

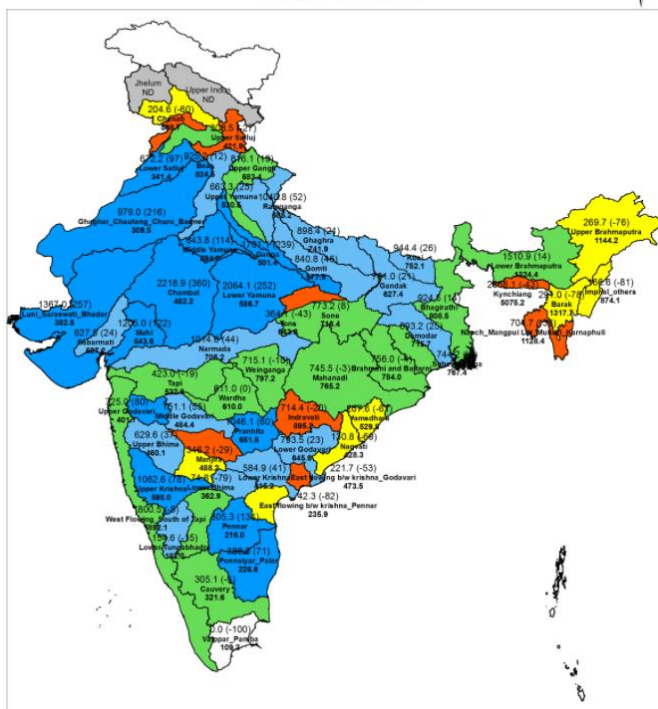


Central Water Commission
Daily Flood Situation Report cum Advisories
19-08-2021

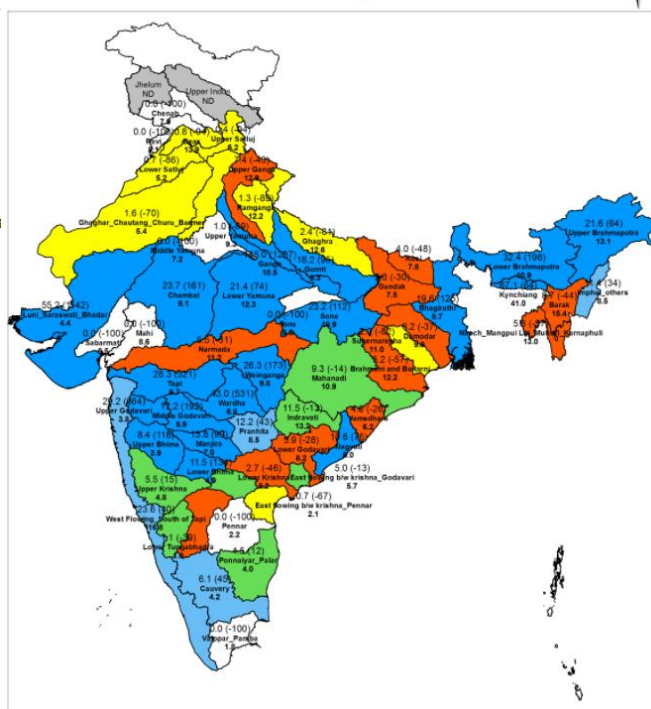
1.0 Rainfall Situation

1.1 Basin wise departure from normal of cumulative and daily rainfall

RIVER BASIN RAINFALL MAP : INDIA
 Period :01-06-2021 To 19-08-2021

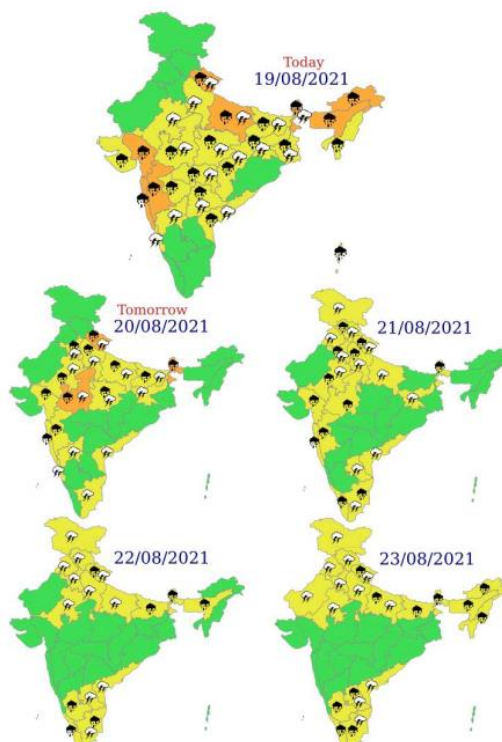


RIVER BASIN RAINFALL MAP : INDIA
 Date :19-08-2021



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 19th August, 2021 (Midday) by IMD



