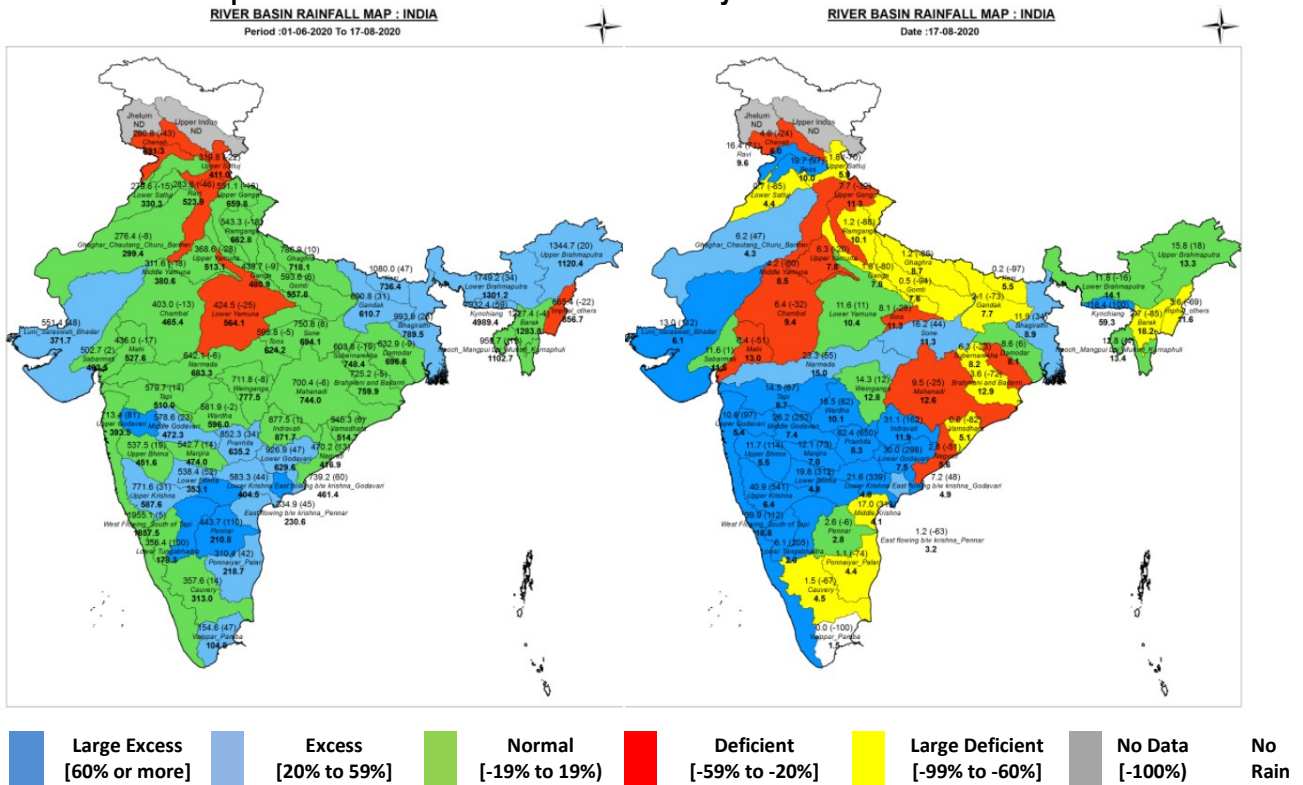




Central Water Commission
Daily Flood Situation Report cum Advisories
17-08-2020

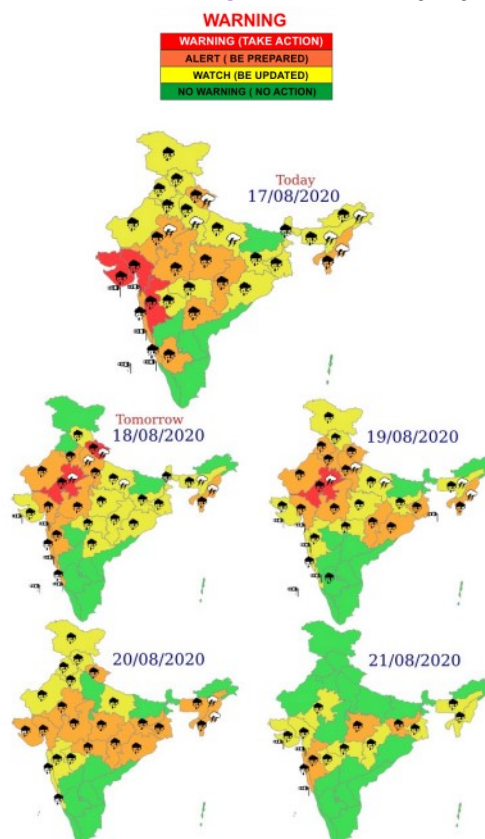
1.0 IMD information

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 