HYDROMETEOROLOGICAL SERVICE OF GUYANA

DROUGHT MONITORING BULLETIN

To observe, archive and understand Guyana's weather and climate and provide meteorological, hydrological and oceanographic services in support of Guyana's national needs and international obligations.

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Introduction: The Drought Monitoring Bulletin for February was prepared using the WMO recommended Standardized Precipitation Index (SPI). The maps represent the 1-month (February 2018), 3-month (December 2017 - February 2018), 6-month (September 2017 - February 2018) and 12-month (March 2017 - February 2018) SPIs respectively, showing various degrees of wetness and/or dryness across the country. On short timescales, the SPI is closely related to soil moisture, while at longer timescales, the SPI can be related to groundwater and reservoir storage.

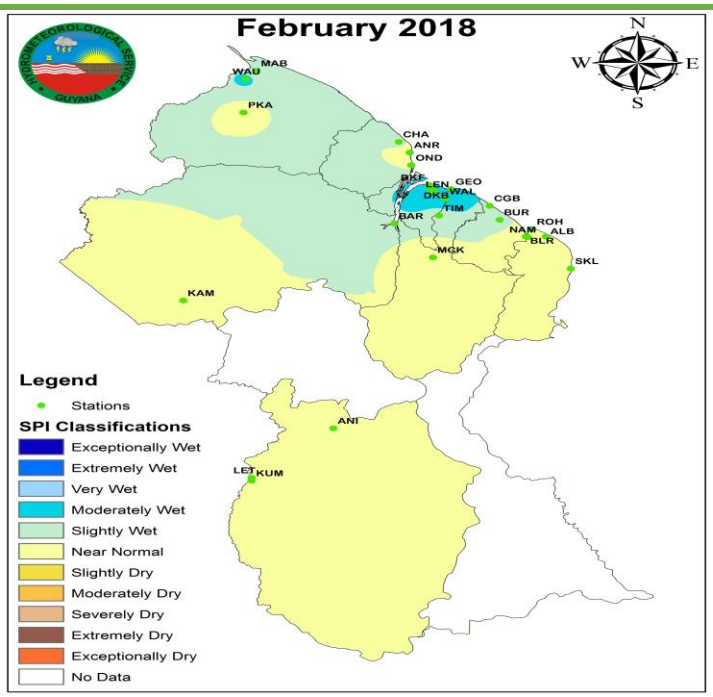

Fig.1: 1-Month Standardized Precipitation Index(SPI)

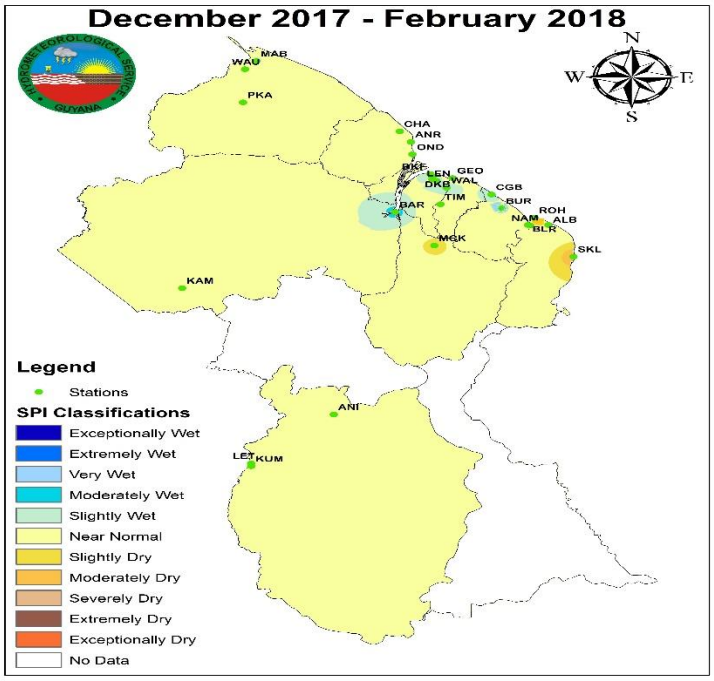

Fig.2: 3-Month Standardized Precipitation Index(SPI)
(for agricultural drought-soil moisture)

OBSERVED FEATURES

The 1-Month Standardized Precipitation Index (SPI) analysis for February (Fig.1) shows that all of the stations analysed ranged from near normal to moderately wet conditions. Port Kaituma, Kamarang, Annai, and Skeldon were some of the stations that experienced near normal conditions. Other places, such as Mabaruma, Bartica, Charity, and Timehri were slightly wet. Further, Wauna, Leonora, Wales and DeKindren were classified as moderately wet for the month.

For the 3-month Standardized Precipitation Index (SPI) (Fig. 2) all of the stations in Southern Guyana (Lethem, Annai, and Kumu) experienced near normal conditions (generally dry). Further, Wauna, Anna Regina, and Kamarang also recorded near normal conditions. Additionally, M^{c}Kenzie recorded slightly dry conditions while Rose Hall and Skeldon were classified as moderately dry. Lastly, Bartica, Cane Grove Back and Burma were some of the stations classified as slightly wet for the three month period.

