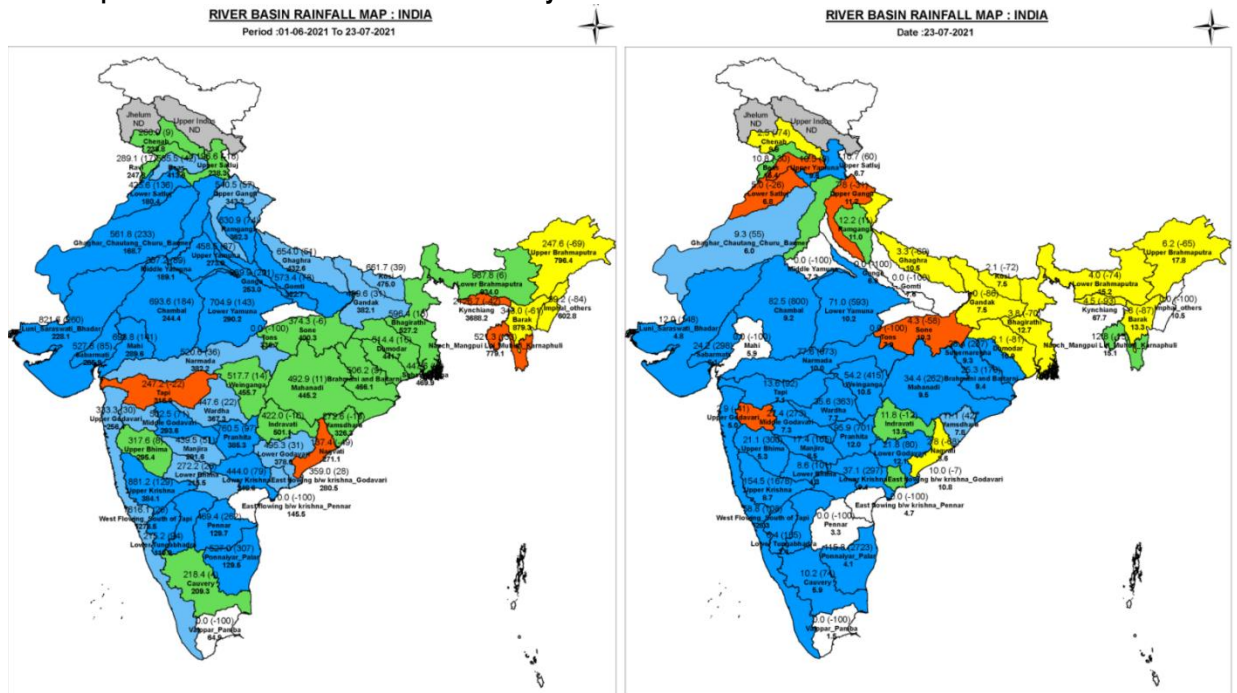




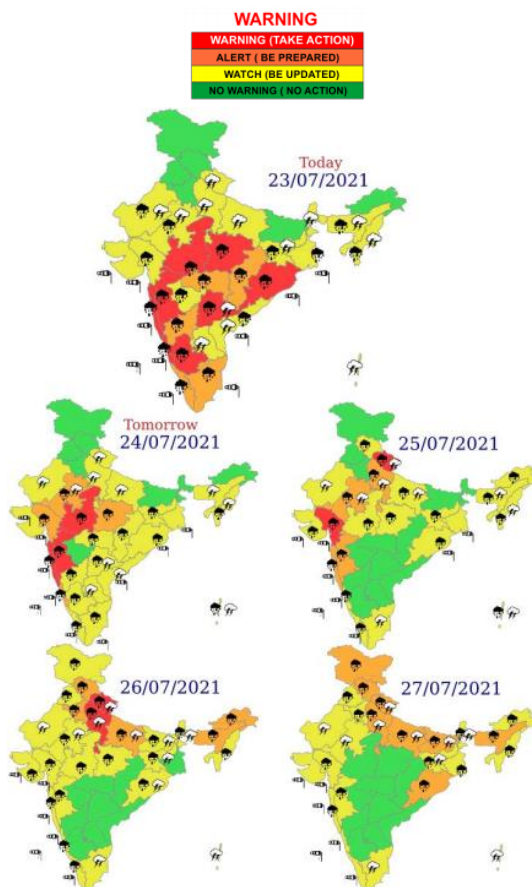
**Central Water Commission**  
**Daily Flood Situation Report cum Advisories**  
**23-07-2021**