17th August 2020 (Midday) by IMD



2.0 CWC inferences

2.1 Flood Situation on 17th August 2020

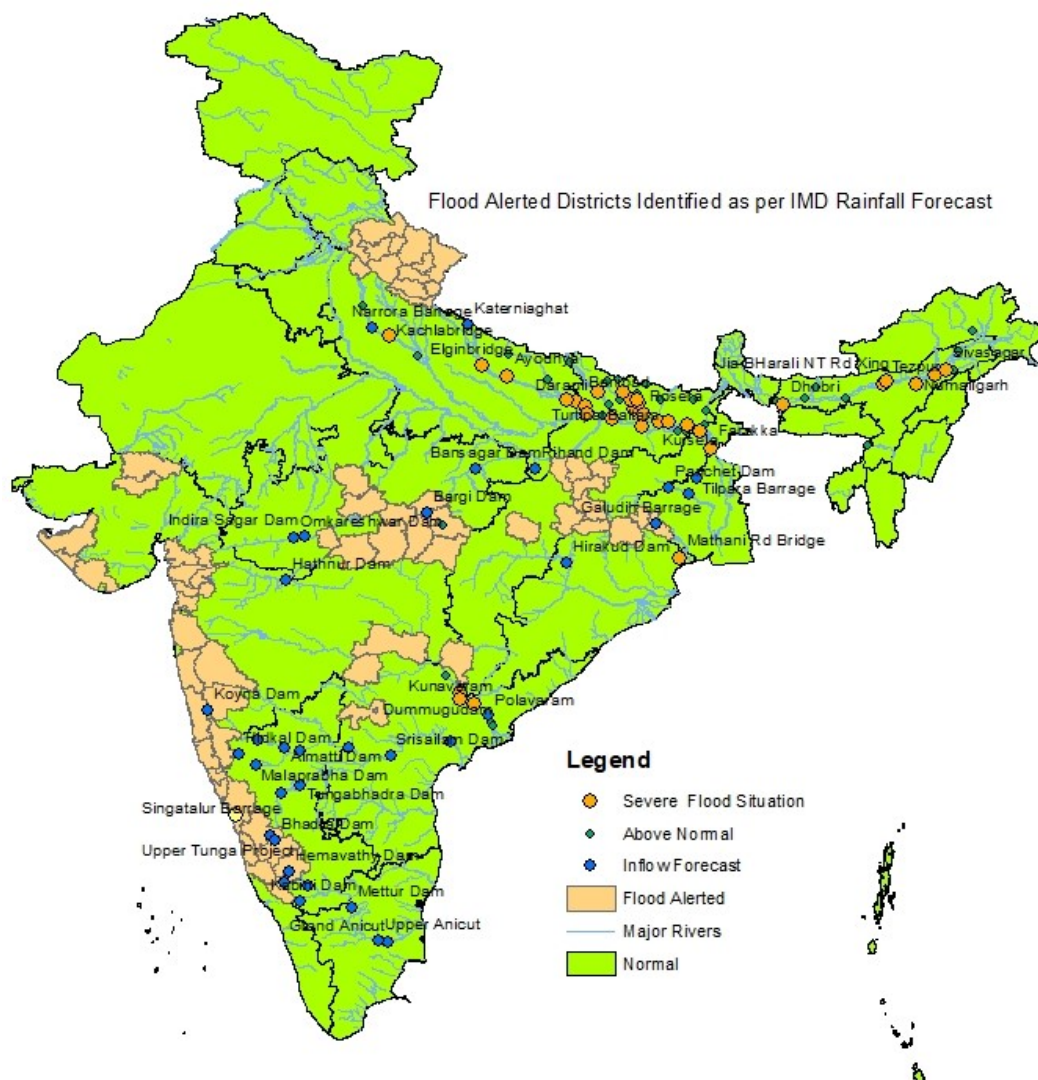
2.1.1 Summary of Flood Situation as per CWC Flood Forecasting Network

