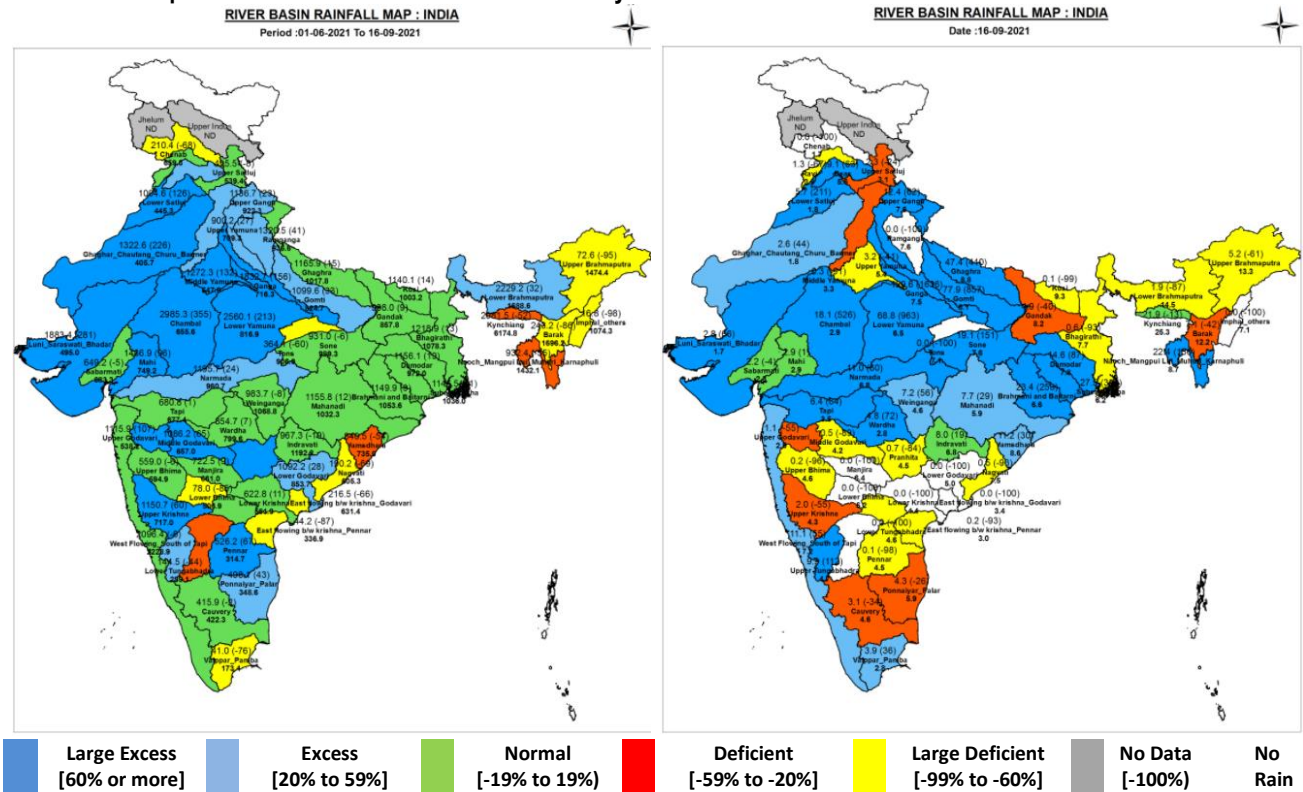




Central Water Commission
Daily Flood Situation Report cum Advisories
16-09-2021

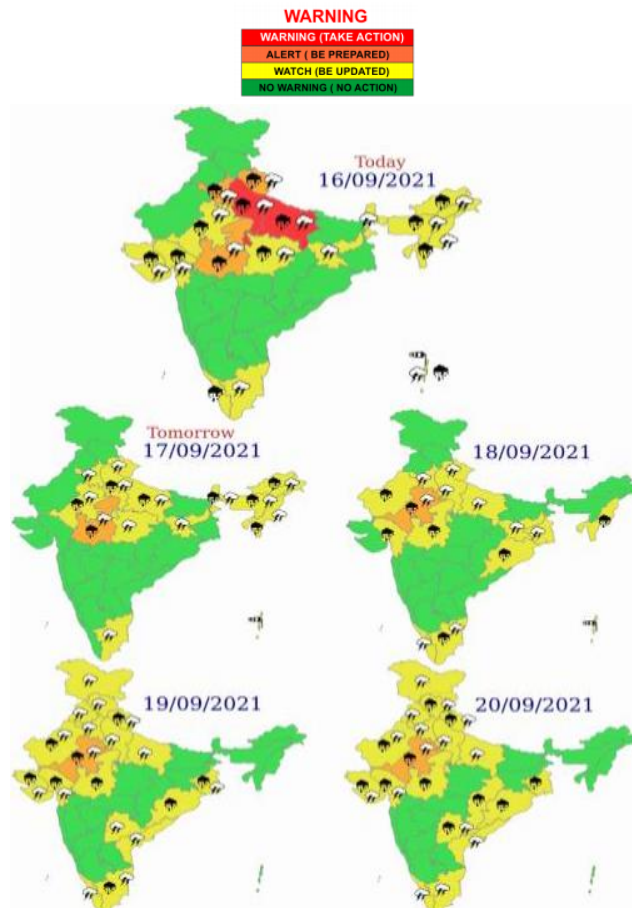
1.0 Rainfall Situation

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 16th September, 2021 (Midday) by IMD



- Extremely Heavy Rainfall over Uttar Pradesh on 16th and Very Heavy Rainfall over Uttarakhand on 16th; West Madhya Pradesh on 16th & 17th; East Rajasthan during 18th-20th and Gujarat Region on 19th & 20th September, 2021.

