



## Daily Flood Situation Report cum Advisories

10-08-2019

### 1.0 IMD information

### 1.1 Rainfall Situation

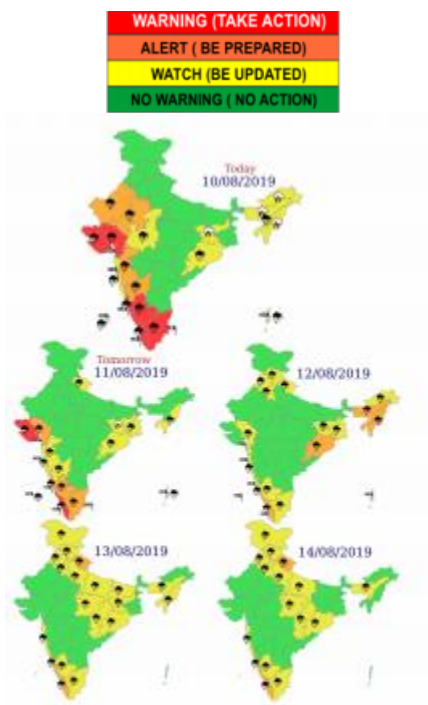
#### 1.1.1 Amount of rainfall recorded at 0830 hours IST of today (17 cm or more) as per IMD

Name of Place (State)	Rainfall (in cm)
Humchadakatte (Karnataka)	39
Barwala (Gujarat)	38
Avalanchi (Tamilnadu)	35
Mahuda (Gujarat)	34
Dhanduka (Gujarat), Kalasa (Karnataka)	32
Subrahmanya (Karnataka)	31
Kadi (Gujarat), Vadakara (Kerala)	30 each
Gadhda, Botad (Gujarat), Ottapalam (Kerala), Mudigere (Karnataka)	29 each
Linganamakki (Karnataka)	27
Ranpur & Ghaiteshwar (Gujarat), Bhagamandala (Karnataka)	26 each
Chuda & Dholera (Gujarat)	24 each
Kalol (Gujarat), Dharamsthala & Hosanagara (Karnataka)	23 each
Belthangadi (Karnataka), Hosdurg (Kerala)	22 each
Jotana, Dharangadhara, Surendranagar, Vallabhipur & Kandla (Gujarat), Siddapur, Kammardi & Jayapura (Karnataka), Irrikur & Vythri (Kerala)	21 each
Chote Udaipur, Nadiad & Rajkot (Gujarat)	20 each
Rapar, Bodeli, Dediapada, Thangadh & Vadhvan (Gujarat), Bbara (Madhya Pradesh), Ajra (Maharashtra), Ponnampet, Sakleshpur & Thirthahalli (Karnataka), Quilandy (Kerala) & Upper Bhavani (Tamilnadu)	19 each
Sanand, Mehsana, Anand & Katalal (Gujarat), Radhanagari (Maharashtra), Virajpet (Karnataka), Mahe (Puducherry), Pattambi (Kerala)	18 each
Desar, Thasra, Dholka, Bhacau, Halvad, & Vichhiya (Gujarat), Mahabaleshwar (Maharashtra), Uppinangadi, Mangaluru AP, Mudibidre & Sringeri (Karnataka), Amabalvayal & Karipur AP	17 each





### 1.1.2 Rainfall forecast for next 5 days issued on 10<sup>th</sup> August, 2019 (Midday) by IMD



## 2.0 CWC inferences

### 2.1 Flood Situation

#### 2.1.1 Summary of Flood Situation as per CWC Flood Forecasting network

FLOOD SITUATION SUMMARY		
<b>PART - I: LEVEL FORECAST</b>		
S.No.	Flood Situations	Numbers of Forecasting Sites
<b>A</b>	Extreme Flood Situation: (Site (s) where the previous Highest Flood Level (HFL) is exceeded or equalled)	<b>4</b>
<b>B</b>	Severe Flood Situation: (Site (s) where water level is touching or exceeding the Danger Level but below Highest Flood Level (HFL))	<b>8</b>
<b>C</b>	Above Normal Flood Situation: (Site (s) where water level is touching or exceeding the Warning Level but below Danger Level)	<b>23</b>
<b>D</b>	Normal Flood Situation with Forecast: (Site (s) where water level is below Warning Level but Forecast Issued)	<b>7</b>
Total number of sites above Warning Level ( A+B+C)		<b>42</b>
<b>PART - II: INFLOW FORECAST</b>		
Number of sites for which inflow forecasts issued: (Where Inflows are equal or exceed the specified Threshold Limit for a particular reservoir / barrage)		<b>26</b>

