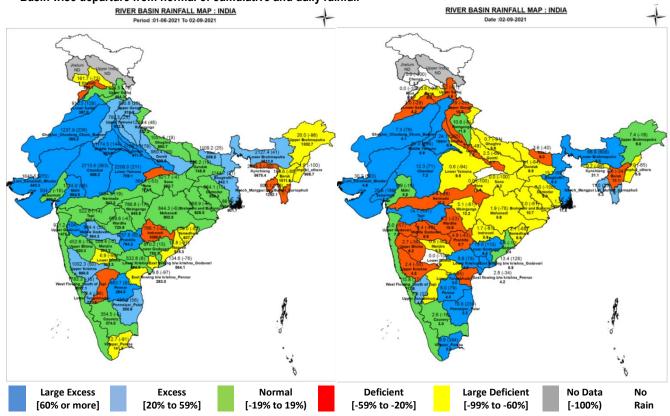


# Central Water Commission Daily Flood Situation Report cum Advisories 02 -09-2021

## 1.0 Rainfall Situation

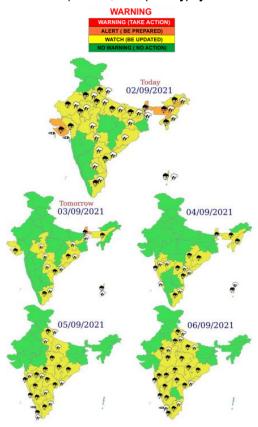
# 1.1 Basin wise departure from normal of cumulative and daily rainfall



Notes: a) Small figures indicate actual rainfall (mm), while bold figures indicate Normal rainfall (mm)

b) Percentage departures of rainfall are shown in brackets.

# 1.2 Rainfall forecast for next 5 days issued on 2<sup>nd</sup> September, 2021 (Midday) by IMD



 Very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim on 02nd & 03rd; Assam & Meghalaya and Saurashtra & Kutch on 02nd September, 2021.

## 2.0 Flood Situation and Advisories

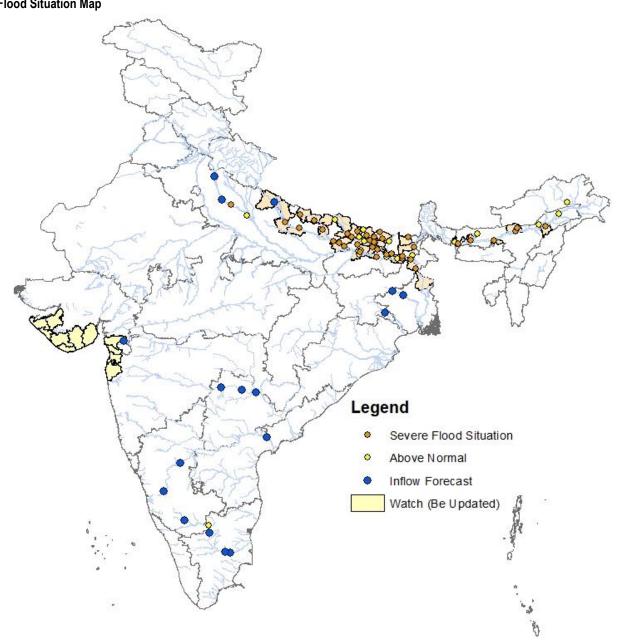
# 2.1 Summary of Flood Situation as per CWC Flood Forecasting Network

On 2<sup>nd</sup> September, 2021, 1 station in Uttar Pradesh is flowing in Extreme Flood Situation, 38 Stations (23 in Bihar, 7 in Uttar Pradesh, 6 in Assam and 1 each in Jharkhand & West Bengal) are flowing in Severe Flood Situation and 19 stations (10 in Bihar, 6 in Assam, 2 in Uttar Pradesh and 1 West Bengal) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 17 Barrages & Dams (3 each in Telangana, Tamilnadu & Uttar Pradesh, 2 each in Andhra Pradesh, Jharkhand & Karnataka and 1 each in Gujarat & West Bengal).

