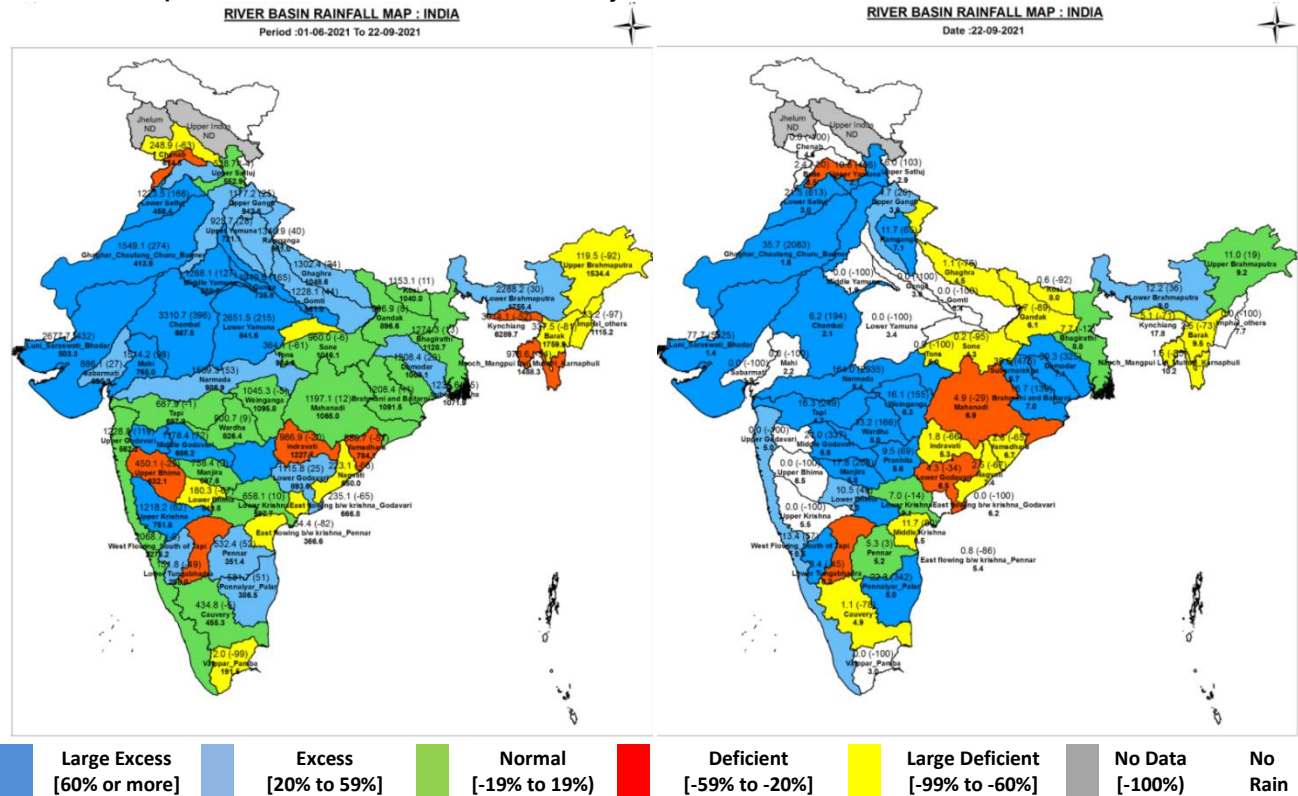




Central Water Commission
Daily Flood Situation Report cum Advisories
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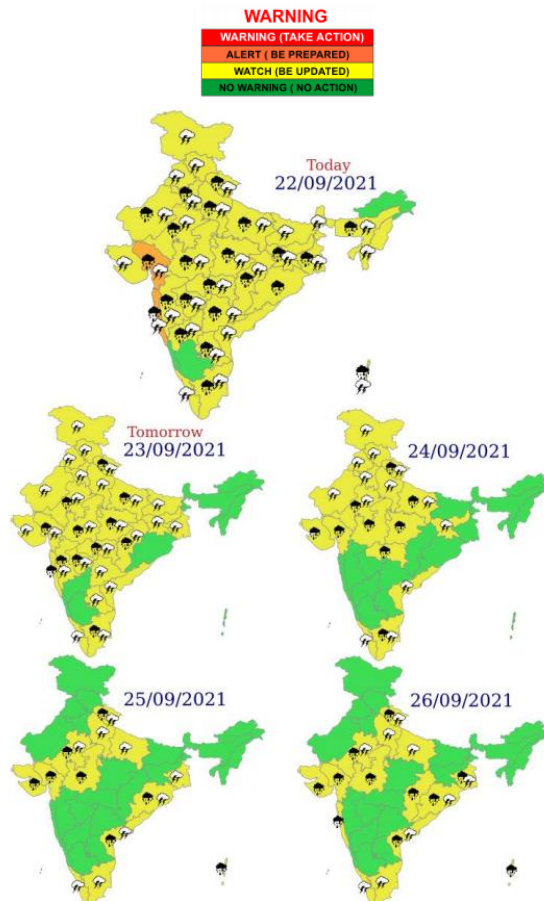
1.0 Rainfall Situation

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 