**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 23<sup>rd</sup> July 2021 (Midday) by IMD**



- Extremely Heavy/Very Heavy rainfall over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad on 27th; over Himachal Pradesh on 26th & 27th; over Uttarakhand during 25th-27th; Haryana on 26th; West Uttar Pradesh during 25th-27th; East Uttar Pradesh on 26th & 27th; East Rajasthan on 24th-25th; Odisha on 27th; Bihar on 27th; Arunachal Pradesh on 26th; Assam & Meghalaya on 26th & 27th; Madhya Pradesh on 23rd & 24th ; Vidarbha and Chhattisgarh on 23rd; Konkan & Goa and Madhya Maharashtra during 23rd -25th ; Gujarat region on 24th & 25th; Kerala & Mahe, Tamilnadu, Puducherry & Karaikal and Interior Karnataka on 23rd; Coastal Karnataka and Telangana on 23rd & 24th July, 2021.

## 2.0 Flood Situation and Advisories

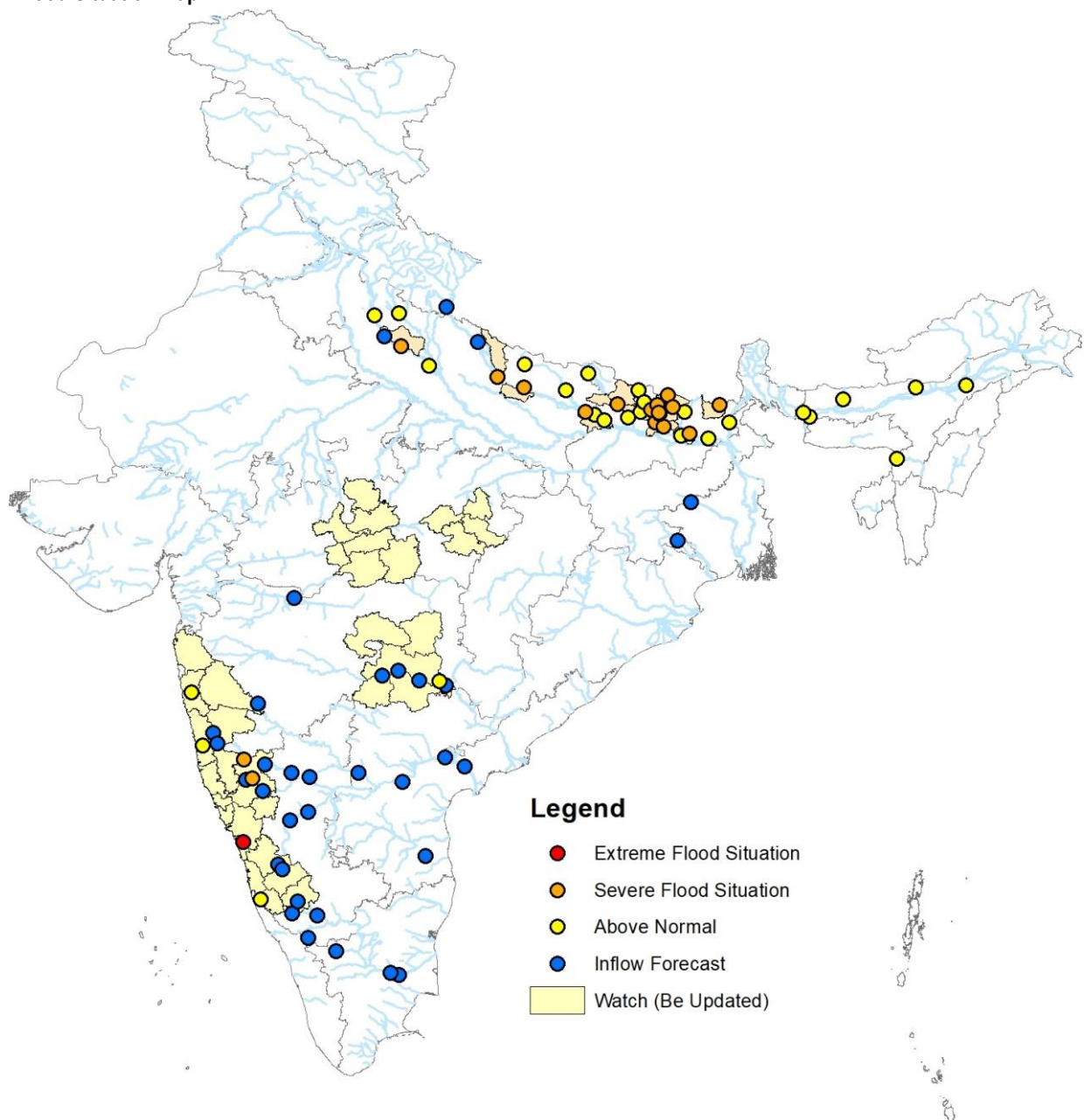
### 2.1 Summary of Flood Situation as per CWC Flood Forecasting Network

