



**Central Water Commission**  
**Upper Ganga Basin Organisation, Lucknow**  
**Daily Flood Situation Report Cum Advisories**  
**Date: 24 SEPTEMBER, 2020**

**FSR No.94**

**Dated 24-09-2020**

**1. Weather forecast by IMD**

**I. SYNOPTIC SITUATION:**

- ♦ The Low Pressure Area over central parts of East Uttar Pradesh & neighbourhood and associated cyclonic circulation extending upto 5.8 km above mean sea level persists. It is likely to move east southeastwards during next 48 hours.
- ♦ The monsoon trough at mean sea level now passes through Bikaner, Alwar, center of Low Pressure Area over central parts of East Uttar Pradesh & neighbourhood, Gaya, Malda and thence eastwards to Manipur across Bangladesh and south Assam.
- ♦ The trough at mean sea level now runs from north Madhya Maharashtra to the cyclonic circulation associated with Low Pressure Area over central parts of East Uttar Pradesh & neighbourhood and lies between 1.5 km & 4.5 km above mean sea level.
- ♦ The cyclonic circulation over West Rajasthan & neighbourhood now lies over Northeast Rajasthan and extends upto 0.9 km above mean sea level.

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

Sr. No.	BASIN NAME	SUBBASIN CODE/NAME	QPF (mm)		
			Day-1	Day-2	Day-3
1	Alaknanda	Alaknanda	0.1-10	0.1-10	0.1-10
2	Bhagirathi	Bhagirathi	0.1-10	0.1-10	0.1-10
3	Ganga	Chhatnag to Mirzapur	0.1-10	0.1-10	0.1-10
		Narora to Phaphamau	0.1-10	0.1-10	0.1-10
		Phaphamau to Ballia	11-25	0.1-10	0.1-10
		Gomti	0.1-10	0.1-10	0.1-10
		Sai	0.1-10	0.1-10	0.1-10
		Upper Ganga	0.1-10	0.1-10	0.1-10
4	Ghaghra	Lower Ghaghra	11-25	0.1-10	0.1-10
		Middle Ghaghra	0.1-10	0.1-10	0.1-10
		Upper Ghaghra	0.1-10	0.1-10	0.1-10
5	Ramganga	Ramganga	0.1-10	0.1-10	0.1-10
6	Rapti	Rapti	11-25	0.1-10	0.1-10
7.	Sharda	Sharda	0.1-10	0.1-10	0.1-10

## II (b) DETERMINISTIC FORECAST (DISTRIBUTION)

	BASIN NAME	SUBBASIN CODE/NAME	INTENSITY (I) & SPATIAL DISTRIBUTION (D)					
			Day-1		Day-2		Day-3	
			I	D	I	D	I	D
1	Alaknanda	Alaknanda	VL	ISOL	VL	SCT	VL	ISOL
2	Bhagirathi	Bhagirathi	VL	ISOL	VL	SCT	VL	ISOL
3	Ganga	Chhatnag to Mirzapur	M	FWS	VL	SCT	VL	ISOL
		Narora to Phaphamau	VL	ISOL	VL	SCT	VL	ISOL
		Phaphamau to Ballia	M	WS	VL	SCT	VL	ISOL
		Gomti	L	SCT	VL	SCT	VL	ISOL
		Sai	L	SCT	VL	SCT	VL	ISOL
		Upper Ganga	VL	ISOL	VL	ISOL	VL	ISOL
4	Ghaghra	Lower Ghaghra	M	ISOL	VL	WS	VL	SCT
		Middle Ghaghra	M	ISOL	VL	ISOL	VL	ISOL
		Upper Ghaghra	L	SCT	VL	ISOL	VL	ISOL
5	Ramganga	Ramganga	VL	ISOL	VL	ISOL	VL	ISOL
6	Rapti	Rapti	M	WS	L	SCT	VL	ISOL
7.	Sharda	Sharda	VL	ISOL	VL	ISOL	VL	ISOL

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

NAME OF BASIN	NAME OF SUB-BASIN	Day-1		Day-2		Day-3	
		I	D	I	D	I	D
Alaknanda	Alaknanda						
Bhagirathi	Bhagirathi						
Ganga	Chhatnag to Mirzapur						
	Narora to Phaphamau						
	Phaphamau to Ballia						
	Gomti						
	Sai						
	Upper Ganga						
Ghaghra	Lower Ghaghra	H	ISOL				
	Middle Ghaghra						
	Upper Ghaghra						
Ramganga	Ramganga						
Rapti	Rapti	H	ISOL				
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					
MDry	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			
ExH	Exceptionally Heavy Rainfall	When the amount is a value near about the highest recorded rainfall at or near the station for the month or season. However, this term will be used only when the actual rainfall amount exceeds 12 cm			

