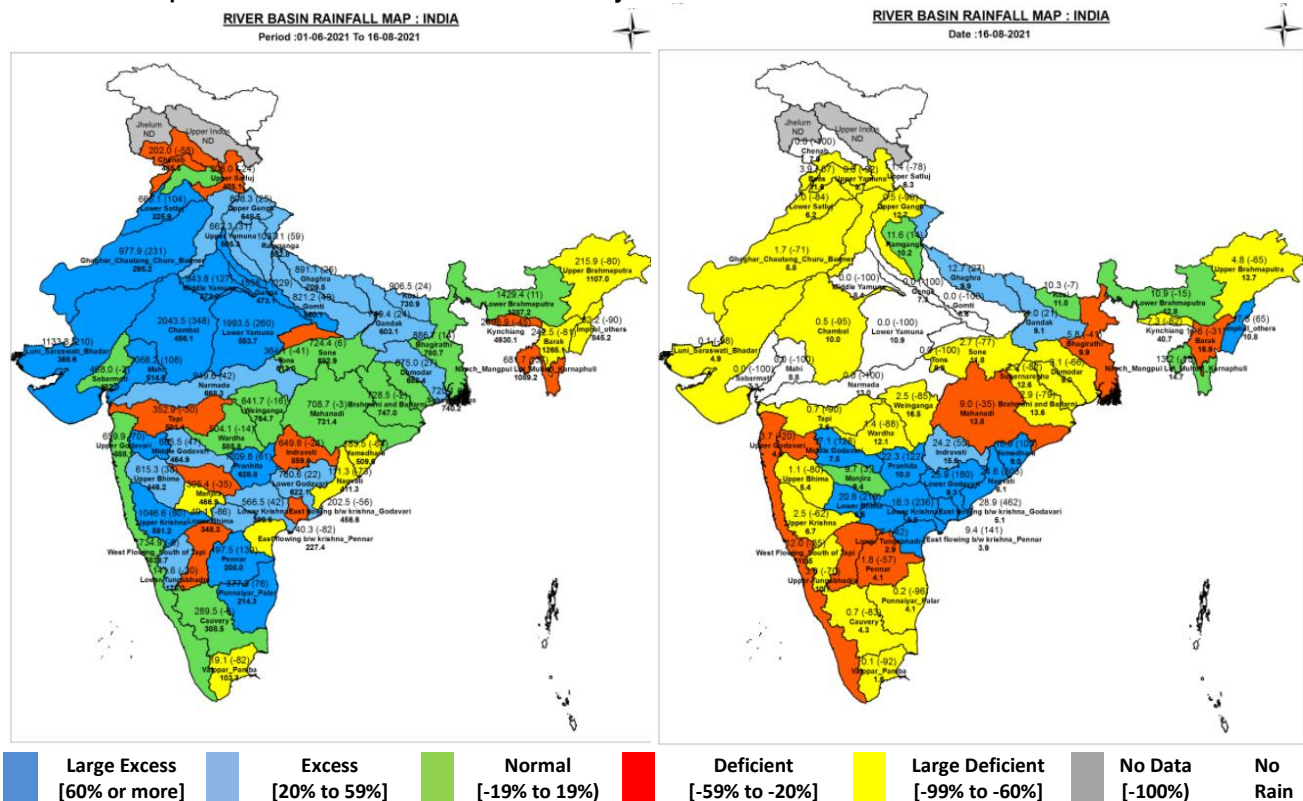




Central Water Commission
Daily Flood Situation Report cum Advisories
16-08-2021

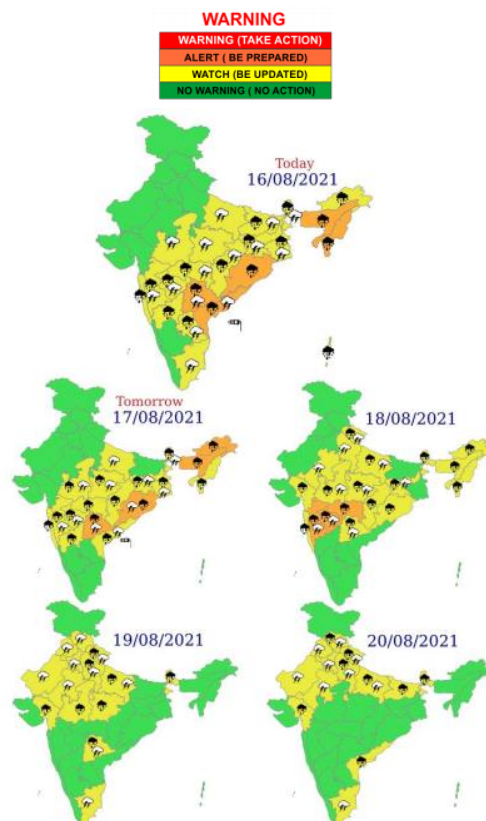
1.0 Rainfall Situation

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 16th August, 2021 (Midday) by IMD



- Very heavy rainfall over Coastal Andhra Pradesh and Nagaland, Manipur, Mizoram & Tripura on 16th; over Arunachal Pradesh on 17th; over Assam & Meghalaya, Odisha and Telangana during 16th-17th; over Madhya Maharashtra, Marathwada and Vidarbha on 18th August, 2021.

2.0 Flood Situation and Advisories

