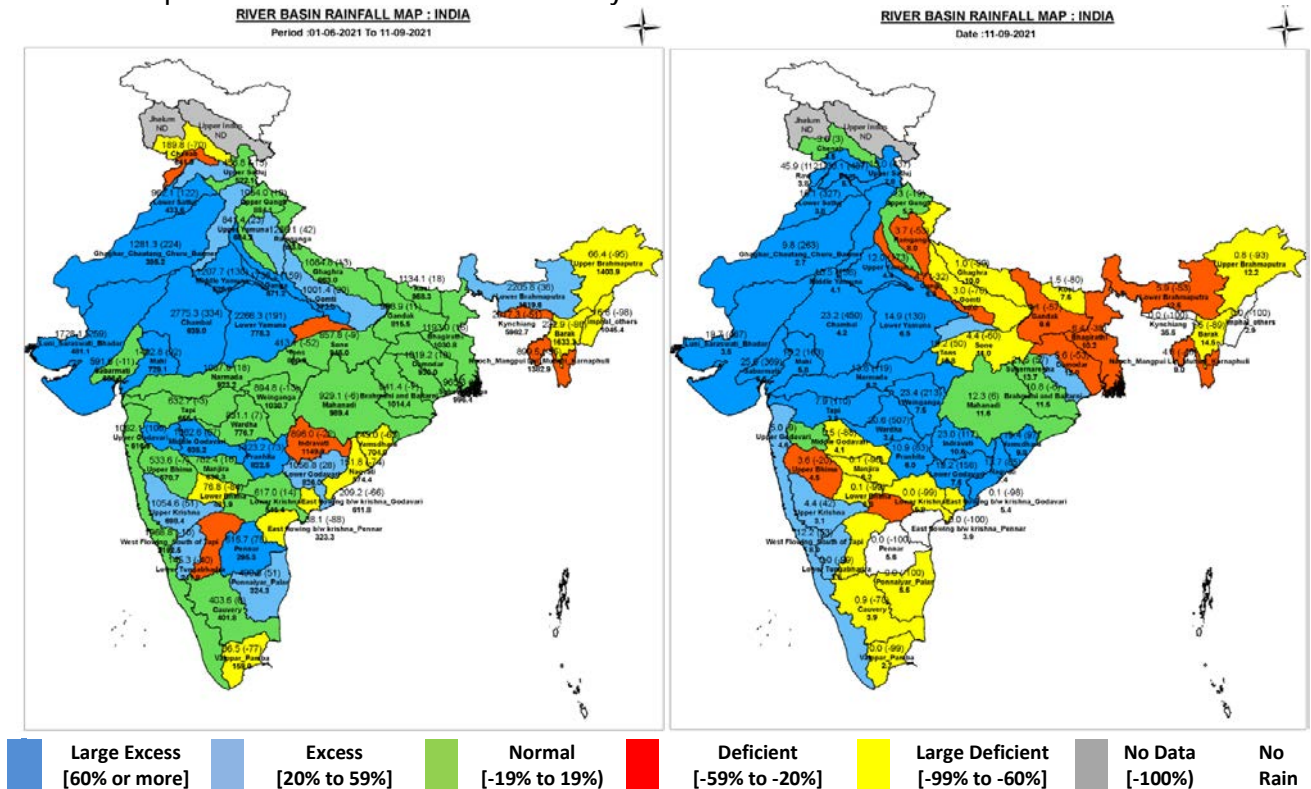




Central Water Commission
Daily Flood Situation Report cum Advisories
11-09-2021

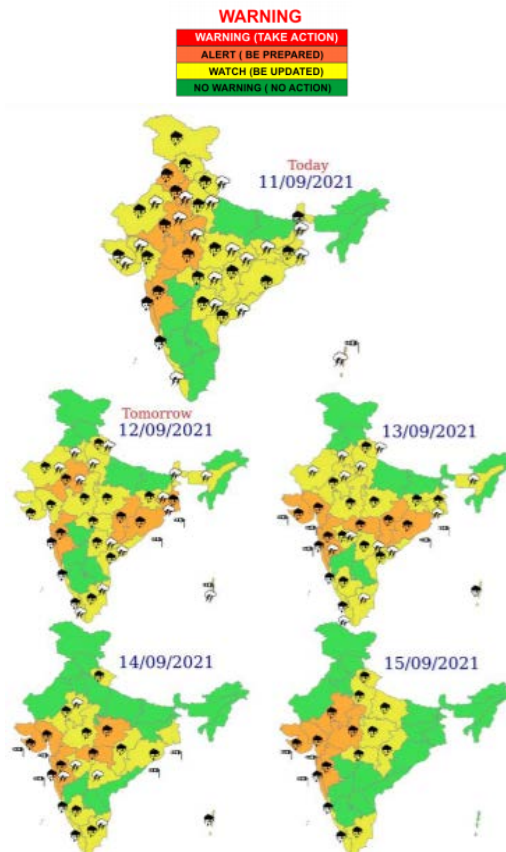
1.0 Rainfall Situation

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 11th September, 2021 (Midday) by IMD