- Very heavy rainfall over Sub-Himalayan West Bengal & Sikkim and Uttarakhand on 19th & 20th August; Arunachal Pradesh, Assam & Meghalaya, East Uttar Pradesh, Gujarat Region, Konkan & Goa and Madhya Maharashtra on 19th August, 2021.

2.0 Flood Situation and Advisories

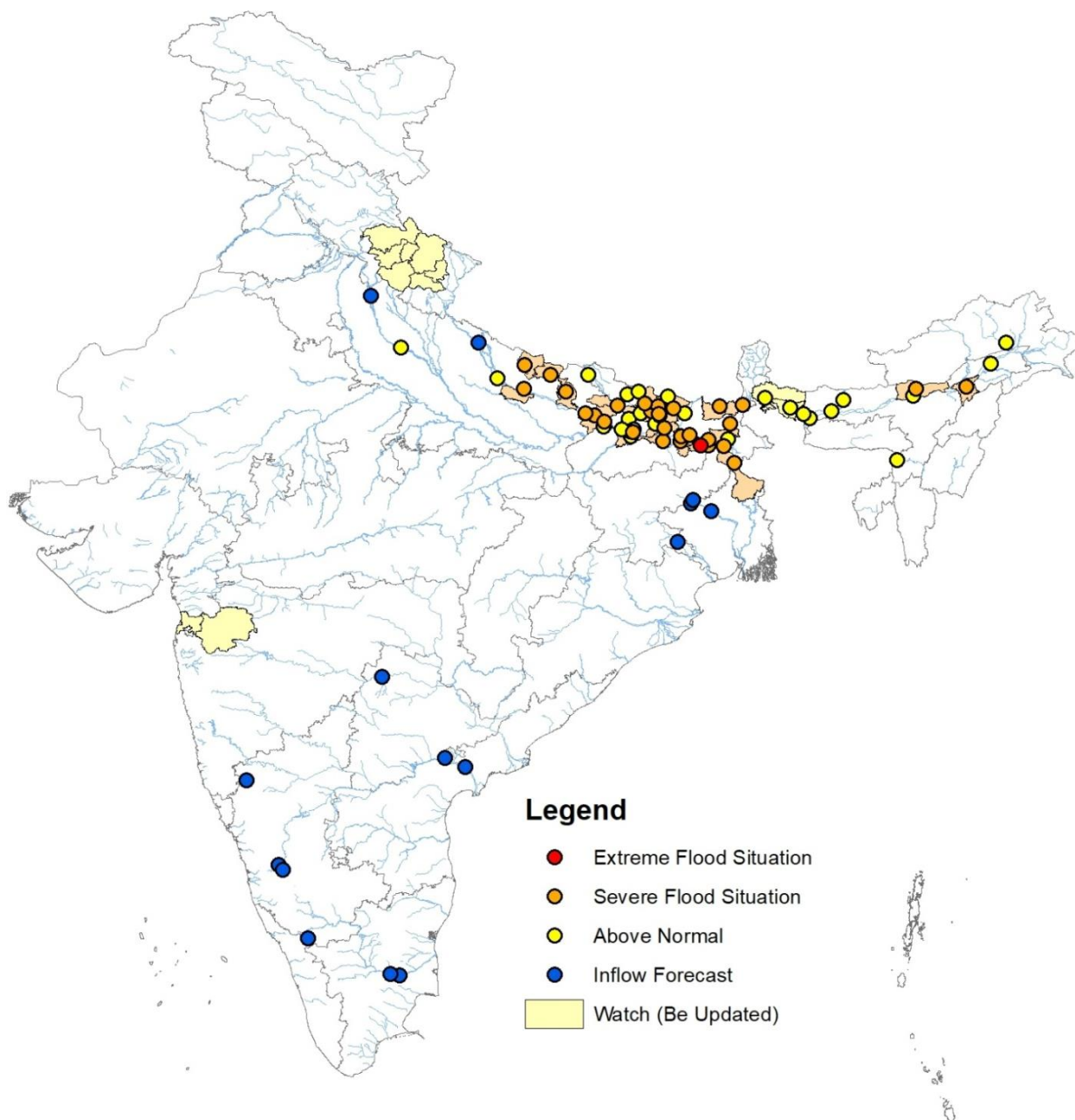
2.1 Summary of Flood Situation as per CWC Flood Forecasting Network