2.1 Summary of Flood Situation as per CWC Flood Forecasting Network

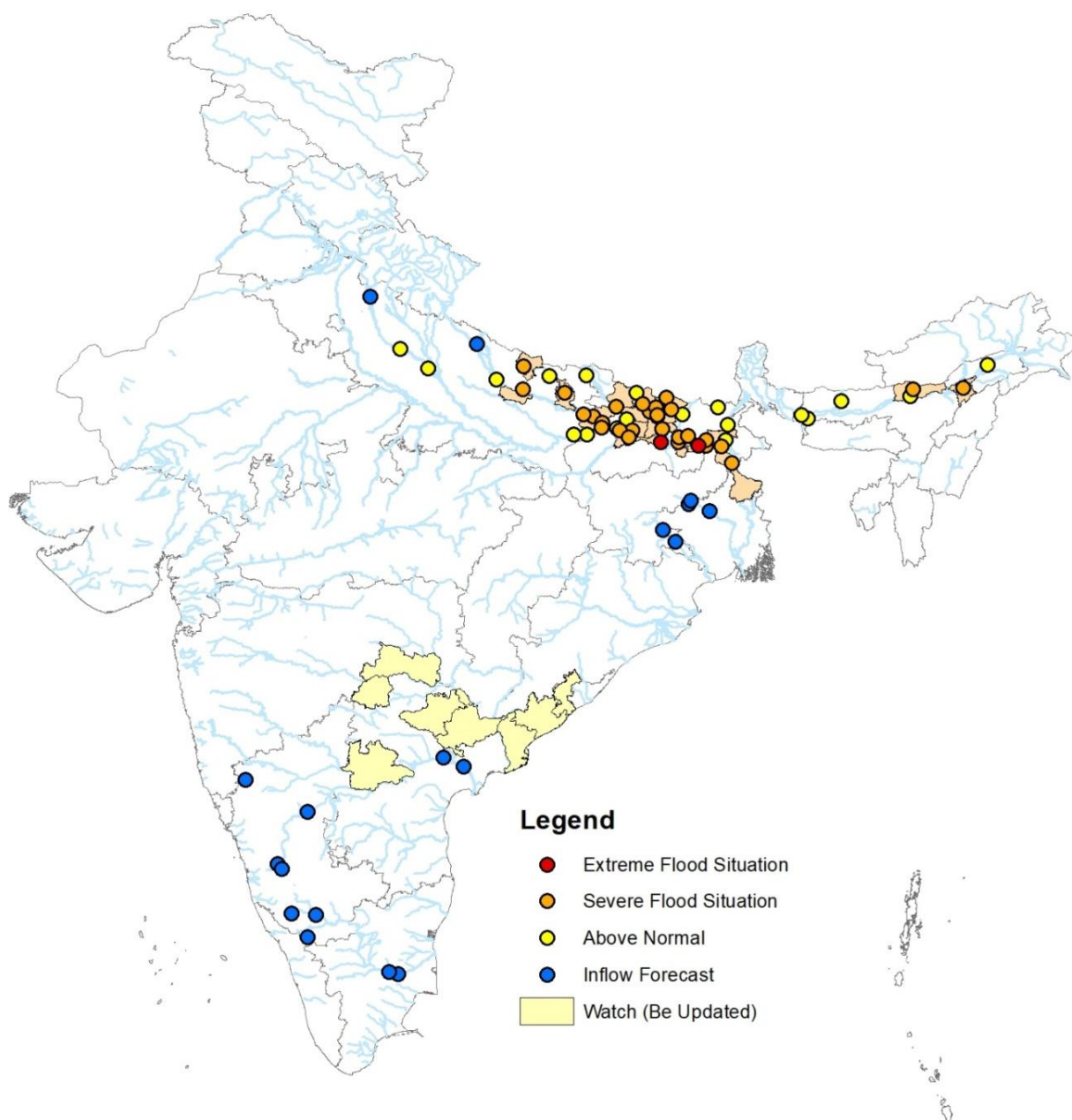
On 16th August, 2021, 2 stations in Bihar are flowing in Extreme Flood Situation, 29 Stations (20 in Bihar, 5 in Uttar Pradesh, 2 in Assam and 1 each in Jharkhand & West Bengal) are flowing in Severe Flood Situation and 20 stations (9 in Bihar, 6 in Uttar Pradesh and 5 in Assam) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 18 Barrages & Dams (7 in Karnataka, 4 in Jharkhand, 2 each in Andhra Pradesh, Tamilnadu & Uttar Pradesh and 1 in West Bengal).