22nd September, 2021 (Midday) by IMD



- Very Heavy Rainfall over Gujarat Region and Konkan & Goa on 22nd September, 2021.

2.0 Flood Situation and Advisories

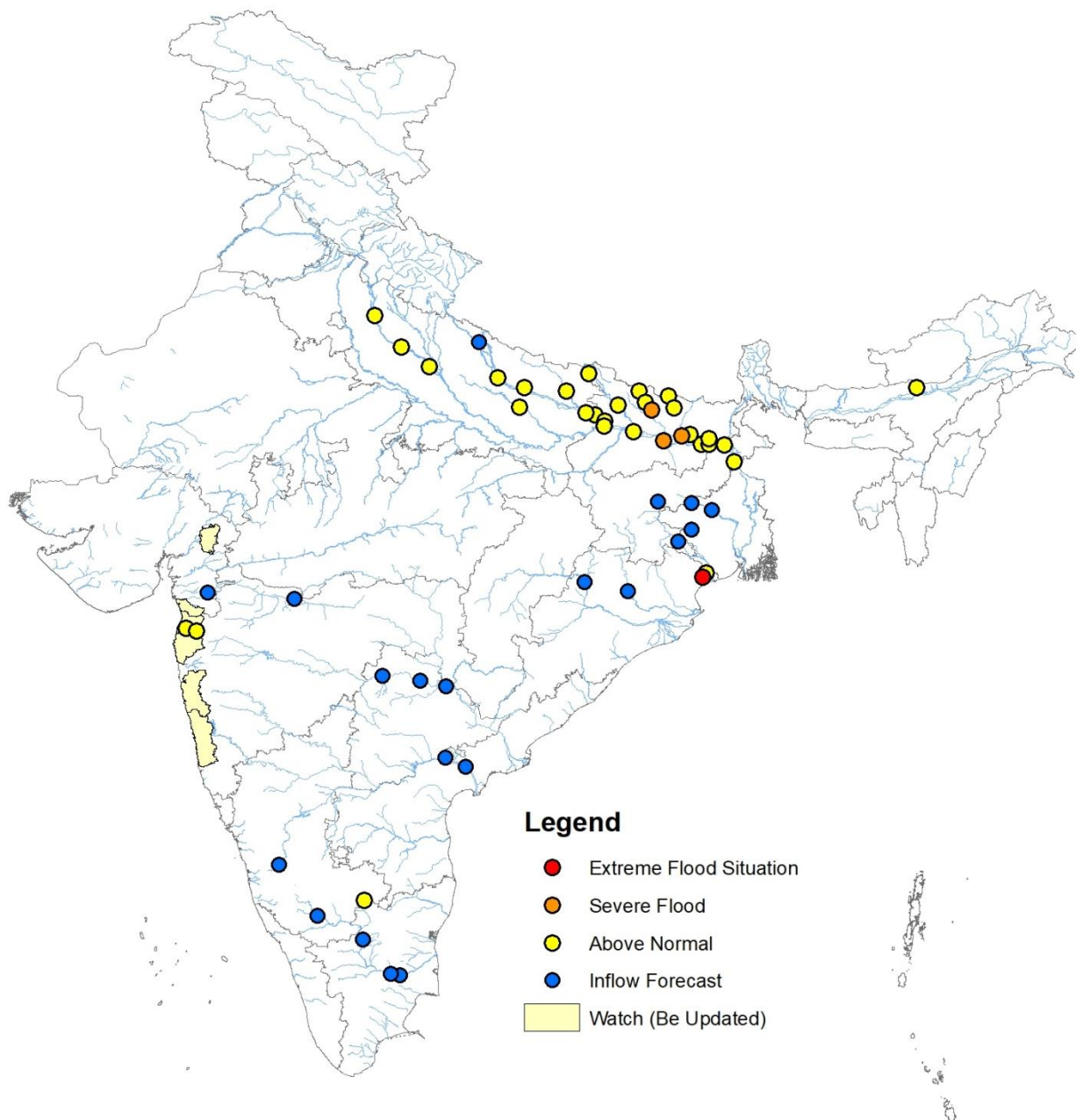
2.1 Summary of Flood Situation as per CWC Flood Forecasting Network

