

# Central Water Commission Upper Ganga Basin Organisation, Lucknow Daily Flood Situation Report Cum Advisories Date: 10 SEPTEMBER, 2020

FSR No.80 Dated 10-09-2020

1. Weather forecast by IMD

# I. SYNOPTIC SITUATION:

- ♦ The Monsoon Trough at mean sea level now passes through Amritsar, Karnal, Meerut, Bareilly, Varanasi, Daltongani, Bankura, Digha and thence east-northeastwards to Northeast Bay of Bengal.
- ♦ The trough from northwest Uttar Pradesh to southwest Madhya Pradesh now runs from East Uttar Pradesh to Vidarbha and extends upto 0.9 km above mean sea level.

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

			QPF (mm)		
Sr. No.	BASIN NAME	SUBBASIN CODE/NAME	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
		Chhatnag to Mirzapur	0.1-10	0.1-10	0.1-10
3		Narora to Phaphamau	0.1-10	0.1-10	0.1-10
	Congo	Phaphamau to Ballia	0.1-10	0.1-10	0.1-10
3	Ganga	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
		Lower Ghaghra	0.1-10	0.1-10	0.1-10
4	Ghaghra	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	0.1-10	0.1-10	0.1-10
7.	Sharda	Sharda	0.1-10	0.1-10	0.1-10

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

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

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QPF in Ranges (mm)	UNLISTED	1 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						

5	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 Rainfa	II	
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

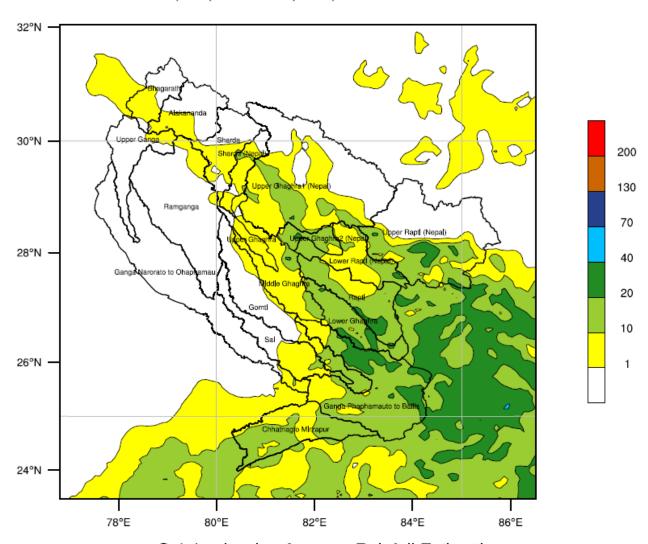
			Day-	1					Day	Day-2					Day-3					
S. No.	BASIN NAME	SUBBASIN CODE/NAME	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm	0 mm	0.1-10 mm	11-25 mm	26-50 mm	51-100 mm	>100 mm
1	Alaknanda	Alaknanda	25-50	50-75					25-50	50-75					25-50	50-75				
2	Bhagirathi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

Probability of occurrence (%)	0-5	5-25 25-50	50-75	75-100
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Init: 2020-09-10\_00:00:00 Valld: 2020-09-11\_03:00:00

# FLOOD MET OFFICE LUCKNOW

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



# Sub basin wise Average Rainfall Estimation

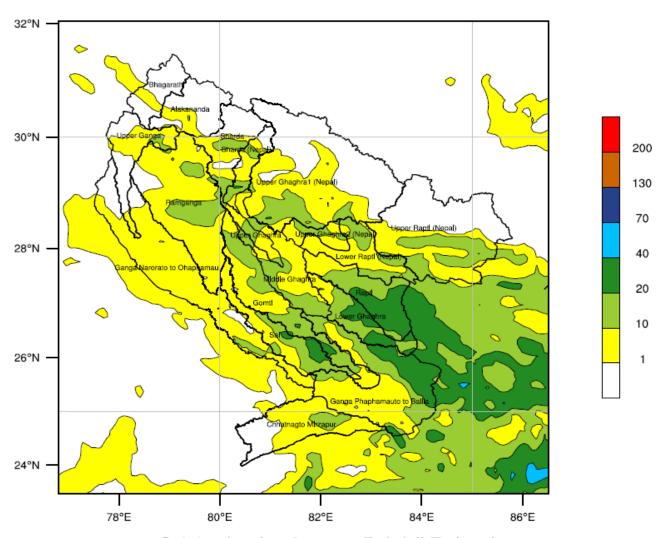
Alaknanda =	1 mm	Raptl =	14 mm
Bhaglrathl =	1 mm	Sai =	4 mm
Chhatnagto M rzapur =	11 mm	Sharda =	4 mm
Ganga Narorato Ohaphamau =	0 mm	Sharda (Nepal) =	2 mm
Ganga Phaphamauto Balia =	15 mm	Upper Ganga =	0 mm
Gomtl =	3 mm	Upper Ghaghra =	4 mm
Lower Ghaghara =	17 mm	Upper Ghaghra1 (Nepal) =	13 mm
Lower Raptl (Nepal) =	10 mm	Upper Ghaghra2 (Nepal) =	5 mm
Middle Ghaghara =	8 mm	Upper Raptl (Nepal) =	7 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: 2020-09-10\_00:00:00 Valld: 2020-09-12\_03:00:00

# FLOOD MET OFFICE LUCKNOW

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



# Sub basin wise Average Rainfall Estimation

Alaknanda =	1 mm	Raptl =	19 mm
Bhaglrathl =	1 mm	Sai =	11 mm
Chhatnagto M rzapur =	5 mm	Sharda =	7 mm
Ganga Narorato Ohaphamau =	4 mm	Sharda (Nepal) =	5 mm
Ganga Phaphamauto Balia =	12 mm	Upper Ganga =	2 mm
Gomtl =	11 mm	Upper Ghaghra =	4 mm
Lower Ghaghara =	18 mm	Upper Ghaghra1 (Nepal) =	8 mm
Lower Raptl (Nepal) =	9 mm	Upper Ghaghra2 (Nepal) =	8 mm
Middle Ghaghara =	10 mm	Upper Raptl (Nepal) =	5 mm
Ramganga =	7 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

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

## Flood Situation on 10 SEPTEMBER, 2020



## 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 10.09.2020

# 2.2 LEVEL FORECAST

	LEVEL FORECAST	
		No. of Forecasting
S.No.	Flood Situations	Sites
	Extreme Flood Situation:	
<b>4</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	0
В.	Highest Flood Level(HFL)	
	Above Normal Flood Situation:	
<b>Z.</b>	(Site (s) where water level touching or exceeding the warning Level but below	03
	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 Dan	Danger	Warning	Previous Highest		Actual Level				Forecast			
				Level(m)	Level (m)	Level (m)	Date	Level (m)	Time	Trend	Level (m)	Date	Time	Trend	
Ghaghra	Elgin Bridge	Barabanki	U.P	106.07	105.07	107.616	2014	105.096	0800	F	104.95	11.09.20	0800	F	
Ghaghra	Turtipar	Ballia	U.P	64.01	63.01	66.00	1998	63.13	0800	F	63.00	11.09.20	0800	F	
Ganga	Kachhla bridge	Budaun	U.P	161.00	162.00	162.79	2010	161.03	0800	F	160.65	11.09.20	0800	F	

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

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

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

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

Note - No Station is in this situation Dated 10.09.2020

# 2.6 Inflow Forecast

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

## Advisory on Hydro Meteorological Situation Expected from 11-09-2020 to 12-09-2020

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

अधिशासीअभियंता

मध्य गंगा मण्डल -1 लखनऊ