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)	2
B	Severe Flood Situation: (Site (s) where water level is touching or exceeding the Danger Level but below Highest Flood Level (HFL))	29
C	Above Normal Flood Situation: (Site (s) where water level is touching or exceeding the Warning Level but below Danger Level)	20
Total number of sites above Warning Level (A+B+C)		51
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)		18

Details are given at link: [http://www.cwc.gov.in/sites/default/files/cfcrwcdfb-16.08.2021-](http://www.cwc.gov.in/sites/default/files/cfcrwcdfb-16.08.2021-2_5.pdf?fbclid=IwAR06yPtQ9JEimd38kRRekuiO5zZ8g0OAAQ_u8omos72wTUSKKVGDii1stEjo)

[2_5.pdf?fbclid=IwAR06yPtQ9JEimd38kRRekuiO5zZ8g0OAAQ_u8omos72wTUSKKVGDii1stEjo](http://www.cwc.gov.in/sites/default/files/cfcrwcdfb-16.08.2021-2_5.pdf?fbclid=IwAR06yPtQ9JEimd38kRRekuiO5zZ8g0OAAQ_u8omos72wTUSKKVGDii1stEjo)

2.1.1 Flood Situation Map



2.2 CWC Advisories

2.2.1 Ganga basin- Uttar Pradesh, Bihar, Jharkhand & West Bengal

Due to combined effect of river runoff from Yamuna and northern tributaries of Ganga, main **Ganga** is flowing in extreme flood situations to above normal flood situations in districts **Ghazipur (U.P)** to **Murshirabad (West Bengal)**. From Ghazipur to Ballia, Ganga River is in falling trend, in Patna & Bhagalpur river is flowing in extreme flood situation with slightly rising to steady trend, and further downstream it is flowing in severe flood situation with rising trend. Alert may be kept in districts **Balia (U.P), Patna, Munger, Bhagalpur (Bihar), Sahibganj (Jharkhand) and Malda & Murshirabad (West Bengal)**. Propagating peak inflow will further increase the water level of main Ganga stem in Bihar, Jharkhand and West Bengal in next 2 to 3 days.