- Very Heavy/Extremely heavy Rainfall over Punjab, Haryana, Chandigarh & Delhi on 11th; Gangetic West Bengal on 12th; East Rajasthan during 11th-12th & 15th; West Madhya Pradesh on 11th & 15th; East Madhya Pradesh on 14th; Odisha on 12th-13th; Gujarat state during 13th-15th; Konkan & Goa, Madhya Maharashtra during 11th- 15th; Vidarbha on 13th&14th; over Chhattisgarh on 12th&13th September, 2021.

2.0 Flood Situation and Advisories

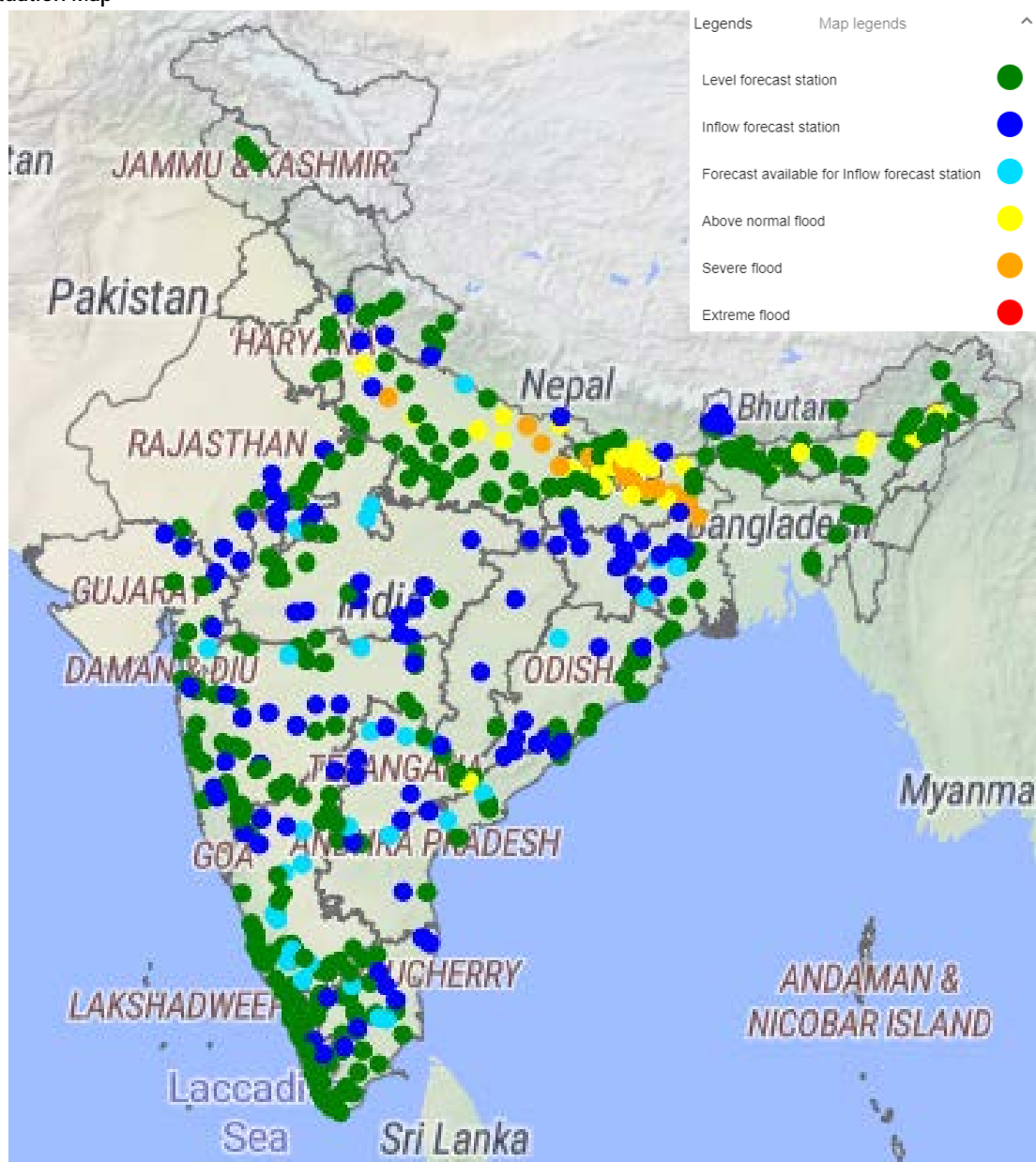
2.1 Summary of Flood Situation as per CWC Flood Forecasting Network