#### IV. PROBABILISTIC FORECAST

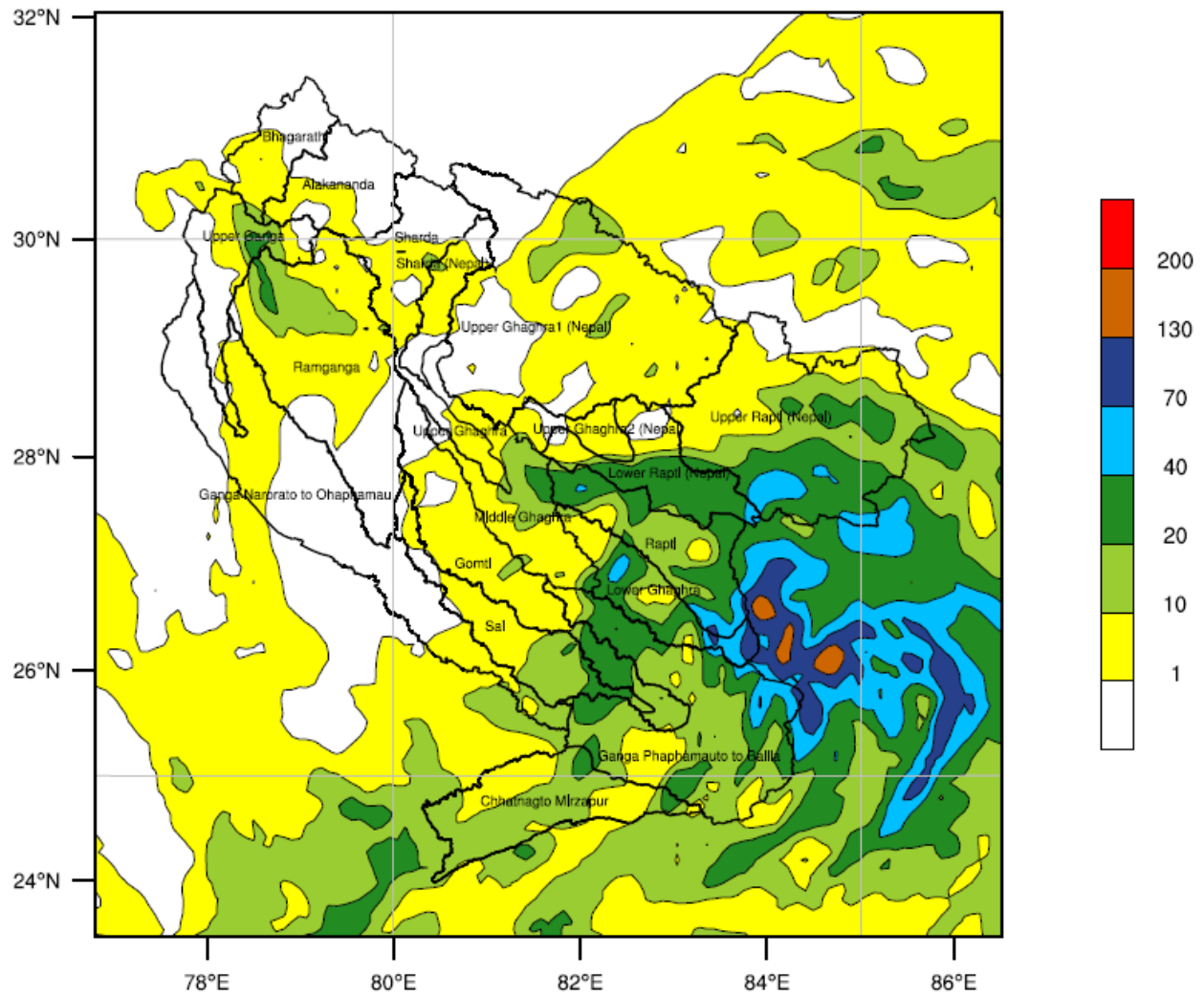
S. No.	BASIN NAME	SUBBASIN CODE/NAME	Day-1						Day-2						Day-3					
			0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm
1	Alaknanda	Alaknanda		75-100						75-100						75-100				
2	Bhagirathi	Bhagirathi		75-100						75-100						75-100				
3	Ganga	Chhatnag to Mirzapur		75-100						75-100						75-100				
		Narora to Phaphamau		75-100						75-100						75-100				
		Phaphamau to ballia		25-50	50-75					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				
4	Ghaghra	Lower Ghaghra		75-100						75-100						75-100				
		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
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Init: 2020-09-24\_00:00:00  
Valid: 2020-09-25\_03:00:00

