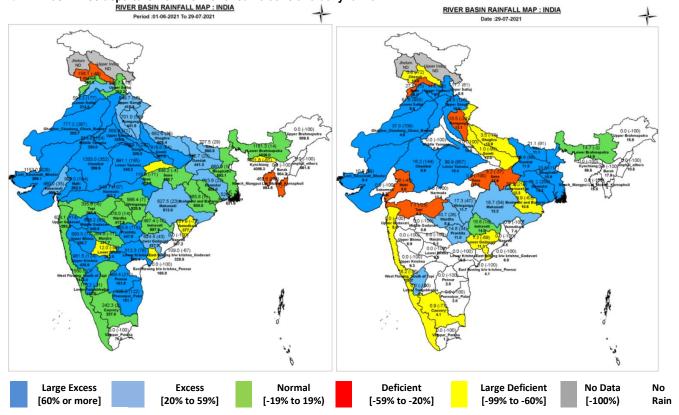


Central Water Commission Daily Flood Situation Report cum Advisories 29-07-2021

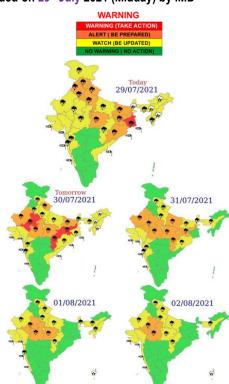
1.0 Rainfall Situation

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 29th July 2021 (Midday) by IMD



• Isolated Very Heavy/Extremely Heavy falls over Gangetic West Bengal, Himachal Pradesh, Punjab, Haryana, West Uttar Pradesh and Odisha on 29th July; over East Madhya Pradesh during 29th July-01st August; West Madhya Pradesh during 30th July-02nd August; over Chhattisgarh and West Rajasthan during 30th-31st July; East Rajasthan during 30th July-02nd August; over Uttarakhand and Bihar during 29th-30th July; over Jharkhand during 29th-31st July.

2.0 Flood Situation and Advisories

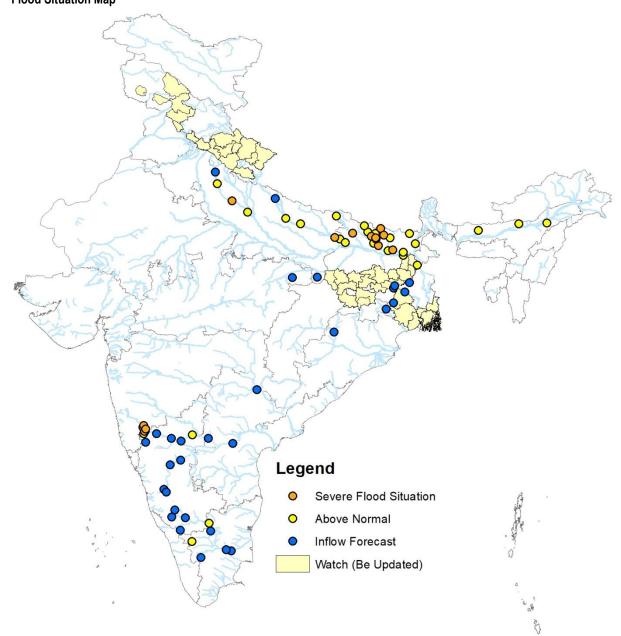
2.1 Summary of Flood Situation as per CWC Flood Forecasting Network

On 29th July, 2021, 14 Stations (8 in Bihar, 4 in Maharashtra and 2 in U.P) are flowing in Severe Flood Situation and 26 stations (12 in Bihar, 5 in Uttar Pradesh, 3 in Assam, 2 each in Tamil Nadu & Karnataka and 1 each in Maharashtra & West Bengal) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 31 Barrages & Dams (12 in Karnataka, 4 in Tamil Nadu, 3 each in U.P, West Bengal & Jharkhand, 2 each in Telangana & Andhra Pradesh and 1 each in Odisha & Madhya Pradesh)

PART - I: LEVEL FORECAST					
S.No.	Flood Situations	Numbers of Forecasting Sites			
Α	Extreme Flood Situation: (Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalled)	0			
В	Severe Flood Situation: (Site (s) where water level is touching or exceeding the Danger Level but below Highest Flood Level (HFL))	14			
С	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)					
PART - II: INFLOW FORECAST					
Number of (Where Infl	31				

Details are given at link: http://cwc.gov.in/sites/default/files/cfcrcwcdfb-29.07.20212_5.pdf

2.1.1 Flood Situation Map



2.2 CWC Advisories

2.2.1 Indus Basin and its Tributaries (Sutlej, Chenab, Beas, Ravi, Jhelum, etc) - Himachal Pradesh, Jammu & Kashmir

Due to forecasted heavy to very heavy rainfall in these regions in the next 2 days, there is likelihood of rise in water levels in rivers such as Sutlej, Ravi, Beas & Chenab. There is likelihood of flash floods in some of the hilly 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. Alert may be kept in districts Lahaul & Spiti, Bilaspur, Chamba, Kangra, Mandi, Kullu, Una & Kinnaur of Himachal Pradesh and Pathankot, Udhampur, Rajouri, Kathua & Punch of Jammu & Kashmir.

