Mekong River Commission

Weekly Wet Season Situation Report in the Lower Mekong River Basin

09 – 15 September 2025

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

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Key Messages

Key messages for this weekly report are presented below.

Rainfall monitoring and forecast

- From 09 - 15 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 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.

Water level monitoring and forecast

- At 22 key monitoring stations along the Mekong mainstream from 09 – 15 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 16 – 20 September 2025, the water level all stations are not expected to reach alarm and flood levels. water levels Luang Prabang to Paksane are expected to slightly rise, while from Nakhon Phanom to Kompong Cham, they are expected to drop. Water levels at Phnom Penh (Bassac), Phnom Penh Port & Prek Kdam stations are expected to slightly 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 09 - 15 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 northeatern 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 **09** – **15 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 monsoon through lies across the central part 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

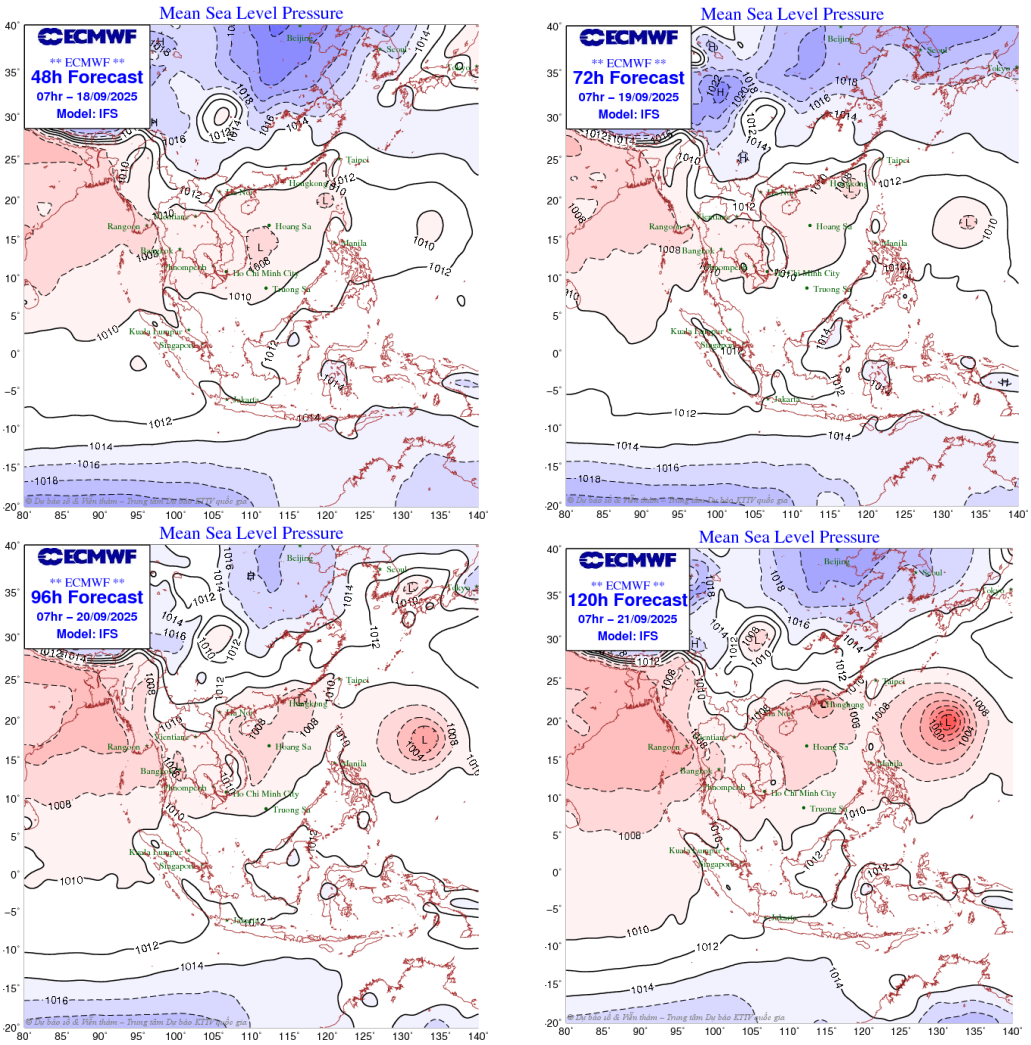


Figure 1: Weather conditions over the LMB

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).