animiadu & Ottal Fradesii, 2 each in Andria Fradesii, sharkhand & Ramataka <b>and</b> Freach in Odjarat & West Bengar).							
PART - I: LEVEL FORECAST							
S.No.	Flood Situations	Numbers of Forecasting Site					
Α	Extreme Flood Situation: (Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalled)	1					
В	Severe Flood Situation:  (Site (s) where water level is touching or exceeding the Danger Level but below Highest Flood Level (HFL))	38					
С	Above Normal Flood Situation:  (Site (s) where water level is touching or exceeding the Warning Level but below Danger Level)	19					
Total number of sites above Warning Level ( A+B+C)							
PART - II: INFLOW FORECAST							
Number of sites for which inflow forecasts issued:  (Where Inflows are equal or exceed the specified Threshold Limit for a particular reservoir / barrage)							

Details are given at link: http://www.cwc.gov.in/sites/default/files/cfcrcwcdfb-02.09.2021-2\_10.pdf

# 2.1.1 Flood Situation Map



#### 2.2 CWC Advisories

## 2.2.1 Tapi, Narmada, Damanganga, Banas, Sabarmati, Mahi, Rivers of Saurashtra - Gujarat

Due to upper air cyclonic circulation over Saurashtra and presence of trough running from Saurashtra to Haryana through central parts of Rajasthan, heavy to very heavy rains are expected in river basins of Saurashta & Kutch. Alert may be kept in districts such as **Dwarka**, **Porbander & Kutch** and in rivers Jamraval, Minsar, Ozat etc.

Ukai dam is presently receiving inflows above 1000 cumecs and it is in decreasing trend. Mahi, Sabarmati, Banas basins are expected to get fairly widespread rainfall activity.

#### 2.2.2 Ganga Basin- Uttar Pradesh, Bihar, Jharkhand & West Bengal

#### 2.2.2.1 Uttar Pradesh

Presently, river **Ghagra** is flowing above Danger Level in **Barabanki**, **Ayodhya** districts with receding trends & **Ballia** with rising trends. River **Rapti** is flowing in extreme to severe flood situations in **Balrampur**, **Siddharth Nagar & Gorakhpur** districts with falling trends. The <u>Rapti river is flowing in extreme flood situation with falling trend at CWC site Bansi in Siddharth Nagar district. Currently water levels at the said station is 0.2 m above its previous HFL (attained in August, 2017), as per CWC forecast by 03.09.2021 08:00 AM the water level is expected to fall to 85.85 m. River **Gandak** in **Kushinagar** district is flowing in above normal flood situation with falling trend. Main Ganga is flowing in severe to above normal flood situation in middle reaches such as Budaun and Farrukhabad with falling trend.</u>

## 2.2.3.2 Bihar

Presently, river Ghagra is flowing above Danger Level in Siwan district with rising trend. River Gandak in Purba Champaran, Gopalganj, Vaishali & Muzaffarpur, River Burhi Gandak in Purba Champaran, Muzaffarpur, Samastipur & Khagaria, River Bagmati in Muzzafarpur & Darbhanga, River Adhwara in Darbhanga, Rivers Kamla & Kamlabalan in Madhubani, River Kosi in Supaul, Khagaria & Katihar, River Parman in Araria and River Mahananda in Kishanganj, Purnia & Katihar districts are flowing in severe to above normal flood situations. Rivers such as Gandak, Kosi & Mahananda are flowing in rising trends in upper reaches and in falling trends in middle and lower reaches. Burhi Gandak is flowing in falling trend in upper reaches and in rising trend in lower reaches. Bagmati, Adhwara & Kamla, is having falling trend at all CWC stations located in upper and lower reaches. River Parman is in falling trends.