2.2.2 Ganga basin- Himachal Pradesh, Uttarakhand, Uttar Pradesh & Bihar

Heavy to very heavy rainfall has been forecasted in Himachal Pradesh, Uttarakhand & Uttar Pradesh in the next 2-3 days; hence rise in river levels are expected in Ganga, Alaknanda, Bagirathi, Ramganga, Sharda, Gori & Upper Yamuna river basins. There is moderate risk of flash floods in Himalayan regions of Himachal Pradesh and Hilly regions of Uttarakhand during next 24 to 48 hours and hence maximum vigil has to be maintained.

River Ghaghra in Ballia & Barabanki Districts, River Gandak in Kushinagar District and River Ganga in Badaun, Hapur & Farrukhabad Districts of Uttar Pradesh are flowing in Severe to Above Normal Flood Situation.

Currently River Kosi in Khagaria, Supaul & Katihar districts, River Bagmati in Muzzafarpur & Sitamarhi districts, River Gandak in Gopalganj Dt, River Adhwara in Darbhanga District, Rivers Kamla & Kamlabalan in Madhubani Dt, River Burhi Gandak in Khagaria & Samastipur Districts, River Araria in Parman Dt, River Ghaghra in Siwan Dt and River Mahananda in Purnia Dt of Bihar are flowing in Severe to Above Normal Flood Situation.

2.2.3 Chambal Basin - Rajasthan & Madhya Pradesh

Heavy rainfall has been predicted in Upper Chambal as well as in its tributaries like Parbati, Kalisindh, etc. Alert may be kept in districts of Jhalawar, Kota, Karauli, Bharatpur, Dholpur (Rajasthan), Neemuch, Dewas, Sheopur, Morena, Malwa, Mandsaur (MP).

2.2.4 Mahanadi, Brahmani, Baitarni, Burhabalanga, Damodar, Subarnarekha, Kangsabati – Odisha, Jharkhand, West Bengal

Heavy rainfall may occur in the river basins of Odisha such as Mahanadi, Brahmani, Baitarni & Burhabalanga on 29th – 31st July. Hence alert is issued in districts Bargarh, Jharsuguda, Sundargarh, Deogarh, Keonjhar, Mayurbhanj, Balasore, Bhadrak, Jajpur, Kendrapada, Jagatsinghpur, Angul, Puri, Sambalpur, Khordha and Cuttack in Odisha.

In **Jharkhand**, alert may be kept in the river basins of Damodar & Subarnarekha in the districts **Bokaro**, **Ramgarh** (Damodar river); **Purbi Singbhum** (Subarnarekha river); **Giridih** (Mayuraskshi River); **Jamtara**, **Deogarh** (Barakar river) & **Dumka** (Ajoy river).

In West Bengal alert may be kept in districts Purulia, Bankura and Paschim Medinipur

2.2.4 Godavari and Krishna basin- Maharashtra, Telangana, Andhra Pradesh & Karnataka

<u>Godavari basin</u>: IMD has predicted normal rainfall in Godavari basin. Water Levels in Godavari in Maharashtra have started falling after the recent flood wave. Sriramsagar (>90%), Karanja, Sri PadaYellampally (>80%), Yeldari, Kaddam are having storages >70% and above. Releases are to be done as per SOP. As PVN Rao Kantapally (Sammakka Barrage), is passing 2,15,000 Cusecs, water levels of downstream sites will rise; the sites from Perur to Dowlaiswaram needs to be watchful.

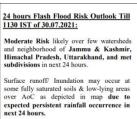
Krishna Basin: The inflows into major dams such as Almatti, Narayanpur, Tungabhadra are steady whereas Srisailam Dam is receiving high inflows. Releases from these dams may be done as per SOP.

2.2.5 Cauvery basin - Karnataka, Tamil Nadu

Inflows into Harangi, Hemavathi, Kabini and KRS dams are having steady trend. Close watch is to be maintained as the storages are high in most of the major projects. Necessary precautions may be taken for releases from dam after informing all downstream areas in Karnataka and lower riparian States. Releases from Kabini dam are being realised at Mettur dam of **Salem and Dharmapuri** district (Tamil Nadu).