Currently, Ganga at CWC site Hathidah in Patna district is flowing above HFL. Present water level (04:00 PM) observed at site is 43.52 m and expected water level at 08:00 AM of 17.08.2021 is 43.51 m. Rate of water level rise has decreased, compared to previous days; currently it is almost steady and decreasing trend is expected in next 24 hrs. At Bhagalpur site of CWC, water level of Ganga is flowing above HFL. Present water level (04:00 PM) observed at site is 34.75 m and expected water level at 08:00 AM of 17.08.2021 is 34.78 m.

Middle reaches of Ganga river in districts such as **Badaun & Farrukhabad (Uttar Pradesh)** are in above normal flood situations. River **Ghaghra** in **Barabanki, Ayodhya & Ballia (Uttar Pradesh)** and **Siwan & Saran (Bihar)** districts are flowing in above normal to severe flood situations with rising trend. River Rapti is flowing in above normal to severe flood situations in **Balrampur, Siddharth Nagar & Gorakhpur districts (U.P)**. River Sone & Punpun are flowing in severe flood situation in Patna.

Currently the flood originated in tributaries of Yamuna last week is passing through Ganga and it may take another 3 to 4 days to pass through completely; in such situation further runoff created due to intense rainfall in the catchments of north tributaries of Ganga may not stream into Ganga easily. The flooding situation in districts such as **Ballia (U.P), Saran, Bhagalpur, Khagaria, Vaishali, Katihar (Bihar)** may get accentuated.

Currently River **Kosi** in **Supaul, Khagaria & Katihar** districts, River **Bagmati** in **Sitamarhi, Muzaffarpur & Darbhanga** districts, River **Gandak** in **Gopalganj, Muzaffarpur & Vaishali** districts, River **Adhwara** in **Darbhanga** District, Rivers **Kamla & Kamlabalan** in **Madhubani** district, River **Burhi Gandak** in **Samastipur & Khagaria** districts, River **Parman** in **Araria**, River **Mahananda** in **Purnia & Katihar** districts are flowing in above normal to severe flood situations. Flow in Gandak has increased with rising trend. Flow in Bagmati has increased in its upper reaches and that of Kosi has increased in middle and lower reaches. Hence flood situations may exist in the lower reaches of these rivers in the coming days.

2.2.2 Brahmaputra and its tributaries – Assam, West Bengal, Sikkim, Arunachal Pradesh & Meghalaya

IMD has predicted very heavy rains in the catchment of Brahmaputra and its tributaries for next 3 to 4 days, hence, alert may be kept in North West Bengal, Assam, Sikkim, Arunachal Pradesh & Meghalaya, mainly in districts **Kokrajhar, Barpeta, Baksa, Nalbari & Karimganj (Assam)** and **East Khasi hills (Meghalaya)**. Alert to be kept in the basins of Champabati, Aie, Gurang, Manas, Teesta, Raidak, Jaldhaka, Rangpochu, Rangit, Torsa, Beki, Pagladiya, Puthimari, Subansiri, Disang, Siang, Singsha, Digaru, Myntdu rivers and in all other tributaries of Brahmaputra.

Currently, due to past 3 to 4 days rainfall, rivers in NE India of Brahmaputra basin viz. Jia-Bharali in **Sonitpur** district, river Sankosh in Golokganj & Brahmaputra in **Dibrugarh, Jorhat, Sonitpur & Dhubri** are flowing in above normal to severe flood situations.

2.2.3 Rushikulya, Vamsadhara, Nagavali – Orissa & Andhra Pradesh

Due to formation of Low Pressure Area in Bay of Bengal, heavy rainfall is expected in catchments of rivers Rushikulya, Vamsadhara & Nagavali, mainly in districts **Ganjam, Phulbani, Rayagada, Gajapati, Kalahandi, Koraput (Orissa) & Srikakulam, Vizianagaram of Andhra Pradesh**.

