



**Mekong River Commission**

# **Weekly Wet Season Situation Report in the Lower Mekong River Basin 16 – 22 September 2025**

Prepared by  
The Regional Flood and Drought Management Centre  
23 September 2025

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# Content

Content .....	i
List of Figures.....	ii
List of Tables.....	iii
Key Messages .....	iv
1 Introduction .....	1
2 General Weather Patterns .....	2
3. Rainfall and Water Level Monitoring .....	3
3.1. Rainfall monitoring .....	3
3.2. Water level monitoring .....	5
4. Flash Flood in the Lower Mekong Basin .....	9
5. Drought Monitoring in the Lower Mekong Basin .....	11
5.2. Weekly drought monitoring from 16 - 22 September 2025 .....	11
6 Weather and Water Level Forecast and Flash Flood information .....	14
6.1 Rainfall forecast .....	14
6.2 Water level forecast .....	16
6.3 Flash Flood Information .....	19
6.4 Drought forecast .....	19
7 Summary and Possible Implications .....	20
7.1. Rainfall and its forecast .....	20
7.2. Water level and its forecast .....	20
7.3. Flash flood and its trends .....	20
7.4. Drought condition and its forecast .....	20
Annex A: Weekly water level monitoring at 22 key stations .....	22
Annex B: Tables for weekly updated water levels and rainfall at the Key Stations .....	25
Annex C: Performance of the weekly flood forecasting .....	29

## List of Figures

<b>Figure 1: Weather conditions over the LMB.....</b>	<b>2</b>
<b>Figure 2: Outlook of wet and dry conditions over the Asian countries by ASMC.....</b>	<b>3</b>
<b>Figure 3: Tropical storm observed on 22 September 2025 .....</b>	<b>3</b>
<b>Figure 4: Weekly rainfall distribution over the LMB during 16 – 22 September 2025 .....</b>	<b>4</b>
<b>Figure 5: The key stations along LMB for river flood forecasting .....</b>	<b>6</b>
<b>Figure 6. Water level at the Jinghong hydrological station up to 22 September 2025. ....</b>	<b>7</b>
<b>Figure 7: Total accumulated reverse flow to Tonle Sap Lake updated on 22 September. ....</b>	<b>8</b>
<b>Figure 8: Seasonal change of inflows and outflows of Tonle Sap Lake. ....</b>	<b>8</b>
<b>Figure 9. The seasonal change in monthly flow volume of Tonle Sap Lake. ....</b>	<b>9</b>
<b>Figure 10. Flash Flood Guidance for the next 1-hr, 3-hr and 6-hr on 22 September .....</b>	<b>11</b>
<b>Figure 11: Weekly standardized precipitation index from 16 - 22 September .....</b>	<b>12</b>
<b>Figure 12: Weekly Index of Soil Water Fraction from 16 - 22 September.....</b>	<b>13</b>
<b>Figure 13: Weekly Combined Drought Index from 16 - 22 September .....</b>	<b>14</b>
<b>Figure 14: Accumulated rainfall forecast from CHIRPS-GFS (23 – 27 September 2025) .....</b>	<b>15</b>
<b>Figure 15: Seasonal forecast of rainfall anomalies for September to November 2025 based on CFSv2 (NCEP-NOAA) .....</b>	<b>19</b>
<b>Figure 16. Monthly forecasts of combined drought indicators from September to November 2025 .....</b>	<b>19</b>

## List of Tables

Table 1. The monthly change in the flow volume of Tonle Sap Lake. ....	9
Table 2. Detected flash flood in the LMB on 22 September .....	10
Table 3. River Monitoring and Forecasting Bulletin.....	17

# Key Messages

**Key messages for this weekly report are presented below.**

## **Rainfall monitoring and forecast**

- From 16 - 22 September, thunderstorm and moderate to heavy rain are expected in the central part of the LMB including the central part of Lao PDR, the northeastern part of Thailand, the western and eastern part of Cambodia, and the 3S basin.
- Next week, from 23 - 29 September, thunderstorm and moderate to heavy rain are expected in the central part of the LMB including the central part of Lao PDR, the northeastern part of Thailand, the western and eastern part of Cambodia, and the 3S basin.

## **Water level monitoring and forecast**

- At 22 key monitoring stations along the Mekong mainstream from 16 – 22 September 2025, water levels at all stations along the Mekong mainstream have been in normal conditions, which have not reached alarm or flood levels, and the flow threshold (PMFM 6C) are under normal conditions. It is also the same condition for Tan Chau and Chau Doc monitoring stations, which are significantly influenced by sea tidal fluctuation.
- In the period of 23 – 27 September 2025, the water level all stations are not expected to reach alarm and flood levels. Water levels at all stations along the Mekong mainstream are expected to rise. At Tan Chau and Chau Doc stations, the water levels are predicted to be also fluctuated, resulting from the influence of sea tidal patterns.

## **Drought condition and forecast**

- During 23 - 29 September, the LMB were facing normal to wet conditions.
- In September and November 2025, the total amount of rainfall in most areas of the LMB will be higher than the LTA by around 5 - 25 mm, except for some areas in the Mekong Delta. However, in October, the total amount of rainfall in most areas of the LMB will be lower than the LTA by around 5 - 15 mm, except for some areas in the southern Lao PDR, northern Cambodia, and the 3S Basin.
- The forecast indicates that no drought conditions are expected in over the LMB in September and October. In November, some areas in the northern part of Lao PDR and northeastern part of Thailand are likely to occur moderate drought using the Combined Drought Indicator (CDI).

# 1 Introduction

This Weekly Wet Season Situation Report presents a preliminary analysis of the weekly hydrological situation in the Lower Mekong River Basin (LMB) for **16 – 22 September 2025**. The trend and outlook for water levels are also presented.

This analysis is based on the daily hydro-meteorological data provided by the Mekong River Commission (MRC) Member Countries – Cambodia, Lao PDR, Thailand, and Viet Nam – and on satellite data. The water level indicated in this report refers to an above zero gauge of each station.

The report covers the following topics that are updated weekly:

- General weather patterns, including rainfall patterns over the LMB.
- Water levels in the LMB, including in the Tonle Sap Lake.
- Flash flood and drought situation in the LMB.
- Weather, water level and flash flood forecast, and
- Possible implications.

Mekong River water levels are updated daily and can be accessed from:

<http://ffw.mrcmekong.org/bulletin.php>.

Drought monitoring and forecasting information is available at:

<http://droughtforecast.mrcmekong.org>

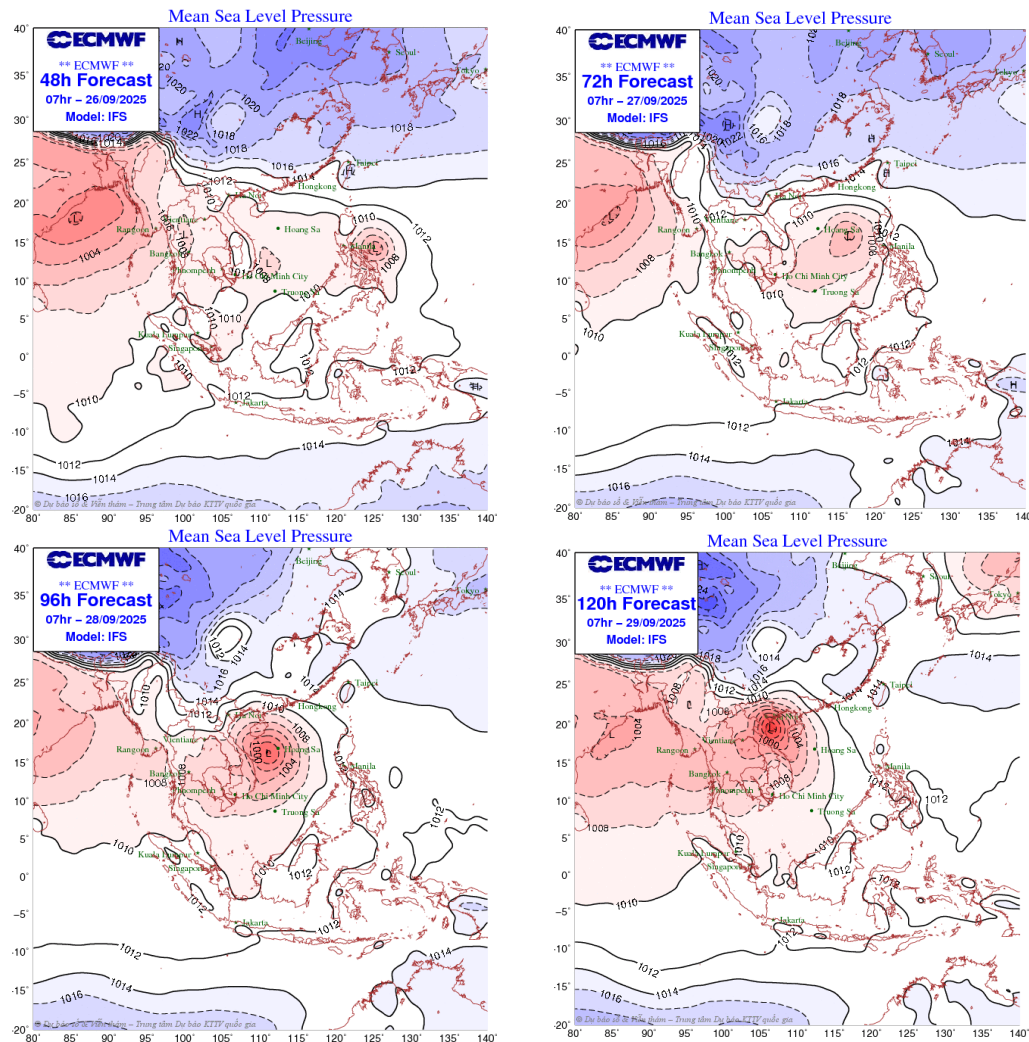
Flash flood information is accessible at: <http://ffp.mrcmekong.org:8000/bulletin/>



## 2 General Weather Patterns

Next week, the lower pressure area may impact over the LMB while the southwest monsoon prevails the lower part, thunderstorm and moderate to heavy rain are expected in the central part of the LMB including the central part of Lao PDR, the northeastern part of Thailand, the western and eastern part of Cambodia, and the 3S basin.

**Figure 1** presents mean sea level pressure over the region



**Figure 1: Weather conditions over the LMB**

According to the ASEAN Specialised Meteorological Centre (ASMC, <http://asmc.asean.org/home/>), the sub seasonal weather outlook (15 – 28 September 2025) indicates that the Lower Mekong Basin (LMB) are expected to experience drier condition from central to upper parts. Moreover, it will not be expected to either warmer or cooler conditions as well. **Figure 2** shows the outlook of weather condition from 15 to 28 September 2025 in Southeast Asia based on results from the NCEP model (National Centres for Environmental Prediction).

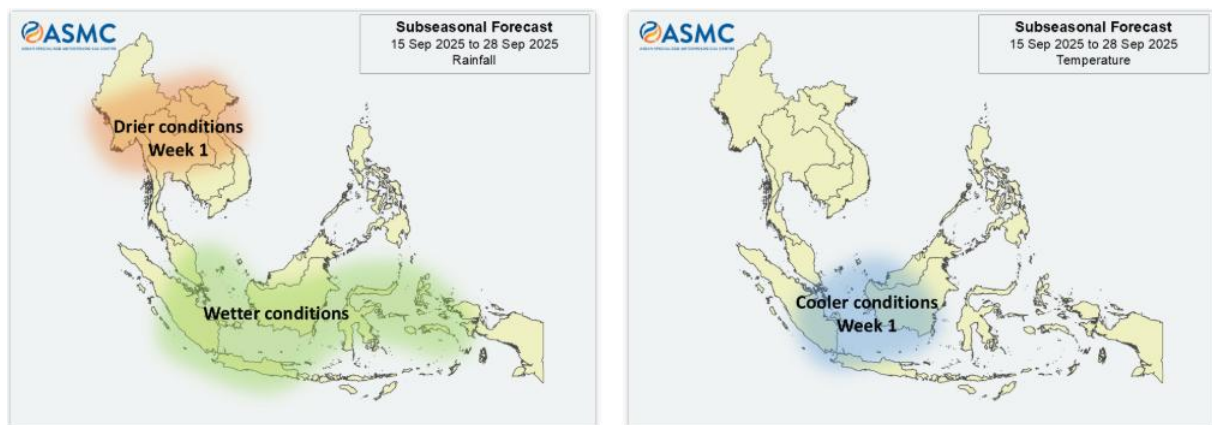


Figure 2: Outlook of wet and dry conditions over the Asian countries by ASMC.

Based on the tropical storm ([https://www.jma.go.jp/bosai/weather\\_map/#lang=en](https://www.jma.go.jp/bosai/weather_map/#lang=en)), there is one super typhoon (ST), namely RAGASA at NW pacific system as of **22 September 2025** (Figure 3). The center of the Supper Typhoon (ST) was at about 19.3 degrees North latitude; 123.1 degrees East longitude on the East Sea, with the maximum sustained winds of 202 - 221 km/h and moving the West Northwestward at a speed of about 20 km/h about 160km northeast of Luzon Island (Philippines).