Presently, main Ganga River is flowing in above normal to severe flood situations in districts **Patna**, **Munger & Bhagalpur** districts with rising trends. As the tail end sites of northern side tributaries of Ganga such as Ghagra, Gandak, Kosi are in severe flood situations, the existing flood situation in Ganga from Patna to Murshirabad is likely to continue for coming days. River **Punpun** in **Patna** district is also flowing above warning level with falling trend.

#### 2.2.4.3 Jharkhand

Main Ganga in **Sahibganj** district is flowing above danger level with rising trend.

## 2.2.4.4 West Bengal

Main Ganga in Murshirabad district is flowing above danger level with rising trend

## 2.2.5 Brahmaputra and its tributaries

## 2.2.5.1 Assam

Due to past one week rainfall, **Brahmaputra** main river is flowing in above normal to severe flood situations in **Dibrugarh**, **Jorhat**, **Sonitpur**, **Goalpara**, **Kamrup & Dhubri** districts with falling trends. Also tributaries of Brahmaputra namely **Beki** river in **Barpeta**, **Jia-Bharali** river in **Sonitpur** districts are flowing in above normal to severe flood situations with falling trends. Due to last day's heavy rainfall happened in Sub-Himalayan West Bengal and neighbouring Assam the river **Subbansiri in Lakhimpur**, **river Gaurang at Kokrajhar**, **river Sankosh in Dhubri**, **river Pagladiya in Nalbari**, **river Puthimari in Kamrup** are in above normal to severe flood situations with rising trends. Alert may be kept in districts **Kokrajhar and Biswanath**.

## 2.2.5.2 West Bengal

River Torsa in Coochbihar is flowing in above normal flood situation with falling trend.

## 2.2.6 Cauvery, Rivers of Tamil Nadu, Tadri to Kanyakumari – Kerala and Tamil nadu

## 2.2.6.1 Kerala

There is rainfall alert in Theni and Nilgris. Heavy inflows are expected in Idukki and Edamalayar dams. As storages are more than 70%, proper reservoir operation as per standard operating manuals should be done after informing downstream areas in advance.

## 2.2.6.2 Tamil nadu

Alert may be kept in districts Nilgris, Salem, Erode, Dharmapuri, Krishnagiri, Thiruppattar, Thirupp

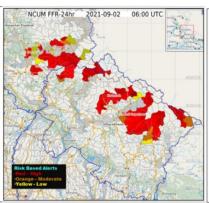
## 2.3 Flash Flood Guidance

IMD has issued Flash Flood Guidance of moderate to high risk over few watersheds and neighborhoods of Uttarakhand and Himachal Pradesh and also over few watersheds of Saurashtra and Kutch in next 24 hours.

24 hours Flash Flood Risk (FFR) Outlook Till 1130 IST of 03.09.2021:

Moderate to High Risk likely over few watersheds and neighborhoods of Uttarakhand and Himachal Pradesh met subdivisions in next 24 hours.

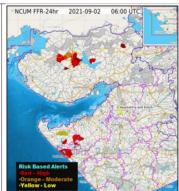
Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as depicted in map due to expected rainfall occurrences in next 24 hours.



24 hours Flash Flood Risk (FFR) Outlook Till 1130 IST of 03.09.2021:

Moderate to High Risk likely over few watersheds and neighborhoods of Saurashtra and Kutch met subdivision in next 24 hours.

Surface runoff/ Inundation may occur at some fully saturated soils & lowlying areas over AoC as depicted in map due to expected rainfall occurrences in next 24 hours.



# 3.0 Storage Position in Dams where Inflow forecast is being issued by CWC as on 2<sup>nd</sup> September, 2021

Reservoirs shown in red are having gross storage capacity more than 80% and those in orange are having gross storage greater than 60%. Close watch is to be maintained at these reservoirs whenever Very Heavy Rainfall (Orange) and Extremely Heavy Rainfall (Red) warning in next 120 hours are given below:

_ (	Storage above 60%									
#	Reservoir/Dams	River/Sub-Basin /Basin	State	US/ DS District	Rainfall situation					
					Day 1	Day 2	Day 3	Day 4	Day 5	
1	Pulichinthala	Krishna/Lower Krishna/ Krishna	AP	Nalgonda(Tel)/Guntoor,Krishna (AP)				·		
2	Srisailam	Krishna/Lower Krishna/Krishna	AP	JogulambaGadwal (Tel), Kurnool(AP)/Nalgonda(Tel), Guntoor (AP)						
3	NagarjunaSagar	Krishna/Lower Krishna/Krishna	AP	Nalgonda(Tel), Guntoor (AP)						
4	Musi	Musi/Lower Krishna/ Krishna	Tel	Nalgonda						
5	Sri PadaYellampally	Godavari/Middle Godavari/Godavari	Tel	Mancherial/ JaishankarBhupalpally						
6	Sriramsagar Project	Godavari/Middle Godavari/Godavari	Tel	Nanded (Mah)/Nirmal (Tel)						
7	Kaddam	Kaddam/Middle Godavari/Godavari	Tel	Adilabad, Nirmal/ Mancherial						
8	PD Jurala	Krishna/ Middle Krishna/Krishna	Tel	Raichur(Kar)/Kurnool(Andhra Pradesh),JogulambaGadwal(Tel)						
9	Singur	Manjira/Manjira/Godavari	Tel	Medak						
10	Panchet	Damodar/ Damodar East/ Ganga	Jhar	Dhanbad, Jamtara (Jhar)/ Puruliya, PaschimBardhaman, Bankura (WB)						
11	Getalsud	Damodar/ Damodar West/Ganga & its tributaries	Jhar	Bokaro (Jharkand)						
12	Konar	Konar/ Damodar West/Ganga & its tributaries	Jhar	Hazaribagh (Jharkand)						
13	Tilaiya	Barakar/ Barakar West/Ganga & its tributaries	Jhar	Koderma (Jharkand)						
14	Maithon	Barakar/ Barakar East/Ganga	Jhar	Dhanbad, Jamtara (Jhar)/ Puruliya, PaschimBardhaman, Bankura (WB)						
15	Kabini	Kabini/Kabini/Cauvery	Kar	Wayanad (Kerala)/ Mysuru (Kar)						
16	Harangi	Cauvery/Upper Cauvery/Cauvery	Kar	Kodagu/Mandya						
17	Karanja	Karanja/Manjira/Godavari	Kar	Bidar (Kar), Vikarabad(Tel)/Bidar(Kar)						
18	Almatti	Krishna/Upper Krishna/Krishna	Kar	Kolhapur(Mah)/ Bagalkote(Kar)						
19	Narayanpur	Krishna/Upper Krishna/Krishna	Kar	Bagalkot, Vijayapura/ Raichur, Yaadgir						
20	KRS	Cauvery/Middle Cauvery/Cauvery	Kar	Mandya, Mysore						
21	Tungabhadra	Tungabhadra/Middle Tungabhadra/Krishna	Kar	Gadag/Bellary, Koppal, Raichur						
22	Hemavathy	Hemavathy/ Hemavathy/Cauvery	Kar	Hassan, Kodagu/Mandya, Mysore						
23	Bhadra	Bhadra/Upper Tungabhadra/Krishna	Kar	Chikmagaluru/Shimoga						
24	Hidkal	Ghataprabha/Ghataprabha/Krishna	Kar	Kolhapur (Mah)/ Belgaum (Kar)						
25	Malaprabha	Malaprabha/Malaprabha/Krishna	Kar	Belgaum						
26	Warana	Warana/Upper Krishna/Krishna	Mah	Kolhapur, Sangli						
27	Koyna	Koyna/ Upper Krishna/Krishna	Mah	Satara/Kolhapur, Sangli						
28	Yeldari	Purna/Purna/Godavari	Mah	Parbhani, Hingoli						
29	Totladoh	Pench/Wainganga/Godavari	Mah	Chindwara(MP)/Nagpur(Mah)						
30	Isapur	Penganga/Penganga/Godavari	Mah	Hingoli, Yavatmal/Yavatmal,Nanded						
31	Upper Wardha	Wardha/Wardha/Godavari	Mah	Wardha, Amravati						
32	Veer	Nira/Upper Bhima/Krishna	Mah	Pune, Satara						
33	Ujjani	Bhima/Upper Bhima/Krishna	Mah	Pune, Solapur						
34	Mula	Mula/Upper Godavari/Godavari	Mah	Ahmadnagar						
35	Rana Pratap Sagar	Chambal/Upper Chambal/Ganga	Raj	Neemuch(MP)/Dholpur,Kota, Bundi(Raj)						
36	Parwati	Parbati/Kalisindh/Kalisindh/Upper	Raj	Baran (Raj)/Baran (Raj), Kota (Raj), Sheopur (MP)						
		Chambal								
									<u> </u>	