2.2.4 Middle & Lower Godavari basin and Lower Krishna basin – Telangana, Andhra Pradesh

Due to formation of Low Pressure Area in Bay of Bengal heavy rainfall is expected in Sub-catchments of middle & lower Godavari such as Sabari, Indravati, Waiganga, Pranrita, Penganga, Middle Godavari, Manjira & Maneru. In lower Krishna heavy rainfall is expected Munneru & Palleru sub-basins. Hence alert may be kept in districts **Vishakhapatnam, East Godavari (Andhra Pradesh); Adilabad, Nirmal, Kumaram Bheem, Mancherla, Jagtial, Nizamabad, Rajanna Sircilla, Karimnagar, J.Bhupalpally, Warangal (urban & rural), Mahabubabad & Khammam (Telangana)**.

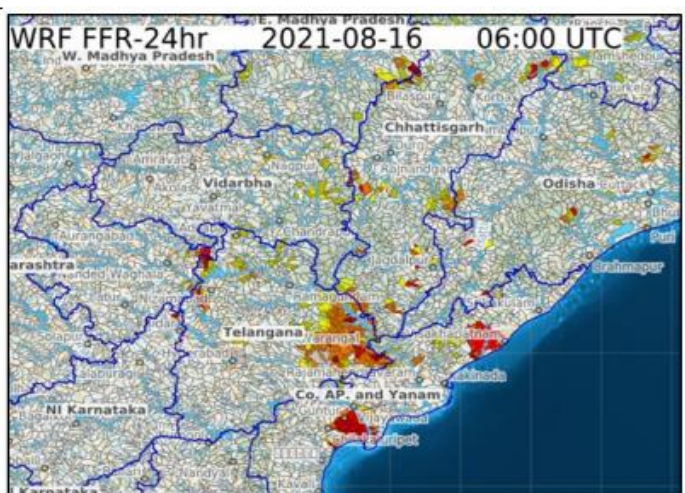
2.3 Flash Flood Guidance

IMD has issued flash flood risk over few watersheds and neighbourhoods of **North Coastal AP & Yanam, adjoining Odisha, Telangana, Chhattisgarh met sub-divisions**.

24 hours Flash Flood Risk (FFR) Outlook Till 1130 IST of 17.08.2021:

Moderate Risk likely over few watersheds and neighborhoods of North Coastal AP & Yanam, adjoining Odisha, Telangana, Chhattisgarh 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 rainfall occurrence in next 24 hours.



3.0 Storage Position in Dams where Inflow forecast is being issued by CWC as on 16thAugust, 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:

Storage above 85%	
Storage above 60%	

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	Srisalam	Krishna/Lower Krishna/Krishna	AP	JogulambaGadwal (Telangana), Kurnool(AP)/Nalgonda(Telangana), Guntoor (AP)					
2	NagarjunaSagar	Krishna/Lower Krishna/Krishna	AP	Nalgonda(Telangana), Guntoor (AP)					
3	Musi	Musi/Lower Krishna/ Krishna	Telangana	Nalgonda					
4	Sri PadaYellampally	Godavari/Middle Godavari/Godavari	Telangana	Mancherial/ JaishankarBhupalpally					
5	Sriramsagar Project	Godavari/Middle Godavari/Godavari	Telangana	Nanded (Mah)/Nirmal (Telangana)					
6	Kaddam	Kaddam/Middle Godavari/Godavari	Telangana	Adilabad, Nirmal/ Mancherial					
7	PD Jurala	Krishna/ Middle Krishna/Krishna	Telangana	Raichur(Kar)/Kurnool(Andhra Pradesh),JogulambaGadwal(Telangana)					
8	Singur	Manjira/Manjira/Godavari	Telangana	Bidar(Kar)/Sangareddy(Telangana)					
9	Panchet	Damodar/Damodar East/ Ganga	Jharkhand	Dhanbad, Jamtara (Jharkhand)/ Puruliya, PaschimBardhaman, Bankura (WB)					
10	Maithon	Barakar/Barakar East/Ganga	Jharkhand	Dhanbad, Jamtara (Jharkhand)/ Puruliya, PaschimBardhaman, Bankura (WB)					
11	Kabini	Kabini/Kabini/ Cauvery	Karnataka	Wayanad (Kerala)/ Mysuru (Karnataka)					
12	Harangi	Cauvery/Upper Cauvery/Cauvery	Karnataka	Kodagu/Mandya					
13	Karanja	Karanja/Manjira/Godavari	Karnataka	Bidar (Kar), Vikarabad(Telangana)/Bidar(Kar)					
14	Almatti	Krishna/Upper Krishna/Krishna	Karnataka	Kolhapur(Mah)/ Bagalkote(Kar)					
15	Narayanpur	Krishna/Upper Krishna/Krishna	Karnataka	Bagalkot, Vijayapura/ Raichur, Yadgir					
16	KRS	Cauvery/Middle Cauvery/Cauvery	Karnataka	Mandya, Mysore					
17	Tungabhadra	Tungabhadra/Middle Tungabhadra/Krishna	Karnataka	Gadag/Bellary, Koppal, Raichur					
18	Hemavathy	Hemavathy/ Hemavathy/Cauvery	Karnataka	Hassan, Kodagu/Mandya, Mysore					
19	Bhadra	Bhadra/Upper Tungabhadra/Krishna	Karnataka	Chikmagalur/Shimoga					
20	Hidkal	Ghataprabha/Ghataprabha/Krishna	Karnataka	Kolhapur (Mah)/ Belgaum (Kar)					
21	Malaprabha	Malaprabha/Malaprabha/Krishna	Karnataka	Belgaum					
22	Warana	Warana/Upper Krishna/Krishna	Maharashtra	Kolhapur, Sangli					
23	Koyna	Koyna/ Upper Krishna/Krishna	Maharashtra	Satara/Kolhapur, Sangli					
24	Yeldari	Purna/Purna/Godavari	Maharashtra	Parbhani, Hingoli					
25	Totladoh	Pench/Wainganga/Godavari	Maharashtra	Chindwara(MP)/Nagpur(Mah)					
26	Isapur	Penganga/Penganga/Godavari	Maharashtra	Hingoli, Yavatmal/Yavatmal,Nanded					
27	Veer	Nira/Upper Bhima/Krishna	Maharashtra	Pune, Satara					
28	Ujjani	Bhima/Upper Bhima/Krishna	Maharashtra	Pune, Solapur					
29	Mula	Mula/Upper Godavari/Godavari	Maharashtra	Ahmadnagar					
30	RanaPratapSagar	Chambal/Upper Chambal/Ganga	Rajasthan	Neemuch(MP)/Dholpur,Kota, Bundi(Raj)					
31	Panchana	Gambhiri/Upper Chambal/Ganga	Rajasthan	Karauli					
32	Gudha	Mejchambal/UpperChambal/Ganga	Rajasthan	Bhilwara/Bundi					
33	SomKamlaAmba	Som/Mahi B/Mahi	Rajasthan	Udaipur/ Dungarpur					

34	Mahi Bajaj Sagar	Mahi/Mahi B/Mahi	Rajasthan	Ratlam(MP)/Banswara, Pratapgarh,Dungapur (Raj)					
35	Vaigai	Vaigai/Upper Vaigai/EF Rivers b/w Cauvery & Kanyakumari	TN	Theni/Madurai					
36	Bhavanisagar	Bhavani/Middle Cauvery/Cauvery	TN	Palakad (Kerala), Nilgiri (TN), Coimbatore (TN)/ Erode (TN)					
37	Idukki	Periyar/Upper Periyar/West Flowing Rivers from Tadri to Kanyakumari	Kerala	Idduki/Ernakulam					
38	Edamalyar	Periyar/Upper Periyar/West flowing rivers from Tadri to Kanyakumari	Kerala	Ernakulam					
39	Bargi	Narmada/UpperNarmada/Narmada	MP	Mandla, Seoni/Jabalpur, Narsimhapur					
40	Tawa	Tawa/Middle Narmada/Narmada	MP	Betul,Hoshnabad/Sehore					
41	Gandhi Sagar	Chambal/Upper Chambal/Ganga	MP	Mandsaur,Neemuch(MP)/Dholpur(Raj)					
42	Rajghat	Betwa/Betwa/Ganga	MP	Ashoknagar(MP), Lalitpur(UP)/Shivpuri, Lalitpur(UP)					

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.