative Observer Network Data (COOP), 145 percent of the normal rainfall was observed across Puerto Rico. Preliminarily, an average rainfall total of 9.71 inches was measured, which is 3.02 inches above normal. Across the U.S. Virgin Islands, 65 and 158 percent of the normal rainfall was observed across Saint Thomas and Saint Croix, respectively. In San Juan, a rainfall amount of 17.65 inches was observed making it the wettest November on record and the second wettest month for any given year with August of 2011 holding the number one spot with 18.56 inches.



Please also see November 2016 Climate Report:

(http://www.weather.gov/media/sju/climo/monthly_reports/2016/Nov2016.pdf)

River and Drought Conditions: The 28-day average streamflow from the U.S. Geological Survey (USGS) river-gauge sensors indicates that the majority of streamflows across eastern Puerto Rico are running between the 25th and the 90th percentile, which is in the normal to above normal range. Across western Puerto Rico, most streamflows are running above the 90th percentile, which is well above the normal range. The U.S. Drought Monitor removed all USDM categories from the forecast area after 157 weeks under abnormally dry and/or drought conditions.

Water Supply: Lake levels at water supply reservoirs continue at optimum levels.

Flood Conditions: Flash flooding was observed across urban areas as well as along rivers during November. Widespread mudslides were also reported across central and interior PR. The most affected areas in terms of flooding and mudslides were in the vicinity of Utuado, Adjuntas, Lares and San Sebastian.

Non-Routine Hydrologic Products Issued:	Approximate number of Products for the month
Hydrologic Outlooks (SJUESFSJU)	1
Flood Watches (SJUFFASJU)	5
Flood Warnings (SJUFLWSJU)	9
Flash Flood Warnings (SJUFFWSJU)	14
Flash Flood Statements (SJUFFSSJU)	12
Urban/Small Stream Flood Advisories (SJUFLSSJU)	137

General Hydrology Information: The multi-model averages favor La Niña conditions continuing through the winter. Given the current atmospheric and oceanic conditions, along with model forecasts, the forecaster consensus favors the continuation of weak La Niña conditions through December-February (DJF) 2016-17. At this time, the consensus favors La Niña to be short-lived, with ENSO-neutral favored beyond DJF. La Niña tend to shift rainfall chances for DJF to above-normal in the south and east of the Caribbean, and below-normal in the extreme north-west. However, with the forecast ENSO conditions suggesting a weak La Niña, their effect on rainfall may not be dominant. In terms of SSTs within the Caribbean, current warmer SSTs may lead to above-average humidity particularly in the western and northern Caribbean. Warm tropical Atlantic SSTs may further enhance humidity levels during the remainder of the year and into early 2017. As a result, normal to above normal rainfall is expected across our forecast area during DJF, becoming equal chances for MAM. As we continue in this potentially wet period, the chance of wet spells and flooding continues.

More Info: <http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/>