

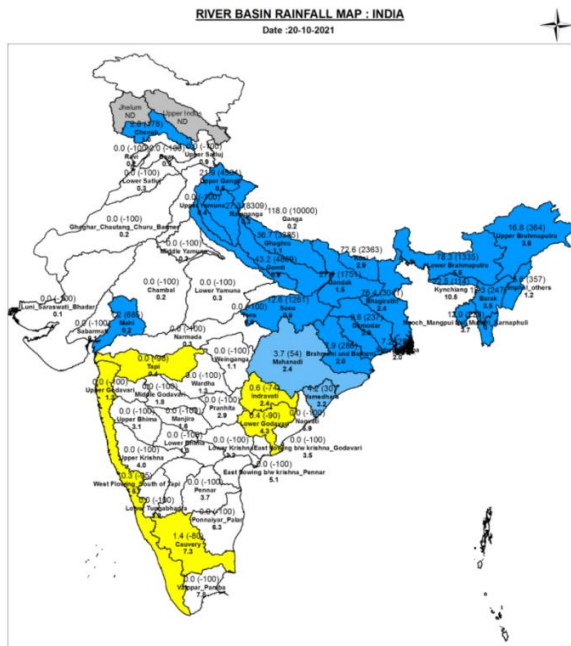


Central Water Commission
Daily Flood Situation Report cum Advisories
20-10-2021

1.0 Rainfall Situation

1.1 Significant Amount of Rainfall & Basin wise departure from normal of daily rainfall

Significant Rainfall Amount recorded (0830 hrs IST of yesterday to 0830 hrs IST of today) (**10 cm or more**):



Large Excess [60% or more]	Excess [20% to 59%]
Normal [-19% to 19%]	Deficient [-59% to -20%]
Large Deficient [-99% to -60%]	No Data [-100%]
No Rain	

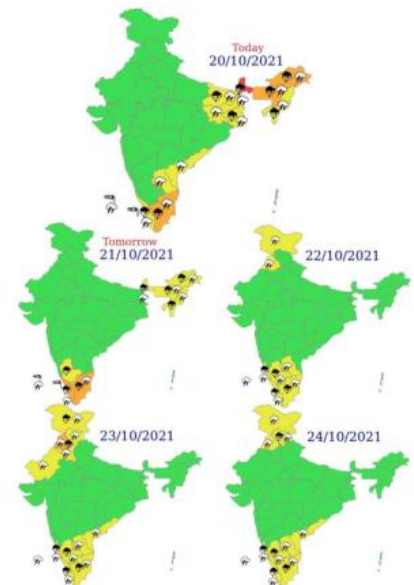
- Uttarakhand: Champawat-12; Nainital, Udham Singh Nagar, Mukteshwar Kumaon-9; Almora-7
- Sub-Himalayan West Bengal & Sikkim: Jalpaiguri-34; Darjeeling-25; Bagdogra and Kalimpong-20 each; Rongli-16; Mazitar, Pakyong, Jalpaiguri-15; Ranipool, Damthang, Gangtok -13; Tadong, Gyalsing-12; Singhik, Yuksom-10; Mangan, Sankalan-9; Chungthang-7
- Bihar: Forbesganj -26; Supaul -11; Purnea -7

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 20th October, 2021 (Midday)

- Isolated Extremely heavy falls over Sub-Himalayan West Bengal & Sikkim on 20th October, 2021.
- Isolated Very Heavy Rainfall over Arunachal Pradesh, Assam & Meghalaya on 20th, Tamilnadu, Puducherry & Karaikal on 20th & 21st; over Kerala & Mahe on 21st October, 2021.

WARNING
WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)



