

# Central Water Commission Upper Ganga Basin Organisation, Lucknow Daily Flood Situation Report Cum Advisories Date: 28 SEPTEMBER, 2020

FSR No.98 Dated 28-09-2020

#### 1. Weather forecast by IMD

#### I. SYNOPTIC SITUATION:

- ♦ In view of the establishment of an anticyclonic circulation in the lower levels over western parts of northwest India and substantial reduction in moisture content and rainfall, the Southwest Monsoon has withdrawn from some parts of west Rajasthan and Punjab today the 28th September, 2020. The withdrawal line passes through Amritsar, Bhatinda, Hanumangarh, Bikaner, Jaisalmer and Lat. 26°N/Long.70°E.
- ♦ Also, conditions are becoming favourable for further withdrawal of Southwest-Monsoon from some more parts of Rajasthan and Punjab and some parts of Haryana, Chandigarh & Delhi, Uttar Pradesh and Madhya Pradesh during next 2-3 days.
- ♦ A cyclonic circulation at 3.1 km above mean sea level lies over northwest Uttar Pradesh & neighbourhood.
- ♦ The monsoon trough at mean sea level has become disorganized.

#### II. a) DETERMINISTIC FORECAST (QPF):

			QPF (mm)		
Sr. No.	BASIN NAME	SUBBASIN CODE/NAME	Day-1	Day-2	Day-3
1	Alaknanda	Alaknanda	0	0	0
2	Bhagirathi	Bhagirathi	0	0	0
		Chhatnag to Mirzapur	0	0	0
		Narora to Phaphamau	0	0	0
2	Comme	Phaphamau to Ballia	0	0	0
3	Ganga	Gomti	0	0	0
		Sai	0	0	0
		Upper Ganga	0	0	0
		Lower Ghaghra	0	0	0
4	Ghaghra	Middle Ghaghra	0	0	0
		Upper Ghaghra	0	0	0
5	Ramganga	Ramganga	0	0	0
6	Rapti	Rapti	0.1-10	0	0
7.	Sharda	Sharda	0	0	0

# II (b) <u>DETERMINISTIC FORECAST (DISTRIBUTION)</u>

		SUBBASIN		NSITY TAL DI	` '	UTION	(D)	
	BASIN NAME	CODE/NAME	Day-1	1	Day-	2	Day-	3
			Ι	D	I	D	I	D
1	Alaknanda	Alaknanda	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
2	Bhagirathi	Bhagirathi	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
		Chhatnag to Mirzapur	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
		Narora to Phaphamau	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
	Ganga	Phaphamau to Ballia	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
3		Gomti	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
		Sai	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
		Upper Ganga	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
		Lower Ghaghra	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
4	Ghaghra	Middle Ghaghra	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
		Upper Ghaghra	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
5	Ramganga	Ramganga	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY
6	Rapti	Rapti	VL	ISOL	M.Dry	DRY	M.Dry	DRY
7.	Sharda	Sharda	M.Dry	DRY	M.Dry	DRY	M.Dry	DRY

QPF in Ranges (mm)	UNLISTED	0	0.1-10	11-25	26-50	51-100	>100
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## III. HEAVY RAINFALL WARNING:

NAME OF	NAME OF SUB-	Day-1		Day-2		Day-3		
BASIN	BASIN	I	D	I	D	I	D	
Alaknanda	Alaknanda							
Bhagirathi	Bhagirathi							
	Chhatnag to Mirzapur							
	Narora to Phaphamau							
Ganga	Phaphamau to Ballia							
	Gomti							
	Sai							
	Upper Ganga							
	Lower Ghaghra							
Ghaghra	Middle Ghaghra							
	Upper Ghaghra							
Ramganga	Ramganga							
Rapti	Rapti							
Sharda	Sharda							

	Spatial Distribution of Rainfall						
DRY	Dry	No Station reported rainfall					
ISOL	One or two Places	25% or less number of stations recorded rainfall 2.5 mm					
SCT	At a few Places	26%-50% number of stations recorded rainfall 2.5 mm					
FWS	At many Places	51%-75% number of stations recorded rainfall 2.5 mm					
WS	At most places	76%-100% number of stations recorded rainfall 2.5 mm					

