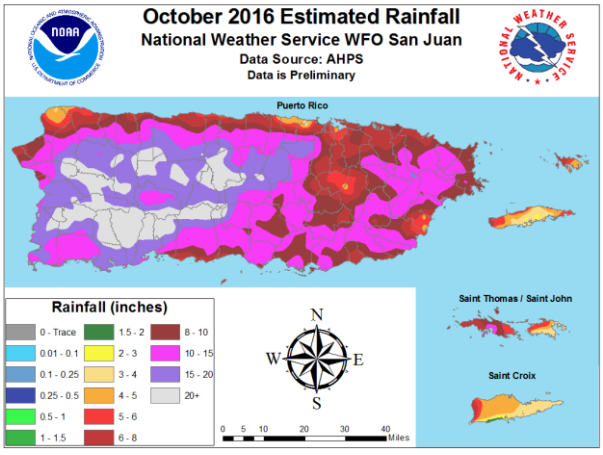
NWS Form E-5 (04-2006) (PRES. BY NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) San Juan, Puerto Rico
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		REPORT FOR: MONTH October YEAR 2016
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		SIGNATURE Odalys Martinez - FIC DATE 11/15/2016

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 seasonable weather pattern prevailed across the islands during October. Diurnal and locally induced convection was observed most afternoons across the climatologically favored areas of interior and western PR, resulting in heavy rainfall activity across these areas. A couple of significant features affected the islands during the month. On October 3rd and 4th the outer bands from Hurricane Matthew, which took a track through the Windward Passage, produced bands of showers and thunderstorms and hazardous marine conditions. On October 18th-19th, an area of low pressure tracking to the north of the area produced rounds of strong showers and thunderstorms, with the heaviest activity focused along Western and Southern PR. Based on the Cooperative Observer Network Data (COOP), 113 percent of the normal rainfall was observed across Puerto Rico. Preliminarily, an average rainfall total of 8.98 inches was measured, which is 1.04 inches above normal. Although good rain felt across south central and southeast Puerto Rico where abnormally dry to moderate drought conditions persist, the rainfall was not enough to introduce improvements in drought conditions across these areas. Across the U.S. Virgin Islands, 105 and 64 percent of the normal rainfall was observed across Saint Thomas and Saint Croix, respectively.



Please also see October 2016 Climate Report:
(http://www.srh.noaa.gov/images/sju/climo/monthly_reports/2016/Oct2016.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 outliers are observed; 3 out of 50 are running below the normal range, all of them across the eastern third of Puerto Rico. Although good rain felt across south central and southeast Puerto Rico where abnormally dry to moderate drought conditions persist, the rainfall was not enough to introduce improvements in drought conditions across these areas.

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

Flood Conditions: Widespread flooding was not observed across the forecast area. However, urban and small stream flooding as well as river flooding was observed during the month particularly across West Puerto Rico. Localized flash flood was also observed across Trujillo Alto and Utuado.

Non-Routine Hydrologic Products Issued:	Approximate number of Products for the month
Hydrologic Outlooks (SJUESFSJU)	0
Flood Watches (SJUFFASJU)	1
Flood Warnings (SJUFLWSJU)	25
Flash Flood Warnings (SJUFFWSJU)	4
Flash Flood Statements (SJUFFSSJU)	4
Urban/Small Stream Flood Advisories (SJUFLSSJU)	111

General Hydrology Information: A majority of models suggests a developing weak La Niña or cold-neutral ENSO conditions. La Niña chances are decreasing from 50-60% confidence for NDJ 2016-'17, down to 20-30% by FMA, when return to ENSO neutral conditions is more likely (50-75% confidence). 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 at most, their effect on rainfall may not be dominant. Global models show limited signal as to the expected rainfall during FMA. In terms of Tropical North Atlantic SSTs, warmer temperatures are expected to persist throughout the region during NDJ and, to a lesser degree, FMA.

As a result, normal to above normal rainfall is expected across the local islands NDJ, becoming normal to below normal during FMA. Therefore 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/