2.1 Summary of Flood Situation as per CWC Flood Forecasting Network

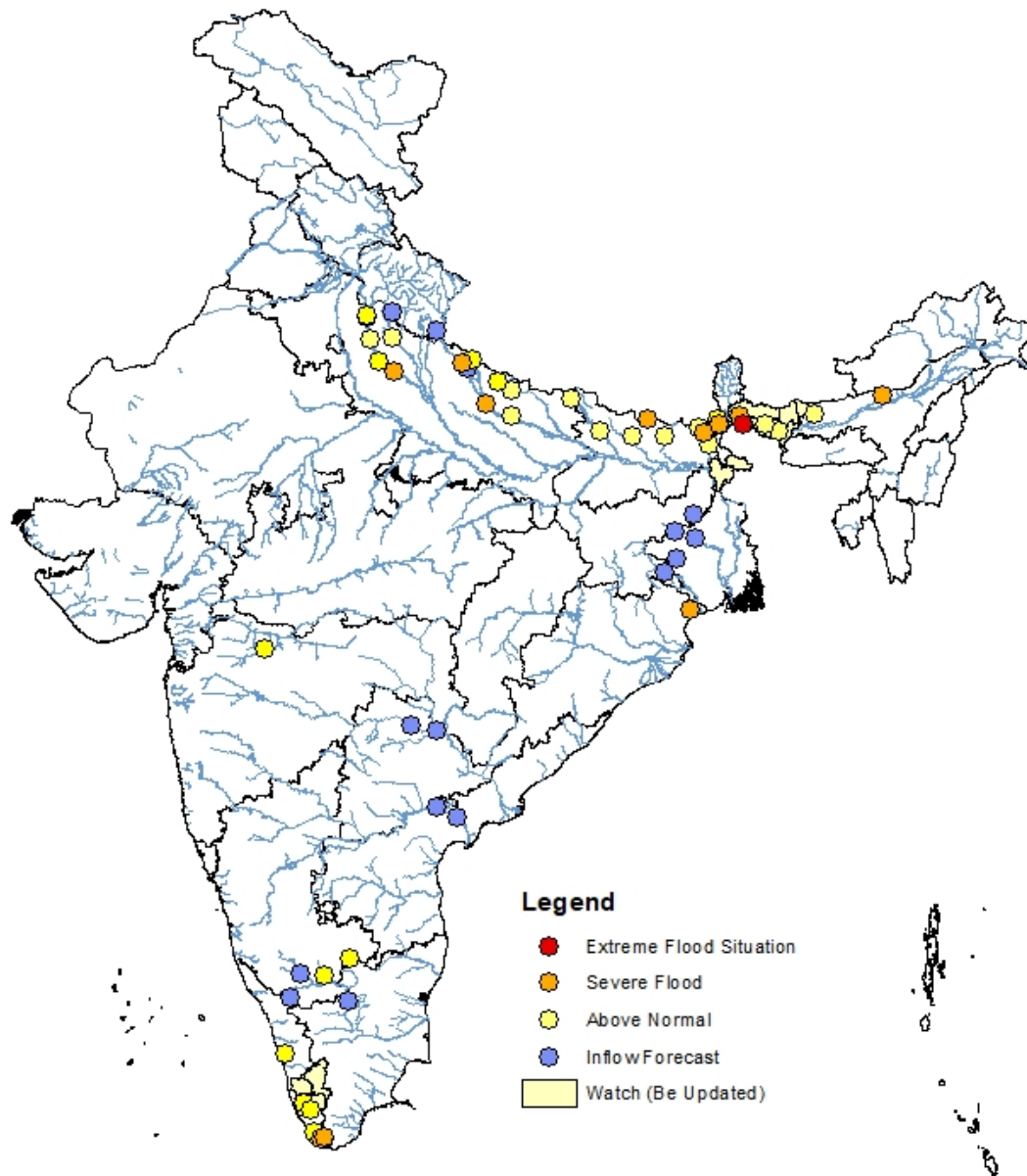
On 20th October, 2021, as per daily bulletin (Mid-day):

- 1 station in West Bengal is flowing in Extreme Flood Situation
- 10 stations (2 each in Assam, Bihar, Tamilnadu & Uttar Pradesh and 1 each in Odisha & West Bengal) is flowing in Severe Flood Situation.
- 21 stations (6 in Kerala, 5 each in Bihar & Uttar Pradesh, 2 in Tamilnadu and 1 each in Assam, Karnataka & West Bengal) are flowing in Above Normal Flood Situation.
- Inflow Forecast has been issued for 19 Barrages & Dams (3 each in Jharkhand, Uttar Pradesh & West Bengal, 2 each in Andhra Pradesh, Karnataka, Telangana & Uttarakhand and 1 each in Tamilnadu & Maharashtra)

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))	10
C	Above Normal Flood Situation: (Site (s) where water level is touching or exceeding the Warning Level but below Danger Level)	21
Total number of sites above Warning Level (A+B+C)		32
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)		19

Details are given at link: http://cwc.gov.in/sites/default/files/cfrcwcdfb20-10-2021-2_5.pdf

2.1.1 Flood Situation Map



2.2 CWC Advisories

2.2.1 Ganga and its Tributaries – Bihar, Uttar Pradesh

2.2.1.1 Uttar Pradesh

Currently, Ganga in district **Budaun** and Ghagra in **Barabanki** are flowing in severe flood situation with rising trend. Above normal flood situation with rising trend exists in **Moradhabad** (Ramganga), **Ayodhya** (Ghagra), **Balrampur** (Rapti) and **Hapur** (Ganga with falling trend). With no major rainfall event predicted, river will gradually recede.