2.3 Flash Flood Guidance

IMD has issued flash flood risk over many watersheds and neighbourhood of J&K, Himachal Pradesh, Uttarakhand, Jharkhand and Gangetic West Bengal met sub-divisions.

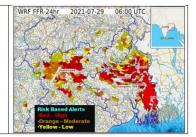




24 hours Flash Flood Risk Outlook Till 1130 IST of 30.07.2021:

Moderate to High Risk likely over many watersheds and neighborhood of Jharkhand and Gangetic West Bengal met subdivisions in next 24 hours.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as depicted in map due to expected persistent rainfall occurrence in root 24 bours.



3.0 Storage Position in Dams where Inflow forecast is being issued by CWC as on 29th 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 given below

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

Storage above 85%
Storage above 60%

#	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	Srisalam	Krishna/Lower Krishna/Krishna	Andhra Pradesh	JogulambaGadwal (Telangana),							
				Kurnool(AP)/Nalgonda(Telangana), Guntoor (AP)							
3	Sri PadaYellampally	Godavari/Middle Godavari/Godavari	Telangana	Mancherial/JaishankarBhupalpally							
4	Sriramsagar Project	Godavari/Middle Godavari /Godavari	Telangana	Nanded (Mah)/Nirmal (Telangana)							
5	Kaddam	Kaddam/Middle Godavari/Godavari	Telangana	Adilabad, Nirmal/ Mancherial							
6	Musi	Musi/Lower Krishna/ Krishna	Telangana	Nalgonda							
7	Panchet	Damodar/Damodar East/ Ganga	Jharkhand	Dhanbad, Jamtara (Jharkhand) / Puruliya, PaschimBardhaman, Bankura (WB)							
8	Maithon	Barakar/Barakar East/Ganga	Jharkhand	Dhanbad,Jamtara (Jharkhand)/ Puruliya, PaschimBardhaman, Bankura (WB)							
9	Kabini	Kabini/Kabini/ Cauvery	Karnataka	Wayanad (Kerala)/ Mysuru (Karnataka)							
10	Harangi	Cauvery/Upper Cauvery/Cauvery	Karnataka	Kodagu/Mandya							
11	Karanja	Karanja/Manjera/Godavari	Karnataka	Bidar (Kar), Vikarabad (Telangana)/ Bidar (Kar)							
12	Almatti	Krishna/Upper Krishna/Krishna	Karnataka	Kolhapur(Mah)/ Bagalkote(Kar)							
13	KRS	Cauvery/Middle Cauvery/Cauvery	Karnataka	Mandya, Mysore							
14	Tungabhadra	Tungabhadra/Middle Tungabhadra/Krishna	Karnataka	Gadag/Bellary, Koppal, Raichur							
15	Hemavathy	Hemavathy/ Hemavathy/Cauvery	Karnataka	Hassan, Kodagu/Mandya, Mysore							
16	Bhadra	Bhadra/Upper Tungabhadra/Krishna	Karnataka	Chikmagaluru/Shimoga							
17	Hidkal	Ghataprabha/Ghataprabha/Krishna	Karnataka	Kolhapur (Mah)/ Belgaum (Kar)							
18	Malaprabha	Malaprabha/Malaprabha/Krishna	Karnataka	Belgaum							
19	Warana	Warana/Upper Krishna/Krishna	Maharashtra	Kolhapur, Sangli							
20	Koyna	Koyna/ Upper Krishna/Krishna	Maharashtra	Satara/Kolhapur, Sangli							
21	Yeldari	Purna/Purna/Godavari	Maharashtra	Parbhani, Hingoli							
22	Veer	Nira/Upper Bhima/Krishna	Maharashtra	Pune, Satara							
23	RanaPratapSagar	Chambal/Upper Chambal/Ganga	Rajasthan	Neemuch(MP)/Dholpur,Kota, Bundi(Raj)							
24	SomKamlaAmba	Som/Mahi B/Mahi	Rajasthan	Udaipur/ Dungarpur							
25	Kalisindh	Kalisindh/Upper Chambal/Ganga	Rajasthan	Shajapur, Rajgarh(MP)/Jhalawar(Raj)							
26	Vaigai	Vaigai/Upper Vaigai/EF Rivers b/w Cauvery & Kanyakumari	Tamil Nadu	Theni/Madurai							
27	Bhavanisagar	Bhavani/Middle Cauvery/Cauvery	Tamil Nadu	Palakad (Kerala), Nilgiri (TN), Coimbatore (TN)/ Erode (TN)							
28	Idukki	Periyar/Upper Periyar/West Flowing Rivers from Tadri to Kanyakumari	Kerala	Idduki/Ernakulam							

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.