On 22nd September, 2021, 1 station in Odisha is flowing in Extreme Flood Situation, 3 Stations in Bihar are flowing in Severe Flood Situation and 29 stations (12 in Bihar, 10 in Uttar Pradesh, 1 each in Assam, Dadra & Nagar Haveli, Gujarat, Jharkhand, Odisha, Tamilnadu, & West Bengal) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 20 Barrages & Dams (3 each in Jharkhand, Telangana & Tamilnadu, 2 each in Karnataka, Andhra Pradesh, Odisha & West Bengal and 1 each in Gujarat, Maharashtra & Uttar 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))	3
C	Above Normal Flood Situation: (Site (s) where water level is touching or exceeding the Warning Level but below Danger Level)	29
Total number of sites above Warning Level (A+B+C)		33
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)		20

Details are given at link: http://www.cwc.gov.in/sites/default/files/cfrcwcdfb-22-09.2021-2_5.pdf

2.1.1 Flood Situation Map



2.2 CWC Advisories

2.2.1 Ganga and its tributaries – Uttar Pradesh, Bihar, Jharkhand & West Bengal

River Ganga is flowing in severe to above normal flood situation with rising trend in Hapur & Budaun districts and in falling trend in Farrukhabad district of Uttar Pradesh. Towards lower reaches, Ganga is flowing in above normal to severe flood situation in Patna (Bihar) with falling trend. In Sahebganj (Jharkhand) and Murshirabad (West Bengal) Ganga is flowing in above normal flood situation with rising trend. The said rise in lower reaches of Ganga is mainly due to runoff contribution from Ghagra & Bagmati from northern side.

Due to rainfall happened in Nepal, currently, river River Ghagra is flowing in above normal flood situation in Barabanki district with rising trend and thereafter in falling trend. River Bagmati is in falling trend in upper reaches and in middle reaches at Muzaffarpur (in Bihar), it is in rising trend. Flooding situation in rest of the northern tributaries of Ganga in Bihar such as Gandak, Burhi Gandak, Adhwara, Kamalabalan and Kosi have receded from severe to above normal in most of the districts.

2.2.2 East Flowing rivers Damodar, Subernrekha, Brahmani-Baitarni, Mahanadi – Jharkhand, Odisha & Chhatisgarh

In Odisha, Jharkhand and Chattisgarh alert may be kept in river basins such as Mahanadi, Damodar, Subarnarekha, Burhabalang, Baitarni & Brahmani. Existing low pressure area over South-East Jharkhand may lead to increased rainfall activity in the catchment of above said rivers. In Mahanadi basin, Hirakud dam is receiving inflow of 4120 cumec with almost steady trend and outflow from the dam is of same order. Rengali reservoir in Brahmani-Baitarni basin is receiving inflows of 2296 cumec with falling trend and outflows from the dam is about 1300 cumec. Since storages in both these dams are high, releases may be done as per SOP after advance information to downstream areas.

