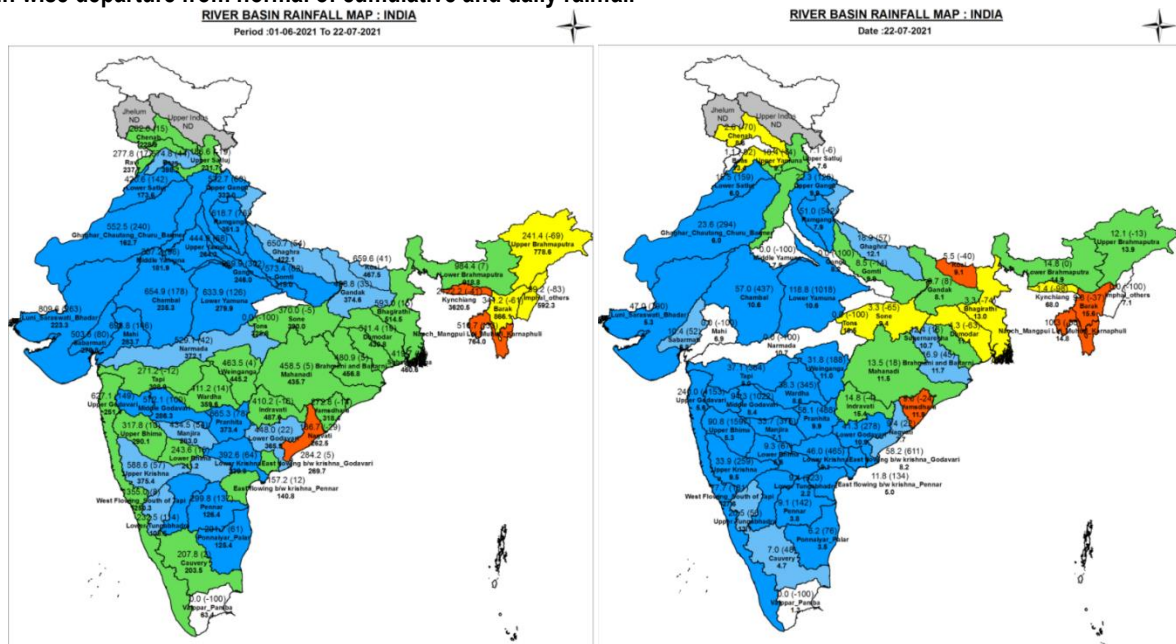




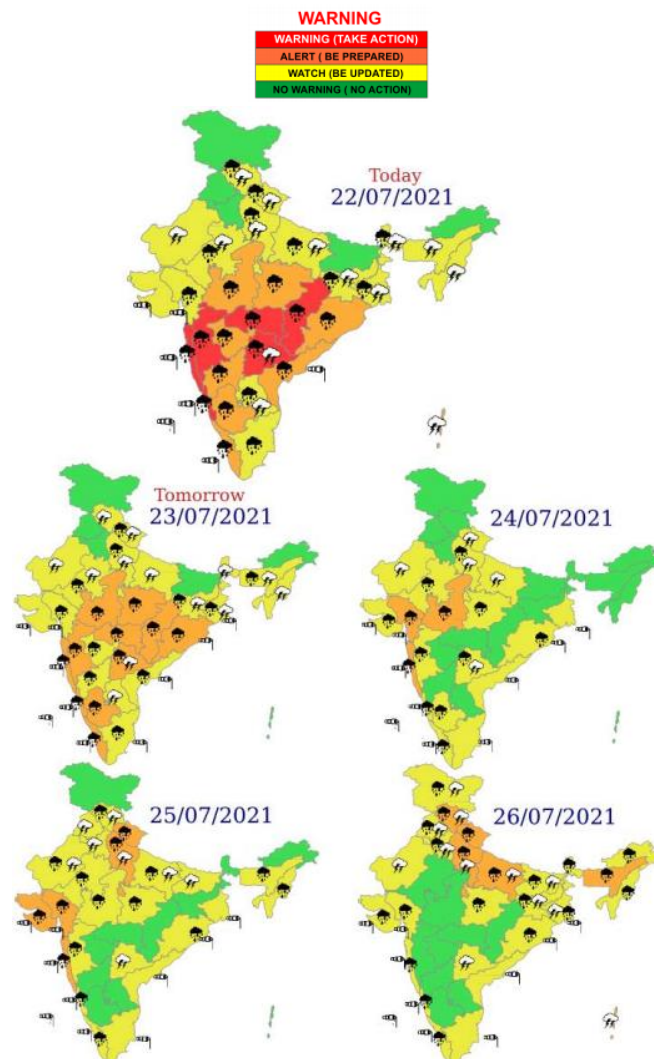
Central Water Commission
Daily Flood Situation Report cum Advisories
22-07-2021