	Intensity of Rainfall							
M.Dry	NIL	0 cm	VL	Very Light Rainfall	Trace			
L	Light Rainfall	Upto 1 cm	M	Moderate rainfall	02-06 cm			
H	Heavy rainfall	07-11 cm	VH	Very Heavy rainfall	12-20 cm			
EH	Extremely Heavy rainfall	21 cm or More	11/10	N 7000	-54			
ExH	Exceptionally Heavy Rainfall		he month or	e near about the highest reco season. However, this term xceeds 12 cm				

## IV. PROBABILISTIC FORECAST

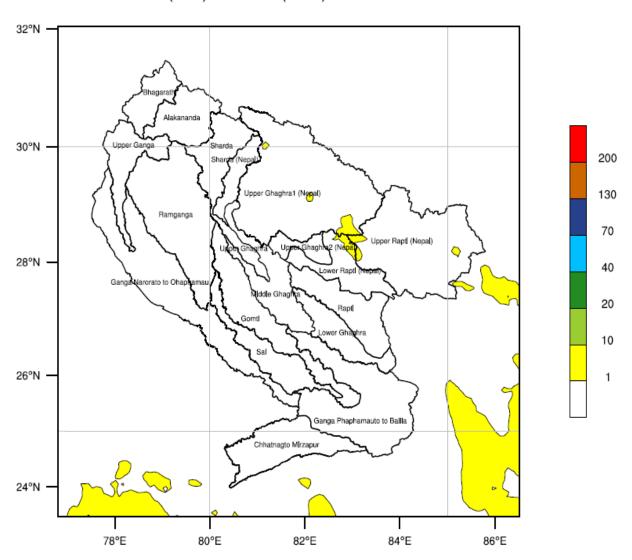
			Day-	Day-1			Day-	2					Day-3							
S. No.	BASIN NAME	SUBBASIN CODE/NAME	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm
1	Alaknanda	Alaknanda	75-100						75-100						75-100					
2	Bhagirathi	Bhagirathi	75-100						75-100						75-100					
		Chhatnag to Mirzapur	75-100						75-100						75-100					
		Narora to Phaphamau	75-100						75-100						75-100					
3	Ganga	Phaphamau to ballia	75-100						75-100						75-100					
		Gomti	75-100						75-100						75-100					
		Sai	75-100						75-100						75-100					
		Upper Ganga	75-100						75-100						75-100					
		Lower Ghaghra	75-100						75-100						75-100					
4	Ghaghra	Middle Ghaghra	75-100						75-100						75-100					
		Upper Ghaghra	75-100						75-100						75-100					
5	Ramganga	Ramganga	75-100						75-100						75-100					
6	Rapti	Rapti	25-50	50-75					75-100						75-100					
7.	Sharda	Sharda	75-100						75-100						75-100					

Probability of occurrence (%)	0-5	5-25	25-50	50-75	75-100

Init; 2020-09-28\_00:00:00 Valld: 2020-09-29\_03:00:00

## FLOOD MET OFFICE LUCKNOW

# IMD WRF Rainfall (mm) Forecast(24hr)



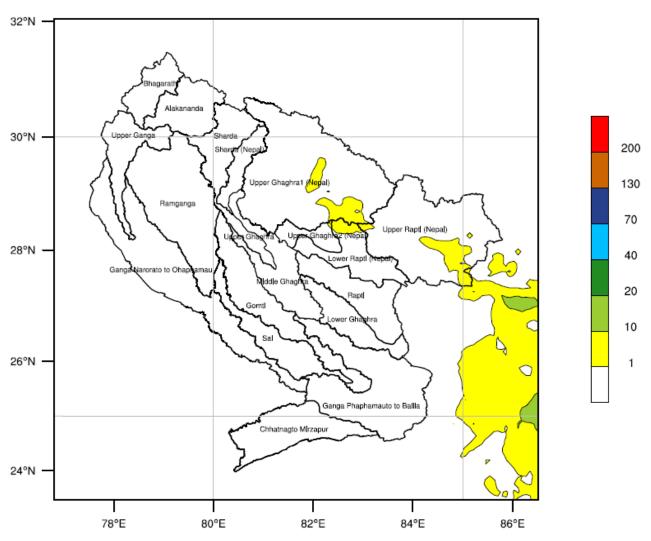
# Sub basin wise Average Rainfall Estimation

