

# Central Water Commission Upper Ganga Basin Organisation, Lucknow Daily Flood Situation Report Cum Advisories Date: 30 SEPTEMBER, 2020

FSR No.100 Dated: 30-09-2020

#### 1. Weather forecast by IMD

#### I. SYNOPTIC SITUATION:

- ♦ Change in low level wind pattern into north-westerlies, reduction in moisture content and cessation of rainfall indicates that the southwest monsoon has further withdrawn from some more parts of Rajasthan, remaining parts of Punjab, entire Western Himalayan region & Haryana, Chandigarh & Delhi and some parts of Uttar Pradesh.
- ♦ The withdrawal line of the Southwest Monsoon passes through Lat. 29°N/ Long.81°E, Lakhimpur Kheri, Shahjhanpur, Alwar, Nagaur and Lat. 26°N/ Long.70°E.
- ♦ Conditions are becoming favourable for further withdrawal of Southwest-Monsoon from some more parts of Uttar Pradesh & Rajasthan and some parts of northwest Madhya Pradesh during next 2-3 days.

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			
		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	0	0			
7.	Sharda	Sharda	0	0	0			

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

		SUBBASIN		NSITY TAL D	` '	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	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	M.Dry	DRY	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	2	Day-3	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	19/10						
ExH	Exceptionally Heavy Rainfall		he month or	e near about the highest reco season. However, this term exceeds 12 cm					

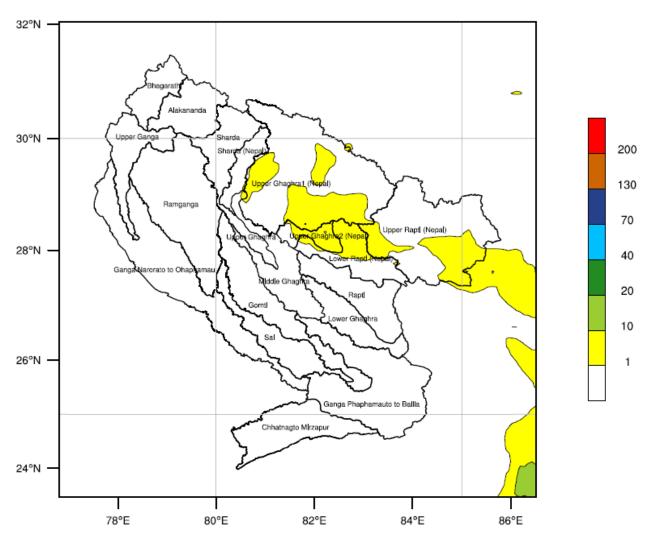
## IV. PROBABILISTIC FORECAST

			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	75-100						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

## 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 M rzapur =	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 =	1 mm
Lower Ghaghara =	0 mm	Upper Ghaghra1 (Nepal) =	3 mm
Lower Raptl (Nepal) =	1 mm	Upper Ghaghra2 (Nepal) =	0 mm
Middle Ghaghara =	0 mm	Upper Raptl (Nepal) =	1 mm
Ramganga =	0 mm		