On 11th September, 2021, 16 Stations (10 in Bihar, 4 in Uttar Pradesh and 1 each in Jharkhand & West Bengal) are flowing in Severe Flood Situation and 26 stations (13 in Bihar, 6 each in Uttar Pradesh and Assam & 1 in Andhra Pradesh) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 29 Barrages & Dams (8 in Karnataka, 4 in Telangana, 3 each in Andhra Pradesh & Tamilnadu, 2 each in Uttar Pradesh, Jharkhand & Maharashtra and 1 each in Gujarat, Madhya Pradesh, Odisha, Rajasthan & West Bengal).

FLOOD SITUATION SUMMARY		
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)	0
B	Severe Flood Situation: (Site (s) where water level is touching or exceeding the Danger Level but below Highest Flood Level (HFL))	16
C	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)		42
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)		29

Details are given at link: http://cwc.gov.in/sites/default/files/cfcrcwcdfb-11.09.2021-2_5.pdf

2.1.1 Flood Situation Map



2 CWC Advisories

2.2.1 Brahmani, Baitarni, Mahanadi Basins

Due to presence of low pressure area over Bay of Bengal and its subsequent intensification to depression, rivers such as Brahmani & Baitarni and Mahanadi are expected to get good amount of inflow. Alert may be kept in districts **Bhadrak, Jajapur, Kendraparha, Cuttack, Khordha, Puri & Jagatsinghpur** in **Odisha**. Alert may be also be kept in districts such as **Korba and Gariaband** in **Chhatisgarh**, as water level rise is expected in Mahanadi Basin.

2.2.2 Godavari Basin, Tapi, Mahi, Sabarmati, Banas, West Flowing Rivers from Tapi to Tadri & Krishna

2.2.2.1 Maharashtra

Tapi Basin: Under the effect of heavy rainfall happened in past 3 to 4 days, average inflows of more than 1000 cumec are still expected in Hathnur dam till 11.09.2021 midnight. It is expected that Hathnur dam inflow will show gradual decrease as the rainfall has stopped over the region.

Independent rivers originating from Western Ghats: IMD has predicted strengthening of monsoon current due to likelihood of formation of low pressure area and this would create increased rainfall activity along Konkon Coast, hence there is likelihood of water level rise in rivers originating from Ghat regions such as Gad, Kajvi, Khadapar, Madai, Savitri, Kal, Vashisti, Bav, Wagh & Bogeshwari in next 2 days. Alert may be kept in **Phalghar, Thane**, etc.

Godavari and Krishna Basins: In Godavari basin, water level rise is expected in Mula river and upper Godavari basin. Alert may be kept in districts **Ahmadnagar and Gadchiroli**. In Krishna basin water level rise is expected in rivers Yerala, Nira, Bhima and upper Krishna. Keep watch in districts **Satara, Sangli and Pune**.

2.2.2.2 Telangana

Godavari Basin: Flow created from past 3 to 4 heavy rainfalls are progressing downstream. The peak of induced flood wave has flowed past Telangana. Inflows are in decreasing trend in all major dams. Expected inflows in major projects are as follows, SriramsagarSagar (>2500 cumec), Sripada Yellampally (>5500 cumec), Laxmi Barrage (>16,000 cumec) till tomorrow (12.09.2021) morning. As the storages are high, close watch is to be maintained for any releases from all the dams in the basin as well as for proper gate operation following SOP and after informing the downstream areas in advance. Alert may be kept in districts **B. Kothagudam, Mulugu, Mancherial, J. Bhupapally, Kumaram Bheem & Pedapalle** as heavy rainfall is expected for 2 days.