On 23<sup>rd</sup> July, 2021, 1 station in Karnataka is flowing in Extreme Flood Situation, 17 Stations (11 in Bihar, 4 in Uttar Pradesh, 1 each in Karnataka & Maharashtra) are flowing in Severe Flood Situation and 26 stations (10 in Bihar, 6 each in Uttar Pradesh and Assam, 2 in Maharashtra, 1 each in Karnataka & Telangana) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 34 Barrages & Dams (13 in Karnataka, 6 in Telangana, 4 in Maharashtra, 3 each in Andhra Pradesh & Tamilnadu, 2 each in Jharkhand & Uttar Pradesh and 1 in Uttarakhand)

PART - I: LEVEL FORECAST		
S.No.	Flood Situations	Numbers of Forecasting Sites
<b>A</b>	Extreme Flood Situation: (Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalled)	<b>1</b>
<b>B</b>	Severe Flood Situation: (Site (s) where water level is touching or exceeding the Danger Level but below Highest Flood Level (HFL))	<b>17</b>
<b>C</b>	Above Normal Flood Situation: (Site (s) where water level is touching or exceeding the Warning Level but below Danger Level)	<b>26</b>
Total number of sites above Warning Level (A+B+C)		<b>44</b>
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)		<b>34</b>

Details are given at link: [http://cwc.gov.in/sites/default/files/dfbcwc23072021\\_5.pdf](http://cwc.gov.in/sites/default/files/dfbcwc23072021_5.pdf)

#### 2.1.1 Flood Situation Map



## 2.2 CWC Advisories

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

IMD has predicted heavy to very heavy rainfall over Mumbai, Thane & Palghar; very heavy rainfall with isolated extremely heavy rainfall over Konkan, Goa & other coastal districts of Maharashtra, Pune, Satara, Kolhapur, coastal districts of Karnataka, Hassan, Chickmagalur & Shimoga. Since the rainfall is incessant in these regions from past 3 to 4 days, due to increased soil moisture, increased surface flows are continuing in these locations with severe to extreme flood situations in some of the rivers of the basin west flowing rivers of Tapi to Tadri and that of Tadri to Kanyakumari. Severe to extreme flood situation can occur in rivers such as Ulhas (**Thane** district); Bhogeshwari, Savitri & Kal (**Raigad** district); Bav (**Ratnagiri** district); Gad (**Sindhudurg** dist.); Madai (**North Goa**); Aghanashini (**Uttar Kannada** District); Haladi, Sita, Swarna and Shambavi (**Udupi** district); Gulpur & Netravathi (**Dakshin Kannada** district). Most of these rivers are already in spate and are expected to rise further due to excessive rainfall. **Low level bridges and railway tracks crossing these rivers may get submerged and hence traffic needs to be regulated as per flooding situation.**

As per CWC network, extreme floods have occurred in rivers Bav & Vashisti (**Ratnagiri** dist.), Madai (**N. Goa**) & Gad (**Sindhudurg** dist.).