FLOOD MET OFFICE LUCKNOW

IMD WRF Rainfall (mm) Forecast(24hr)



Sub basin wise Average Rainfall Estimation

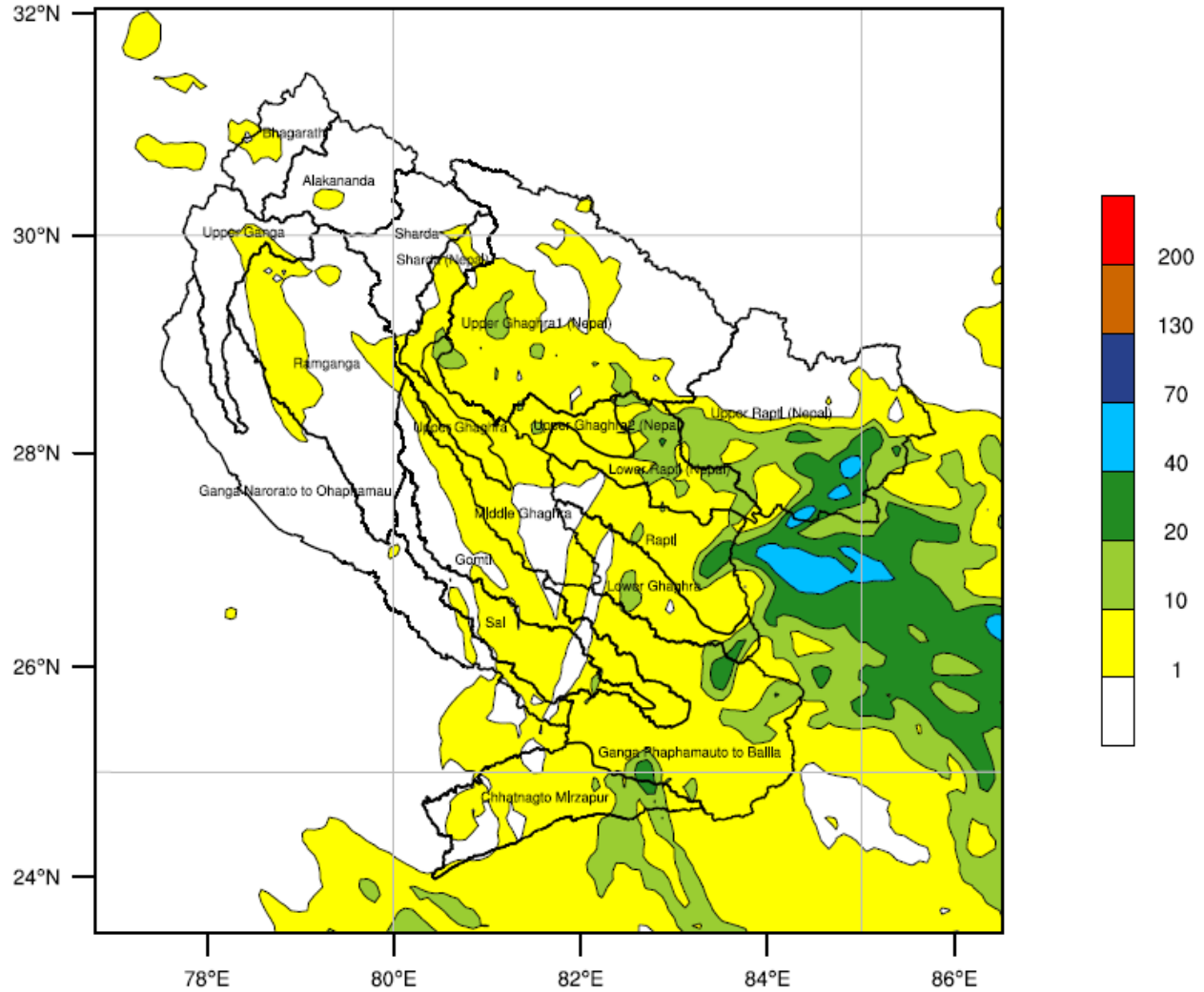
Alakananda = 1 mm	Rapti = 25 mm
Bhagirathi = 2 mm	Sai = 9 mm
Chhatnagto Mirzapur = 11 mm	Sharda = 3 mm
Ganga Narorato Ohaphamau = 1 mm	Sharda (Nepal) = 3 mm
Ganga Phaphamauto Ballia = 19 mm	Upper Ganga = 4 mm
Gomti = 7 mm	Upper Ghaghra = 3 mm
Lower Ghaghara = 26 mm	Upper Ghaghra1 (Nepal) = 4 mm
Lower Rapti (Nepal) = 19 mm	Upper Ghaghra2 (Nepal) = 8 mm
Middle Ghaghara = 9 mm	Upper Rapti (Nepal) = 18 mm
Ramganga = 5 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: 2020-09-24\_00:00:00  
Vald: 2020-09-26\_03:00:00

