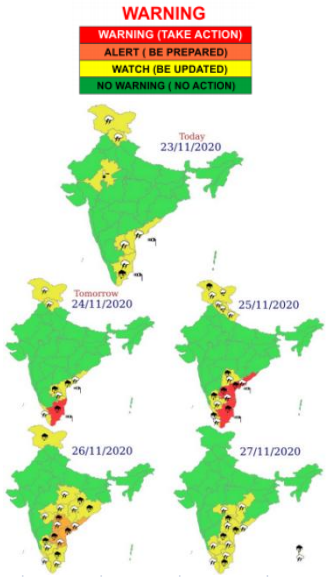
Central Water Commission
Special Advisories in association with Depression
23-11-2020 at 1700 hrs

1. Meteorological Situation

A well marked low pressure area over southwest Bay and adjoining southeast Bay of Bengal (BoB) near latitude 9.5°N and longitude 84.2°E concentrated into a depression over the same region in the early hours (0230 hours IST) of today, the 23rd November, 2020. It lay centred at 0830 hrs IST of 23rd November, 2020 over the same region, about 550 km east-southeast of Puducherry and 590 km southeast of Chennai. It is very likely to intensify into a cyclonic storm during next 24 hours. It is very likely to move northwestwards and cross Tamil Nadu and Puducherry coasts between Karaikal and Mamallapuram around 25th November 2020 afternoon as a severe cyclonic storm with a wind speed of 100-110 kmph gusting to 120 kmph.

1.1 Rainfall forecast for next 5 days issued on 23rd November, 2020 (Midday) by IMD



Real Time Monitoring of Flood and Hydrometeorological Forecasting by IMD														
Date: 23.11.2020														
Flood Monitoring Offices				Flood Level (CWC)		Quantitative Precipitation Forecast (QPF) (IMD)								
						Day-1			Day-2			Day-3		
SNO	FMO	Basin	Sub-Basin	Severe Flood	Extreme Flood	26-50mm	51-100mm	>100mm	26-50mm	51-100mm	>100mm	26-50mm	51-100mm	>100mm
1	FMO Bengaluru	Cauvery	Middle Cauvery									√		
2	FMO Bengaluru	Cauvery	Lower Cauvery						√				√	
3	FMO Chennai	East Flowing Rivers	Gummanur										√	
4	FMO Chennai	East Flowing Rivers	Upper South Pennar											√
5	FMO Chennai	East Flowing Rivers	Korttalaiyar						√				√	
6	FMO Chennai	East Flowing Rivers	Vellar						√					√
7	FMO Chennai	East Flowing Rivers	Lower South Pennar						√					√
8	FMO Chennai	Pennar	Sagileru									√		
9	FMO Chennai	Pennar	Lower Pennar									√		
10	FMO Chennai	Pennar	Papagni									√		

Date	Extremely heavy	Very heavy
24/11/2020	Pudukottai, Thanjavur, Tiruvarur, Nagapattinam, Cuddalore, Ariyalur & Perambalur Districts of Tamilnadu and Karaikal in UT of Puducherry,	Thiruvallur, Kanchipuram, Chengalpattu, Chennai, Villupuram, Vellore, Tiruchirapalli & Tiruvannamalai District of Tamilnadu & Puducherry in UT of Puducherry
25/11/2020	Cuddalore, Kallakurchi, Villupuram, Tiruvannamalai, Chengalpattu, Ariyalur, Perambalur in Tamilnadu and Puducherry & Karaikal in UT of Puducherry Nellore & Chittoor District of Andhra Pradesh	Thiruvallur, Kanchipuram, Chennai, Pudukottai, Vellore, Tiruchirapalli, Karur, Namakkal, Salem, Dharmapuri & Krishnagiri in Tamilnadu, Kadapa, Prakasham, Krishna and Guntur District of Andhra Pradesh

2 CWC Advisories

Hydrological Observation Stations which are coming in the path of the Depression/Cyclone in the above mentioned Districts are shown in the figure below:

In view of the extreme rainfall forecast given, there is likelihood of sudden rise in water levels in many of the Flood Monitoring Stations. There is likelihood of increase in inflows into medium reservoir in the District of Kallakurichi, Cuddalore, Salem, Tiruvannamalai, Chengalpattu, Kanchipuram and Thiruvallur District.

Special Advisory for Chembarambakkam Reservoir

1. As the Chembarambakkam reservoir is 80% filled, intense rainfall activity has be to seriously monitored and necessary alert needs to be given to downstream area / and authorities for possible release as part of preparedness activity.
2. Necessary Cushion may be maintained in the reservoir, as the lakes upstream and reservoir is likely to get completely filled if forecast rainfall realizes.
3. The levels in Adyar may rise as catchment outside of Chembarambakkam is also saturated and the water bodies are almost completely filled which will rise the water levels in river, if the intense rainfall activity as forecasted happens.

Maximum precautions have to be taken on the banks of river Adyar and its tributaries in the District of Chengalpattu and Chennai. Strict vigil has to be maintained along the banks of the river especially near Chennai Airport through which the river passes under one of the runway.

Special Advisory for Gomukhi Dam

Due to forecasted extremely heavy rainfall in Kallakurichi District and very heavy rainfall in Salem District, there is likely to be significantly high inflows into Gomukhi Dam and as the dam is having a cushion of around 70 mcft only, spillage from the dam is very likely which will create a flood like situation in low lying areas in Kallakurichi Town downstream of the dam.

Deltaic Rivers in Cauvery Basin

Since extremely heavy rains have been forecasted in Nagapattinam, Ariyalur, Perambalur, Thanjavur, Tiruvarur Districts & Karaikal, deltaic distributaries of river Cauvery in the districts of Nagapattinam, Tiruvarur and Karaikal are expected to rise significantly and as there is likelihood of tidal waves also in association with likely intensification of depression, there may be inundation in deltaic river at confluence points with sea and inundation is also likely in Karaikal areas of UT of Puducherry.

Rivers Palar and Ponnaiyar

Due to extremely heavy rainfall forecast in Chengalpattu, Villupuram, Tiruvannamalai District in Tamilnadu, Chittoor District in Andhra Pradesh and Very heavy rainfall in Tirupattur, Vellore and Ranipet District of Tamilnadu, there is likelihood of sudden rise in Palar and Ponnaiyar Basins. River Palar is expected to rise in Arcot, Kanchipuram and Chengalpattu Towns in association with likely rains.

Rivers Suwarnamukhi and Kalingi

Due to extremely heavy rains forecasted in Chittoor and Nellore Districts in Andhra Pradesh, river Suwarnamukhi and Kalingi are also expected to rise significantly. This may create flood like situation in Chittoor & Nellore Districts.

General Advisory

Since rainfall is expected to continue in upstream areas of all the medium dams, the need for proper reservoir operation taking into account the upstream rainfall as well as the downstream flood situation in association with forecasted rainfall by taking a balanced approach to avoid upstream submergence as well as downstream flooding is required to be done by all project authorities. All project authorities have to inform in advance about the releases made to downstream Districts in the same State as well as to lower riparian States.