On 19th August, 2021, 1 station in Bihar is flowing in Extreme Flood Situation, 29 Stations (20 in Bihar, 5 in Uttar Pradesh, 2 in Assam and 1 each in Jharkhand & West Bengal) are flowing in Severe Flood Situation and 26 stations (12 in Bihar, 7 in Assam, 4 in Uttar Pradesh, 2 in West Bengal and 1 in Arunachal Pradesh) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 15 Barrages & Dams (4 in Karnataka, 3 in Jharkhand, 2 each in Andhra Pradesh, Tamilnadu & Uttar Pradesh and 1 each in Telangana & West Bengal).

PART - I: LEVEL FORECAST		
S.No.	Flood Situations	Numbers of Forecasting Sites
A	Extreme Flood Situation: (Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalled)	1
B	Severe Flood Situation: (Site (s) where water level is touching or exceeding the Danger Level but below Highest Flood Level (HFL))	29
C	Above Normal Flood Situation: (Site (s) where water level is touching or exceeding the Warning Level but below Danger Level)	26
Total number of sites above Warning Level (A+B+C)		56
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)		15

Details are given at link: http://www.cwc.gov.in/sites/default/files/cfcrcwcdfb-19.08.2021-3_5.pdf

2.1.1 Flood Situation Map



2.2 CWC Advisories

2.2.1 Ganga Basin- Uttarakhand, Uttar Pradesh, Bihar, Jharkhand & West Bengal

Due to forecasted heavy to very heavy rainfall over Uttarakhand from 19th - 20th August 2021, there is likelihood of rise in water levels in rivers such as Bhagirathi, Alaknanda, Mandakini, Ganga, Ramganga, Sharda, Sarju etc. There is likelihood of flash floods in some of the hill districts in association with cloud burst. Necessary precautions have to be taken for possible landslides and blockages of river flows due to landslides in high ranges of the state. Hence alert may be kept in **all hill districts of Uttarakhand**.

In lower Ganga reaches, downstream of Patna (Bihar), it is flowing above danger level at all stations except at Bhagalpur, which is flowing above HFL, with falling trend. **Ganga at Bhagalpur** is expected to fall below extreme flood situation and forecasted water level by 04:00 PM of 20.08.2021 is 34.54 m.

River Ghaghra in Barabanki, **Ayodhya (Uttar Pradesh)** and **Siwan (Bihar)** districts it is flowing in above normal and severe flood situations respectively with falling trend and in Ballia district it is flowing in severe flood situation with rising trend. River Rapti is flowing in severe flood situations in **Balrampur** with falling trend and in **Siddharth Nagar & Gorakhpur districts (U.P)** with rising trend.

Currently River Kosi in **Supaul, Khagaria & Katihar** districts (Bihar), River Sone and Punpun in **Patna**, River **Bagmati** in **Sitamarhi, Muzaffarpur & Darbhanga** districts (Bihar), River **Gandak** in **Kushinagar (U.P)**, **Gopalganj, Muzaffarpur & Vaishali (Bihar)** districts, River Parman in **Araria (Bihar)**, River **Adhwara** in **Darbhanga** district, Rivers **Kamla & Kamlabalan** in **Madhubani** district, River **Burhi Gandak** in **Purba Champaran, Muzaffarpur, Samastipur & Khagaria** districts, River **Mahananda** in **Kishanganj, Purnia & Katihar** districts in Bihar are flowing in severe flood situations. Flood situations may exist in the lower reaches of these rivers in the coming days.