1.0 Rainfall Situation

1.1 Basin wise departure from normal of cumulative and daily rainfall



1.2 Rainfall forecast for next 5 days issued on 22nd July 2021 (Midday) by IMD



- Extremely heavy rainfall over Konkan & Goa, Ghat Areas of Madhya Maharashtra, Coastal Karnataka, Telangana, Vidarbha and south Chhattisgarh during next 24 hours.

2.0 Flood Situation and Advisories

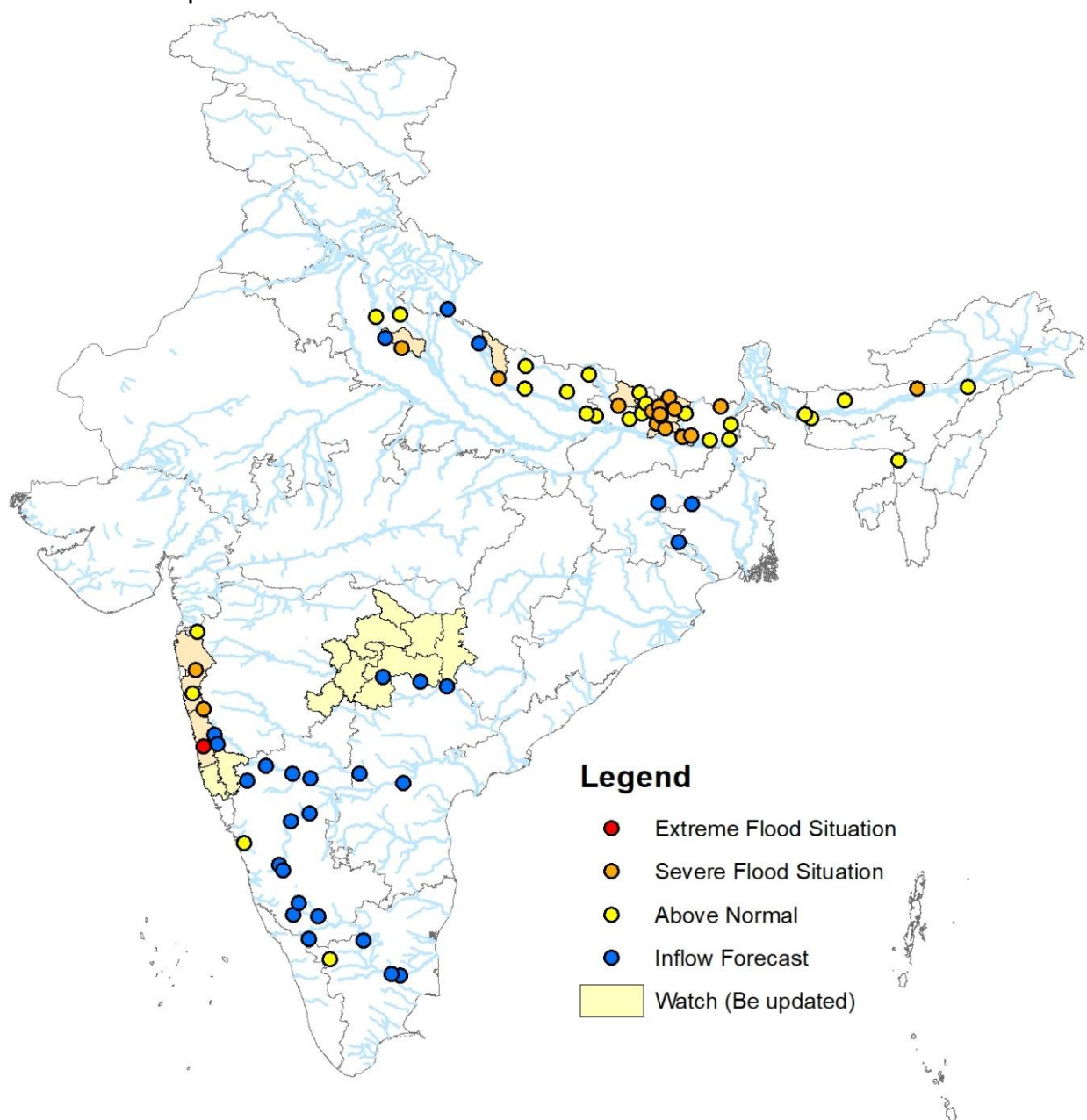
2.1 Summary of Flood Situation as per CWC Flood Forecasting Network