Watch for urban flooding situation is to be maintained in **Mumbai**.

Since heavy rainfall is likely to continue along Ghats of **Shimoga, 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 (Haladi river) and Supa Project (Kali river) located in districts of **Shimoga** and **Uttar Kannada** respectively have storages in the range 25 to 55 % hence no spill is expected.

In Kerala increased inflows are expected in Idukki and Edamalar Dam.

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

**Godavari basin:** IMD has predicted heavy rainfall in sub-basins of Godavari such as Wardha, Penganga, Middle Godavari, Maneru, Pranhita, Indravathi and Sabari. Hence there will be water level rise in main Godavari in the reaches b/w Kaleshwaram to Doleswaram. Main Godavari at Kaleshwaram in **Bhupalpally** district of **Telangana** is flowing in severe flood situation. 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 (90%), Karanja (83%), Kaddam and Sri pada Yellampally are having storages 70% and above. Hence releases are to be done as per SOP. Sriramsagar releases 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.

As per CWC network extreme flood situation existed in Wardha (**Chandrapur** district of **Maharashtra**) & Penganga (**Adilabad** district of **Telangana**) of Godavari. Alerts may be kept in the basin since IMD has predicted heavy rainfall for next 2 days.

Water levels may rise due to rainfall in sub catchments of Godavari Basin. As PVN Rao Kantapally (Sammakka Barrage) is passing (7,50,000 Cusecs) water due to inflows into the barrage, the same will reach downstream and water levels of downstream sites will rise, hence it is advised that the sites from Perur to Dowlaiswaram to be watchful. Some of the sites such as Etunagar (Mulugu district in) may cross Warning Level by tomorrow morning. Alert may also be sounded in districts **Nizamabad & Karimnagar** districts of Telangana.

**Krishna Basin:** Heavy rainfall at Mahabaleshwar is still continuing in the region and it is the source regions for Krishna, Koyna as well as West flowing rivers. Closed watch is to be maintained in all reservoirs of Krishna, Bhima and their tributaries in Maharashtra. Alertness is needed in districts of **Sangli, Satara, Sholapur, Kolhapur & Pune** in Maharashtra also. Panchganga river in **Kolhapur** district is also flowing in severe flood situation. Main Krishna at Arjunwad & Karad in **Sangli** district of **Maharashtra** is now flowing in above normal flood situation. In Krishna basin all the major dams such as Almatti, Narayanpur, Ujjani, P D Jurala, Bhadra, Malaprabha, Ghataprabha & Tungabhadra dam are in rising condition. Releases from these dams may be done as per SOP. Gokak Falls in **Belgaum** district of **Karnataka** is already in severe flooding situation. River Tunga in **Shimoga** district of **Karnataka** is now flowing in severe flood situation

### 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. 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. River Hemavathi in **Hassan** district of **Karnataka** is now flowing in above normal flood situation.

Releases from Kabini dam are being realised at Mettur dam of **Salem and Dharmapuri** district (Tamil Nadu).

### 2.2.4 Ganga – Bihar, Uttar Pradesh

Currently river Ghagra, Rapti, Gandak, Ramganga, Bagmati, Kamla, Burhi Gandak, Adhwar, Mahananda, Parman & Kosi are flowing in severe to above normal flood situation in districts **Barabanki, Gorakhpur, Ayodhya, Ballia, Kushinagar, 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. River Kosi at **Balrampur** district in **Uttar Pradesh** has crossed its previous HFL. Alert may also be sounded in the districts of Gonda, Basti, Deoria, Maharajganj.