2.2.2 Brahmaputra and its tributaries – Assam, West Bengal, Sikkim, Arunachal Pradesh & Meghalaya

IMD has predicted very heavy rainfall in the catchment of Brahmaputra and its tributaries from 19th - 20th August, hence, alert may be kept in North West Bengal, Assam, Sikkim, Arunachal Pradesh & Meghalaya. Alert to be kept in the basins of Champabati, Aie, Gurang, Manas, Teesta, Raidak, Jaldhaka, Rangpochu, Rangit, Torsa, Beki, Pagladiya, Puthimari, Subansiri, Disang, Siang, Simsang, Digaru, Myntdu rivers and in all other tributaries of Brahmaputra. Alert may be kept in districts **Jalpaiguri, Alipurduar, Coochbihar (West Bengal)**. Precautions have to be taken for possible landslides and blockages of river flows due to landslides in hilly districts **Darjeeting & Kalimpong** (West Bengal).

Brahmaputra main river is flowing in above normal flood situations to severe flood situations in Goalpara, Dhubri, Dibrugarh & Jorhat districts (Assam). Also tributaries of Brahmaputra namely Beki river in Barpeta district (Assam), Siang river in East Siang (Arunachal Pradesh), Jia-Bharali river in Sonitpur (Assam) and Sankosh river in Murshirabad (West Bengal) are flowing in above normal flood situations to severe flood situations.

2.2.3 Krishna basin –Andhra Pradesh, Karnataka

Most of the dams in Upper Krishna Basin are having very high storages. Hidkal Dam, Almatti Dam and Tungabhadra Dam are filled to their full capacity. Narayanpur and Bhadra Dams are 98% filled up. Malaprabha Dam on River Malaprabha is filled to 93% of its full capacity. Dams Koyana, Warna & Veer are also having high storage. Round the clock watch has to be maintained for proper reservoir operation. Releases from any of these reservoirs may be done as per rule curve and standard operating procedure.

2.2.4 West Flowing Rivers from Tapi to Tadri basin, Tapi, Upper Godavari – Maharashtra, Gujarat

River catchment located in such as **Nashik, Palghar** (Maharashtra), **Valsad & Dangs** (Gujarat) are expected to receive good rainfall. Hence alert may be kept in rivers such as Damanganaga, Wagh, Upper Godavari, Tapi and its tributaries

3.0 Storage Position in Dams where Inflow forecast is being issued by CWC as on 19thAugust, 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 85%	
Storage above 60%	