On 22nd July, 2021, 1 station in Maharashtra is flowing in Extreme Flood Situation, 17 Stations (12 in Bihar, 2 each in Uttar Pradesh & Maharashtra and 1 in Assam) are flowing in Severe Flood Situation and 25 stations (9 in Bihar, 7 in Uttar Pradesh, 5 in Assam and 1 each in Gujarat, Karnataka, Maharashtra and Tamilnadu) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 28 Barrages & Dams (12 in Karnataka, 4 in Telangana, 3 each in Tamilnadu & Jharkhand, 2 each in Uttar Pradesh and Maharashtra 1 each in Uttarakhand and Andhra Pradesh)

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))	17
C	Above Normal Flood Situation: (Site (s) where water level is touching or exceeding the Warning Level but below Danger Level)	25
Total number of sites above Warning Level (A+B+C)		43
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)		28

Details are given at link: http://cwc.gov.in/sites/default/files/dfbcwc22072021_5.pdf

2.1.1 Flood Situation Map



2.2 CWC Advisories

2.2.1 West Flowing Rivers between Tapi and Tadri - Mumbai, Konkan and Goa, Coastal Karnataka

IMD has predicted Heavy to Very Heavy Rainfall over Mumbai, Konkan & Goa and heavy rainfall over Coastal Karnataka. Under its effect the West flowing rivers from Tapi to Tadri such as Ulhas (**Thane** district); Bhogeshwari, Savitri & Kal of **Raigad** district; river Bav of **Ratnagiri** district, which are already in spate due to excessive rainfall, are expected to rise further. Alertness is needed in the districts **Palghar** and **Sindhudurg** also. Similarly west flowing rivers from Tadri to Kanyakumari located in Karnataka, such as Aghanashini (Uttar Kannada District); Haladi, Sita, Swarna and Shambavi of Udupi district; Gurpur & Netravathi of Dakshin Kannada district may also rise due to heavy rains. **Low level bridges and railway tracts crossing these rivers may get submerged and hence traffic needs to be regulated as per flooding situation.**

Since heavy rainfall is likely to continue along Ghats of Shivamogga, Chikmagalur, Hassan & Kodagu Districts in Karnataka, there is likelihood of inflow into all major reservoirs for next 2 days and close watch is to be maintained. Presently Linganamakki Project (Sharavathi river), Varahi Project on (Haladi river) and Supa Project (Kali river) located in districts such as Shivmogga and Uttar Kannada respectively have storages in the range 25 to 55 % hence no spill is expected.