2.2.1.2 Bihar

Severe to above normal flood situation exist in Gandak, Bagmati, Kamla, Kosi & Mahananda. Alert may be kept in districts **Gopalganj**, **Muzaffarpur**, **Madhubani**, **Supaul**, **Araria**, **Purnia** & **Kishanganj**. With no major rainfall event predicted, river will gradually recede.

2.2.2 Brahmaputra and its tributaries – Assam, Sub-Himalayan West Bengal, Sikkim, Arunachal Pradesh

Water level rise is expected in the rivers Teesta, Jaldhaka, Raidak, Torsa, Sankosh and other tributaries of Brahmaputra over districts **Dakshin Dinajpur**, **Darjeeling**, **Jalpaiguri**, **Kalimpong**, **Alipurduar**, **Coochbihar** (Sub-Himalayan West Bengal); **Kokrajhar**, **Dhubri**, **Chirang**, **Karbi Analog** (Assam); **Dibang Valley**, **Lower Dibang valley** (Arunachal Pradesh).

Currently, severe to above normal flood situation exist in rivers Teesta, Torsa, Beki, Sankosh & Jia Bharali.

2.2.3 West flowing rivers from Tadri to Kanyakumari – Kerala, Tamil Nadu

2.2.3.1 Kerala

Alert may be kept in districts **Pathanamthitta**, **Idukki** & **Kottayam**. Watch/alert for water level rise should be maintained in rivers Achankovil, Pamba, Pambar, Periyar, Muvattupuzha, Meenachil & Manimala. Currently above normal flood situation exist in rivers Karuvannur (**Trichur dist.**), Achankovil (**Pathanamthitta dist.**), Kallada (**Kollam dist.**) and Karamana, Neyyar (**Thiruvananthapuram dist.**).

2.2.3.1 Tamil Nadu

Watch/alert should be maintained in district **Kanyakumari** for water level rise in rivers Kodaiyar, Thambraparni, Paralayar and Pazhayar.

Currently above normal flood situation exist in river Kodaiyar and severe flood situation in river Thambraparni (Kanyakumari dist.)

2.2.4 East flowing rivers between Pennar to Kanyakumari - Tamilnadu

Alert may be kept in districts **Kallakurichi, Vellore, Ranipet, Thiruppattur, Thiruvanamala, Trichy, Karur, Namakkal, Salem, Dharmapuri, Krishnagiri, Erode, Nilgris, Coimbatore, Tiruppathur, Teni, Dindigul, Madurai, Virudhunagar, Tenkasi & Tiruchirappalli.**

Currently above normal flood situation exist in river Ponnaiyar (Krishnagiri dist.)

Storages in dams such as **Parambikulam** (FRL 72 ft., 20.10.21 WL is 71.3 ft.), **Aliyar** (FRL 120 ft., 20.10.21 WL is 119.45 ft) and **Sholayar** (filled 1.22 ft above FRL i.e. FRL is 160ft., 20.10.21 WL is 161.22 ft.) are high. Hence, they should be operated as per SOP and if required, releases may be made after informing downstream areas in advance.

1.0 Storage Position in Dams where Inflow forecast is being issued by CWC as on 20th October, 2021

Reservoirs shown in red are having gross storage capacity more than 90% and those in orange are having gross storage greater than 75%. 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 90%	
Storage above 75%	

QPF categories (mm)	0	0.1-10	11-25	26-37	38-50	51-75	76-100	>100
---------------------	---	--------	-------	-------	-------	-------	--------	------