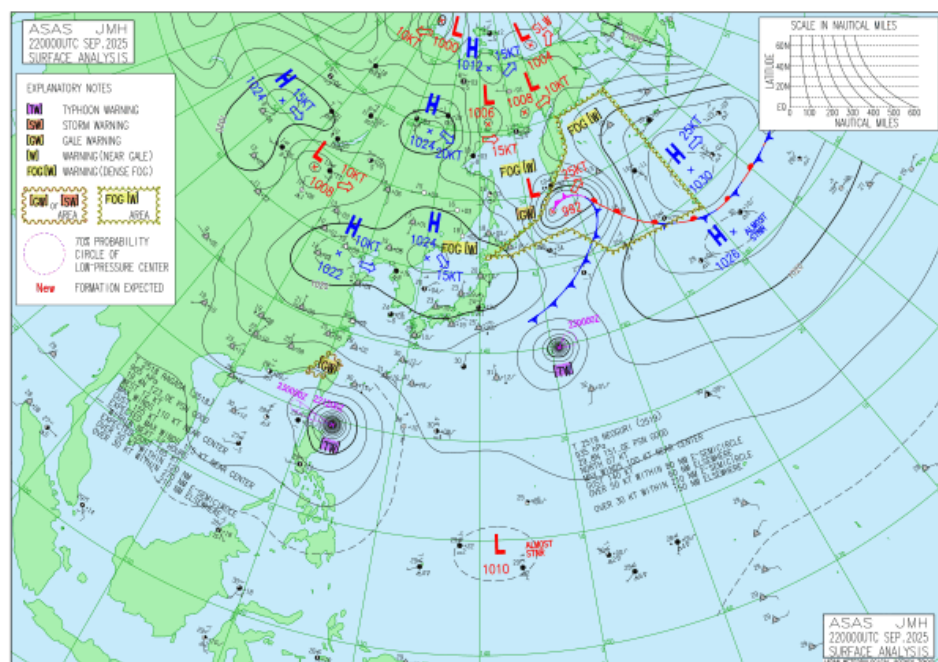


Figure 3: Tropical storm observed on 22 September 2025

### 3. Rainfall and Water Level Monitoring

#### 3.1. Rainfall monitoring

The weekly accumulated rainfall based on the observed data provided by the MRC Member Countries – Cambodia, Lao PDR, Thailand, and Viet Nam – from 16 - 22 September 2025 (Figure 4). Thunderstorm & moderate to heavy rain are expected in the LMB including the upper & central part of Lao PDR, the northeastern part of Thailand, the western and eastern part of Cambodia, and the 3S basin.

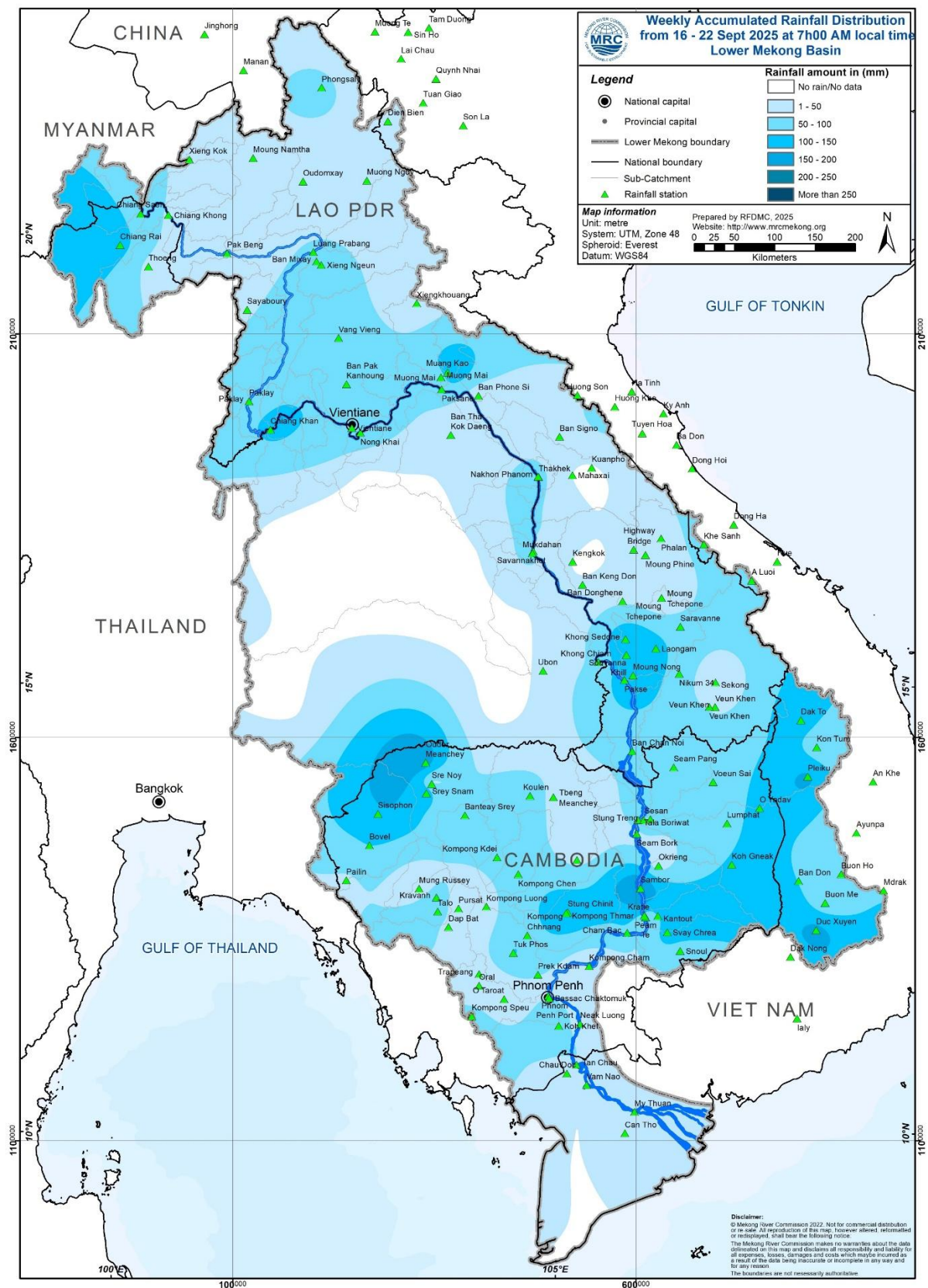


Figure 4: Weekly rainfall distribution over the LMB during 16 – 22 September 2025



### 3.2. Water level monitoring

The hydrological regimes of the Mekong mainstream are illustrated by recorded water levels and flows at key mainstream stations: at Chiang Saen to capture mainstream flows entering from the Upper Mekong Basin (UMB); at Vientiane to present flows generated by climate conditions in the upper part of the LMB; at Pakse to investigate flows influenced by inflows from the larger Mekong tributaries; at Kratie in Cambodia to capture overall flows of the Mekong Basin; and at Viet Nam's Tan Chau and Chau Doc to monitor flows to the Delta.

The key stations along the LMB and their respective model application for River Flood Forecasting during the wet season from June to October and River Monitoring during the dry season from November to May are presented in **Figure 5**. The hydrograph for each key station is available from the MRC's River Flood Forecasting: <http://ffw.mrcmekong.org/overview.php>.

During 16 – 22 September 2025, the observed water level (WL) at Jinghong hydrological station<sup>1</sup>, was almost constant and ranges between 537.49 and 537.05 m, which are corresponding to the outflow between 2,580.00 m<sup>3</sup>/s to 2,200.00 m<sup>3</sup>/s (recorded on 7:00 am), respectively (**Figure 6**). The water level in Chiang Saen Station also indicated a slight fluctuation ranging from 4.86 m to 4.52 m. At the same period, the water level in Luang Prabang Station also increased with an approximate value of 0.36 m from 11.28 m to 11.64 m as compared to the previous week. In addition, at Chiang Khan, the water level has increased from 9.13 m to 9.92 m.

The water levels at Vientiane, Nongkhai, Paksane, Nakhon Phanom, and Thakhek stations have increased from 7.25 m to 8.57 m, 6.74 m to 7.99 m, 8.40 m to 9.19 m, 7.62 m to 7.67 m, and 8.86 m to 8.92 m, respectively. However, at Mukdahan, Savannakhet, Khong Chiam and Pakse stations, the water levels have decreased from 7.75 m to 7.35 m, 6.03 m to 5.83 m, 9.81 m to 8.91 m, and 8.10 m to 7.10 m, respectively.

However, the water levels at Stung Treng, Kratie, and Kompong Cham stations also have decreased from 8.11 m to 7.35 m, 18.53 m to 17.76 m, and 12.36 m to 11.86 m, respectively. However, at Phnom Penh (Bassac), Phnom Penh Port, Koh Khel and Prek Kdam, water levels have increased from 8.29 m to 8.33 m, 6.95 m to 6.97 m, 7.16 m to 7.22 m, and 7.32 m to 7.45 m, respectively. In contrast, water level at Neak Luong has decreased.

Similar to the previous week, the water levels from 16 to 22 September 2025 at Viet Nam's Tan Chau and Chau Doc fluctuated between their LTA values due to daily tidal effects from the sea. At the Tan Chau station, the water levels varied between 2.98 m and 3.06 m, while at the Chau Doc station, they ranged between 2.60 m and 2.73 m.

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<sup>1</sup> Near-real time data of hydro-meteorological monitoring at the Jinghong hydrological station is available at <https://portal.mrcmekong.org/monitoring/river-monitoring-telemetry>.

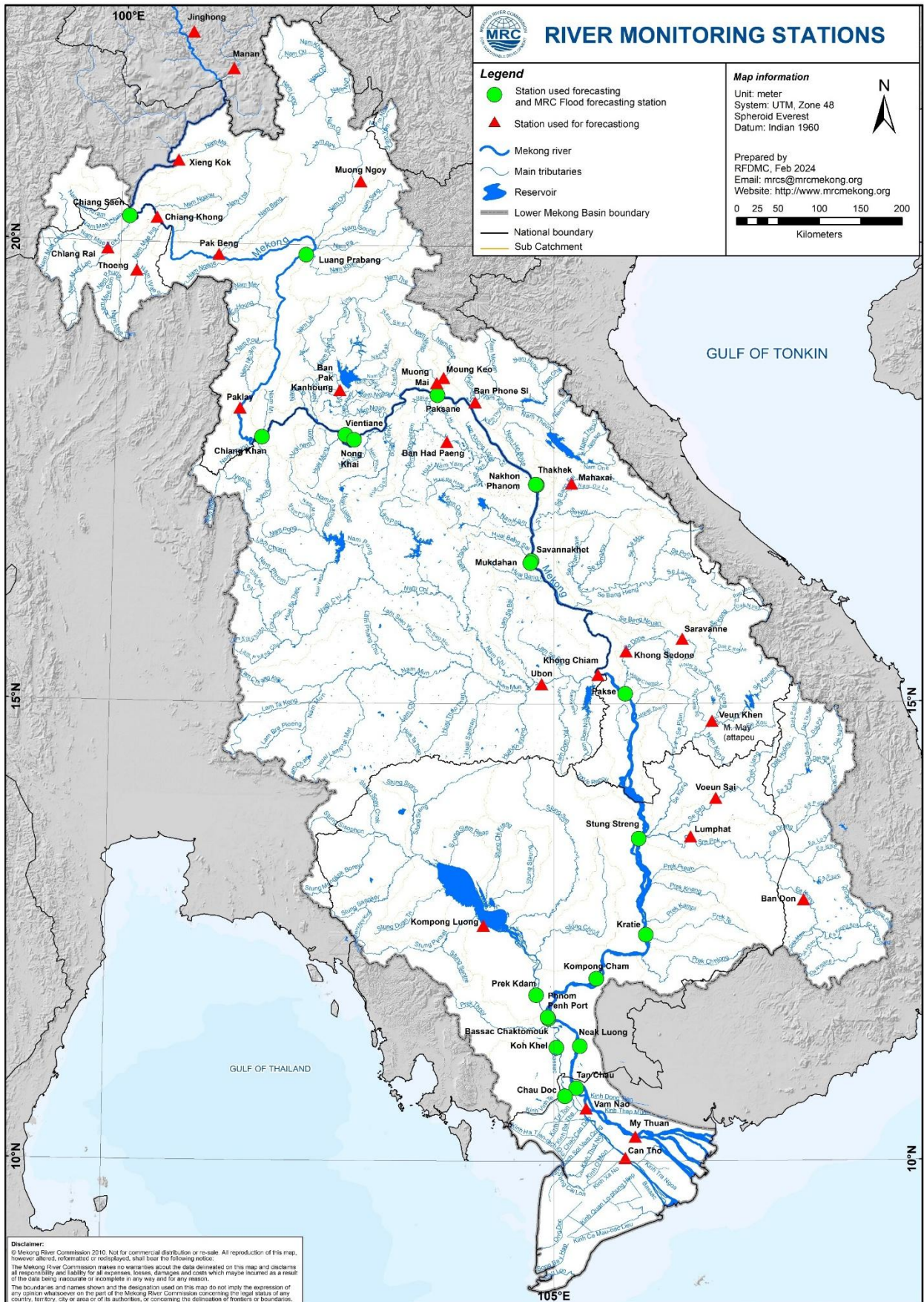
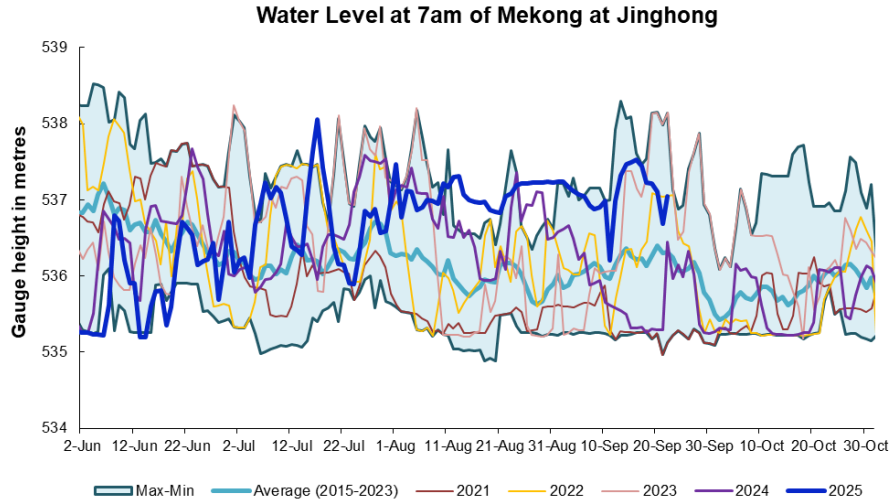


Figure 5: The key stations along LMB for river flood forecasting

The water levels in key monitoring stations on **22 September 2025** are in normal conditions, which have not reached alarm or flood levels. Moreover, all stations with available PMFM thresholds are in normal conditions. The graphics of water level monitoring in all key stations are presented in **Annex A** and the weekly water levels and rainfall at each key station are summarised in **Annex B**.