Alaknanda =	0 mm	Raptl =	0 mm
Bhaglrathl =	0 mm	Sai =	0 mm
Chhatnagto Mirzapur =	0 mm	Sharda =	0 mm
Ganga Narorato Ohaphamau =	0 mm	Sharda (Nepal) =	0 mm
Ganga Phaphamauto Balia =	0 mm	Upper Ganga =	0 mm
Gomtl =	0 mm	Upper Ghaghra =	0 mm
Lower Ghaghara =	0 mm	Upper Ghaghra1 (Nepal) =	0 mm
Lower Raptl (Nepal) =	0 mm	Upper Ghaghra2 (Nepal) =	0 mm
Middle Ghaghara =	0 mm	Upper Raptl (Nepal) =	0 mm
Ramganga =	0 mm		

Init; 2020-09-28\_00:00:00 Valld: 2020-09-30\_03:00:00

## FLOOD MET OFFICE LUCKNOW

# IMD WRF Rainfall (mm) Forecast(48hr)



## Sub basin wise Average Rainfall Estimation

Alaknanda =	0 mm	Raptl =	0 mm
Bhaglrathl =	0 mm	Sai =	0 mm
Chhatnagto Mirzapur =	0 mm	Sharda =	0 mm
Ganga Narorato Ohaphamau =	0 mm	Sharda (Nepal) =	0 mm
Ganga Phaphamauto Balia =	0 mm	Upper Ganga =	0 mm
Gomtl =	0 mm	Upper Ghaghra =	0 mm
Lower Ghaghara =	0 mm	Upper Ghaghra1 (Nepal) =	0 mm
Lower Rapti (Nepal) =	0 mm	Upper Ghaghra2 (Nepal) =	0 mm
Mlddle Ghaghara =	0 mm	Upper Raptl (Nepal) =	0 mm
Ramganga =	0 mm		

OUTPUT FROM WRF V3.6.1 MODEL

WE = 1001; SN = 945; Levels = 45; Dls = 9km; Phys Opt = 16; PBL Opt = 2; Cu Opt = 5

#### Flood Situation on 28 SEPTEMBER, 2020



- 1. River Rohin at Trimohinighat in MAHRAJGANJ district of Uttar Pradesh continues to flow in SEVERE SITUATION at 14:00 hrs. today. At 14:00 hrs., it was flowing at a level of 84.55m with rising trend which is 2.11m above its Danger Level of 82.44 m and 0.93m below its previous HFL of 85.48 m (2017-08-15).
- 2. River Rapti at Birdghat in GORAKHPUR district of Uttar Pradesh continues to flow in SEVERE SITUATION at 14:00 hrs. today. At 14:00 hrs, it was flowing at a level of 75.745 m with rising trend which is 0.765m above its Danger Level of 74.98 m and 1.795m below its previous HFL of 77.54 m (1998-08-23).
- **3.** River Rapti at Regauli in GORAKHPUR district of Uttar Pradesh continues to flow in SEVERE SITUATION at 14:00 hrs. today. At 14:00 hrs, it was flowing at a level of 80.34m with rising trend which is 0.04m above its Danger Level of 80.30m and 1.78m below its previous HFL of 82.12m (2000).
- **4.** River Burhi Rapti at Kakrahi in SIDDHARTHNAGAR district of Uttar Pradesh continues to flow in SEVERE SITUATION at 14:00 hrs today. At 14:00 hrs, it was flowing at a level of 86.01m with falling trend which is 0.36m above its Danger Level of 85.65 m and 2.96m below its previous HFL of 88.97 m (1998-08-22).
- **5.** River Burhi Rapti at Uskabazar in SIDDHARTHNAGAR district of Uttar Pradesh continues to flow in SEVERE SITUATION at 14:00 hrs today. At 14:00 hrs, it was flowing at a level of 83.59m with falling trend which is 0.07m above its Danger Level of 83.52m and 2.03m below its previous HFL of 85.62m (1998-08-21).
- **6.** River Kwano at Chandradeepghat in GONDA district of Uttar Pradesh continues to flow in SEVERE SITUATION at 14:00 hrs today. At 14:00 hrs, it was flowing at a level of 88.87m with falling trend which is 0.03m above its Danger Level of 88.84m and 3.17m below its previous HFL of 92.04 m (1989-07-16).
- 7. River Ghaghara at Turtipar in BALIA district of Uttar Pradesh continues to flow in SEVERE SITUATION at 14:00 hrs today. At 14:00 hrs, it was flowing at a level of 64.15m with rising trend which is 0.14m above its Danger Level of 64.01m and 1.85m below its previous HFL of 66.0 m (1998).