Main Ganga river is having above normal to severe situation in the districts **Bulandshahr, Badaun, Kanshiram Nagar & Farrukhabad**, hence alert may be kept

### 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 in Barpeta district 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.



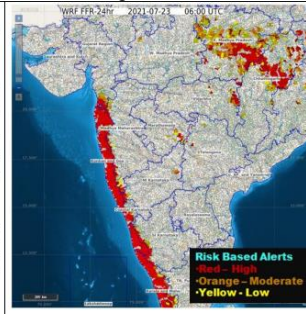
### 2.3 Flash Flood Guidance

IMD has issued flash flood risk over many watersheds and neighbourhood of Konkan & Goa, Coastal Karnataka and adjoining SIK & NIK, East Madhya Maharashtra adjoining Vidarbha & West Madhya Pradesh, Chhattisgarh met subdivision.

#### 24 hours Flash Flood Risk Outlook till 1130 IST of 24.07.2021:

Moderate Risk over few watersheds and neighborhood of Konkan & Goa, Coastal Karnataka and adjoining SIK & NIK, East Madhya Pradesh adjoining Vidarbha & West Madhya Pradesh, Chhattisgarh met subdivision.

Surface runoff/Inundation may occur at some fully saturated watersheds & low-lying areas due to expected persistent rainfall in next 24 hours.



### 3. Storage Position in Dams where Inflow forecast is being issued by CWC as on 23<sup>rd</sup> 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

#	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 PadaYellampally	Godavari/Middle Godavari/Godavari	Telangana	Mancherla/JaishankarBhupalpally					
3	Sriramsagar Project	Godavari/Middle Godavari /Godavari	Telangana	Nanded (Mah)/Nirmal (Telangana)					
4	Kaddam	Kaddam/Middle Godavari/Godavari	Telangana	Adilabad, Nirmal/ Mancherla					
5	Panchet	Damodar/Damodar East/Ganga	Jharkhand	Dhanbad					
6	Maithon	Barakar/Barakar East/Ganga	Jharkhand	Dhanbad					
7	Narayanpur	Krishna/Upper Krishna/Krishna	Karnataka	Bagalkot, Vijayapura/Raichur,Yadgir					
8	Kabini	Kabini/Kabini/ Cauvery	Karnataka	Wayanad (Kerala)/ Mysuru (Karnataka)					
9	Harangi	Cauvery/Upper Cauvery/Cauvery	Karnataka	Kodagu/Mandya					
10	Almatti	Krishna/ Upper Krishna/Krishna	Karnataka	Kolhapur(Mah)/ Bagalkote(Kar)					
11	Karanja	Karanja/Manjara/Godavari	Karnataka	Bidar (Kar), Vikarabad(Telangana)/ Bidar(Kar)					
12	Tungabhadra	Tungabhadra/Middle Tungabhadra/Krishna	Karnataka	Gadag/Bellary, Koppal, Raichur					
13	Hemavathy	Hemavathy/Hemavathy/Cauvery	Karnataka	Hassan, Kodagu/Mandya, Mysore					
14	Bhadra	Bhadra/Upper Tungabhadra/Krishna	Karnataka	Chikmagalur/Shimoga					
15	Hidkal	Ghataprabha/Ghataprabha/Krishna	Karnataka	Kolhapur (Mah)/ Belgaum (Kar)					
16	Malaprabha	Malaprabha/Malaprabha/Krishna	Karnataka	Belgaum					
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	Veer	Nira/Upper Bhima/Krishna	Maharashtra	Pune, Satara					
21	RanaPratap Sagar	Chambal/Upper Chambal/Ganga	Rajasthan	Neemuch(MP)/Dholpur,Kota, Bundi(Raj)					
22	SomKamlaAmba	Som/Mahi B/Mahi	Rajasthan	Udaipur/Dungarpur					
23	Vaigai	Vaigai/Upper Rivers b/w Cauvery &Kanyakumari	Tamil Nadu	Theni/Madurai					
24	Bhavanisagar	Bhavani/ Middle Cauvery/ Cauvery	Tamil Nadu	Palakkad (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.