2.0 Flood Situation and Advisories

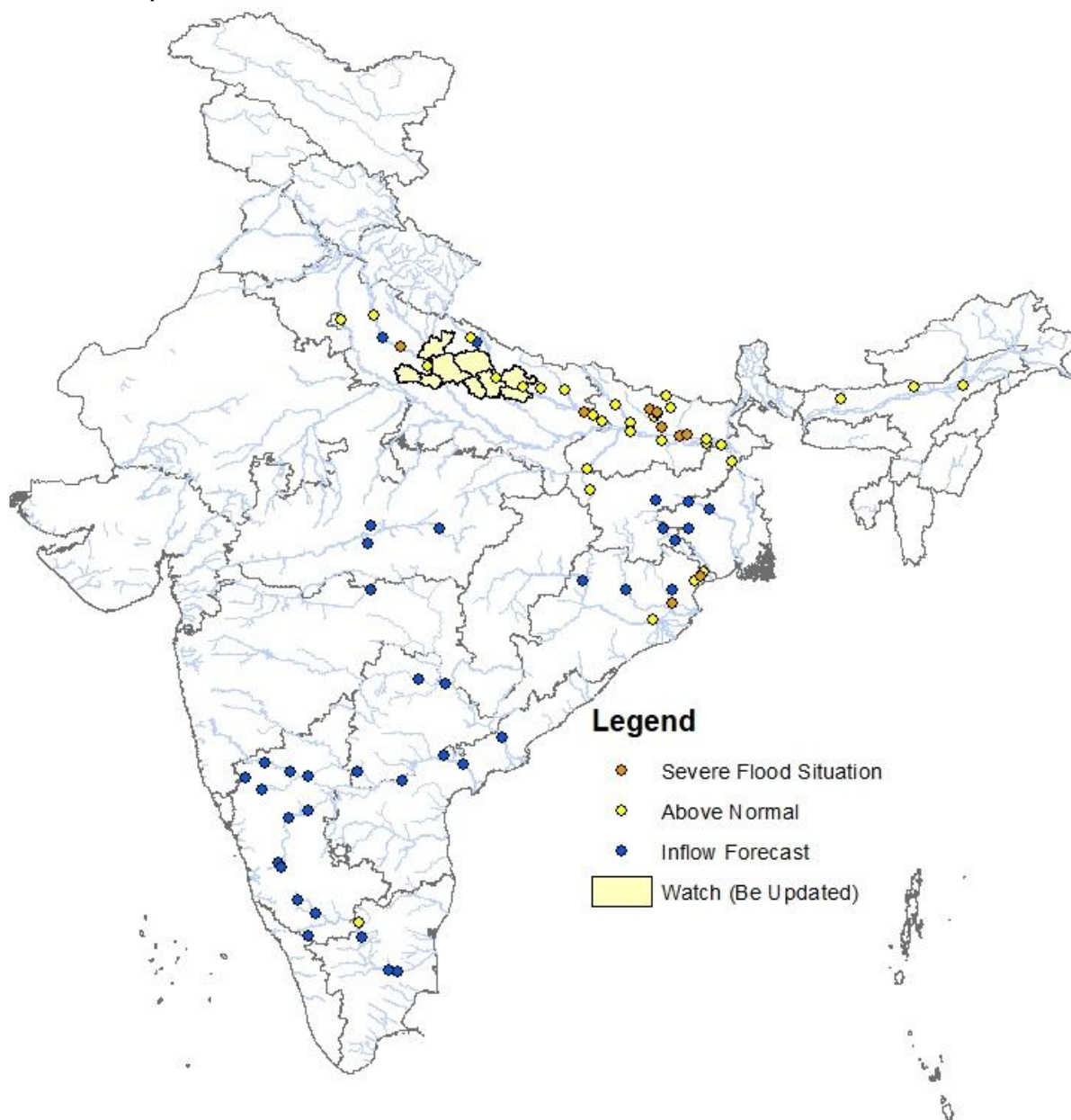
2.1 Summary of Flood Situation as per CWC Flood Forecasting Network

On 16th September, 2021, 10 Stations (6 in Bihar, 3 in Uttar Pradesh, 2 in Odisha) are flowing in Severe Flood Situation and 24 stations (9 in Bihar, 5 in Uttar Pradesh, 3 each in Assam & Odisha and 1 each in Delhi, Jharkhand, Tamilnadu & West Bengal) are flowing in Above Normal Flood Situation. Inflow Forecast has been issued for 37 Barrages & Dams (12 in Karnataka, 4 each in Andhra Pradesh & Jharkhand, 3 each in Madhya Pradesh, Odisha, Tamilnadu & Telangana, 2 each in Uttar Pradesh & West Bengal and 1 in Maharashtra).

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))	10
C	Above Normal Flood Situation: (Site (s) where water level is touching or exceeding the Warning Level but below Danger Level)	24
Total number of sites above Warning Level (A+B+C)		34
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)		37