For detail bulletins refer to [http://cwc.gov.in/sites/default/files/cfcr-cwcdfb10082019\\_1.pdf](http://cwc.gov.in/sites/default/files/cfcr-cwcdfb10082019_1.pdf)





## 2.1.2 Flood Situation as per actual/ forecasted rainfall situation

IMD has forecasted heavy to very Heavy rain at few places with isolated Extremely Heavy rainfall in Gujarat Coastal and South Interior Karnataka, Kerala and Tamilnadu on 11<sup>th</sup> and then slow reduction everywhere except Kerala where heavy to very heavy rain is likely to continue for all five days from 11<sup>th</sup> to 15<sup>th</sup> August 2019.

## 2.2. Gujarat

### 2.2.1 West Flowing Rivers

Due to extremely heavy rain which occurred over Gujarat region as well as Saurashtra and Kutch, many of the rivers in the above regions are in flood. As per Government of Gujarat Flood report, the storages in dams in various districts is less except in Mahisagar, Tapi, Morbi and Panchmahal district where the dam levels have reached warning or alert category as indicated in the Table below:

Date :- 10-08-2019

Gross Storage of major schemes													
Sche me Id	District	Name Of Scheme	FRL in ft.	Rule level 01/09 in ft.	level As On. 01/06 in ft.	PWL in ft.	Design Gross Storage in MCM	Present Gross Storage in MCM	percentage %	warning	Inflow in Cusecs	Outflow in Cusecs (River)	Outflow in Cusecs (Canal)
5	Banaskantha	Sipu	612	607.00	575.26	579.68	161.43	17.73	10.98%	NIL	579	0	0
13	Mehsana	Dharoi	622	619.00	587.67	591.30	813.14	170.26	20.94%	NIL	3333	0	0
30	Aravalli	Hathmati	593	UG	569.25	570.70	145.90	17.77	12.18%	NIL	5000	0	0
27	Aravalli	Watrak	447	446.00	413.74	418.70	158.20	29.93	18.92%	NIL	1700	0	0
17	Mahisagar	Kadana	419	416.00	393.17	410.33	1249.30	987.88	79.07%	WARNING	69187	0	300
36	Tapi	Ukai	345	335.00	277.82	333.76	7414.29	5532.46	74.62%	WARNING	508471	184494	600
42	Valsad	Damanganga	262	249.00	211.28	239.17	524.86	254.25	48.44%	NIL	26487	23951	0
40	Chhotaudepur	Sukhi	485	483.00	447.89	479.92	173.01	143.15	82.74%	ALERT	2168	14175.44	0
76	Bhavnagar	Shetrunji	182	182.00	157.22	166.40	308.68	74.31	24.07%	NIL	0	0	0
148	Rajkot	Bhadar	354	354.00	325.06	336.48	188.14	35.33	18.78%	NIL	12409	0	0
94	Jamnagar	Und-I	322	322.00	278.87	304.29	69.05	13.35	19.33%	NIL	35700	0	0
14	Panchmahal	Panam	418	418.00	399.11	412.72	578.18	473.48	81.89%	ALERT	11960	0	0
150	Morbi	Machchhu-II	188	188.00	168.31	176.54	87.90	36.02	40.97%	NIL	42886	0	0
4	Banaskantha	Dantiwada	604	600.00	547.50	550.39	393.62	32.70	8.31%	NIL	4304	0	2
6	Narmada	Karjan	378	363.00	326.77	357.05	538.75	365.75	67.89%	NIL	47025	39825	0
189	Morbi	Brahmani	212	UG	188.94	188.97	58.33	4.53	7.77%	NIL	463	0	0
158	Morbi	Machchhu - I	444	UG	414.56	433.95	68.95	32.85	47.64%	NIL	23155	0	0
Total Storage Of Major Dams							12931.73	8221.74	63.58%				
	NARMADA	SARDAR SAROVAR	454.98		393.79	429.75	9460.00	7149.37	75.57%	NIL	430118.00	41948.00	14563.00
Total Storage Of Other Dams							2832.43	1036.15	36.58%				
Total Storage							25224.16	16407.26	65.05%				