27		a 1111/10 at 11/a	D.:	"					
37	Panchana	Gambhiri/Upper Chambal/Ganga	Raj	Karauli					
38	Gudha	Mejchambal/UpperChambal/Ganga	Raj	Bhilwara/Bundi					
39	Kalisindh	Kalisindh/Upper Chambal/Ganga	Raj	Jhalawar, Kota					
40	Som Kamla Amba	Som/Mahi B/Mahi	Raj	Udaipur/ Dungarpur					
41	Mahi Bajaj Sagar	Mahi/Mahi B/Mahi	Raj	Ratlam(MP)/Banswara, Pratapgarh, Dungapur (Raj)					
42	Vaigai	Vaigai/Upper Vaigai/EF Rivers b/w	TN	Theni/Madurai					
		Cauvery &Kanyakumari							
43	Bhavanisagar	Bhavani/Middle Cauvery/Cauvery	TN	Palakad (Kerala), Nilgiri (TN), Coimbatore (TN)/ Erode (TN)					
44	Idukki	Periyar/Upper Periyar/West Flowing	Kerala	Idduki/Ernakulam					
		Rivers from Tadri to Kanyakumari							
45	Edamalyar	Periyar/Upper Periyar/West flowing	Kerala	Ernakulam					
		rivers from Tadri to Kanyakumari							
46	Bargi	Narmada/Upper Narmada/Narmada	MP	Mandla, Seoni/Jabalpur, Narsimhapur					
47	Tawa	Tawa/Middle Narmada/Narmada	MP	Betul, Hoshnabad/Sehore					
48	Gandhi Sagar	Chambal/Upper Chambal/Ganga	MP	Mandsaur, Neemuch (MP)/Dholpur (Raj)					
49	Rajghat	Betwa/Betwa/Ganga	MP	Ashoknagar(MP), Lalitpur(UP)/Shivpuri, Lalitpur(UP)					
50	Bansagar	Sone/Sone/Ganga	MP	Katni, Umaria, Shahdol, Satna/ Rewa, Sidhi					
51	Sanjay Sarovar	Wainganga/Wainganga/Godavari	MP	Seoni/Balaghat					
52	Rengali	Brahmani River/Brahmani and	Odisha	Deogarh/Angul, Dhenkanal					
		Baitarni/Brahmani and Baitarni							
53	Hirakud	Mahanadi/Upper Mahanadi/Mahanadi	Odisha	Janjgir Champa, Raigarh(Chsgrh), Jharsuguda, Bargarh,					
				Sambalpur(Odisha)/Subarnapur, Baudh, Anugul (Odisha)					
54	Ukai	Tapi/Lower Tapi/Tapi	Guj	Nadurbar(Mah), Tapi(Guj)/ Surat (Guj)					
55	Madhuban	Damanganga/Damanganga/West	Guj	Valsad (Guj)/Selvasa (UT of DNH)					
		Flowing Rivers from Tapi to Tadri							
	Note: Decident the Decide As the site on a constant of the constant of the constant of the second decident of the constant of								

Note- Based on above information, Project Authority may regulate the reservoirs as per standard operating manuals/ rule levels to avoid downstream flooding and upstream submergence.