**Figure 6. Water level at the Jinghong hydrological station up to 22 September 2025.**

At the end of the wet season, when water levels along the Mekong River subside, the outflow of the Tonle Sap Lake (TSL) returns to the Mekong River and then to the Delta. This phenomenon normally takes place between September and October. Based on flow observation at Prek Kdam monitoring station, the inflow (reverse flow) of the Tonle Sap Lake took place since 29 May 2025.

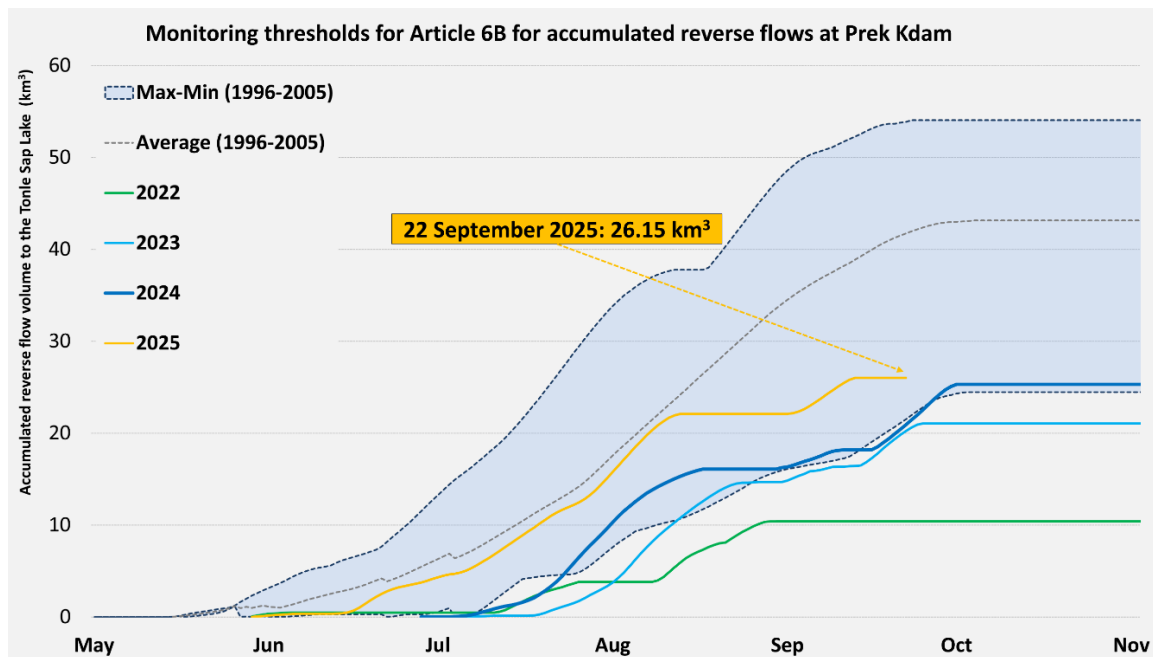
The inflow flow is calculated based on a formula of rating-curves using by difference of water levels at Kompong Luong and Phnom Penh Port stations for slope and Prek Kdam as cross-section of the Lake. The formula of flow is as follows:

$$Flow = WL_{Prek\ Kdam}^{1.2} \times \sqrt{|WL_{Phnom\ Penh\ Port} - WL_{Kampong\ Luong}|}$$

Where, WL is water level in m (msl).

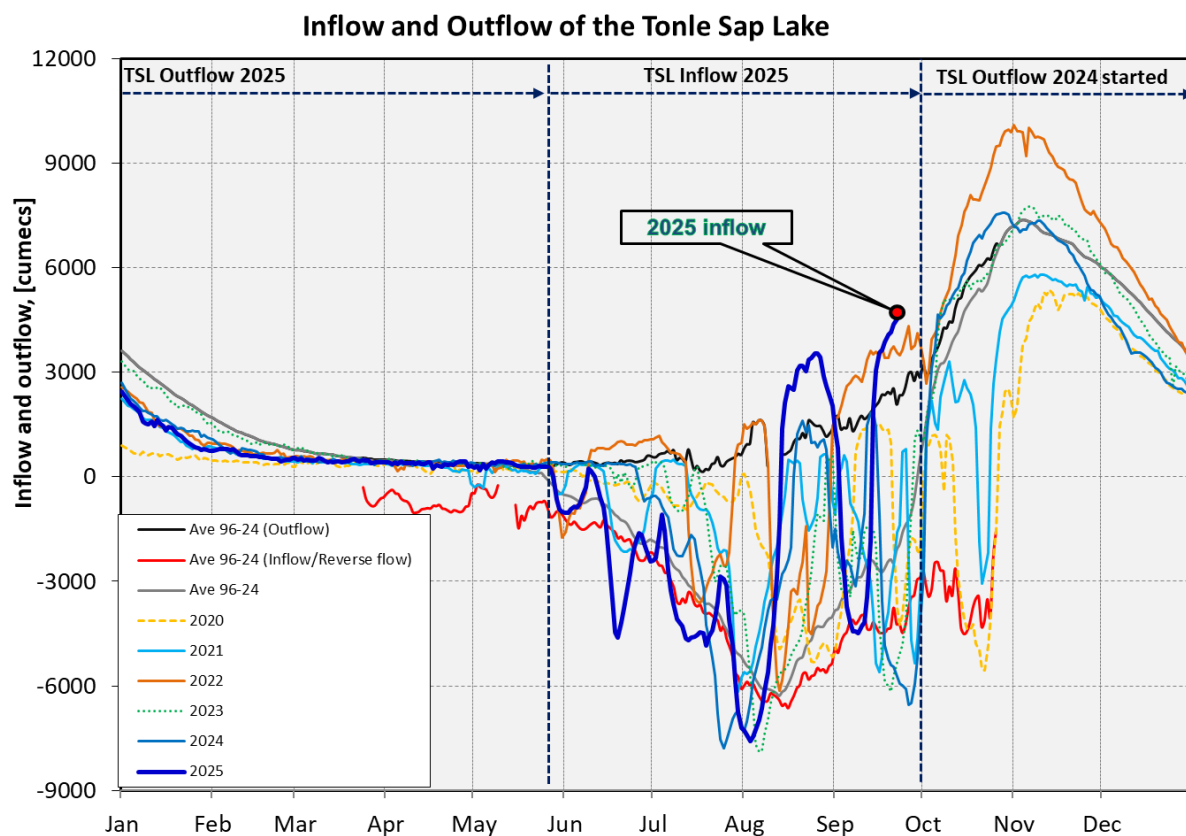
The current total accumulated reverse flow to the lake is **26.15 Km<sup>3</sup>** (**Figure 7**). The seasonal changes of the inflow/reverse flow and the outflow of the TSL at Prek Kdam in comparison with the flows of 2020, 2021 and 2022, 2023 and their LTA level (1997-2024) are illustrated in **Figure 8**. Up to **22 September 2025**, it was observed that the inflow to Tonle Sap Lake is relatively higher than its LTA due to significant high inflows from upstream (**Figure 8**).



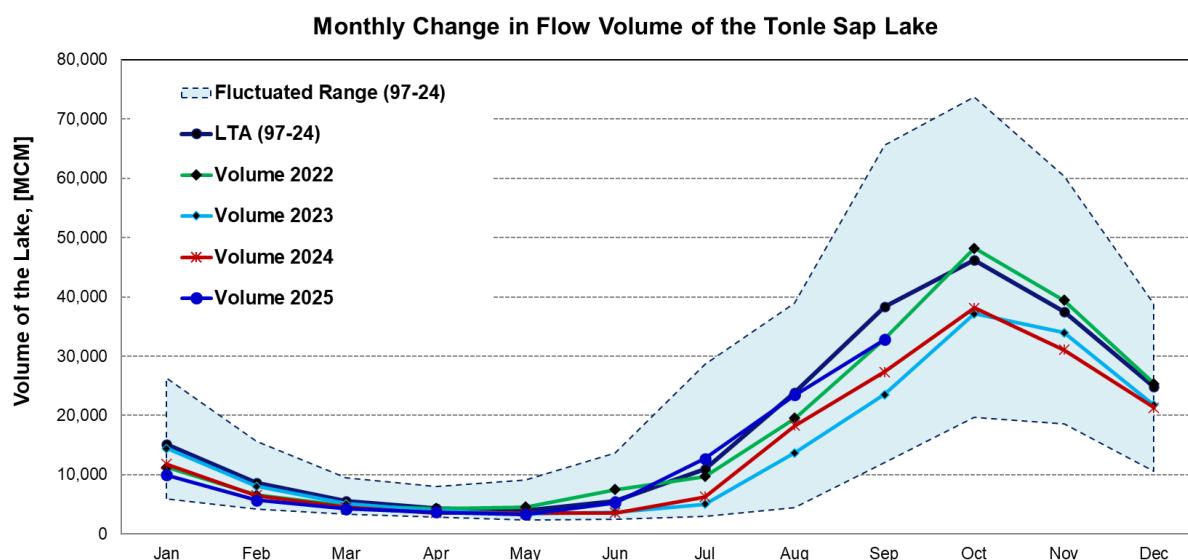


**Figure 7: Total accumulated reverse flow to Tonle Sap Lake updated on 22 September.**

The seasonal changes in monthly flow volumes up to **22 September 2025** for the TSL compared with that in 2020, 2021, 2022, 2023, 2024 and their LTAs, and the fluctuation levels (1997–2024) are presented in **Table 8**. The mean monthly water volume of the Tonle Sap Lake in August 2025 is lower than its LTA (about 98.32 %) and higher than all recent years from 2019 during the same period (**Figure 9 and Table 1**).



**Figure 8: Seasonal change of inflows and outflows of Tonle Sap Lake.**



**Figure 9. The seasonal change in monthly flow volume of Tonle Sap Lake.**

**Table 1. The monthly change in the flow volume of Tonle Sap Lake.**

Month	LTA (97-24) [MCM]	Max Volume [MCM]	Min Volume [MCM]	Volume 2019 [MCM]	Volume 2020 [MCM]	Volume 2021 [MCM]	Volume 2022 [MCM]	Volume 2023 [MCM]	Volume 2024 [MCM]	Volume 2025 [MCM]	Volume in 2025 [%], compared with its LTA
Jan	15197.93	26357.53	5906.80	13080.39	10285.31	5906.80	9923.80	11214.32	14422.11	10341.91	68.05
Feb	8644.19	15596.22	4198.60	7302.32	6019.30	4264.19	5832.97	6558.79	8069.29	5690.52	65.83
Mar	5564.35	9438.24	3347.07	4852.74	4354.62	3553.99	4264.88	4736.52	5080.64	4256.33	76.49
Apr	4300.28	8009.14	2866.91	4282.78	3667.47	2992.61	3556.68	4288.31	3884.16	3697.92	85.99
May	4009.61	9176.93	2417.81	4356.44	3266.43	2594.92	3240.78	4556.83	3438.66	3322.45	82.86
Jun	5624.02	13635.01	2468.70	8465.20	3517.06	2641.88	3798.29	7489.04	3689.97	5278.20	93.85
Jul	11012.31	28599.56	2925.86	14964.58	4001.99	2925.86	5346.73	9703.79	5062.21	12706.40	115.38
Aug	23865.05	39015.12	4433.46	23407.37	7622.71	5941.07	10547.80	19554.70	13694.57	23464.06	98.32
Sep	38377.57	65632.35	12105.31	39654.01	24194.19	12105.31	16382.34	32860.34	23550.60	32775.79	85.40
Oct	46261.30	73757.23	19705.50	41847.54	30358.38	20799.13	27318.21	48199.12	37141.40		
Nov	37500.63	60367.33	18534.61	33663.58	19112.65	27546.80	28982.93	39452.53	33929.52		
Dec	24795.31	38888.95	10563.49	23079.82	10577.29	18251.65	20170.76	25346.65	21757.70		
	Critical situation: lower than long-term minimum values (LTMIN)										
	Normal condition: within the range of long-term average (LTA) and max (LTMAX) values										
	Low volume situation: lower than long-term average (LTA)										
Unit: Million Cubic Meter (1 MCM= 0.001 Km³)											

**Remarks:** the volume of Tonle Sap Lake in 2025 is updated until 22 September 2025.

#### 4. Flash Flood in the Lower Mekong Basin

During the weekly monitoring period from 16 – 22 September, the LMB received light to heavy rain and thunderstorms in some areas.