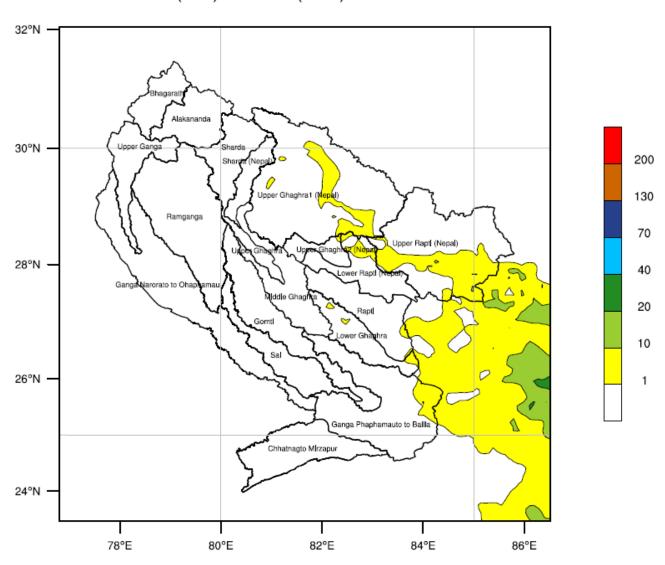
OUTPUT FROM WRF V3.6.1 MODEL

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

Init; 2020-09-30\_00:00:00 Valid: 2020-10-02\_03:00:00

## FLOOD MET OFFICE LUCKNOW

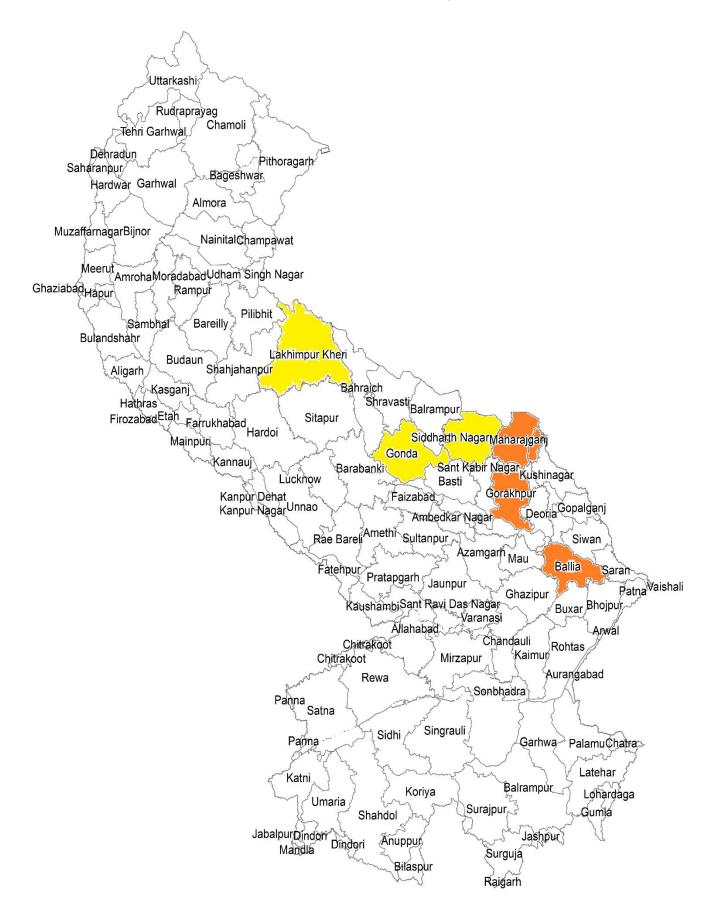
# IMD WRF Rainfall (mm) Forecast(48hr)



# Sub basin wise Average Rainfall Estimation

Alaknanda =	0 mm	Raptl =	0 mm
Bhaglrathl =	0 mm	Sai =	0 mm
Chhatnagto M rzapur =	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) =	1 mm
Ramganga =	0 mm		

#### Flood Situation on 30 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 84.17m with falling trend which is 1.73m above its Danger Level of 82.44 m and 1.31m 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 76.015m with rising trend which is 1.035m above its Danger Level of 74.98 m and 1.525m below its previous HFL of 77.54 m (1998-08-23).
- **3.** 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 64.04m with falling trend which is 0.03m above its Danger Level of 64.01m and 1.96m below its previous HFL of 66.0 m (1998-08-28).

## 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)
NIL	

Note - No Station is in this situation Dated 30.09.2020

## 2.2 LEVEL FORECAST

	LEVEL FORECAST	
S.No.	Flood Situations	No. of Forecasting Sites
	Extreme Flood Situation:	
A.	(Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalized)	0
	Severe Flood Situation :	
В.	(Site(s) where water Level touching or exceeding the Danger Level but below Highest Flood Level(HFL)	02
	Above Normal Flood Situation:	
C.	(Site (s) where water level touching or exceeding the warning Level but below Danger Level)	0
	Total Numbers of Sites above Warning Level (A+B+C)	02
	INFLOW FORECAST	
Numbe	or 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	_	Warning Level (m)	Previous Highest		Actual Level			Forecast			
				Level(m)		Level (m)	year	Level (m)	Time	Trend	Level (m)	Date	Time	Trend

Note - No Station is in this situation Dated 30.09.2020

## 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	State	Danger Level(m)	Warning	Previou	s Highest	Actu	al Level					
rivei	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	76.02	0800	R	75.75	01.10.20	0800	F
Ghaghara	Turtipar	Balia	U.P	64.01	63.01	66.00	1998	64.06	0800	F	63.85	01.10.20	0800	F

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

Name of river	Flood Forecasting Sites	District	6	Danger Level(m)	Warning Level (m)	Previous Highest		Act	Actual Level			Forecast			
			State			Level(m)	Date	Level(m)	Time	Trend	Level (m)	Date	Time	Trend	

Note - No Station is in this situation Dated 30.09.2020

#### 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

## Advisory on Hydro Meteorological Situation Expected from 01-10-2020 to 02-10-2020

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