## 2.1 Rainfall Situation

# Amount of rainfall recorded at 8:30 hours IST of today ( $(\geq 50 \text{ mm or more})$

Name of Place (State)	Rainfall (in mm)
Birdghat (U.P)	48.2

## 2.2 LEVEL FORECAST

	LEVEL FORECAST	
		No. of Forecasting
S.No.	Flood Situations	Sites
	Extreme Flood Situation:	
<b>A</b> .	(Site (s) where the previous Highest Flood Level (HFL) is exceeded or	
	equalized)	0
	Severe Flood Situation :	
	(Site(s) where water Level touching or exceeding the Danger Level but below	02
3.	Highest Flood Level(HFL)	
	Above Normal Flood Situation:	
<b>7.</b>	(Site (s) where water level touching or exceeding the warning Level but below	01
	Danger Level)	
	Total Numbers of Sites above Warning Level (A+B+C)	03
	INFLOW FORECAST	
Numbe	r of Sites for which inflow forecasts issued:	0
•	inflow are equal or exceed the specified Threshold Limit for a particular ir/ barrage)	0

## 2.3 Above Normal (Water Level touching or exceeding the warning Level but below Danger Level)

Name of river	Flood Forecastin g Sites	District	State	Danger	Warning		rious nest	Actı	ual Leve	l		Foreca	ast	
				Level(m)	Level (m)	Level (m)	year	Level (m)	Time	Trend	Level (m)	Date	Time	Trend
Rapti	Bansi	Siddharth Nagar	U.P	84.90	83.90	85.88	2017	84.44	0800	F	84.23	29.09.20	0800	F

## 2.4 Severe Flood Situation (Water Level touching or exceeding the Danger Level but below Highest Flood Level (HFL))

Name of river	Flood Forecasting	District	District State		State Danger Level(m)		Previous Highest		Actual Level			Forecast			
livei	Sites			Level(III)	Level (m)	Level(m)	Date	Level(m)	Time	Trend	Level (m)	) Date	Time	Trend	
Rapti	Birdghat	Gorakhpur	U.P	74.98	73.98	77.54	1998	75.69	0800	R	75.90	29.09.20	0800	R	
Ghaghara	Turtipar	Balia	U.P	64.01	63.01	66.00	1998	64.14	0800	R	64.20	29.09.20	0800	R	

### 2.5 Extreme Flood Situation (Water Level exceeded or equalized Highest Flood Level (HFL))

Name of river	Flood Forecasting Sites		State	Danger Level(m)	Warning Level (m)	Previous Highest		Actual Level			Forecast			
		District				Level(m)	Date	Level(m)	Time	Trend	Level (m)	Date	Time	Trend

Note - No Station is in this situation Dated 28.09.2020

#### 2.6 Inflow Forecast

						Previous Highest		Actual Level			Forecast			
Name of river	Flood Forecasting Sites	District	State	HFL(m)	FRL(m)	Discharge (Q)	Date	Discharge (Q)	Time	Trend	D (Q)	Date	Time	Trend

Note - No Station is in this situation Dated 28.09.2020

#### Advisory on Hydro Meteorological Situation Expected from 29-09-2020 to 30-09-2020

As per rainfall pattern given in section II, Alaknanda, Bhagirathi & Ganga river basins are expected to receive nil rain in next 48 hrs. Ghaghara, Ramganga, Sharda & Rapti river basins are expected to receive nil rain in next 48 hours. Water level at most of CWC stations are expected to steady/fall in next 48 hours. Level forecast will be issued if the level of river at stations are likely to touch or cross warning level. From the given QPF, Above Flood Normal situation is expected in Ghaghara & Rapti river basins.

अधिशासीअभियंता

मध्य गंगा मण्डल -1 लखनऊ