Details are given at link: http://cwc.gov.in/sites/default/files/cwcdfb-16.09.2021_4.pdf

2.1.1 Flood Situation Map



2.2 CWC Advisories

2.2.1 Ganga and its tributaries - Uttar Pradesh, Bihar, Madhya Pradesh, Delhi, Haryana, Uttarakhand

2.2.1.1 Uttar Pradesh

IMD has predicted extremely heavy falls in Uttar Pradesh for today. Hence Water levels rise is expected in rivers Ramganga, Gomti, Yamuna, Ghagra, Rapti and main Ganga river. Alert may be kept in districts **Pilibhit, Hardoi, Sitapur, Kheri, Barabanki, Lucknow, Sultanpur, Amethi & Unnao** (Gomti basin), **Shahjahanpur, Pilibhit, Hardoi, Bareilly** (Ramganga basin), **Mainpuri, Etawah, Firozabad, Auraiya & Kanpur** (Yamuna basin), **Sitapur, Kheri, Bahraich, Barabanki & Ambedkarnagar** (Ghagra basin); **Faizabad** (Rapti basin). Currently, river Ghagra is flowing in Severe to above normal flood situation in Barabanki, Ayodhya & Ballia districts with rising trend. River Rapti is flowing in above normal flood situation with rising trend in **Gorakhpur** district.