## FLOOD MET OFFICE LUCKNOW

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



### Sub basin wise Average Rainfall Estimation

Alaknanda =	0 mm	Rapti =	6 mm
Bhagirathi =	0 mm	Sai =	2 mm
Chhatnagto Mirzapur =	4 mm	Sharda =	2 mm
Ganga Narorato Ohaphamau =	0 mm	Sharda (Nepal) =	1 mm
Ganga Phaphamauto Ballia =	7 mm	Upper Ganga =	0 mm
Gomti =	2 mm	Upper Ghaghra =	3 mm
Lower Ghaghara =	5 mm	Upper Ghaghra1 (Nepal) =	6 mm
Lower Rapti (Nepal) =	9 mm	Upper Ghaghra2 (Nepal) =	5 mm
Middle Ghaghara =	2 mm	Upper Rapti (Nepal) =	9 mm
Ramganga =	1 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

## 2. Summary of flood situation as per CWC flood forecasting network

### Flood Situation on 24 SEPTEMBER, 2020



## 2.1 Rainfall Situation

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

Name of Place (State)	Rainfall (in mm)
Banda (U.P)	104.8
Lucknow (U.P)	55.6
Sultanpur (U.P)	85.3
Jaunpur (U.P)	133.0
Sharda Nagar (U.P)	59.6
Motipur (U.P)	84.4
B.K.Ghat (U.P)	48.2
Ayodhya (U.P)	77.0
Turtipar (U.P)	200.4
Bansi (U.P)	124.4
Regauli (U.P)	85.2
Bird Ghat (U.P)	90.6
Kakrahi (U.P)	120.2
Uskabazar (U.P)	130.6
Trimohinighat (U.P)	81.6
Maniram (U.P)	74.4
Chandradeepghat (U.P)	57.0
Mukhlisipur (U.P)	60.0
Basti (U.P)	156.0
Hetimpur (U.P)	139.0
Salempur (U.P)	116.2
Gola Bazar (U.P)	112.2
Parsohanghat (U.P)	81.2
Chauhaanpatti (U.P)	136.6
Thoothibari (U.P)	68.6
Kukea (U.K)	98.8
Valmiki Nagar (B.R)	188.6



## 2.2 LEVEL FORECAST

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

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

Name of river	Flood Forecasting Sites	District	State	Danger Level(m)	Warning Level (m)	Previous Highest		Actual Level			Forecast			
						Level (m)	Date	Level (m)	Time	Trend	Level (m)	Date	Time	Trend
Ghaghara	Turtipar	Balia	U.P	64.01	63.01	66.00	1998	63.39	0800	R	63.65	25.09.20	0800	R

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

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

Note - No Station is in this situation Dated 24.09.2020

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

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

Note - No Station is in this situation Dated 24.09.2020

## 2.6 Inflow Forecast

Name of river	Flood Forecasting Sites	District	State	HFL(m)	FRL(m)	Previous Highest		Actual Level			Forecast			
						Discharge (Q)	Date	Discharge (Q)	Time	Trend	D (Q)	Date	Time	Trend
Rihand	Rihand Dam	Sonbhadra	U.P		265.18				0800	R	938.00	25.09.20	0800	R
Sone	Bansagar Dam	Shahdol	M.P		341.64				0800	R	1231.00	25.09.20	0800	R

**Advisory on Hydro Meteorological Situation Expected from 25-09-2020 to 26-09-2020**

As per rainfall pattern given in section II, Alaknanda, Bhagirathi & Ganga rivers are expected to receive very light to light rain at isolated to scattered areas in next 48 hrs. Ghaghra, Ramganga, Sharda & Rapti river basins are expected to receive very light to light rain at isolated areas in next 48 hours. Water level at most of CWC stations are expected to raise 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, Normal situation is expected in Ganga, Ghaghra, Rapti & Sharda river basins.

अधिशसीअभियंता

मध्य गंगा मण्डल -1 लखनऊ