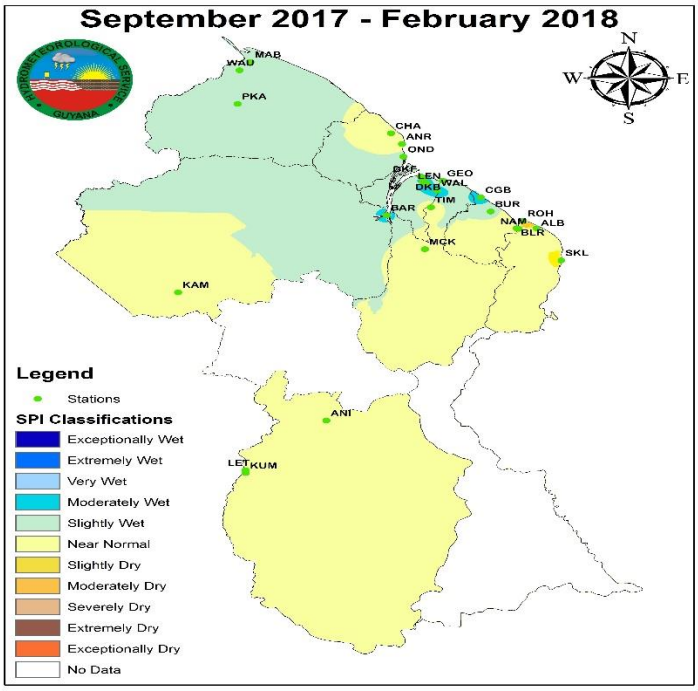

Fig.3: 6-Month Standardized Precipitation Index(SPI)

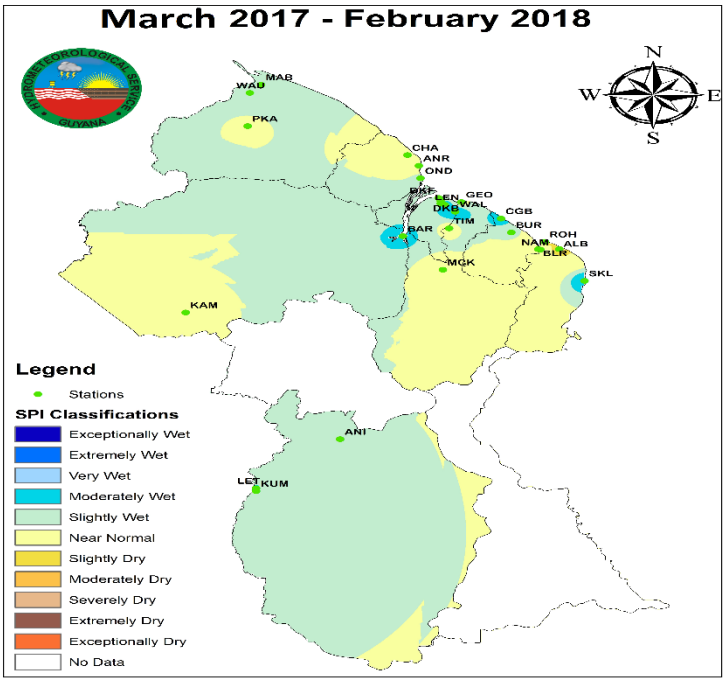

Fig.4: 12-Month Standardized Precipitation Index(SPI)

The 6-months cumulative rainfall (SPI) analysis (Fig. 3) showed that Skeldon and Rose Hall continued to experience deficit rainfall and were classified as slightly and moderately dry respectively. Charity, Anna Regina, kamarang and M^{c}kenzie were some of the stations that experienced near normal conditions.In addition, Maburuma, Wauna and Port Kaituma were classified as slightly wet while Bartica, Cane Grove Back and Leonora were some of the stations classified as moderately wet over the six-month period.

Based on the 12-month Standardized Precipitation Index (SPI) analysis (Fig.4), most of the areas analysed ranged from near normal to moderately wet conditions with the exception of Albion and Rose Hall which were both classified as moderately dry. New Amsterdam, Blairmont, Kamarang and Port Kaituma were some of the stations classified as having near normal conditions over the period considered.

OUTLOOK FOR MARCH, 2018

Northern Guyana has transitioned into its secondary dry season of 2018 (short dry season). The increased occurrence of dry spells (consecutive days without rain) is likely. Additionally, downpours are still expected thus there is no drought concern presently for this region.

Southern Guyana (Rupununi Region) is expected to continue with its dry season. Dry spells (consecutive days without rain) are anticipated. Generally, dry conditions are expected in this region.

NOTE: Values for the SPIs are computed using the monthly rainfall data for the stations represented (at least 20 years).The SPI values can be interpreted as the number of standard deviations by which the observed anomaly deviates from the long-term mean.

STATION ABBREVIATIONS

PKA-PORT KAITUMA	OND-ONDERNEEMING	DKF-DEKINDREN FRONT	ENM-ENMORE	BLR-BLAIRMONT	KAM-KAMARANG	ANI-ANNAI
WAU-WAUNA	UIV-UITVLUGT	LEN-LEONORA	TIM-TIMHERI	NAM-NEW AMSTERDAM	LET-LETHEM	BAR-BARTICA
ANR-ANNA REGINA	DKB-DE KENDREN BACK	GEO-GEORGETOWN	CGB-CANE GROVE BACK	ALB-ALBION	KUM-KUMU	MCK-M^{c}KENZIE
WAL-WALES	ROH-ROSE HALL	SKL-SKELDON	BUR- BURMA	MAB-MABURUMA	CHA-CHARITY	-

This bulletin is prepared by the Hydrometeorological Service of Guyana. We welcome feedback, suggestions and comments on this bulletin. Correspondences should be directed to The Chief Hydrometeorological Officer (Ag) at garvin.cummings@gmail.com and the Agronomist at agrodonessa@yahoo.com. You may also visit our website at www.hydromet.gov.gy. Tele#: (592)-225-9303 and Fax# :(592)-226-1460.