2.2.2 Godavari and Krishna basin– Andhra Pradesh, Telangana, Karnataka & Maharashtra

Rainfall is occurring over Marathawada, Telangana, South Chattisgarh, Coastal Andhra Pradesh. Hence there will be water level rise in main Godavari in the reaches b/w Kaleshwaram to Doleswaram. River Indravathi is also expected to rise along its course upto its confluence with Godavari. River Pranhita is expected to rise in Maharashtra upto its confluence with Godavari this will create increased inflow into Laxmi barrage. Sriramsagar reservoir is very close to its FRL and is expected to rise. Similarly Kaddam and Sri pada Yellampally is also having storages 70% and above. Hence releases are to be done as per SOP. Sriramsagar release and combined effect of flow from Indravathi, Sabari, Pranhita and main Godavari will be realised at Polavaram Dam that is under Construction. Hence precaution needs to be taken.

For July Month, all time highest Rainfall of 480 mm has been reported on 22nd July 2021 over Mahabaleshwar and rainfall is still continuing in the region. It is the source region for Krishna, Koyna as well as West flowing rivers. Closed watch is to be maintained in all reservoirs of Krishan, Bhima and their tributaries in Maharashtra. Alertness is needed in districts of **Sangli, Satara, Sholapur, Kolhapur & Pune** also.

In **Mumbai**, watch for urban flooding situation has to be kept.

2.2.3 Cauvery basin – Karnataka, Tamil Nadu

Due to forecasted heavy rainfall in the next 2-3 days, heavy inflows can be expected in Harangi, Hemavathi, Kabini and KRS dams and close watch is to be maintained as they are in rising trend. Kabini Dam is 87% filled, Harangi dam is 87% filled and Hemavathi is 66% filled. Necessary precautions may be taken for releases from dam after informing all downstream areas in Karnataka and lower riparian States. As per hydro-meteorological situation existing and forecast issued by field offices of CWC, the inflow into Kabini, Harangi, Hemavathi & KRS dam are expected to follow rising trend.

Releases from Kabini dam during last 2 days are being realised at Mettur dam of Salem (Tamil Nadu) and at Dharmapuri district (Tamil Nadu).

2.2.4 Ganga – Bihar, Uttar Pradesh

Currently river Ghagra, Rapti, Gandak, Ramganga, Bagmati, Kamla, Burhi Gandak, Adhwara, Mahananda, Parman & Kosi are flowing in severe to above normal flood situation in districts Barabanki, Gorakhpur, Ayodhya, Ballia, Ghaziabad, Moradabad (of Uttar Pradesh), Siwan, Muzaffarpur, Gopalganj, Darbhanga, Madhubani, Khagaria, Supaul, Samastipur, Araria, Sitamarhi & Katihar (of Bihar). Abatement of water levels in above mentioned rivers of Bihar are expected to be very slow.

Main Ganga river is having above normal to severe situation in the districts Ghaziabad, Bulandshahar and Buduan, hence, alert may be also kept in districts such as Bulandshahar, Aligarh and Farrukhabad.

2.2.5 Brahmaputra and its tributaries, Barak & others – Assam, Sikkim, Arunachal Pradesh & Sub Himalayan Bengal

Jia-Bharali river is flowing in severe flood situation in Sonitpur district, while river Sankosh in Dhubri district and Beki at Barpeta are flowing in above normal flood situation. Brahmaputra is flowing in above normal situation at district Jorhat of Assam. Kushiara river in Barak basin is flowing in about normal situation in District Karimganj of Assam.

2.2.6 Narmada, Tapi and Damanganaga – Gujarat

Water level at CWC station in Tapi, Lower Narmada, Damanganaga & Independent basins are expected to rise slightly in next 48 hours. Due to forecast of moderate/heavy rainfall at many places in the catchment, there is likelihood of rise in inflows of Madhuban, Ukai, Hathnur and Sardar Sarovar Dam.

