

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
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		REPORT FOR: MONTH YEAR October 2006
		SIGNATURE Althea Austin-Smith, Service Hydrologist
		DATE 11/17/2006

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 11.25 inches of rain for the month of October ... 6.19 inches more than the normal of 5.06 inches. At the Truman Field in St. Thomas, the reported amount was 5.40 inches ... 0.17 inches less than the normal of 5.57 inches. Although the St. Thomas ASOS monthly total was close to normal, the entire region was more in line with the San Juan ASOS ... much wetter than normal. This included Jolly Hill, St. Croix where the 3 day rainfall total for October 19 through October 21 was 10.22 inches (table1) ... our radar was hit by lightning during this event as was out of commission for approximately one week. As a result of this heavy rain, many areas experienced localized moderate to serious urban and flash flooding during the month of October.

This rainy period was caused by a surface low pressure system that lingered around to the Northwest of the U.S. Virgin Islands interacting with a mid to upper level trough. The outcome of these systems interacting with very moist unstable air and local effects is usually heavy rain and flooding ... as was the case during this period. The worst of the flooding during October was reported in St. Croix. Initially, the heaviest rainfall was focused over the San Lorenzo area (headwaters of the Guayanes and Loiza basins) ... East-Southeast Puerto Rico where local, small stream and urban flooding was in the "moderate" category. The more impressive and widespread flooding across the Forecast Area occurred from the 18th to the 20th of October. The rainfall was of the "pulsing" variety with some areas experiencing periods of torrential downpours starting late on October 18th and ending of October 20th. The flooding in St. Croix, VI resulted in school and business closings ... there were reports of Flash Flooding throughout the entire island but the worst was in the western suburbs of Christiansted. VITEMA (Virgin Islands Emergency Management Agency) also reported people trapped in flooded vehicles, road and highway washouts and "popping" manhole covers.

There was another period of heavy rainfall during the month of October ... the 11th through the 14th ... impacting Puerto Rico. The Rio Guayanes near Yabacoa and the Rio Grande de Loiza near San Lorenzo both had minor flooding from the rainfall. This was a pre-cursor to the more widespread flooding that occurred the following week. The reported river levels do not always tell the story when it comes to Urban and Small Stream Flooding. As reported, the San Juan ASOS tallied 11.25 inches of rainfall during this month. Heavy showers and thunderstorms on October 11th prompted the issuance of a Flash Flood Warning for the San Juan area and resulted in major problems on the roadways, tunnels and most of San Juan's bordering municipalities ... stalled cars, roadways that became streams ... flooded highway entrances and exits ... popping manhole covers ... flooded homes ... all occurred during this event.

Over 100 Urban / Small Stream Advisories were issued during the month of October along with Flash Flood Warnings, Flood Watches and even Hydrologic Outlooks.

Table 1 – Maximum Reported 24 Hour Rainfall Totals

<p>24 HOUR Rainfall COLLECTIVE ENDING AT 12Z SERFC - ATLANTA, GA Thu Oct 19 2006</p> <p>: ID PRECIP : GCRP4 4.69 :R GUAYANES/YBUCOA 1N (PR) SLLP4 4.60 :R GR D LOIZA@QUEB AR (PR) SLMP4 4.06 :QUEB ARENAS RAINGAGE (PR) PARP4 3.21 :BO MARIN/PATILLAS 4N (PR)</p>	<p>24 HOUR Rainfall COLLECTIVE ENDING AT 12Z SERFC - ATLANTA, GA Fri Oct 20 2006</p> <p>: ID PRECIP : CIBP4 4.13 :B FRONTON/CIALES 5SW (PR) CORP4 3.48 :R CIBUCO BLO COROZAL (PR) ARJP4 3.46 :R YUNES@HWY140 NR FL (PR) NGJP4 2.79 :MET STN AT RIO ICACO (PR) NGIP4 2.44 :R ICACOS NR NAGUABO (PR)</p>	<p>USGS 50345000... JOLLY HILL GUT AT JOLLY HILL, ST. CROIX USVI</p> <table border="1"> <tr> <td>Oct 19</td> <td>Oct 20</td> <td>Oct 21</td> </tr> <tr> <td>1.26</td> <td>5.37</td> <td>3.59</td> </tr> </table>	Oct 19	Oct 20	Oct 21	1.26	5.37	3.59
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Table 2 - Hydrologic Products Issued

Non-Routine Hydrologic Products Issued:	Approximate number of Products for the month
Hydrologic Outlooks (SJUESFSJU)	3
Flood Watches (SJUFFASJU)	17
Flood Warnings (SJUFLWSJU)	4
Flash Flood Warnings (SJUFFWSJU)	19
Flash Flood Statements (SJUFFSSJU)	8
Urban/Small Stream Flood Advisories (SJUFLSSJU)	110