On 17th August 2020, 31 Stations (15 in Bihar, 6 in Assam, 4 in Uttar Pradesh, 2 in Telangana and 1 each in Andhra Pradesh, Jharkhand, Odisha and West Bengal) are flowing in Severe Flood Situation and 32 stations (14 in Bihar, 7 in Assam, 5 in Uttar Pradesh, 2 in Andhra Pradesh and 1 each in Arunachal Pradesh, Madhya Pradesh, Karnataka and Telangana) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 36 Barrages and Dams (13 in Karnataka, 4 in Madhya Pradesh, 3 each in Andhra Pradesh, Tamilnadu & Uttar Pradesh, 2 each in Jharkhand, West Bengal and Maharashtra, 1 each in Gujarat, Odisha, Rajasthan and Telangana).

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)	0
B	Severe Flood Situation: (Site (s) where water level is touching or exceeding the Danger Level but below Highest Flood Level (HFL))	31
C	Above Normal Flood Situation: (Site (s) where water level is touching or exceeding the Warning Level but below Danger Level)	32
Total number of sites above Warning Level (A+B+C)		63
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)		36

Details can be seen in link http://cwc.gov.in/sites/default/files/cfcr-cwcdfb17082020_5.pdf

2.1.1 Summary of Flood Situation as per CWC Flood Forecasting Network



2.2 CWC Advisories

- Enhance rainfall activity with heavy to very heavy falls very likely over northwest India including Western Himalayan region till 20th August, 2020 and decrease thereafter. Isolated heavy to very heavy with extremely heavy falls likely over East Rajasthan on 18th & 19th August and over Uttarakhand on 18th August, 2020.
- Widespread rainfall with isolated heavy to very heavy falls very likely over Gujarat state, Maharashtra State & Goa, Madhya Pradesh, Chhattisgarh, Jharkhand, Odisha and West Bengal during next 4-5 days. Isolated extremely heavy falls likely over Ghat areas of Madhya Maharashtra and Gujarat State on 17th August, 2020.
- Fairly widespread to widespread with isolated heavy to very heavy falls very likely also over Northeastern states during next 4-5 days. Isolated extremely heavy falls likely over Meghalaya on 20th and over Nagaland, Manipur, Mizoram & Tripura on 19th & 20th August, 2020

Based on the above rainfall forecast the following advisories are issued by CWC for various States:

2.2.1 Gujarat, Maharashtra & Goa

Heavy to very Heavy rainfall with isolated extremely heavy rainfall is likely over Ghat areas of Madhya Maharashtra and Gujarat State on 17th August, 2020. There is rise in Water Levels in the basins of Lower Mahi, Lower Narmada, Lower Tapi and Damanganga. Rivers Narmada, Tapi, Damanganga are rising rapidly and further rise is expected due to the forecasted heavy rainfall for next 4-5 days. Madhuban Dam in Valsad District at present has storage of 67% and is likely to get heavy inflows due to the forecasted rainfall. Close watch is to be maintained and releases if any has to be done, it should be with due care and after informing all downstream districts including Union Territories of Daman. Other Dams in this region such as Kadana Dam on river Mahi, Panam Dam on river Panam, Sardar Sarovar Dam on river Narmada, Ukai Dam on river Tapi are also getting increased inflows. Hatnur Dam in Jalgaon District of Maharashtra is likely to get an inflow of around 1160 cumec till today night and Ukai Dam is also expected to receive around 2315 cumec till tomorrow morning. Due to forecast of very heavy rain in their catchment, there is likelihood of sudden rise in inflows which may have to be regulated properly following the rule curves and Standard Operating Procedures (SOP) after informing all downstream Districts well in advance. Many of the small dams in Saurashtra & Kutch are already near their FRL and as extremely heavy rain has also been forecasted for today close watch is to be maintained for proper reservoir operation.