2.2.2.3 Andhra Pradesh

Godavari Basin: The flood wave created due to past rainfall spell is currently passing through Andhra Pradesh. Inflow into Indira Sagar Dam is currently in falling trend and inflow of 21,500 cumec is expected by today (12.09.2021) night. Godavari is flowing in above normal flood situation in **East Godavari** district. Since upper and middle Godavari basin in Maharashtra and Telangana is expected to receive another rainfall spell, it is expected that, abatement of flood wave in East and West Godavari districts will happen slowly and rise of water level may also be expected.

2.2.3.4 Gujarat, Rajasthan, Madhya Pradesh

Mahi Basin: Mahi Bajaj Sagar Dam, Kadana Dam and Panam Dam are expected to receive heavy inflows in forthcoming 2 days. Rainfall and increased flows can lead to rise in water level in Mahi, Sabarmati rivers and in tributaries of Mahi mainly Panam, Som and Anas. Alert may be kept in district **Dungarpur (Rajasthan)**.

Tapi Basin: Outflow from upstream situated **Hathnur dam (Jalgaon dist., Maharashtra)** will be realized at **Ukai dam (Surat dist, Gujarat)** after 24 hours with added in-between catchment contribution. Expected inflow in Ukai dam is nearly 3472 cumec. Ukai dam inflow is in decreasing trend.

Sabarmati & West Banas Basin: Alert may be kept in districts such as **Udaipur, Sirohi (Rajasthan), Sabarkantha, Mehsana, Banaskantha (Gujarat)**.

Chambal Basin: Due to presence of low pressure area over east Rajasthan, IMD has predicted heavy rainfall in Chambal basin for next 2 days. Hence, water level rise is expected in rivers Berach, Kalisindh & Banas. Alert may be kept in districts **Chittaurgarh & Rajsamand (Rajasthan), Nimach, Mandsaur (Madhya Pradesh)**.

2.2.4 Delhi, Haryana and neighbourhood

Heavy rainfall has been predicted in Delhi, and districts such as Sonipat, Jajjar, Jind of Haryana. Urban flooding is expected.

2.2.5 Ganga Basin- Uttarakhand, Uttar Pradesh, Bihar, Jharkhand & West Bengal

Alert may be kept in **whole Uttarakhand** as heavy rainfall is continuing; increased flows are expected in major rivers and its tributaries such as Alaknanda, Sarju, Sarda, Ramganga, Bhagirathi & Mahakali. Ghagra river originating from Uttarakhand is in above normal flood situation to severe flood situation in Barbanki, Ayodhya and Ballia (U.P) & Siwan (Bihar) with slow rising trend. Other northern tributaries of Ganga in Uttar Pradesh & Bihar such as Rapti, Gandak, Burhi Gandak, Bagmati, Adhwara, Kamla, Kosi, Parman & Mahananda continue to flow in Severe to Above Normal Flood Situation with steady/falling trend. In coming days, flooding situation is expected to recede slowly. Main Ganga stem is also flowing in above normal to severe flood situation in Bihar with falling trend.

2.3 Flash Flood Guidance

IMD has issued Flash Flood Guidance of moderate risk over few watersheds and neighbourhoods of Odisha, coastal Andhra , Himachal, Uttarakhand, southern part of East& West Rajasthan, N.Gujarat region, N.west part of west Madhya Pradesh met sub divisions in next 24 hours.