#	Reservoir/Dams	River/Sub-Basin /Basin	State	US/ DS District	Rainfall situation				
					Day 1	Day 2	Day 3	Day 4	Day 5
1	NagarjunaSagar	Krishna/Lower Krishna/Krishna	AP	Nalgonda(Tel), Guntoor (AP)					
2	Srisaillam	Krishna/Lower Krishna/Krishna	AP	JogulambaGadwal(Telangana), Kurnool(AP)/ Nalgonda(Telangana), Guntoor (AP)					
3	Somasila	Pennar/Lower Pennar/Pennar	AP	Kadapa(AP)/Nellore(AP)					
4	Madduvalasa	Nagavalli/Nagavalli/EFR Mahanadi &Pennar	AP	Vizianagaram					
5	Sri PadaYellampally	Godavari/Middle Godavari/Godavari	Tel	Mancherial/ JaishankarBhupalpally					
6	Musi	Musi/Lower Krishna/Krishna	Tel	Nalgonda					
7	Sriramsagar Project	Godavari/Middle Godavari/Godavari	Tel	Nanded (Mah)/Nirmal (Tel)					
8	Kaddam	Kaddam/Middle Godavari/Godavari	Tel	Adilabad, Nirmal/ Mancherial					
9	Singur	Manjira/Manjira/Godavari	Tel	Medak					
10	Nizamsagar	Manjira/Manjira/Godavari	Tel	Medak/Kamareddy					
11	PD Jurala	Krishna/Middle Krishna/Krishna	Tel	Raichur (Kar)/JogalambaGadwal(Telangana)					
12	Kabini	Kabini/Kabini/Cauvery	Kar	Wayanad (Kerala)/ Mysuru (Kar)					
13	Harangi	Harangi/Harangi/Cauvery	Kar	Kodagu/Mandya					
14	Karanja	Karanja/Manjira/Godavari	Kar	Bidar (Kar), Vikarabad(Tel)/Bidar(Kar)					
15	Almatti	Krishna/Upper Krishna/Krishna	Kar	Kolhapur(Mah)/ Bagalkote(Kar)					
16	Narayanpur	Krishna/Upper Krishna/Krishna	Kar	Bagalkot, Vijayapura/ Raichur, Yaadgir					
17	Tungabhadra	Tungabhadra/Middle Tungabhadra/Krishna	Kar	Gadag/Bellary, Koppal, Raichur					
18	Hemavathy	Hemavathy/ Hemavathy/Cauvery	Kar	Hassan, Kodagu/Mandya, Mysore					
19	Bhadra	Bhadra/UpperTungabhadra/Krishna	Kar	Chikmagaluru/Shimoga					
20	Hidkal	Ghataprabha/Ghataprabha/Krishna	Kar	Kolhapur (Mah)/ Belgaum (Kar)					
21	Malaprabha	Malaprabha/Malaprabha/Krishna	Kar	Belgaum					
22	KRS	Cauvery/Middle Cauvery/Cauvery	Kar	Mandya, Mysore					
23	Warana	Warana/Upper Krishna/Krishna	Mah	Kolhapur, Sangli					
24	Koyna	Koyna/ Upper Krishna/Krishna	Mah	Satara/Kolhapur, Sangli					
25	Yeldari	Purna/Purna/Godavari	Mah	Parbhani, Hingoli					
26	Isapur	Penganga/Penganga/Godavari	Mah	Hingoli, Yavatmal/Yavatmal,Nanded					
27	Manjlegaon	Sindphana/Middle Godavari/Godavari	Mah	Bid/Parbhani					
28	Upper WardhaProj	Wardha/Wardha/Godavari	Mah	Wardha, Amravati					
29	Veer Dam	Nira/Upper Bhima/Krishna	Mah	Pune, Satara					
30	Ujjani	Bhima/Upper Bhima/Krishna	Mah	Pune, Solapur					
31	Mula	Mula/Upper Godavari/Godavari	Mah	Ahmadnagar					
32	Totladoh	Pench/Wainganga/Godavari	Mah	Chindwara(MP)/Nagpur(Mah)					

33	Jaikwadi	Godavari/Upper Godavari/Godavari	Mah	Aurangabad, Ahmadnagar/Bid, Jalna					
34	Hathnur	Hatnur/Upper Tapi/Tapi	Mah	Burhanpur (MP)/Jalgaon(Mah)					
35	Bhavanisagar	Bhavani/Middle Cauvery/Cauvery	TN	Palakad (Kerala), Nilgiri (TN), Coimbatore (TN)/ Erode (TN)					
36	PoondiSatyamurthy	Kosasthalaiyar/Kosasthalaiyar/East flowing rivers between Pennar and Cauvery Basin	TN	Thiruvallur/Chennai					
37	Rengali	Brahmani River/Brahmani and Baitarni/Brahmani and Baitarni	Odisha	Deogarh/Angul, Dhenkanal					
38	Hirakud	Mahanadi River/Upper Mahanadi/Mahanadi	Odisha	JanjgirChampa, Raigarh(Chsgrh), Jharsuguda, Bargarh, Sambalpur(Odisha)/Subarnapur, Baudh, Anugul (Odisha)					
39	Salandi	Salandi/Brahmani and Baitarni/Brahmani and Baitarni	Odisha	Mayurbhanj,Kendujhar/Bhadrak					
40	Edamalayar	Upper Periyar/Periyar/Periyar	Ker	Coimbatore/Ernakulam					
41	Idukki	Periyar/Upper Periyar/West Flowing Rivers from Tadri to Kanyakumari	Ker	Idduki/Ernakulam					
42	Bango	Hasdeo/Upper Mahanadi/Mahanadi	Chtgrh	Koriya,Korba/JanjgirChampa					
43	Kangsabati	KangsabatiKumari/KangsabatiKumari/Ganga	WB	Puruliya, Bankura, Midnapore, Hooghly					

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.