Due to forecasted heavy rainfall for 4-5 days in Konkan & Goa and in Hill ranges of Western Ghats in Maharashtra, there is probability of sudden rise in water levels in West Flowing Rivers between Tapi and Tadri in States of Maharashtra, Goa and UT of Dadra & Nagar Haveli and Daman & Diu, such as rivers Damanganga, Ulhas, Savithri, Kal, etc. Maximum vigil is to be maintained along the low lying areas of these rivers which are near to Railway lines and Highways during the above period. Small Dams in these reaches may get filled up and start releasing excess water at short notice. River Kal a tributary of River Savithri at Mangaon in Raigad District is rising. River Savithri at Mahad in Raigad District is also rising. Heavy to Very Heavy at few places with extremely heavy rainfall at isolated places are likely in Palghar, Thane, Nasik, Pune, Satara, Raigad, Ratnagiri, Sindhudurg and Kolhapur Districts of Maharashtra and in the Districts of South & North Goa. River Krishna at Kurundwad in Kolhapur District of Maharashtra is flowing in Above Normal flood situation. River Panchganga at Terwad in Kolhapur District is also flowing in Above Normal Flood Situation with rising trend. Since most of the dams in the region have storage of the order of 85 to 100% of their Full capacity, hence all the dams should exercise caution. Khadakwasla Dam in Pune District is releasing around 265 cumec of water in to river while Veer Dam in Pune District is releasing excess water in river Nira. All these releases will be increasing the level of river Bhima. Ujni Dam in Sholapur District is only 53.32% full; the increase flow in Bhima will increase the storage in Ujni dam.

Necessary precautions have to be taken in Road and Rail Bridges which pass through these areas as they are prone to submergence. Care should be taken to regulate road and rail traffic to avoid any incidents.

2.2.2 Odisha, Chhattisgarh, Andhra Pradesh & Telangana

Heavy to very heavy rainfall is likely over Odisha and Chhattisgarh during next 4-5. Due to ongoing extremely heavy rainfall, River Godavari is also getting good flows due to rain in Chhattisgarh, Maharashtra and Telangana. River Godavari at Dummagudem & Bhadrachalam in Bhadradi Kothagudem District in Telangana is flowing above Danger Level. Polavaram project on River Godavari in Andhra Pradesh is likely to get around 53000 cumec till 0830 hours tomorrow and Laxmi Barrage on River Godavari is likely to get inflows of around 16500 cumec till today night. River Godavari at Kunavaram and Dowlaiswaram Barrage (Sir Arthur Cotton Barrage) in East Godavari District of Andhra Pradesh is flowing in Severe Flood Situation.

River Mahanadi is likely to get inflow of about 10,100 cumec in Hirakud Dam and the dam is likely to continue getting heavy inflows due heavy rainfall forecasted in Chhattisgarh catchment. Close watch is to be maintained.

River Krishna at P D Jurala in Jogulamba Gadwal District of Telangana is expected to get inflow of about 8700 cumec till tomorrow morning and Srisailem Dam in Kurnool District of Andhra Pradesh about 5750 cumec till tomorrow morning. Since the dam is about 70% filled, it is expected that with inflows for next 4 to 5 days may increase its storage substantially. Due to heavy rainfall in downstream areas of river Krishna in Warangal, Khammam, Nalgonda and Krishna Districts of Telangana and Andhra Pradesh, river Krishna at Prakasam Barrage is getting inflows above its threshold limit and inflow forecasts have been issued for the same.