According to the Southeast Asian Flash Flood Guidance System (SEAFFGS) and analysis, flash flood guidance was detected at low to high level in the next 1, 3 and 6 hours in some areas in Cambodia during the reporting period as shown in **Figure 10 & Table 2**.



**Table 2. Detected flash flood in the LMB on 22 September**

FLASH FLOOD GUIDANCE IN THE LOWER MEKONG BASIN								
In the next 1hrs			In the next 3hrs			In the next 6hrs		
Provinces	Districts	Level	Provinces	Districts	Level	Provinces	Districts	Level
Kampong Cham	Stueng Trang	High	Kampong Cham	Stueng Trang	High	Kampong Cham	Stueng Trang	High
Kratie	Preaek Prasab	Moderate	Mondul Kiri	Kaoh Nheak	Moderate	Mondul Kiri	Kaoh Nheak	Moderate
Mondul Kiri	Kaoh Nheak	Moderate	Mondul Kiri	Ou Reang	Moderate	Mondul Kiri	Ou Reang	Moderate
Mondul Kiri	Ou Reang	Moderate	Mondul Kiri	Pechr Chenda	High	Mondul Kiri	Pechr Chenda	High
Mondul Kiri	Pechr Chenda	High	Ratana Kiri	Andoung Meas	Moderate	Ratana Kiri	Andoung Meas	Moderate
Ratana Kiri	Andoung Meas	Moderate	Ratana Kiri	Koun Mom	Moderate	Ratana Kiri	Koun Mom	Moderate
Ratana Kiri	Ban Lung	Moderate	Ratana Kiri	Ou Chum	Moderate	Ratana Kiri	Ou Chum	Moderate
Ratana Kiri	Bar Kaev	Moderate	Ratana Kiri	Ta Veang	High	Ratana Kiri	Ta Veang	High
Ratana Kiri	Koun Mom	High	Ratana Kiri	Veun Sai	Moderate	Ratana Kiri	Veun Sai	Moderate
Ratana Kiri	Ou Chum	Moderate	Stung Treng	Sesan	Moderate	Stung Treng	Sesan	Moderate
Ratana Kiri	Ta Veang	High	Stung Treng	Siem Pang	Moderate	Stung Treng	Siem Pang	Moderate
Ratana Kiri	Veun Sai	Moderate	Stung Treng	Thala Barivat	Moderate	Stung Treng	Thala Barivat	Moderate
Stung Treng	Sesan	Moderate						
Stung Treng	Siem Bouk	Moderate						
Stung Treng	Siem Pang	Moderate						
Stung Treng	Thala Barivat	Moderate						

FLASH FLOOD RISK IN THE LOWER MEKONG BASIN					
In the next 12hrs			In the next 24hrs		
Provinces	Districts	Level	Provinces	Districts	Level
Kratie	Snuol	Moderate	Kratie	Sambour	Moderate
Mondul Kiri	Kaev Seima	Moderate	Kratie	Snuol	Moderate
Mondul Kiri	Kaoh Nheak	Moderate	Mondul Kiri	Kaev Seima	Moderate
Mondul Kiri	Ou Reang	Moderate	Mondul Kiri	Kaoh Nheak	Moderate
Mondul Kiri	Pechr Chenda	Moderate	Mondul Kiri	Ou Reang	Moderate
Ratana Kiri	Koun Mom	Moderate	Mondul Kiri	Pechr Chenda	Moderate
Ratana Kiri	Ou Ya Dav	Moderate	Mondul Kiri	Saen Monourom	Moderate
Ratana Kiri	Ta Veang	Moderate	Preah Vihear	Choam Khsant	Moderate
Stung Treng	Sesan	Moderate	Preah Vihear	Sangkom Thmei	Moderate
Stung Treng	Siem Pang	Moderate	Ratana Kiri	Andoung Meas	Moderate
			Ratana Kiri	Ban Lung	Moderate
			Ratana Kiri	Bar Kaev	Moderate
			Ratana Kiri	Koun Mom	Moderate
			Ratana Kiri	Lumphat	Moderate
			Ratana Kiri	Ou Chum	Moderate

FLASH FLOOD RISK IN THE LOWER MEKONG BASIN					
In the next 12hrs			In the next 24hrs		
Provinces	Districts	Level	Provinces	Districts	Level
			Ratana Kiri	Ou Ya Dav	Moderate
			Ratana Kiri	Ta Veaeng	Moderate
			Ratana Kiri	Veun Sai	Moderate
			Stung Treng	Sesan	Moderate
			Stung Treng	Siem Bouk	Moderate
			Stung Treng	Siem Pang	Moderate

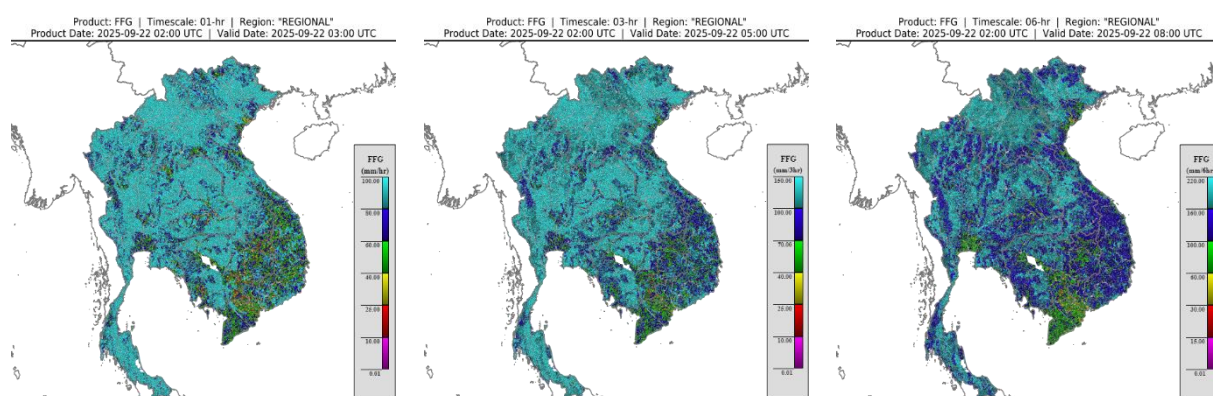


Figure 10. Flash Flood Guidance for the next 1-hr, 3-hr and 6-hr on 22 September

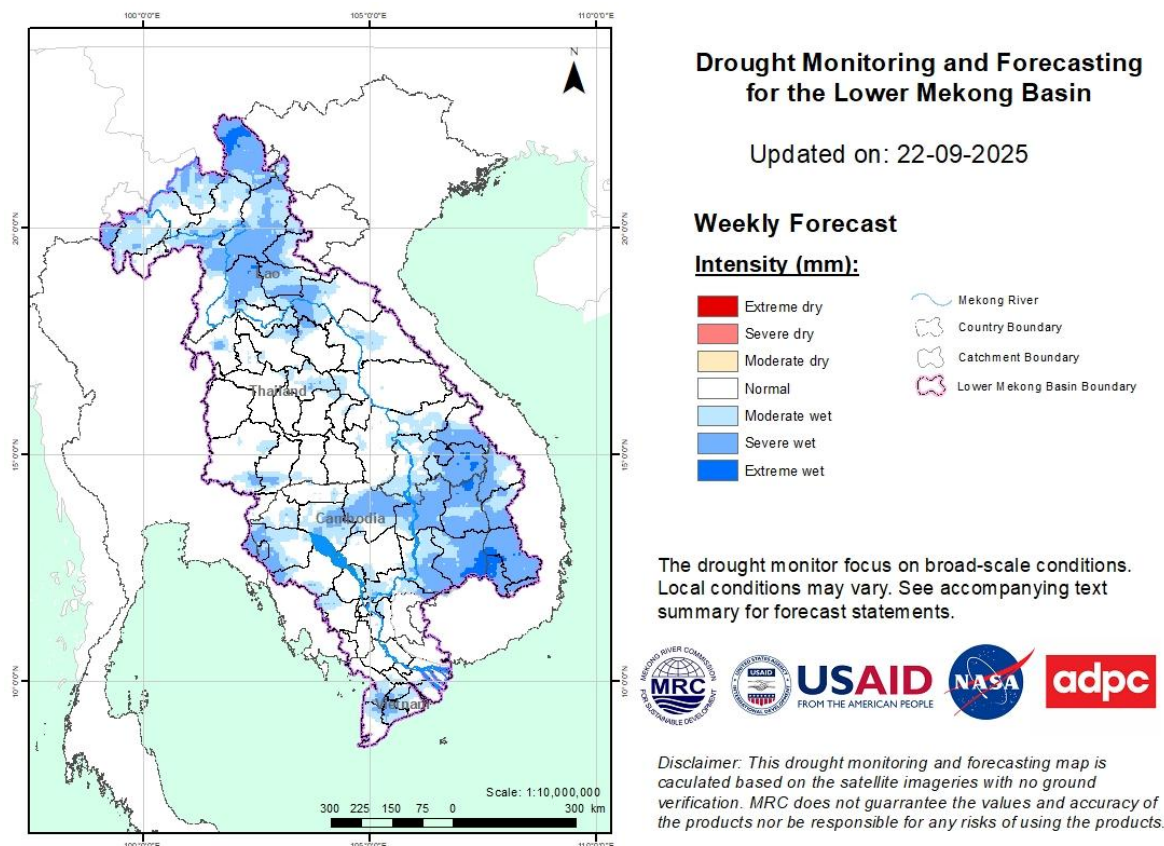
## 5. Drought Monitoring in the Lower Mekong Basin

### 5.2. Weekly drought monitoring from 16 - 22 September 2025

Drought monitoring data for 2025 are available from Monday to Sunday every week; thus, the reporting period is normally delayed by one day compared to Flood and Flash Flood reports. We adopt the Index of Soil Water Fraction (ISWF) data obtained from FFGS to represent soil moisture of agricultural indicator for both dry and wet seasons.

- **Weekly Standardised Precipitation Index (SPI1)**

Meteorological indicator shows that from 16 - 22 September, as shown in Figure 9, the LMB were facing normal to wet conditions.

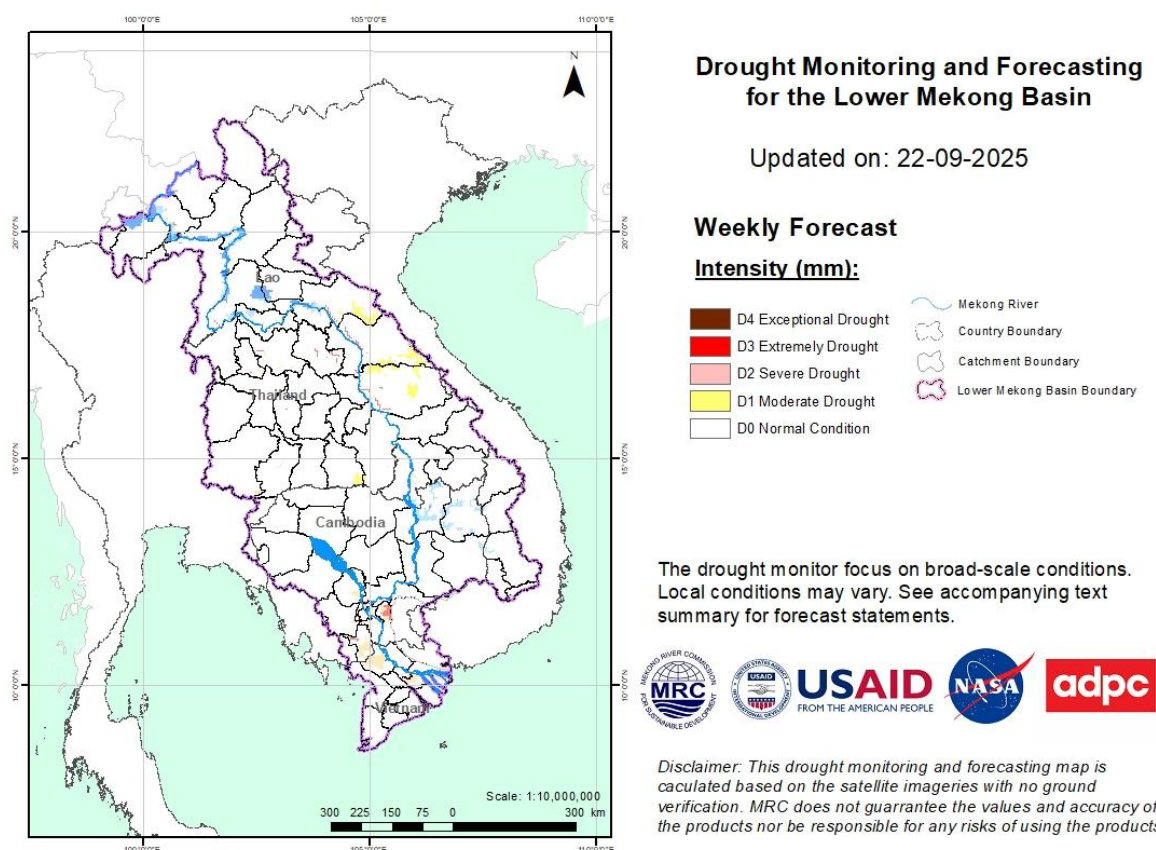


**Figure 11: Weekly standardized precipitation index from 16 - 22 September**

- **Weekly Index of Soil Water Fraction (ISWF)**

No drought over the LMB by the Index of Soil Water Fraction, as displayed in **Figure 10**, during the monitoring week from 16 - 22 September. the LMB was facing normal to wet conditions, except some areas in the northern and central part of Lao PDR and northeastern part of Thailand.