Subarnarekha basin is having heavy runoff. Currently, Chandil dam (Sahebganj dist.) of Jharkhand is receiving inflow of 2500 cumec with rising trend. CWC site Mathani road bridge on Jalka river (Subernrekha basin) in Balasore district (Odisha) has crossed its Highest Flood Level. Main stem of Subarnarekha is flowing in above normal flood situation with rising trend. River Damodar is flowing in rising trend in Dhanbad (Jharkhand), Bardhaman (West Bengal) districts.

2.2.3 Damanganga, Mahi, West Banas– Gujarat & Maharashtra

Due to prevalence of upper air cyclonic circulation over East Rajasthan and neighborhood, heavy rainfall is mainly expected in district **Panchmahal**. Rainfall in Panchmahal will contribute runoff in Mahi basin mainly in rivers Panam, Bhadar and main Mahi river and hence inflow into dams Kadana, Panam & Bhadar. Currently Kadana dam (Mahi sagar dist., Gujarat) is receiving inflows of 1816 cumec and Mahi Bajaj Sagar (Banswara, Rajasthan) inflows is of 907 cumec. Mahi Bajaj sagar has reached near to its FRL and current outflows are of the order 689 cumec. Dam releases may be done as per SOP after incoming lower riparian areas. Increased rainfall in Sirohi district has created runoff and currently Dantiwada dam is receiving inflow of the order 565 cumec with rising trend.

In Damanganga basin, alert may be kept in **Navsari, Valsad** districts. Currently Madhuban dam is receiving inflows of 3747 cumec and outflow from the dam is 5044 cumec. Outflows from Madhuban dam has peaked water levels in Silvassa (Dadra & Nagar Haveli) to severe flood situation with rising trend. In the upstream part of Madhuban dam (**Valsad** dist.) river is flowing in severe flood situation with steady trend.

2.2.4 West Flowing rivers from Tapi to Tadri - Maharashtra

Alert may be kept in rivers Savitri, Kal, Bhogeshwri, Kajvi, Vashisti, Bav and other rivers in districts **Raigad, Ratnagiri and Palghar**.

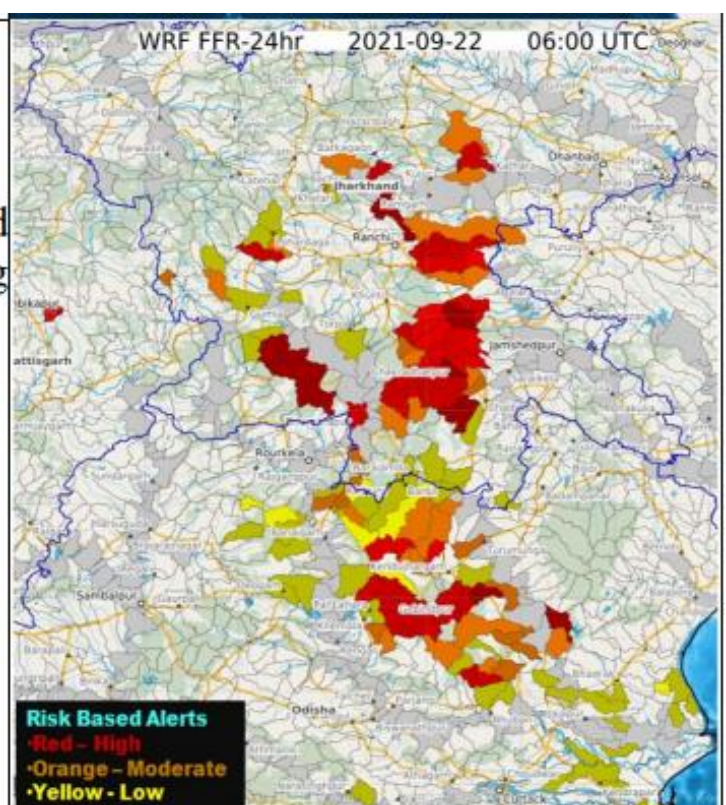
2.2.3 Flash Flood Guidance

IMD has issued warning of moderate risk over few watersheds and neighborhoods of Jharkhand adjoining Odisha in next 24 hours.