There is high alert in the districts of Botad, Bharuch, Narmada, Tapi Districts as the dams are getting heavy inflows due to widespread rain. Since rain is expected to continue in Saurashtra and Kutch areas for next 24 hours, maximum alert have to be maintained in the rivers flowing in districts of Saurashtra and Kutch. Dams in these districts should keep strict watch and any release should be done after giving sufficient warnings to downstream areas. River Narmada at Bharuch is flowing in Severe Flood Situation and Sardar Sarovar Dam is getting inflows of the order of 2.5 to 3Lakh cusec. River Tapi is also getting inflows into Ukai Dam and the releases from this dams are inundating low lying areas in Surat City. However, the river level is below Warning Level.



## 2.2.2 Godavari Basin in Maharashtra, Chhattisgarh, Odisha, Telangana and Andhra Pradesh

River Godavari also continues in Above Normal Flood with falling trend in Kunavaram, Dowlaiswaram in East Godavari District of Andhra Pradesh. Rains have also occurred in upstream of Nasik in the source regions of Godavari. Strict watch is to be maintained for any rise in reservoir levels in Upper Godavari basin and releases if any should be done after proper information to downstream areas.

## 2.2.4 Krishna Basin in States of Maharashtra, Karnataka, Telangana and Andhra Pradesh

Due to ongoing extremely heavy rainfall for the past two weeks, river River Krishna and its tributaries Panchganga and Doodhganga are flowing in Extreme Flood Situation at Kurundwad in Kolhapur, Arjunwad in Sangli District, Terwad in Kolhapur District and Sadalga in Belagavi District of Karnataka with falling trend respectively.

Since rainfall has reduced considerably in Source regions, the floods in Maharashtra may reduce in two days.

However, in Karnataka due to combined effect of Krishna, Ghataprabha, Malaprabha and Bhima, the inflows into major dams are still increasing and around 5 to 6 lakh cusec is being received in Almatti, Narayanpur dams in Vijayapura and Yadgir Districts of Karnataka. River Bhima is flowing in Severe Flood Situation in Deongaon Bridge in Kalaburagi District. The combined inflow of Krishna and Bhima is being received in P D Jurala Project in Jogulamba Gadwal which is being released downstream to Srisailem Dam in Kurnool District of Andhra Pradesh. As Srisailem dam has reached very near to its Full reservoir Level (FRL), they have started releasing to Nagarjunasagar Dam in Nalgonda District of Telangana.

River Tungabhadra is also in floods in South Karnataka and is flowing in Severe to Extreme Flood Situation in many of the Hydrological Observation Stations in the districts of Shivamogga, Koppal, Davangere, Ballari. Tungabhadra Dam in Ballari District is nearing its FRL and is likely to start outflows within next 12 to 24 hours which have been sent in the form of an advisory. The releases from Tungabhadra Dam will be meeting Krishna in the district of Kurnool upstream of Srisailem Dam. This will add further inflows to Srisailem Dam who will in turn has to release it to Nagarjunasagar Dam, in view of the prevailing situation, it is inferred that Nagarjunasagar Dam may receive about 130 to 150nTMC in the next 3-4 days which will take it very close to its FRL. All precautions have to be taken for any releases to be made downstream after informing all concerned stakeholders including other States.