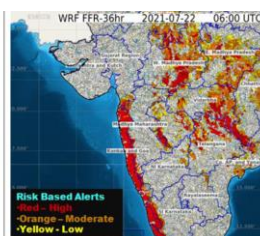
2.3 Flash Flood Guidance

IMD has issued flash flood risk over many watersheds and neighbourhood for Konkan & Goa, Coastal Karnataka, Telangana, Vidarbha, Marathawada, West & East M.P met sub-divisions.

36 hours Flash Flood Risk Outlook till 2330 IST of 23.07.2021:

Moderate to High risk over few watersheds and neighborhood of Konkan & Goa, Coastal Karnataka, Coastal Andhra Pradesh, Telangana, Vidarbha, Marathawada, West Madhya Pradesh and East Madhya Pradesh met subdivision.

Surface runoff/inundation may occur at some fully saturated watersheds & low-lying areas due to expected persistent rainfall in next 36 hours



3. Storage Position in Dams where Inflow forecast is being issued by CWC as on 22nd July 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 as below:

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	Andhra Pradesh	Nalgonda (Telangana)/ Guntoor, Krishna (AP)					
2	Sri Pada Yellampally	Godavari/Middle Godavari/ Godavari	Telangana	Mancherial/ Jaishankar Bhupalpally					
3	Sriramsagar	Godavari/Middle Godavari/ Godavari	Telangana	Nanded (Mah)/ Nirmal (Telangana)					
4	Musi	Musi/Lower Krishna/ Krishna	Telangana	Nalgonda					
5	Kaddam	Kaddam/Middle Godavari/ Godavari	Telangana	Adilabad, Nirmal/ Mancherial					
6	Panchet	Damodar/Damodar East/ Ganga	Jharkhand	Dhanbad					
7	Maithon	Barakar/Barakar East/ Ganga	Jharkhand	Dhanbad					
8	Narayanpur	Krishna/Upper Krishna/ Krishna	Karnataka	Bagalkot, Vijayapura/ Raichur, Yadgir					
9	Kabini	Kabini/Kabini/ Cauvery	Karnataka	Wayanad (Kerala)/ Mysuru (Karnataka)					
10	Harangi	Cauvery/Upper Cauvery/ Cauvery	Karnataka	Kodagu/Mandya					
11	Almatti	Krishna/ Upper Krishna/ Krishna	Karnataka	Kolhapur(Mah)/ Bagalkote (Kar)					
12	Karanja	Karanja/Manjera/ Godavari	Karnataka	Bidar (Kar), Vikarabad (Telangana)/ Bidar(Kar)					
13	Tungabhadra	Tungabhadra/Middle Tungabhadra/Krishna	Karnataka	Gadag/Bellary, Koppal, Raichur					
14	Hemavathy	Hemavathy/Hemavathy/ Cauvery	Karnataka	Hassan, Kodagu/ Mandya, Mysore					
15	Bhadra	Bhadra/Upper Tungabhadra/ Krishna	Karnataka	Chikmagalur/ Shimoga					
16	Hidkal	Ghataprabha/Ghataprabha/ Krishna	Karnataka	Kolhapur (Mah)/ Belgaum (Kar)					
17	Warana	Warana/Upper Krishna/ Krishna	Maharashtra	Kolhapur, Sangli					
18	Koyna	Koyna/ Upper Krishna/ Krishna	Maharashtra	Satara/Kolhapur, Sangli					
19	Yeldari	Purna/Purna/ Godavari	Maharashtra	Parbhani, Hingoli					
20	Rana Pratap Sagar	Chambal/Upper Chambal/ Ganga	Rajasthan	Neemuch(MP)/ Dholpur, Kota, Bundi (Raj)					
21	Som Kamla Amba	Som/Mahi B/ Mahi	Rajasthan	Udaipur/ Dungarpur					
22	Vaigai	Vaigai/Upper Vaigai/ EF Rivers b/w Cauvery & Kanyakumari	Tamil Nadu	Theni/Madurai					
23	Bhavanisagar	Bhavani/ Middle Cauvery/ Cauvery	Tamil Nadu	Palakad (Kerala), Nilgiri (TN), Coimbatore (TN)/ Erode (TN)					

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.