2.2.3 Karnataka

Most of the dams in Krishna Basin are also having storage between 86% to 98%. Hidkal Dam on River Ghataprabha is filled to 98% of its full capacity and is releasing 28,656 cusec. Close watch has to be maintained for any increased inflows likely due to the very heavy rainfall forecasted in Madhya Maharashtra during the next 2-3 days. Due to heavy rain in Madhya Maharashtra, Hidkal and Malaprabha are also getting heavy inflows. River Krishna at Gokak Falls in Belagavi District of Karnataka is flowing above Danger Level. River Krishna at Huvinahedgi in Raichur District is rising due to releases from Narayanpur Dam.

Due to river flows from upstream areas of river Krishna, Almatti Dam and Narayanpur Dam are getting heavy inflows and since these dams are filled around 79% to 89% of the capacity, both the dams are releasing the excess flow continuously. There is forecast of heavy to very heavy rainfall in Madhya Maharashtra for next 4-5 days. Due to this there is likelihood of rise in water levels in Upper Krishna Basin in the upstream of Almatti Dam. Close watch is to be maintained for any releases from all the dams in the basin as well as for proper gate operation following SOP.

Due to continuous inflows from the previous spell of rainfall, most of the dams in Cauvery Basin have reached very close to 96% - 100% storage. Any local rainfall in association with convective activity may also help in adding to the flow in these basins. Round the clock watch has to be maintained for proper reservoir operation and information to all downstream Districts as well as to lower riparian States well in advance. The releases from Kabini and Krishna Raja Sagar through river are becoming inflows into Mettur Dam which is likely to get slow inflows for next 3-4 days. However, it is much below its FRL.

2.2.4 Rajasthan & Madhya Pradesh

Due to forecast of heavy to very heavy rainfall in East Rajasthan and West Madhya Pradesh for next 3-4 days, there is likelihood of rise in Water Levels in rivers such as Chambal, Mahi, Sabarmati, Kalisindh, Banas (both East and West Flowing), etc. Most of the dams in these rivers are having storage between 35 to 70% and hence care should be exercised to monitor the situation very closely. River Narmada at Mandla in Mandla District of Madhya Pradesh is flowing close to Danger Level. Rani Avantibai Sagar (Bargi) Dam on River Narmada is likely to get an inflow of about 7000 cumec due to heavy rainfall in Jabalpur District. Releases if any has to be done, it should be after advance information to all concerned downstream districts and lower riparian States. Inflows have increased in Panchana Dam and Parwan Pickup Weir in Rajasthan. Inflow Forecast has been issued for Parwan Pickup Weir

2.2.5 Himachal Pradesh, Punjab, Haryana, Uttarakhand, Uttar Pradesh

Heavy to very heavy rainfall with extremely heavy rainfall is likely over Uttarakhand on 18th August, 2020. There is likelihood of rise in Water Levels in rivers such as Sutlej, Ravi, Beas, Ghaggar, Yamuna, Bhagirathi, Alaknanda, Ganga, Ramganga, Sarda, Sarju and Ghaghra. There is likelihood of flash floods in some of the hill districts in these states 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 these states.

It is advised that close watch has to be maintained for increased inflows likely during the next 2-3 days. Releases from any of these reservoirs may be done as per rule curve and standard operating procedure.

2.2.6 Bihar, Jharkhand and Gangetic West Bengal

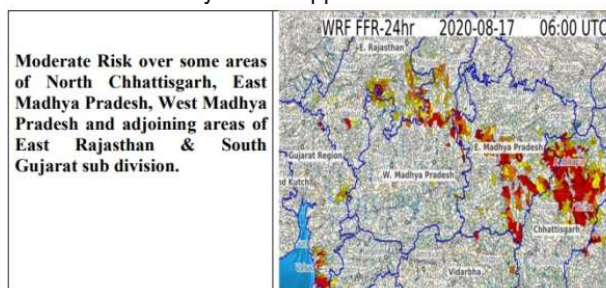
Many of the rivers in Bihar continue to flow in Severe to Above Normal Flood Situation with falling trend. The situation will continue for another 3-4 days.