2.2.1.2 Sindh, Betwa, Tons- Madhya Pradesh

Rainfall is expected to decrease over the region as the pressure system has reduced in strength. Alert may be kept in districts **Bhind, Datia, Morena** (Sindh basin); **Chhatarpur, Sagar** (Betwa basin); **Rewa** (Tons basin). Heavy inflows are expected in the major storages in the above said districts. Hence releases from dams may be done as per SOP after informing downstream districts/ states.

2.2.1.3 Bihar

Flooding situation in Northern tributaries of Ganga such as Gandak, Burhi Gandak, Bagmati, Adhwara, Kamalabalan Kosi and main Ganga are in receding trend. But in coming days, it is expected that water levels in main Ganga may rise due to runoff created from rivers in east U.P.

2.2.1.4 Delhi & Haryana

Alert may be kept in **Delhi**, and districts such as **Sonipat, Jhajjar, Gurgaon, Faridabad, Mewat, Palwal, Rewari, Mahendragarh** for urban flooding. Localized flooding of roads, inundation and water logging in low lying areas and closure of underpasses mainly in urban areas of the above region may be expected. Disruption of traffic in major cities due to water logging in roads can also occur.

2.2.1.5 Uttarakhand

Alert may be kept in **whole Uttarakhand** as heavy rainfall has been predicted for next 2 days. Increased flows are expected in rivers major rivers and its tributaries such as Alaknanda, Sarju, Sarda, Ramganga, Bhagirathi & Mahakali.

2.2.2 Brahmani, Baitarni, Subernrekha, Damodar, Mahanadi

2.2.2.1 West Bengal

Water level rise is expected in the rivers such as Kasai, Damodar, Silai, Ajoy, Subernarekha, etc. Hence alert may be kept in districts **Birbhum, Puruliya, Bankura, Pashchim Medinipur, East Medinipur, Jhargum & Pashchim Bardhaman**.

2.2.2.2 Odisha

Since the low pressure system has travelled past Odisha, rainfall has reduced considerably over the region. Most of the sites in upper and lower reaches of rivers Subernarekha, Brahmani, Baitarni are in slightly rising to steady state. In tail end parts currently, river Jalka of **Subarnarekha basin in Balasore** district and river **Baitarni in Bhadrak** district are flowing in severe flood situation with rising trend. River **Burhabalang in Balasore** district is flowing in above normal flood situation with rising trend.