**Figure 13: Weekly Combined Drought Index from 16 - 22 September**

More information on Drought Forecasting and Early Warning (DFEW) as well as the explanation is available here: <http://droughtforecast.mrcmekong.org/templates/view/our-product>. DFEW provides not only weekly monitoring and forecasting information but also a three-month forecast of drought indicators with seasonal outlook which are updated every month based on international weather forecast models. Details on drought forecast are described in section 6.4 of this report.

## 6 Weather and Water Level Forecast and Flash Flood information

### 6.1 Rainfall forecast

During 23 - 27 September 2025, the accumulated rainfall over the entire Lower Mekong Basin is distributed with light to heavy rain based on CHIRPS-GFS (**Figure 12**). Thunderstorm and moderate to heavy rain are expected in the central part of the LMB including the upper and central part of Lao PDR, the northeastern part of Thailand, the western and eastern part of Cambodia, and the 3S basin.



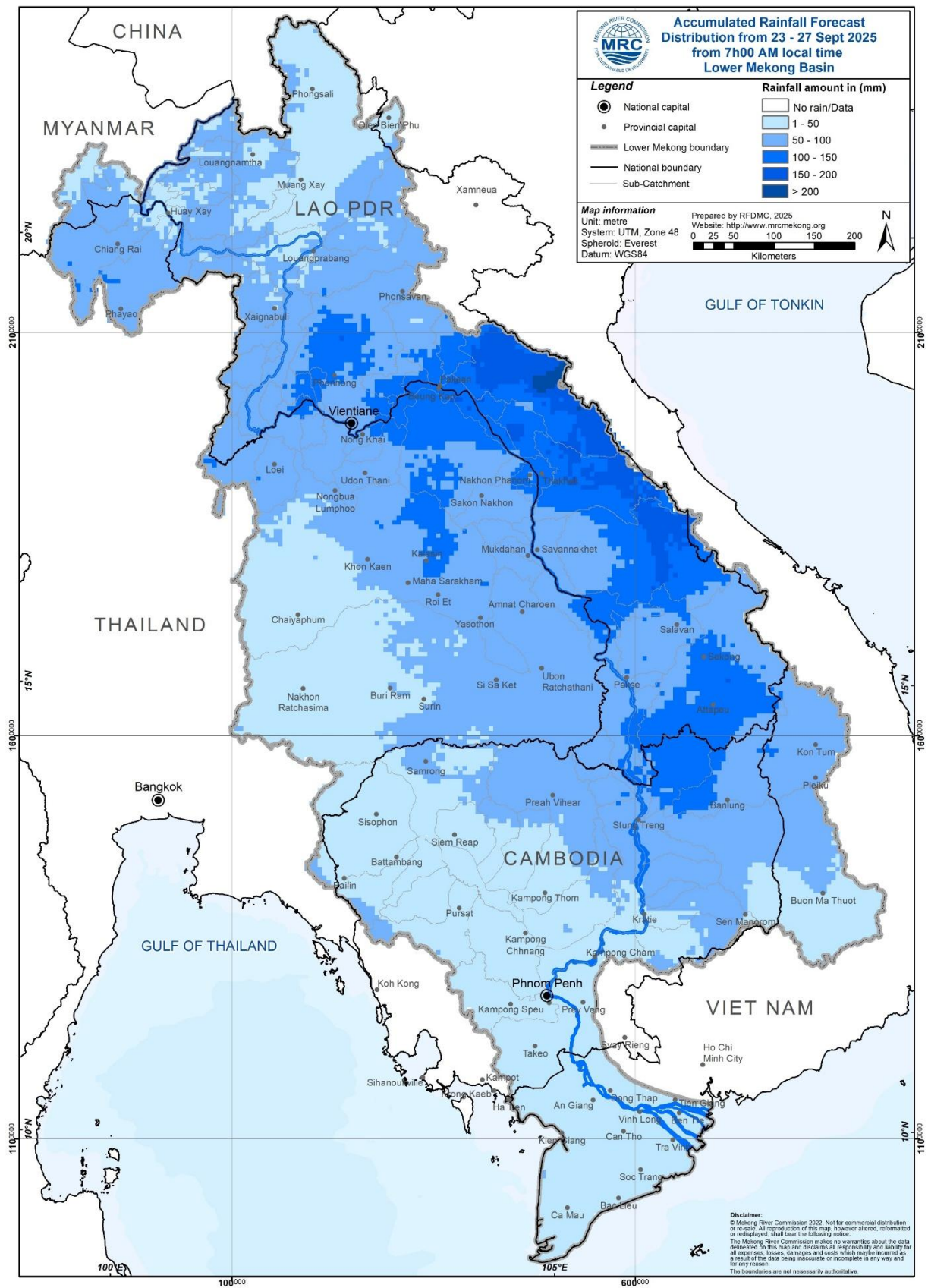


Figure 14: Accumulated rainfall forecast from CHIRPS-GFS (23 – 27 September 2025)

## 6.2 Water level forecast

During the wet season, from June 1<sup>st</sup> to October 31<sup>st</sup> each year, daily riverine flood forecasts are conducted for 22 stations along the Mekong mainstream, with a forecast lead time of five days. This report will describe the forecast water level for a period of **23 – 27 September 2025**. Water levels at all stations along the Mekong mainstream are expected to rise. However, they are not expected to reach alarm and flood levels within the next 5 days. Water levels at Tan Chau and Chau Doc are fluctuated following the tidal fluctuation.

In Chiang Saen monitoring station, the water level is expected to be fluctuated over the forecasting period of **23 – 27 September 2025** with increasing trend. The water level in Luang Prabang stations affected by backwater is likely slightly increasing within a range from 11.64 m to 12.35 m. In addition, at Chiang Khan, Vientiane, Nongkhai and Paksane stations, the water levels are also expected to rise approximately 0.63 m, 0.31 m, 0.34 m, and 0.24 m, respectively.

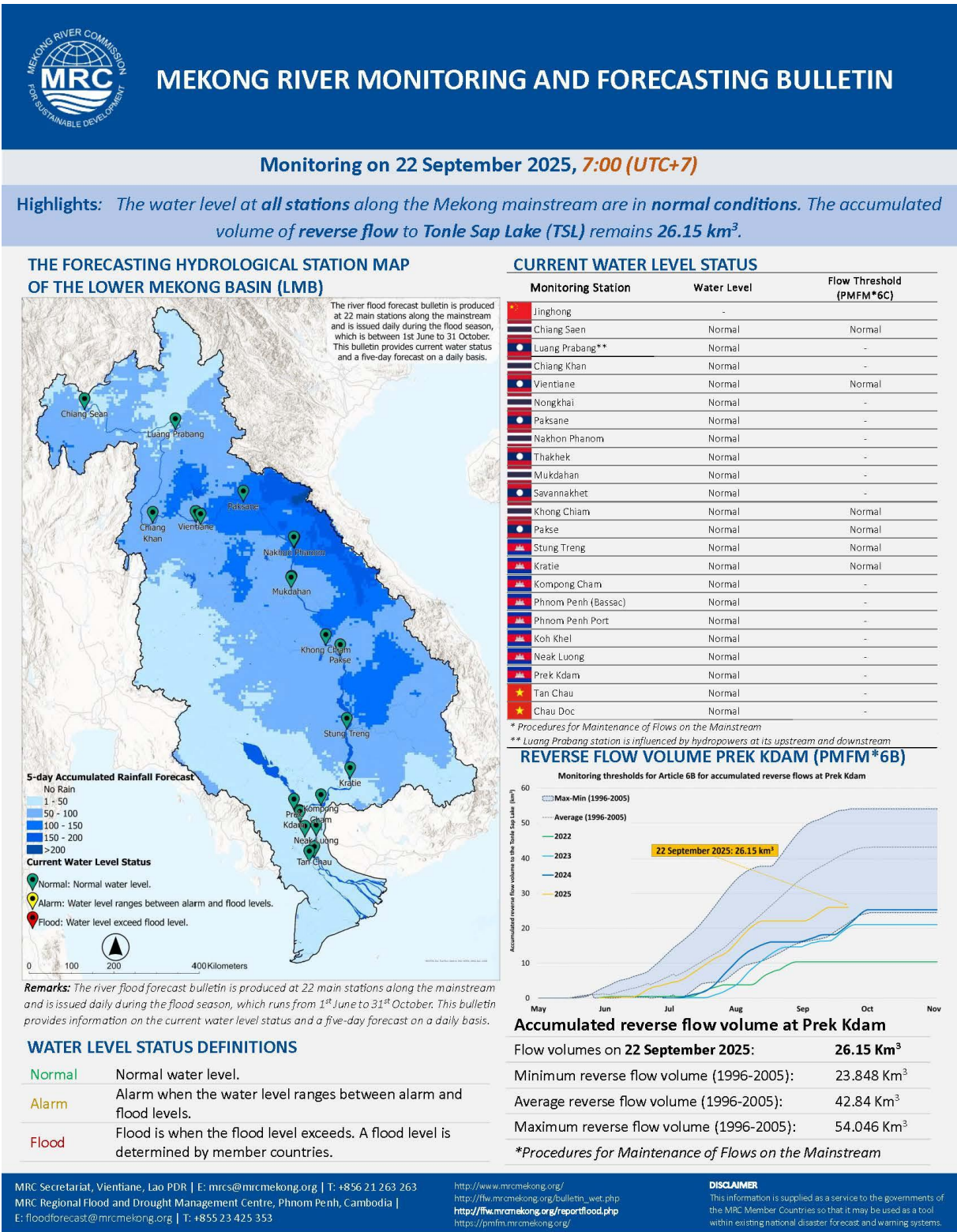
The water levels at Nakhon Phanom, Thakhek, Mukdahan, Savannakhet, Khong Chiam, and Pakse station, are expected to rise with approximate value of 1.05 m, 1.06 m, 1.18 m, 1.17 m, 1.19 m, and 1.11 m, respectively. Moreover, at Stung Treng, Kratie and Kompong Cham stations, the water levels are also expected to increase approximately 0.42 m, 0.33 m, and 0.06 m, respectively.

At the floodplain in Cambodia from Phnom Penh (Bassac) station downstream, the water levels are also expected to increase. At Phnom Penh (Bassac), Phnom Penh Port, Koh Khel, Neak Luong, and Prek Kdam, the water levels are expected to increase approximately 0.08 m, 0.07 m, 0.03 m, 0.03 m, and 0.10 m, respectively.

For the Tan Chau station on the Mekong River and Chau Doc station on the Bassac River, water levels will be fluctuating approximately ranging between 3.06 m & 3.05 m and 2.73 m & 2.72 m, respectively, following daily tidal effects from the sea.

The weekly River Monitoring Bulletin and forecasting issued on **22 September 2025** can be found in **Table 2**. Results of the weekly river monitoring and forecasting bulletin are also available at <http://ffw.mrcmekong.org/bulletin.php>

Table 3. River Monitoring and Forecasting Bulletin.





## Forecasting from 23 to 27 September 2025

**Highlights: Thunderstorm and moderate to heavy rainfall are likely to occur in several parts of LMB. Water levels all stations along the Mekong mainstream are expected to rise. They are not expected to reach alarm and flood levels.**