QPF categories (mm)	0	0.1-10	11-25	26-37	38-50	51-75	76-100	>100
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#	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(Telangana)/Guntoor,Krishna (AP)					
2	Srisaillam	Krishna/Lower Krishna/Krishna	AP	JogulambaGadwal (Telangana), Kurnool(AP)/Nalgonda(Telangana), Guntoor (AP)					
3	NagarjunaSagar	Krishna/Lower Krishna/Krishna	AP	Nalgonda(Telangana), Guntoor (AP)					
4	Musi	Musi/Lower Krishna/ Krishna	Telangana	Nalgonda					
5	Sri PadaYellampally	Godavari/Middle Godavari/Godavari	Telangana	Mancherial/ JaishankarBhupalpally					
6	Sriramsagar Project	Godavari/Middle Godavari/Godavari	Telangana	Nanded (Mah)/Nirmal (Telangana)					
7	Kaddam	Kaddam/Middle Godavari/Godavari	Telangana	Adilabad, Nirmal/ Mancherial					
8	PD Jurala	Krishna/ Middle Krishna/Krishna	Telangana	Raichur(Kar)/Kurnool(Andhra Pradesh),JogulambaGadwal(Telangana)					
9	Singur	Manjira/Manjira/Godavari	Telangana	Bidar(Kar)/Sangareddy(Telangana)					
10	Panchet	Damodar/Damodar East/ Ganga	Jharkhand	Dhanbad, Jamtara (Jharkhand)/ Puruliya, PaschimBardhaman, Bankura (WB)					
11	Maithon	Barakar/Barakar East/Ganga	Jharkhand	Dhanbad, Jamtara (Jharkhand)/ Puruliya, PaschimBardhaman, Bankura (WB)					
12	Kabini	Kabini/Kabini/ Cauvery	Karnataka	Wayanad (Kerala)/ Mysuru (Karnataka)					
13	Harangi	Cauvery/Upper Cauvery/Cauvery	Karnataka	Kodagu/Mandya					
14	Karanja	Karanja/Manjira/Godavari	Karnataka	Bidar (Kar), Vikarabad(Telangana)/Bidar(Kar)					
15	Almatti	Krishna/Upper Krishna/Krishna	Karnataka	Kolhapur(Mah)/ Bagalkote(Kar)					
16	Narayanpur	Krishna/Upper Krishna/Krishna	Karnataka	Bagalkot, Vijayapura/ Raichur, Yadgir					
17	KRS	Cauvery/Middle Cauvery/Cauvery	Karnataka	Mandya, Mysore					
18	Tungabhadra	Tungabhadra/Middle Tungabhadra/Krishna	Karnataka	Gadag/Bellary, Koppal, Raichur					
19	Hemavathy	Hemavathy/ Hemavathy/Cauvery	Karnataka	Hassan, Kodagu/Mandya, Mysore					
20	Bhadra	Bhadra/Upper Tungabhadra/Krishna	Karnataka	Chikmagalur/Shimoga					
21	Hidkal	Ghataprabha/Ghataprabha/Krishna	Karnataka	Kolhapur (Mah)/ Belgaum (Kar)					
22	Malaprabha	Malaprabha/Malaprabha/Krishna	Karnataka	Belgaum					
23	Warana	Warana/Upper Krishna/Krishna	Maharashtra	Kolhapur, Sangli					
24	Koyna	Koyna/ Upper Krishna/Krishna	Maharashtra	Satara/Kolhapur, Sangli					
25	Yeldari	Purna/Purna/Godavari	Maharashtra	Parbhani, Hingoli					
26	Totladoh	Pench/Wainganga/Godavari	Maharashtra	Chindwara(MP)/Nagpur(Mah)					
27	Isapur	Penganga/Penganga/Godavari	Maharashtra	Hingoli, Yavatmal/Yavatmal,Nanded					
28	Veer	Nira/Upper Bhima/Krishna	Maharashtra	Pune, Satara					
29	Ujjani	Bhima/Upper Bhima/Krishna	Maharashtra	Pune, Solapur					
30	Mula	Mula/Upper Godavari/Godavari	Maharashtra	Ahmadnagar					
31	RanaPratapSagar	Chambal/Upper Chambal/Ganga	Rajasthan	Neemuch(MP)/Dholpur,Kota, Bundi(Raj)					
32	Panchana	Gambhiri/Upper Chambal/Ganga	Rajasthan	Karauli					
33	Gudha	Mejchambal/UpperChambal/Ganga	Rajasthan	Bhilwara/Bundi					

34	Kalisindh	Kalisingh/Upper Chambal/Ganga	Rajasthan	Jhalawar, Kota					
35	SomKamlaAmba	Som/Mahi B/Mahi	Rajasthan	Udaipur/ Dungarpur					
36	Mahi Bajaj Sagar	Mahi/Mahi B/Mahi	Rajasthan	Ratlam(MP)/Banswara, Pratapgarh,Dungapur (Raj)					
37	Vaigai	Vaigai/Upper Vaigai/EF Rivers b/w Cauvery &Kanyakumari	TN	Theni/Madurai					
38	Bhavanisagar	Bhavani/Middle Cauvery/Cauvery	TN	Palakad (Kerala), Nilgiri (TN), Coimbatore (TN)/ Erode (TN)					
39	Idukki	Periyar/Upper Periyar/West Flowing Rivers from Tadri to Kanyakumari	Kerala	Idduki/Ernakulam					
40	Edamalyar	Periyar/Upper Periyar/West flowing rivers from Tadri to Kanyakumari	Kerala	Ernakulam					
41	Bargi	Narmada/UpperNarmada/Narmada	MP	Mandla, Seoni/Jabalpur, Narsimhapur					
42	Tawa	Tawa/Middle Narmada/Narmada	MP	Betul,Hoshnabad/Sehore					
43	Gandhi Sagar	Chambal/Upper Chambal/Ganga	MP	Mandsaur,Neemuch(MP)/Dholpur(Raj)					
44	Rajghat	Betwa/Betwa/Ganga	MP	Ashoknagar(MP), Lalitpur(UP)/Shivpuri, Lalitpur(UP)					
45	Tenughat	Damodar/Damodar/Ganga & its tributaries	Jharkhand	Bokaro(Jharkand)					
46	Konar	Konar/Damodar/Ganga & its tributaries	Jharkhand	Hazaribagh(Jharkand)					
47	Tilaiya	Barakar/Barakar/Ganga & its tributaries	Jharkhand	Koderma(Jharkand)					

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.