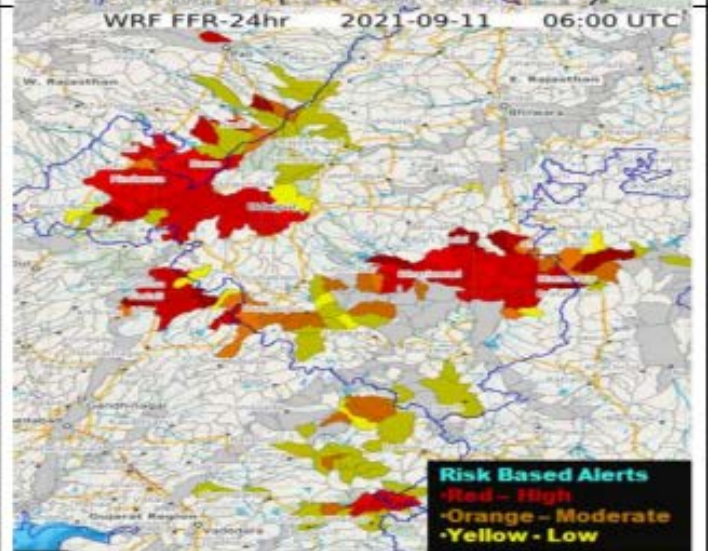
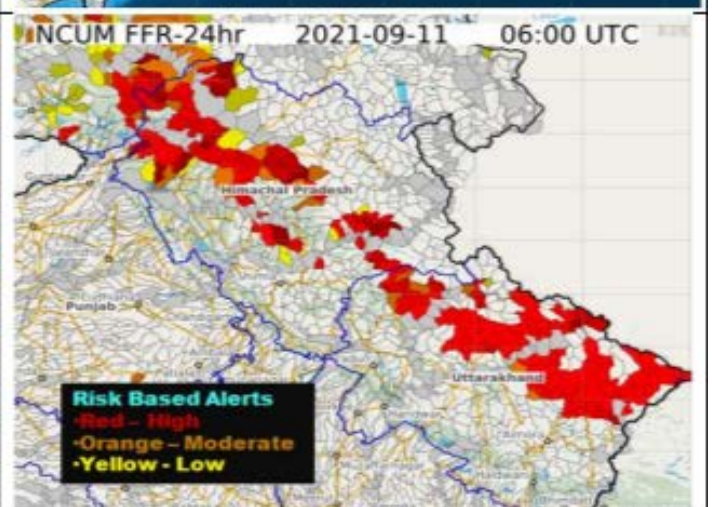
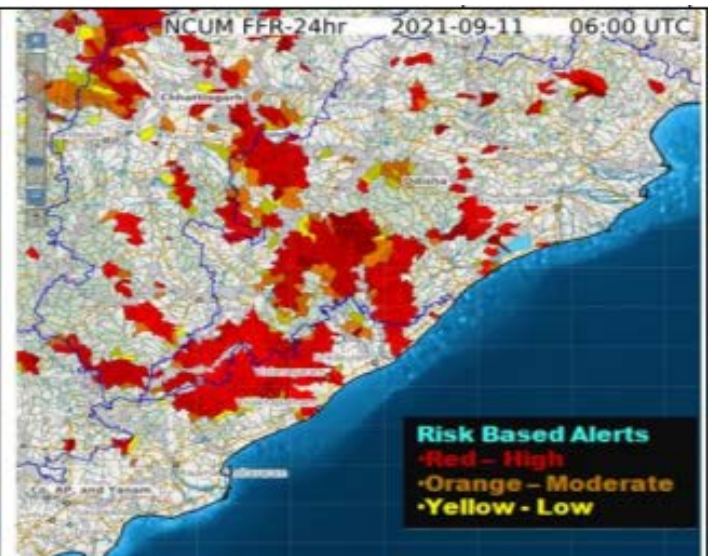
24 hours Outlook for the Flash Flood Risk (FFR) till 1130 IST of 12.09.2021:

Moderate to High Risk over few watersheds and neighborhood of Odisha adjoining Coastal Andhra Pradesh met subdivision in next 24 hours.

Moderate Risk over few watersheds and neighborhood of Himachal Pradesh and Uttarakhand met subdivision in next 24 hours.