Forecasting Station	24 h Observed Rainfall (mm)	Zero gauge above M.S.L (m)	Observed Water Level against zero gauge (m)		Forecasted Water Level (m)					Alarm Level (m)	Flood Level (m)	Low- lying flood level (m)*	Forecasted Water Levels Change in 5 days (m)	Max. Water levels change within next 5 days (m)	Min. distance to alarm level within next 5 days (m)	Min. distance to flood level within next 5 days (m)
	21-Sep		21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep							
✶✶ Jinghong	0.0	-	536.68	↑ 537.05	-	-	-	-	-	-	-	-	-	-	-	-
Chiang Saen	8.5	357.110	4.65	↓ 4.52	→ 4.44	→ 4.53	↑ 4.75	↑ 5.01	↑ 5.24	11.50	12.80	-	↑ 0.72	0.72	6.26	7.56
Luang Prabang	0.0	267.195	11.98	↓ 11.64	→ 11.58	→ 11.66	↑ 12.00	↑ 12.30	→ 12.35	17.50	18.00	-	↑ 0.71	0.71	5.15	5.65
Chiang Khan	1.0	194.118	10.16	↓ 9.92	↓ 9.77	↓ 9.64	↑ 9.77	↑ 10.13	↑ 10.55	14.50	16.00	-	↑ 0.63	0.63	3.95	5.45
Vientiane	12.8	158.040	8.52	→ 8.57	↓ 8.42	↓ 8.23	↓ 8.11	↑ 8.30	↑ 8.88	11.50	12.50	-	↑ 0.31	0.31	2.63	3.63
Nongkhai	20.4	153.648	7.96	→ 7.99	↓ 7.86	↓ 7.67	↓ 7.55	↑ 7.76	↑ 8.33	11.40	12.20	7.35	↑ 0.34	0.34	3.07	3.87
Paksane	10.4	142.125	9.20	↓ 9.19	↓ 9.05	↓ 8.92	→ 8.85	→ 8.94	↑ 9.43	13.50	14.50	-	↑ 0.24	0.24	4.07	5.07
Nakhon Phanom	32.2	130.961	7.46	↑ 7.67	↑ 7.78	↑ 8.04	↑ 8.29	↑ 8.48	↑ 8.72	11.50	12.00	9.04	↑ 1.05	1.05	2.78	3.28
Thakhek	13.8	129.629	8.73	↑ 8.92	↑ 9.02	↑ 9.25	↑ 9.49	↑ 9.68	↑ 9.98	13.00	14.00	-	↑ 1.06	1.06	3.02	4.02
Mukdahan	26.5	124.219	7.11	↑ 7.35	↑ 7.47	↑ 7.60	↑ 7.90	↑ 8.19	↑ 8.53	12.00	12.50	-	↑ 1.18	1.18	3.47	3.97
Savannakhet	5.4	124.219	5.61	↑ 5.83	↑ 5.88	↑ 5.98	↑ 6.29	↑ 6.60	↑ 7.00	12.00	13.00	-	↑ 1.17	1.17	5.00	6.00
Khong Chiam	2.0	89.030	8.74	↑ 8.91	↑ 9.18	→ 9.24	↑ 9.37	↑ 9.70	↑ 10.10	13.50	14.50	-	↑ 1.19	1.19	3.40	4.40
Pakse	15.0	86.490	6.98	↑ 7.10	↑ 7.33	↑ 7.39	↑ 7.49	↑ 7.81	↑ 8.21	11.00	12.00	-	↑ 1.11	1.11	2.79	3.79
Stung Treng	17.0	36.790	7.61	↓ 7.35	→ 7.36	↑ 7.50	↑ 7.56	→ 7.59	↑ 7.77	10.70	12.00	-	↑ 0.42	0.42	2.93	4.23
Kratie	20.0	-1.080	18.17	↓ 17.76	↓ 17.53	↑ 17.61	↑ 17.74	↑ 17.87	↑ 18.09	22.00	23.00	-	↑ 0.33	0.33	3.91	4.91
Kompong Cham	4.0	-0.930	12.04	↓ 11.86	↓ 11.63	↓ 11.57	↑ 11.65	↑ 11.79	↑ 11.92	15.20	16.20	-	↑ 0.06	0.06	3.28	4.28
Phnom Penh (Bassac)	0.7	-1.020	8.32	→ 8.33	→ 8.31	→ 8.31	→ 8.34	→ 8.37	↑ 8.41	10.50	12.00	-	↑ 0.08	0.08	2.09	3.59
Phnom Penh Port	nr	0.070	6.97	→ 6.97	→ 6.94	→ 6.94	→ 6.97	↑ 7.00	↑ 7.04	9.50	11.00	-	↑ 0.07	0.07	2.46	3.96
Koh Khel	0.0	-1.000	7.18	↑ 7.22	→ 7.23	→ 7.22	→ 7.22	→ 7.23	→ 7.25	7.90	8.40	-	↑ 0.03	0.03	0.65	1.15
Neak Luong	0.0	-0.330	5.86	→ 5.88	→ 5.89	→ 5.88	→ 5.88	→ 5.89	→ 5.91	7.50	8.00	-	↑ 0.03	0.03	1.59	2.09
Prek Kdam	7.3	0.080	7.42	↑ 7.45	→ 7.45	→ 7.45	→ 7.47	↑ 7.51	↑ 7.55	9.50	10.00	-	↑ 0.10	0.10	1.95	2.45
Tan Chau	0.0	0.000	3.07	↓ 3.06	→ 3.04	→ 3.03	→ 3.03	→ 3.04	→ 3.05	3.50	4.50	-	→ -0.01	-0.03	0.45	1.45
Chau Doc	0.4	0.000	2.77	↓ 2.73	→ 2.71	→ 2.70	→ 2.70	→ 2.71	→ 2.72	3.00	4.00	-	→ -0.01	-0.03	0.28	1.28

\*: Low-lying flood levels have been requested by Thailand to be included for specific stations including Nongkhai (7.35 m), Nakhon Phanom (9.04 m) and Beung Kan (7.58 m) stations

### WATER LEVEL FORECASTING DEFINITIONS

↑	Rising water level.
→	Stable water level: stable water level is defined as a daily change of less than 10cm from Chaing Saen to Savannakhet; less than 5cm at Pakse and Stung Treng; and no more than 3cm from Kratie downstream.
↓	Falling water level.
X	No data available.
Alarm stage	Alarm stage is when the water level ranges between alarm and flood levels.
Flood stage	Flood stage is when the flood level exceeds. A flood level is determined by member countries.

### NOTES

- On 22 September, water levels at all stations along the Mekong mainstream are in **normal conditions**. As of now, the total **accumulated reverse flow** volume into the TSL is **26.15 km<sup>3</sup>**.
- In the next 5 days, **thunderstorm & moderate to heavy rain** are expected in the LMB including the **upper & central part of Lao PDR**, the **northeastern part of Thailand**, the **western and eastern part of Cambodia**, and the **3S basin**.
- For 23 – 27 September, water levels at all stations along the **Mekong mainstream** are expected to **rise**. However, they are **not expected to reach alarm and flood levels**.

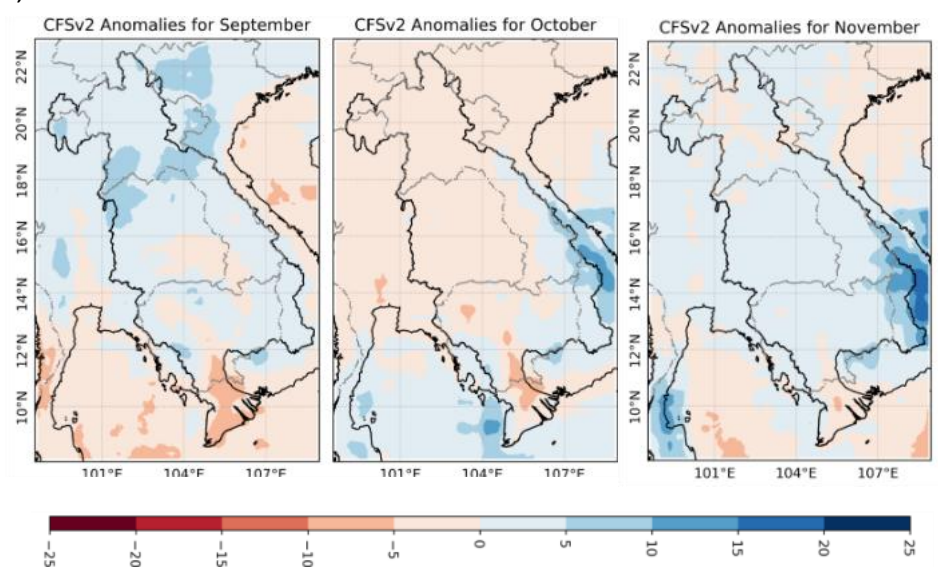
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### 6.3 Flash Flood Information

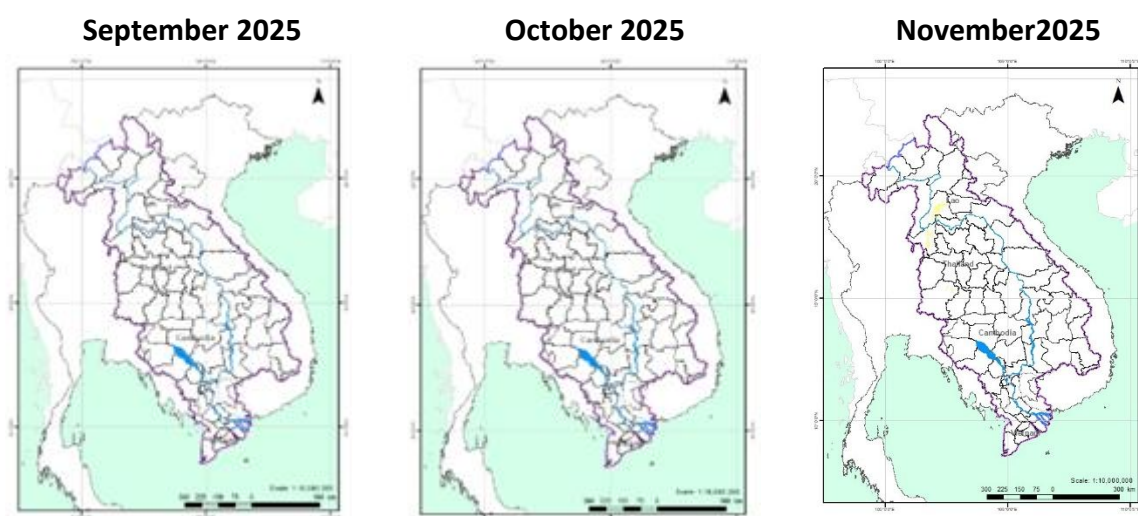
With moderate to heavy rainfall for next week, flash floods might be detected in some areas in the LMB. And local heavy rain in a short period of time is possible with unpredictable short flash floods. Further detailed information on Flash Flood Guidance Information, as well as on its explanation, is available for download [here](#).

### 6.4 Drought forecast

In **Figure 15**, In September and November 2025 the total amount of rainfall in most areas of the LMB will be higher than the LTA by around 5 - 25 mm, except for some areas in the Mekong Delta. However, in October, the total amount of rainfall in most areas of the LMB will be lower than the LTA by around 5 - 15 mm, except for some areas in the southern Lao PDR, northern Cambodia, and the 3S Basin.



**Figure 15:** Seasonal forecast of rainfall anomalies for September to November 2025 based on CFSv2 (NCEP-NOAA)



**Figure 16.** Monthly forecasts of combined drought indicators from September to November 2025

**Figure 14** indicates that the monthly drought forecast for the upcoming three months (September to November) use the Combined Drought Indicator (CDI). The forecast indicates that no drought conditions are expected in over the LMB in September and October. In November, some areas in the northern part of Lao PDR and northeastern part of Thailand are likely to occur moderate drought using the Combined Drought Indicator (CDI).

## **7 Summary and Possible Implications**

### **7.1. Rainfall and its forecast**

From 16 - 22 September 2025, thunderstorm and moderate to heavy rain are expected in the central part of the LMB including the central part of Lao PDR, the northeastern part of Thailand, the western and eastern part of Cambodia, and the 3S basin.

Next week, from 23 - 29 August, thunderstorm and moderate to heavy rain are expected in the central part of the LMB including the central part of Lao PDR, the northeastern part of Thailand, the western and eastern part of Cambodia, and the 3S basin.

### **7.2. Water level and its forecast**

At 22 key monitoring stations along the Mekong mainstream from 16 – 22 September 2025, water levels at all stations along the Mekong mainstream have been in normal conditions, which have not reached alarm or flood levels, and the flow threshold (PMFM 6C) are under normal conditions. It is also the same condition for Tan Chau and Chau Doc monitoring stations, which are significantly influenced by sea tidal fluctuation.

In the period of 23 – 27 September 2025, the water level all stations are not expected to reach alarm and flood levels. Water levels at all stations along the Mekong mainstream are expected to rise. At Tan Chau and Chau Doc stations, the water levels are predicted to be also fluctuated, resulting from the influence of sea tidal patterns.

### **7.3. Flash flood and its trends**

With the predicted of rainfall for the coming week as mentioned earlier in part 2, the flash flood guidance from low to high level will likely be detected in some areas of the LMB.

### **7.4. Drought condition and its forecast**

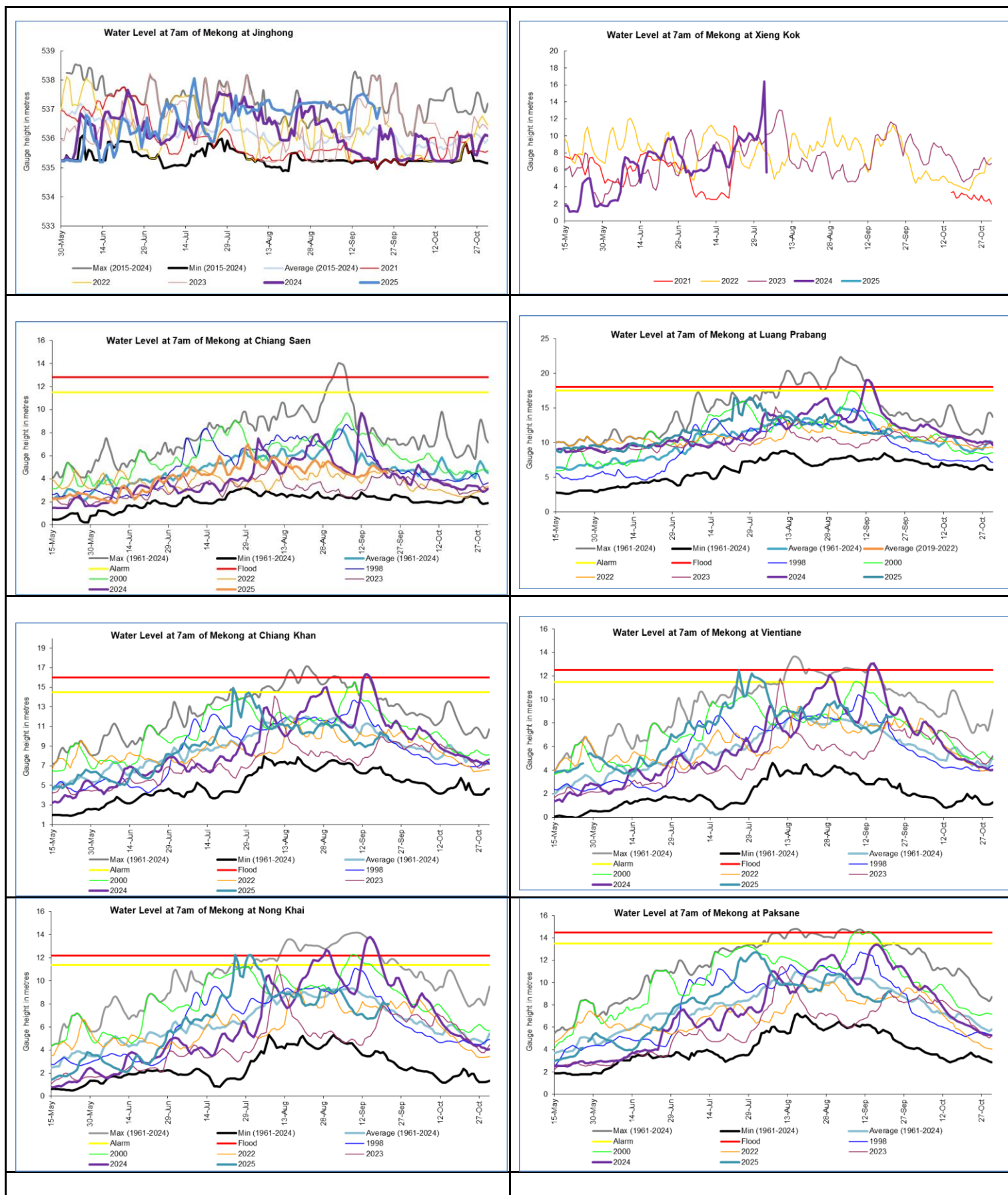
During 16 - 22 September, the LMB were facing normal to wet conditions.