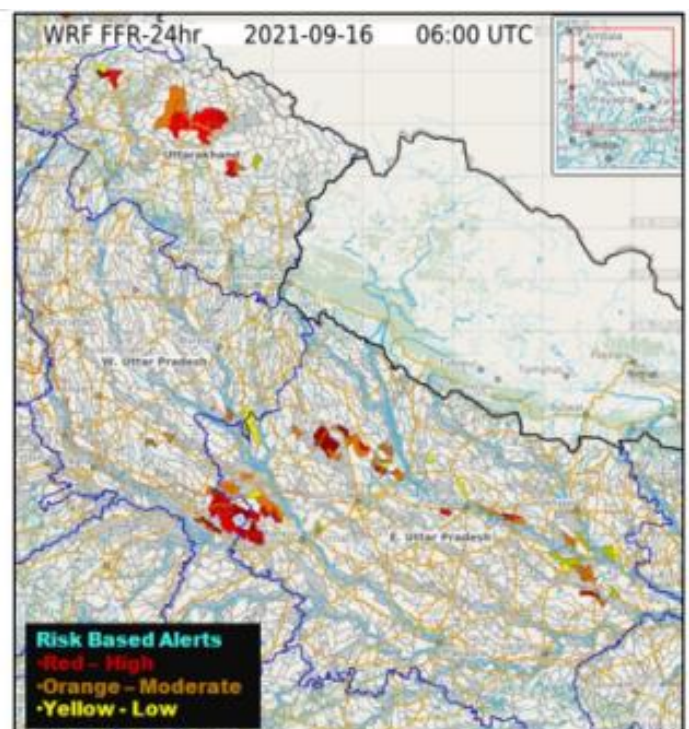
2.3 Flash Flood Guidance

IMD has issued Flash Flood Guidance of high risk over few watersheds and neighborhoods of East Uttar Pradesh adjoining West Uttar Pradesh and Uttarakhand met subdivisions in next 24 hours.

24 hours Flash Flood Risk Outlook Till 1130 IST of 17.09.2021:

High Risk likely over few watersheds and neighborhoods of **East Uttar Pradesh, adjoining West Uttar Pradesh and Uttarakhand 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 16th 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
---------------------	---	--------	-------	-------	-------	-------	--------	------

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

36	Panchana	Gambhiri/Upper Chambal/Ganga	Raj	Karauli					
37	Gudha	Mejchambal/UpperChambal/Ganga	Raj	Bhilwara/Bundi					
38	Kalisindh	Kalisindh/Upper Chambal/Ganga	Raj	Jhalawar, Kota					
39	MahiBajajsagar Dam	Mahi/Mahi B/Mahi	Raj	Ratlam(MP)/Banswara, Pratapgarh,Dungapur (Raj)					
40	SomKamlaAmba Dam	Mahi/Mahi B/Mahi	Raj	Udaipur/Dungarpur					
41	Gandhi Sagar	Chambal/Upper Chambal/Ganga	MP	Mandsaur,Neemuch(MP)/Dholpur(Raj)					
43	Bargi	Narmada/Upper Narmada/Narmada	MP	Mandla, Seoni/Jabalpur, Narsimhapur					
44	Tawa	Tawa/Middle Narmada/Narmada	MP	Betul,Hoshnabad/Sehore					
45	Omkareshwar Dam	Narmada/Narmada b/w Hosangabad to SSP/Narmada	MP	Khandwa/Khargone					
46	Rajghat	Betwa/Betwa/Ganga	MP	Ashoknagar(MP), Lalitpur(UP)/Shivpuri, Lalitpur(UP)					
48	Sanjay Sarovar	Wainganga/Wainganga/Godavari	MP	Seoni					
50	Bhavanisagar	Bhavani/Middle Cauvery/Cauvery	TN	Palakad (Kerala), Nilgiri (TN), Coimbatore (TN)/ Erode (TN)					
51	Rengali	Brahmani River/Brahmani and Baitarni/Brahmani and Baitarni	Odisha	Deogarh/Angul, Dhenkanal					
52	Hirakud	Mahanadi River/Upper Mahanadi/Mahanadi	Odisha	JanjgirChampa, Raigarh(Chsgrh), Jharsuguda, Bargarh, Sambalpur(Odisha)/Subarnapur, Baudh, Anugul (Odisha)					
53	Nizamsagar	Manjira/Manjira/Godavari	Tel	Medak/Kamareddy					
54	Ukai	Tapi/Lower Tapi/Tapi	Guj	Nadurbar(Mah), Tapi(Guj)/ Surat (Guj)					
55	Madhuban	Damanganga/Damanganga/West Flowing Rivers from Tapi to Tadri	Guj	Valsad (Guj)/Selvasa (UT of DNH)					
56	Edamalayar	Upper Periyar/Periyar/Periyar	Ker	Coimbatore/Ernakulam					
57	Idukki	Periyar/Upper Periyar/West Flowing Rivers from Tadri to Kanyakumari	Ker	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.