24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 23.09.2021:

Moderate risk over few watersheds and neighborhood of Jharkhand adjoining Odisha met subdivision 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 forecasted rainfall in next 24 hours.



3.0 Storage Position in Dams where Inflow forecast is being issued by CWC as on 22nd September, 2021

Reservoirs shown in red are having gross storage capacity more than 90% and those in orange are having gross storage greater than 75%. 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 90%	
Storage above 75%	

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	NagarjunaSagar	Krishna/Lower Krishna/Krishna	AP	Nalgonda(Tel), Guntoor (AP)					
2	Srisailem	Krishna/Lower Krishna/Krishna	AP	JogulambaGadwal(Telangana), Kurnool(AP)/ Nalgonda(Telangana), Guntoor (AP)					
3	Musi	Musi/Lower Krishna/Krishna	Tel	Nalgonda					
4	Sri Pada Yellampally	Godavari/Middle Godavari/Godavari	Tel	Mancherla/ JaishankarBhupalpally					
5	Sriramsagar Project	Godavari/Middle Godavari/Godavari	Tel	Nanded (Mah)/Nirmal (Tel)					
6	Kaddam	Kaddam/Middle Godavari/Godavari	Tel	Adilabad, Nirmal/ Mancherla					
7	Singur	Manjira/Manjira/Godavari	Tel	Medak					
8	PD Jurala	Krishna/Middle Krishna/Krishna	Tel	Raichur (Kar)/JogalambaGadwal(Telangana)					
9	Panchet	Damodar/Damodar East/ Ganga	Jhar	Dhanbad, Jamtara (Jhar)/ Puruliya, PaschimBardhaman, Bankura (WB)					
10	Getalsud	Damodar/Damodar West/Ganga & its tributaries	Jhar	Bokaro (Jharkand)					
11	Konar	Konar/Damodar West/Ganga & its tributaries	Jhar	Hazaribagh (Jharkand)					
12	Tilaiya	Barakar/ Barakar West/Ganga & its tributaries	Jhar	Koderma (Jharkand)					
13	Maithon	Barakar/ Barakar East/Ganga	Jhar	Dhanbad, Jamtara (Jhar)/ Puruliya, PaschimBardhaman, Bankura (WB)					
14	Kabini	Kabini/Kabini/Cauvery	Kar	Wayanad (Kerala)/ Mysuru (Kar)					
15	Harangi	Harangi/Harangi/Cauvery	Kar	Kodagu/Mandya					
16	Karanja	Karanja/Manjira/Godavari	Kar	Bidar (Kar), Vikarabad(Tel)/Bidar(Kar)					
17	Almatti	Krishna/Upper Krishna/Krishna	Kar	Kolhapur(Mah)/ Bagalkote(Kar)					
18	Narayanpur	Krishna/Upper Krishna/Krishna	Kar	Bagalkot, Vijayapura/ Raichur, Yaadgir					
19	KRS	Cauvery/Middle Cauvery/Cauvery	Kar	Mandya, Mysore					
20	Tungabhadra	Tungabhadra/Middle Tungabhadra/Krishna	Kar	Gadag/Bellary, Koppal, Raichur					
21	Hemavathy	Hemavathy/ Hemavathy/Cauvery	Kar	Hassan, Kodagu/Mandya, Mysore					
22	Bhadra	Bhadra/UpperTungabhadra/Krishna	Kar	Chikmagalur/Shimoga					
23	Hidkal	Ghataprabha/Ghataprabha/Krishna	Kar	Kolhapur (Mah)/ Belgaum (Kar)					
24	Malaprabha	Malaprabha/Malaprabha/Krishna	Kar	Belgaum					
25	Warana	Warana/Upper Krishna/Krishna	Mah	Kolhapur, Sangli					
26	Koyna	Koyna/ Upper Krishna/Krishna	Mah	Satara/Kolhapur, Sangli					
27	Yeldari	Purna/Purna/Godavari	Mah	Parbhani, Hingoli					
28	Isapur	Penganga/Penganga/Godavari	Mah	Hingoli, Yavatmal/Yavatmal,Nanded					
29	Manjlegaon	Sindphana/Middle Godavari/Godavari	Mah	Bid/Parbhani					
30	Upper Wardha Project	Wardha/Wardha/Godavari	Mah	Wardha, Amravati					
31	Veer Dam	Nira/Upper Bhima/Krishna	Mah	Pune, Satara					
32	Ujjani	Bhima/Upper Bhima/Krishna	Mah	Pune, Solapur					
33	Mula	Mula/Upper Godavari/Godavari	Mah	Ahmadnagar					