Moderate Risk over few watersheds and neighborhood of Southern part of East Rajasthan adjoining West Rajasthan, Northern part of Gujarat Region, Northwest part of West Madhya Pradesh met subdivision in next 24 hours.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over AoC as shown 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 11thSeptember, 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	Musi	Musi/Lower Krishna/ Krishna	Tel	Nalgonda					
3	Sri Pada Yellampally	Godavari/Middle Godavari/Godavari	Tel	Mancheria/ JaishankarBhupalpally					
4	Sriramsagar Project	Godavari/Middle Godavari/Godavari	Tel	Nanded (Mah)/Nirmal (Tel)					
5	Kaddam	Kaddam/Middle Godavari/Godavari	Tel	Adilabad, Nirmal/ Mancheria					
6	Singur	Manjira/Manjira/Godavari	Tel	Medak					
7	Panchet	Damodar/Damodar East/ Ganga	Jhar	Dhanbad, Jamtara (Jhar)/ Puruliya, PaschimBardhaman, Bankura (WB)					
8	Getalsud	Damodar/ Damodar West/Ganga & its tributaries	Jhar	Bokaro (Jharkand)					
9	Konar	Konar/ Damodar West/Ganga & its tributaries	Jhar	Hazaribagh (Jharkand)					
10	Tilaiya	Barakar/ Barakar West/Ganga & its tributaries	Jhar	Koderma (Jharkand)					
11	Maithon	Barakar/ Barakar East/Ganga	Jhar	Dhanbad, Jamtara (Jhar)/ Puruliya, PaschimBardhaman, Bankura (WB)					
12	Kabini	Kabini/Kabini/Cauvery	Kar	Wayanad (Kerala)/ Mysuru (Kar)					
13	Harangi	Harangi/Harangi/Cauvery	Kar	Kodagu/Mandya					
14	Karanja	Karanja/Manjira/Godavari	Kar	Bidar (Kar), Vikarabad(Tel)/Bidar(Kar)					
15	Almatti	Krishna/Upper Krishna/Krishna	Kar	Kolhapur(Mah)/ Bagalkote(Kar)					
16	Narayanpur	Krishna/Upper Krishna/Krishna	Kar	Bagalkot, Vijayapura/ Raichur, Yaadgir					
17	KRS	Cauvery/Middle Cauvery/Cauvery	Kar	Mandya, Mysore					
18	Tungabhadra	Tungabhadra/Middle Tungabhadra/Krishna	Kar	Gadag/Bellary, Koppal, Raichur					
19	Hemavathy	Hemavathy/ Hemavathy/Cauvery	Kar	Hassan, Kodagu/Mandya, Mysore					
20	Bhadra	Bhadra/UpperTungabhadra/Krishna	Kar	Chikmagaluru/Shimoga					
21	Hidkal	Ghataprabha/Ghataprabha/Krishna	Kar	Kolhapur (Mah)/ Belgaum (Kar)					
22	Malaprabha	Malaprabha/Malaprabha/Krishna	Kar	Belgaum					
23	Warana	Warana/Upper Krishna/Krishna	Mah	Kolhapur, Sangli					
24	Koyna	Koyna/ Upper Krishna/Krishna	Mah	Satara/Kolhapur, Sangli					
25	Yeldari	Purna/Purna/Godavari	Mah	Parbhani, Hingoli					
26	Isapur	Penganga/Penganga/Godavari	Mah	Hingoli, Yavatmal/Yavatmal,Nanded					
27	Manjlegaon	Sindhphana/Middle Godavari/Godavari	Mah	Bid/Parbhani					
28	Parwati	Parbati/Kalisindh/Upper Chambal	Raj	Baran (Raj)/Baran (Raj), Kota (Raj), Sheopur (MP)					
29	RanaPratapSagar	Chambal/Upper Chambal/Ganga	Raj	Neemuch(MP)/Dholpur,Kota, Bundi(Raj)					
30	Panchana	Gambhiri/Upper Chambal/Ganga	Raj	Karauli					
31	Gudha	Mejchambal/UpperChambal/Ganga	Raj	Bhilwara/Bundi					
32	Kalisindh	Kalisindh/Upper Chambal/Ganga	Raj	Jhalawar, Kota					
33	Gandhi Sagar	Chambal/Upper Chambal/Ganga	MP	Mandsaur,Neemuch(MP)/Dholpur(Raj)					
34	Bargi	Narmada/Upper Narmada/Narmada	MP	Mandla, Seoni/Jabalpur, Narsimhapur					
35	Tawa	Tawa/Middle Narmada/Narmada	MP	Betul,Hoshnabad/Sehore					
36	Rajghat	Betwa/Betwa/Ganga	MP	Ashoknagar(MP), Lalitpur(UP)/Shivpuri, Lalitpur(UP)					

37	Bhavanisagar	Bhavani/Middle Cauvery/Cauvery	TN	Palakad (Kerala), Nilgiri (TN), Coimbatore (TN)/ Erode (TN)					
38	Rengali	Brahmani River/Brahmani and Baitarni/Brahmani and Baitarni	Odisha	Deogarh/Angul, Dhenkanal					
39	Madhuban	Damanganga/Damanganga/West Flowing Rivers from Tapi to Tadri	Guj	Valsad (Guj)/Selvasa (UT of DNH)					
40	Nizamsagar	Manjira/Manjira/Godavari	Tel	Medak/Kamareddy					
41	Srisailem	Krishna/Lower Krishna/Krishna	AP	JogulambaGadwal(Telangana), Kurnool(AP)/ Nalgonda(Telangana), Guntoor (AP)					
42	Ukai	Tapi/Lower Tapi/Tapi	Guj	Nadurbar(Mah), Tapi(Guj)/ Surat (Guj)					
43	PD Jurala	Krishna/ Middle Krishna/Krishna	Tel	Raichur(Kar)/Kurnool(Andhra Pradesh),JogulambaGadwal(Tel)					

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.