## 2.2.5 Cauvery Basin in States of Kerala, Karnataka and Tamilnadu

Due to extremely heavy rainfall in upstream reaches in source regions of Cauvery and its tributaries most of the dams in Upper Cauvery Basin have attained very near their FRL and have started releasing excess flow. As at 6 PM, Kabini Dam is releasing 1.2 lakh cusec and KRS Dam is releasing 0.45 lakh cusec. The release from Kabini Dam resorted to from day before yesterday have reached Tamilnadu Border yesterday and the flow in river Cauvery has increased to around 1 Lakh cusec by today morning at Biligundulu CWC site which is in Severe Flood Situation in Dharmapuri District of Tamilnadu. Mettur Dam will be receiving the inflows from all upstream dams and is likely to get approximately about 12 to 15 TMC per day for next 3-4 days.

Due to extremely heavy rain in Nilgiri District and adjoining Palakkad District of Kerala, river Bhavani and its tributaries are also in flood and the waters are coming as inflows in to Bhavanisagar Dam in Erode District. As the dam has very little storage, this spell of flood will increase the storage in this dam. Other dams in this sub-basin such as Pykara Hydro-electric project, Upper Bhavani Project, Pilloor Project have also reached very close to their FRL and have started releasing inflows.

## 2.2.6 West Flowing Rivers in Kerala and Karnataka

Due to extremely heavy rain in Kerala in the districts of Kasaragod, Kannur, Kozhikode, Wynad, Malappuram, Palakkad and Thrissur district, most of the rivers in North and Central Kerala are flowing in Severe to Extreme Flood Situation. Since very heavy rainfall forecast has been given for another 5 days in many of this districts, strict watch need to be maintained in all these districts as well as in dams in these basins.



Similarly, rivers Netravathi, Aghanashini and heir major tributaries are also flowing in Above Normal to Severe Flood Situation in Dakshina Kannada, Udupi and Uttara Kannada districts of Karnataka. Strict watch is to be maintained on Konkan Railway/ Road routes in these areas as there is likelihood of submergence of bridges in these areas.

### 2.2.7 Chambal Basin

Due to rain in East Rajasthan, river Chambal and its tributaries are rising in Chambal basin. Gandhisagar Dam is getting inflows of the order of 4500 cumec and has around 391 m of reservoir level compared to its FRL of 399.99 m.

### 2.2.8 Assam

Rivers Dhansiri (S) and Brahmaputra are flowing in Severe Flood Situation in the districts of Jorhat and Golaghat. These are likely to continue in Severe to Above Normal Flood for the next 2-3 days.

### 2.2.9 Bihar

Rivers Gandak, Burhi Gandak, Bagmati, Adhwara Group, Kamla Balan, Kosi and Mahananda continue in Severe to Above Normal Flood Situation. This is likely to continue for another 2-3days in Bihar and then slowly fall as rainfall is not forecasted in Bihar.

#### Flood Affected Districts include:

<b>Bihar:</b>	North Bihar Districts
<b>Assam:</b>	Jorhat, Golaghat
<b>Maharashtra:</b>	Ratnagiri, Sindhudurg, Thane, Raigad, Palghar, Pune, Sholapur, Satara, Sangli, Kolhapur, Nasik
<b>Karnataka:</b>	Belagavi, Vijayapura, Bagalkote, Kalaburagi, Yadgir, Raichur, Dakshina Kannada, Udupi, Uttara Kannada, Chikmagaluru, Hassan, Kodagu, Shivamogga, Mysuru, Mandya, Chamrajnagara, Koppal, Ballari .
<b>Kerala:</b>	Kasaragod, Kannur, Kozhikode, Wynad, Malappuram, Palakkad, Thrissur, Ernakulam, Iduki and Pattanamthitta.
<b>Tamilnadu:</b>	Coimbatore, Nilgiri, Erode, Dharmapuri, Krishnagiri, Salem.

#### Flood Alerted Districts include:

**Gujarat:** Surat, Vapi, Tapi, Dangs, Narmada and all districts in Saurashtra and Kutch





### Flood Affected and Alerted Districts in the Country