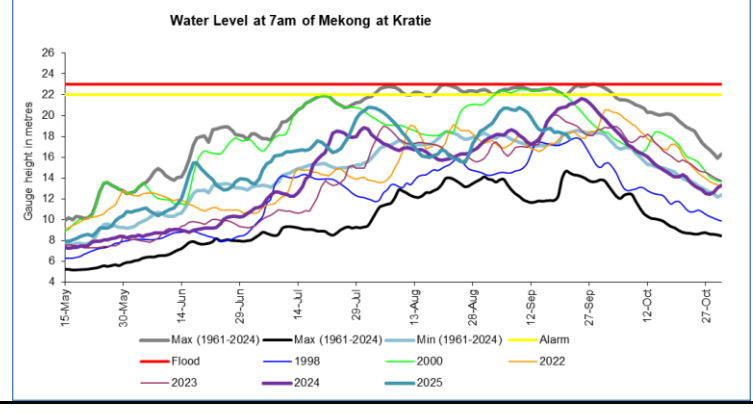
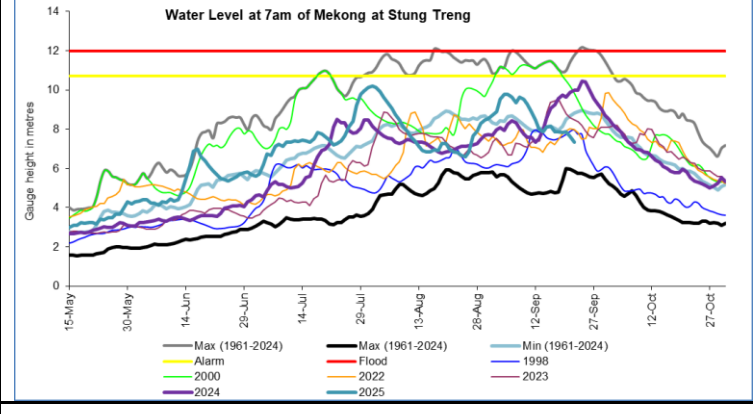
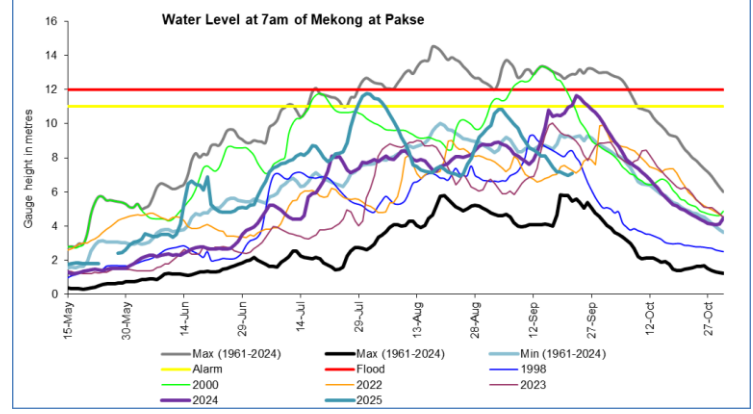
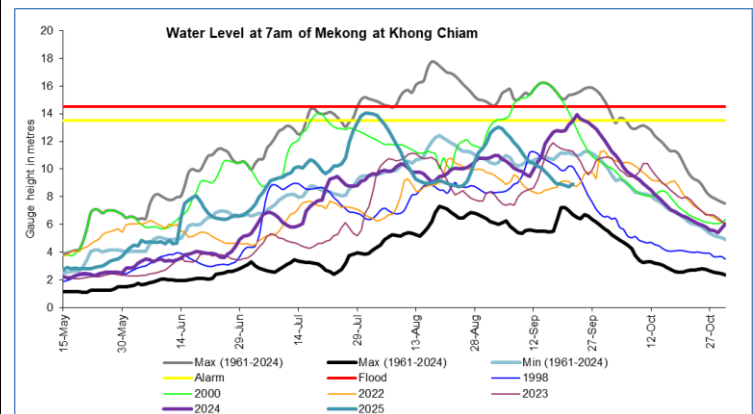
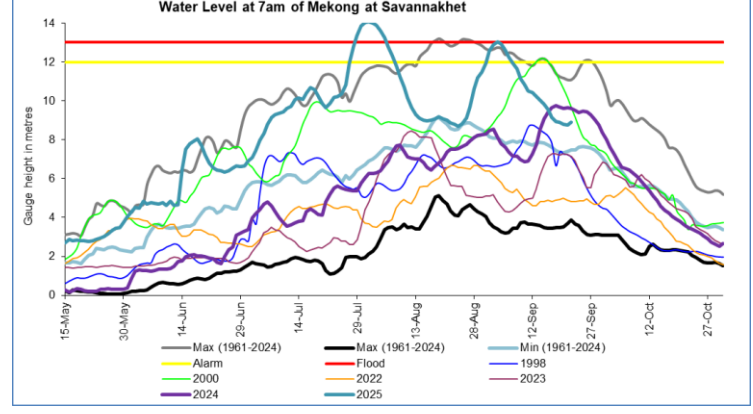
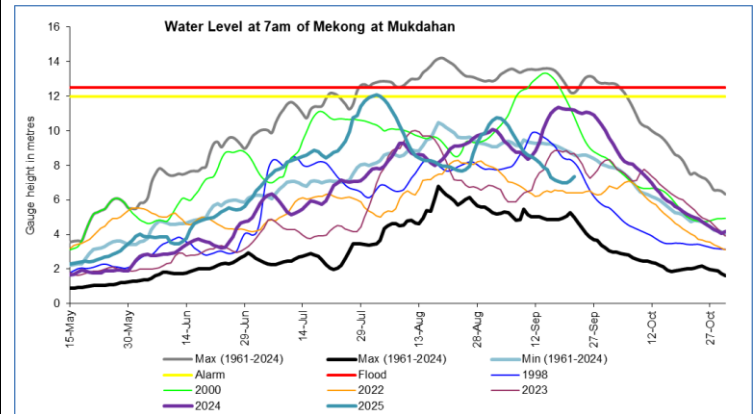
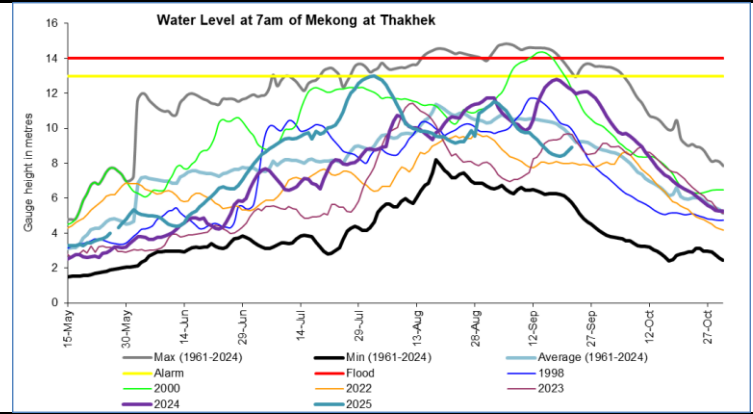
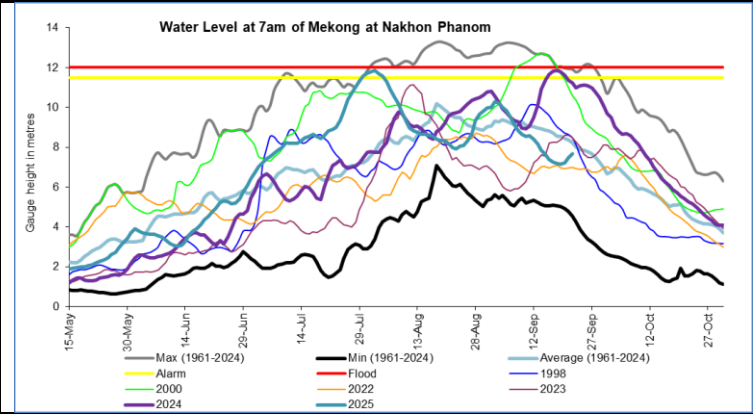
In September and November 2025, the total amount of rainfall in most areas of the LMB will be higher than the LTA by around 5 - 25 mm, except for some areas in the Mekong Delta. However, in October, the total amount of rainfall in most areas of the LMB will be lower than the LTA by around 5 - 15 mm, except for some areas in the southern Lao PDR, northern Cambodia, and the 3S Basin