34	Totladoh	Pench/Wainganga/Godavari	Mah	Chindwara(MP)/Nagpur(Mah)					
35	Parwati	Parbati/Kalisindh/Upper Chambal	Raj	Baran (Raj)/Baran (Raj), Kota (Raj), Sheopur (MP)					
36	RanaPratapSagar	Chambal/Upper Chambal/Ganga	Raj	Neemuch(MP)/Dholpur,Kota, Bundi(Raj)					
37	Panchana	Gambhiri/Upper Chambal/Ganga	Raj	Karauli					
38	Gudha	Mejchambal/UpperChambal/Ganga	Raj	Bhilwara/Bundi					
39	Kalisindh	Kalisindh/Upper Chambal/Ganga	Raj	Jhalawar, Kota					
40	MahiBajajsagar	Mahi/Mahi B/Mahi	Raj	Ratlam(MP)/Banswara, Pratapgarh,Dungapur (Raj)					
41	SomKamlaAmba	Mahi/Mahi B/Mahi	Raj	Udaipur/Dungarpur					
42	Gambhiri	Gambhiri/Upper Chambal/Ganga	Raj	Chittorgarh					
43	Gandhi Sagar	Chambal/Upper Chambal/Ganga	MP	Mandsaur,Neemuch(MP)/Dholpur(Raj)					
44	Bargi	Narmada/Upper Narmada/Narmada	MP	Mandla, Seoni/Jabalpur, Narsimhapur					
45	Tawa	Tawa/Middle Narmada/Narmada	MP	Betul,Hoshnabad/Sehore					
46	Barna	Barna/Middle Narmada/Narmada	MP	Raisen(MP)					
47	Hathnur	Hatnur/Upper Tapi/Tapi	Mah	Burhanpur (MP)/Jalgaon(Mah)					
48	Rajghat	Betwa/Betwa/Ganga	MP	Ashoknagar(MP), Lalitpur(UP)/Shivpuri, Lalitpur(UP)					
49	Bansagar Dam	Sone./Sone/Ganga	MP	Katni, Umaria, Shahdol, Satna/ Rewa, Sidhi					
50	Upper Wainganga (Sanjay Sarovar)	Wainganga/Wainganga/Godavari	MP	Seoni/Balaghat					
51	Bhavanisagar	Bhavani/Middle Cauvery/Cauvery	TN	Palakad (Kerala), Nilgiri (TN), Coimbatore (TN)/ Erode (TN)					
52	Rengali	Brahmani River/Brahmani and Baitarni/Brahmani and Baitarni	Odisha	Deogarh/Angul, Dhenkanal					
53	Hirakud	Mahanadi River/Upper Mahanadi/Mahanadi	Odisha	JanjgirChampa, Raigarh(Chsgrh), Jharsuguda, Bargarh, Sambalpur(Odisha)/Subarnapur, Baudh, Anugul (Odisha)					
54	Nizamsagar	Manjira/Manjira/Godavari	Tel	Medak/Kamareddy					
55	Ukai	Tapi/Lower Tapi/Tapi	Guj	Nadurbar(Mah), Tapi(Guj)/ Surat (Guj)					
56	Madhuban	Damanganga/Damanganga/West Flowing Rivers from Tapi to Tadri	Guj	Valsad (Guj)/Selvasa (UT of DNH)					
57	Edamalayar	Upper Periyar/Periyar/Periyar	Ker	Coimbatore/Ernakulam					
58	Idukki	Periyar/Upper Periyar/West Flowing Rivers from Tadri to Kanyakumari	Ker	Idduki/Ernakulam					
59	Somasila	Pennar/Lower Pennar/Pennar	AP	Kadapa(AP)/Nellore(AP)					

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.