2.2.7 North Eastern States

Heavy to very heavy rain has been forecasted for the next 3-4 days in North Eastern States. Severe Flood Situation is continuing in Brahmaputra and its tributaries in Jorhat, Sonitpur, Golaghat, Sibsagar and Dhubri Districts. Due to forecasted rainfall, there is likelihood of increase in flood situation in other districts also.

2.2.8 Flash Flood Guidance

Flash Flood Guidance for next 24 hours as issued by IMD is appended.



2.2.9 Storage Position in Dams where Inflow forecast is being issued by CWC as on 17th August 2020

S. No.	River	Station	State	Storage present as % full reservoir level	Warning for Heavy rainfall for 24 hours
1	Purna	Yeldari Dam	Maharashtra	100	Yes
2	Cauvery	Krishnarajasagar	Karnataka	100	YES
3	Hemavathy	Hemavathy Dam	Karnataka	99	YES
4	Tungabhadra	Tungabhadra Dam	Karnataka	98	YES
5	Ghataprabha	Hidkal Dam	Karnataka	98	YES
6	Harangi	Harangi Dam	Karnataka	97	YES
7	Kabini	Kabini Dam	Karnataka	96	YES
8	Wardha	Upper Wardha Project	Maharashtra	94	Yes
9	Pench	Totladoh Project	Madhya Pradesh	94	Yes
10	Hasdeo	Bango Dam	Chhattisgarh	93	Yes
11	Nira	Veer Dam	Maharashtra	92	Yes
12	Malaprabha	Malaprabha Dam	Karnataka	90	Yes
13	Warana	Warana Dam	Maharashtra	89	Yes
14	Koyna	Koyna Dam	Maharashtra	89	Yes
15	Krishna	Almatti Dam	Karnataka	89	Yes
16	Bhadra	Bhadra Dam	Karnataka	87	Yes
17	Kalisindh	Kalisindh Dam	Rajasthan	85	Yes
18	Sone	Bansagar Dam	Madhya Pradesh	82	Yes
19	Sindhpana	Manjlegaon	Maharashtra	81	Yes
20	Kaddamvagu	Kaddam Dam	Telangana	81	Yes
21	Wainganga	Upper Wainganga Project	Madhya Pradesh	79	Yes
22	Krishna	Narayanpur Dam	Karnataka	79	Yes
23	Som Kamla	Som Kamla Amba Dam	Rajasthan	76	Yes
24	Tapi	Ukai Dam	Gujarat	75	Yes
25	Chambal	Rana Pratap Sagar	Rajasthan	73	Yes

Close watch has to be maintained at these reservoirs wherever heavy rainfall (Yellow) and Very Heavy Rainfall (Orange) and Extremely Heavy Rainfall (Red) Warnings are given in the last column of Table above.

Impact Based Actions

Strict vigil is to be maintained in all the above States & Districts for next 4-5 days. Breaches in Embankment if any may aggravate further flood like situation which should be monitored and all efforts to fill any such breaches should be done at the earliest. Maximum vigil has to be maintained along the rail and road tracks and bridges on these rivers and regulate traffic suitably to avoid any incident. Submergence of low-level cause ways along rivers and railway tracks along flashy rivers is to be monitored closely especially along Western Ghat areas. All district administrations can take effective measures taking into account the prevailing Covid-19 situation in relief camps being set up in these districts.

3. Flood Alerted Districts

Gujarat:	Districts along Narmada, Tapi, Damanganga, Mahi
Madhya Pradesh:	Districts along Narmada and Upper Chambal, Wainganga, Tapi
Rajasthan:	Districts along Chambal and its tributaries, Mahi
Maharashtra:	Districts along West Flowing Rivers in Thane, Godavari, Damanganga, Krishna & its tributaries
Telangana:	Districts along Godavari and its tributaries
Chhattisgarh:	Districts along Indravathi and its tributaries, Mahanadi & its tributaries
Odisha:	Districts along Indravathi, Sabari, Mahanadi and its tributaries
Assam:	Districts along Brahmaputra and its tributaries.