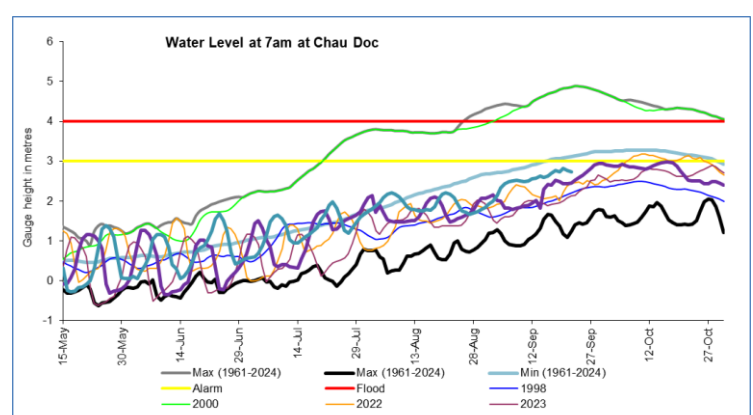
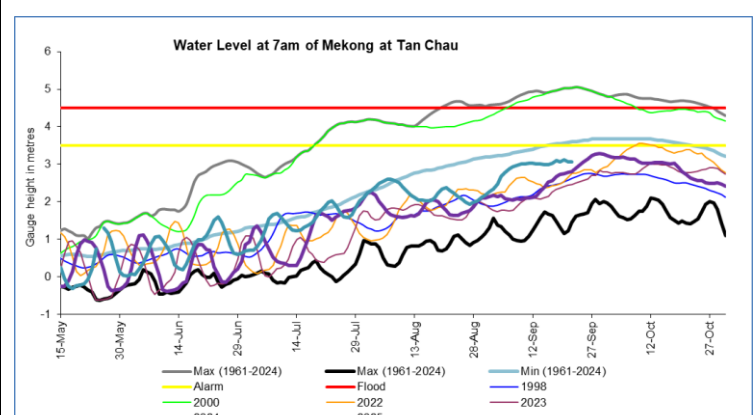
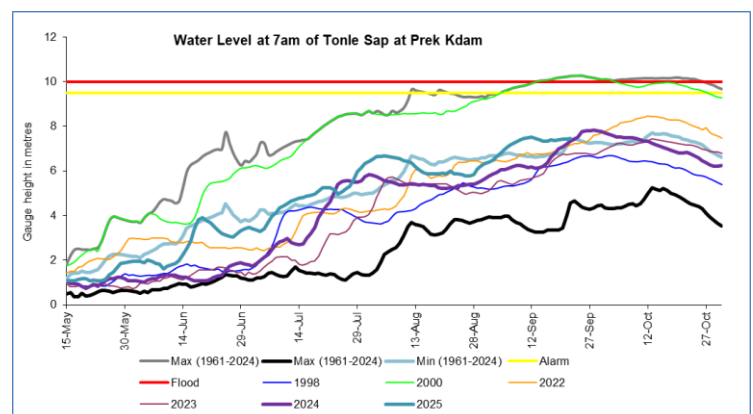
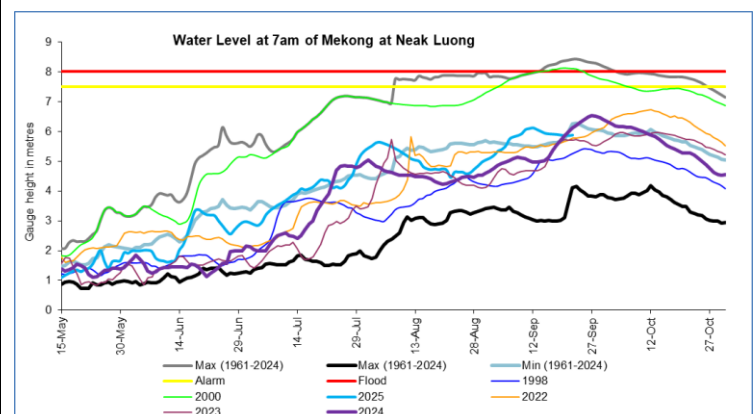
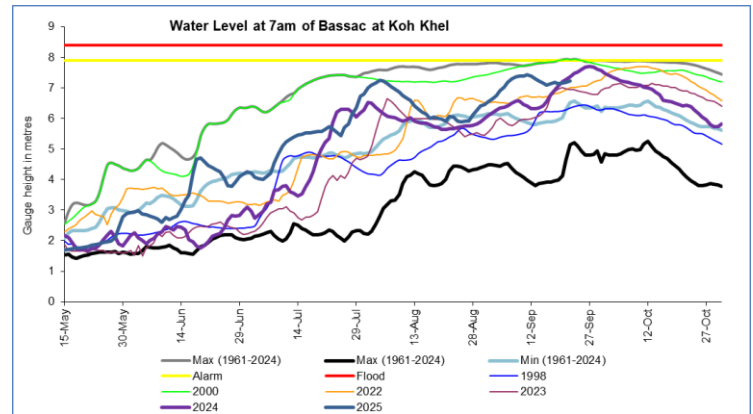
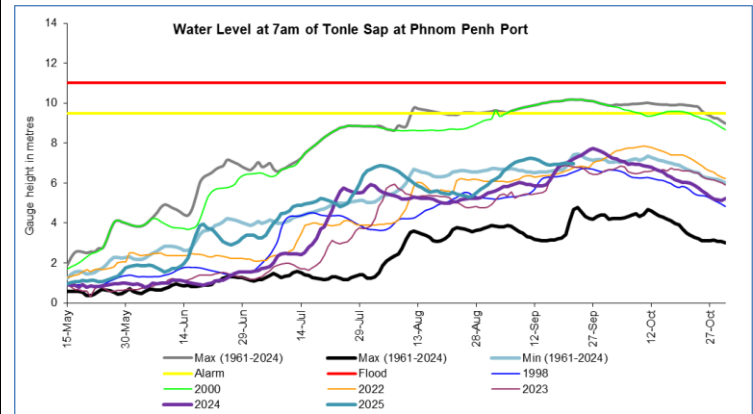
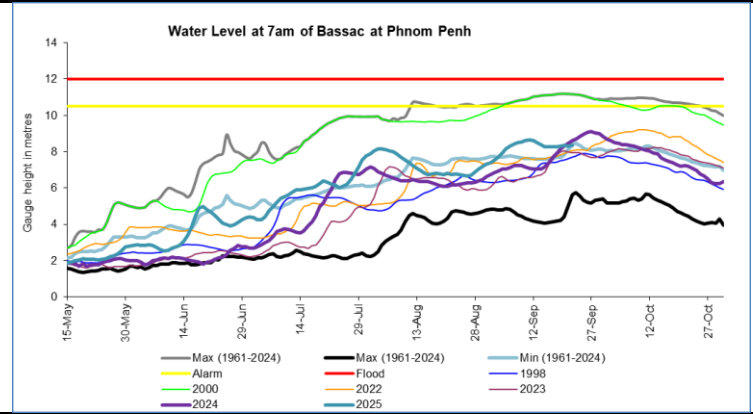
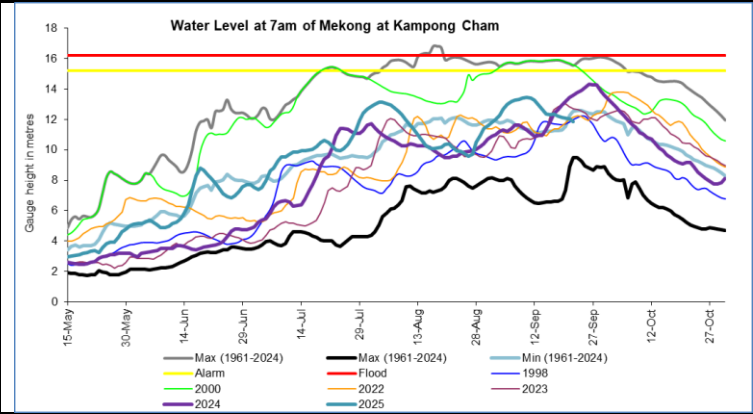
The forecast indicates that no drought conditions are expected in over the LMB in September and October. In November, some areas in the northern part of Lao PDR and northeastern part of Thailand are likely to occur moderate drought using the Combined Drought Indicator (CDI).



## Annex A: Weekly water level monitoring at 22 key stations







## Annex B: Tables for weekly updated water levels and rainfall at the Key Stations

Table A1: Weekly observed water levels

2025	Jinghong	Chiang Saen	Luang Prabang	Chiang Khan	Vientiane	Nongkhai	Paksane	Nakhon Phanom	Thakhek	Mukdahan	Savannakhet	Khong Chiam	Pakse	Stung Treng	Kratie	Kompong Cham	Phnom Penh (Bassac)	Phnom Penh Port	Koh Khel	Neak Luong	Prek Kdam	Tan Chau	Chau Doc
16-09-2025	537.53	5.13	11.34	9.2	7.33	6.75	8.29	7.39	8.64	7.32	5.77	9.54	7.82	8.15	18.72	12.32	8.28	6.9	7.1	5.92	7.33	2.99	2.62
17-09-2025	537.44	5.13	11.3	9.65	7.48	6.85	8.28	7.24	8.5	7.15	5.61	9.15	7.45	7.87	18.8	12.37	8.29	6.95	7.14	5.91	7.39	3.03	2.7
18-09-2025	537.23	4.92	11.36	9.87	7.85	7.35	8.31	7.19	8.44	7.09	5.54	8.93	7.18	7.85	18.34	12.22	8.29	6.95	7.18	5.9	7.37	3.09	2.76
19-09-2025	537.21	4.75	11.3	10.4	8.28	7.72	8.51	7.15	8.4	7	5.46	8.91	7.16	7.83	18.42	12.13	8.31	6.97	7.14	5.88	7.39	3.07	2.74
20-09-2025	537.11	4.63	11.92	10.2	8.63	8.14	8.9	7.23	8.48	6.99	5.47	8.8	7.05	7.88	18.3	12.1	8.33	6.99	7.16	5.86	7.42	3.12	2.82
21-09-2025	536.68	4.65	11.98	10.16	8.52	7.96	9.2	7.46	8.73	7.11	5.61	8.74	6.98	7.61	18.17	12.04	8.32	6.97	7.18	5.86	7.42	3.07	2.77
22-09-2025	537.05	4.52	11.64	9.92	8.57	7.99	9.19	7.67	8.92	7.35	5.83	8.91	7.1	7.35	17.76	11.86	8.33	6.97	7.22	5.88	7.45	3.06	2.73
Flood level		12.80	18.00	16.00	12.50	12.00	14.50	12.50	14.00	12.50	13.00	14.50	12.00	12.00	23.00	16.20	12.00	11.00	6.04	8.00	10.00	4.50	4.00

Table A2: Weekly observed rainfall

2025	Jinghong	Chiang Saen	Luang Prabang	Chiang Khan	Vientiane	Nongkhai	Paksane	Nakhon Phanom	Thakhek	Mukdahan	Savannakhet	Khong Chiam	Pakse	Stung Treng	Kratie	Kompong Cham	Phnom Penh (Bassac)	Phnom Penh Port	Koh Khel	Neak Luong	Prek Kdam	Tan Chau	Chau Doc
16-09-2025	0	0	22.4	9.8	0	0	26.2	0	0	7.7	0.4	0	34	26	46.3	2	0	0	0	0	0	0	3
17-09-2025	0	25	0	34.6	0.1	6.5	4.3	0.5	0.1	0	2.6	0	0	0	1.8	0	0.3	0	27.4	10.8	17.2	2.2	0.8
18-09-2025	0	0	12.8	2	0.6	0	0	26.1	28.7	19.3	25.4	17.1	0	22.5	25	0	0	0	46.5	3.5	7.3	1.5	8.9
19-09-2025	4	17.5	0	2	9.5	0	14.3	11	8.5	0	0	40	64.3	5.5	37.5	9	48.5	0	3.7	6.7	18.4	1.6	0.2
20-09-2025	0	23	22.8	48.5	0	0	15.2	0.6	1.7	17	7.2	6.9	5	10	3	0	0	0	0	0.7	0	0	0.3
21-09-2025	0	0.4	0	10.9	63.8	60.7	9.3	0	0	0	0	0	1.4	0	0	0	0	0	0	1.2	0	39.3	0
22-09-2025	0	8.5	0	1	12.8	20.4	10.4	32.2	13.8	26.5	5.4	2	15	17	20	4	0.7	0	0	0	7.3	0	0.4
Sum	4.0	80.8	20.6	20.0	86.8	87.6	79.7	70.4	52.8	70.5	41.0	66.0	119.7	81.0	133.6	15.0	49.5	0.0	77.6	22.9	50.2	44.6	13.6

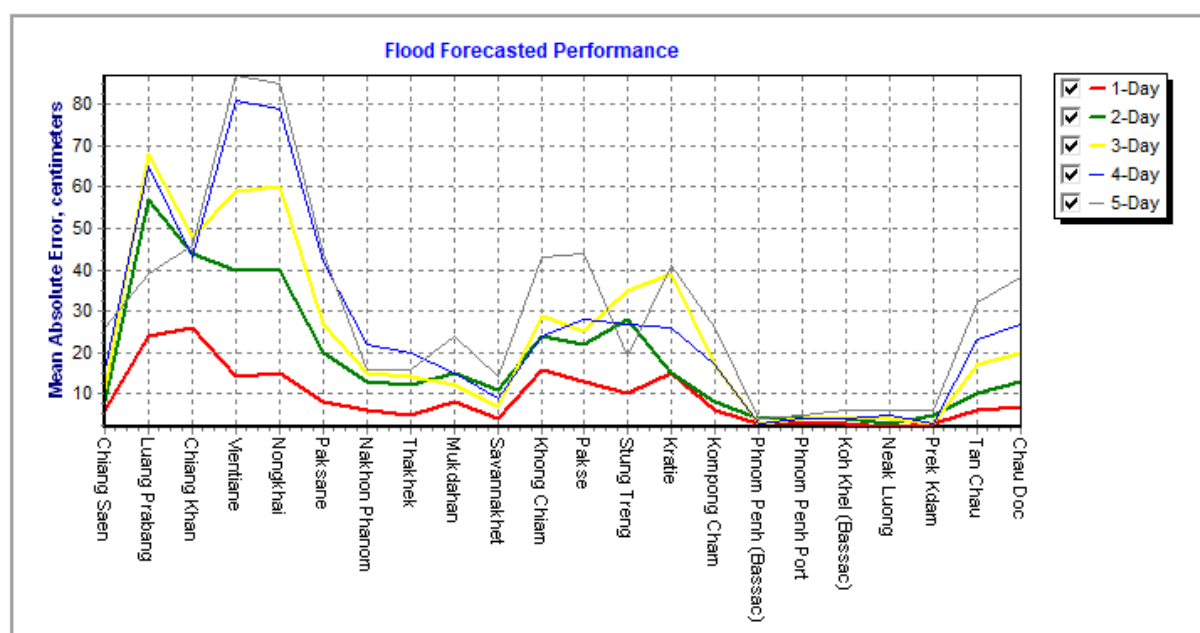


## Annex C: Performance of the weekly flood forecasting

“Accuracy” here refers to the state where data recorded in the MRC’s Mekong River Flood Forecasting System are cleaned and verified.

The adjustment of flood forecasting outcomes from the flood forecasting system requires flood forecasters to have extensive knowledge in hydrology and statistical modelling for estimating the relationships between stations upstream and downstream in the Mekong River Basin. Flood forecasting performance presented in the graph below shows the average flood forecasting accuracy at each key station along the Mekong mainstream from 16 to 22 September 2025.

The forecasting values from 16 to 22 September 2025 show that the overall accuracy is fair for a four-day to five-day forecast in lead time (less than 250 cm) for all of the stations from the upper to the lower parts of the Mekong River with combine information of rainfall and reservoirs' operation in this area during the report period. Moreover, the sudden release from hydropower also contribute to the low accuracies.



**Note:** The higher percentage of flood forecasting accuracy is due to several key factors as follows:

- Chiang Saen station is influenced by hydropower upstream operation from China.
- Luang Prabang to Chiang Khan and Paksane to Stung Treng to Kratie have been influenced by hydropower operations upstream, tributaries inflows.
- The influence of heavy rainfall caused by storms and hydropower operations from upstream, tributaries inflows and the lower part of the Mekong floodplain, including the 3S (Stung Treng and Kratie).
- Fluctuations of the water levels at Tan Chau and Chau Doc stations were due to daily tidal effects of the sea in the Mekong Delta.
- Satellite rainfall data were not representative of the actual rainfall at ground stations in some areas of the Mekong region.



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