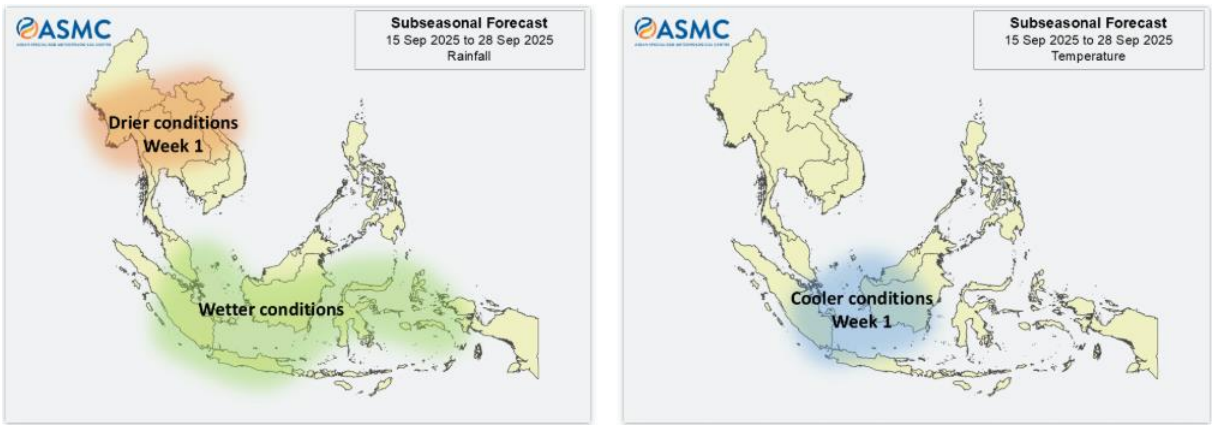


Figure 2: Outlook of wet and dry conditions over the Asian countries by ASMC.

Based on the tropical storm risk (TS) (https://www.jma.go.jp/bosai/weather_map/#lang=en), there is no Tropical Storm (TS) at NW pacific system as of **15 September 2025** (**Figure 3**).

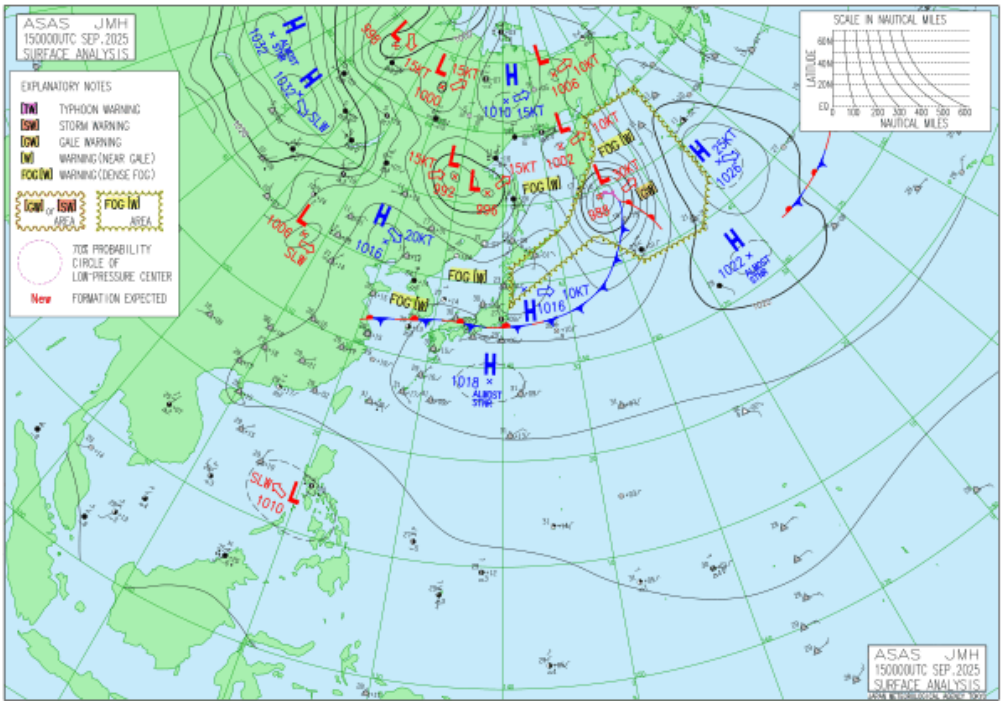


Figure 3: Tropical storm observed on 15 September 2025

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 09 - 15 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.

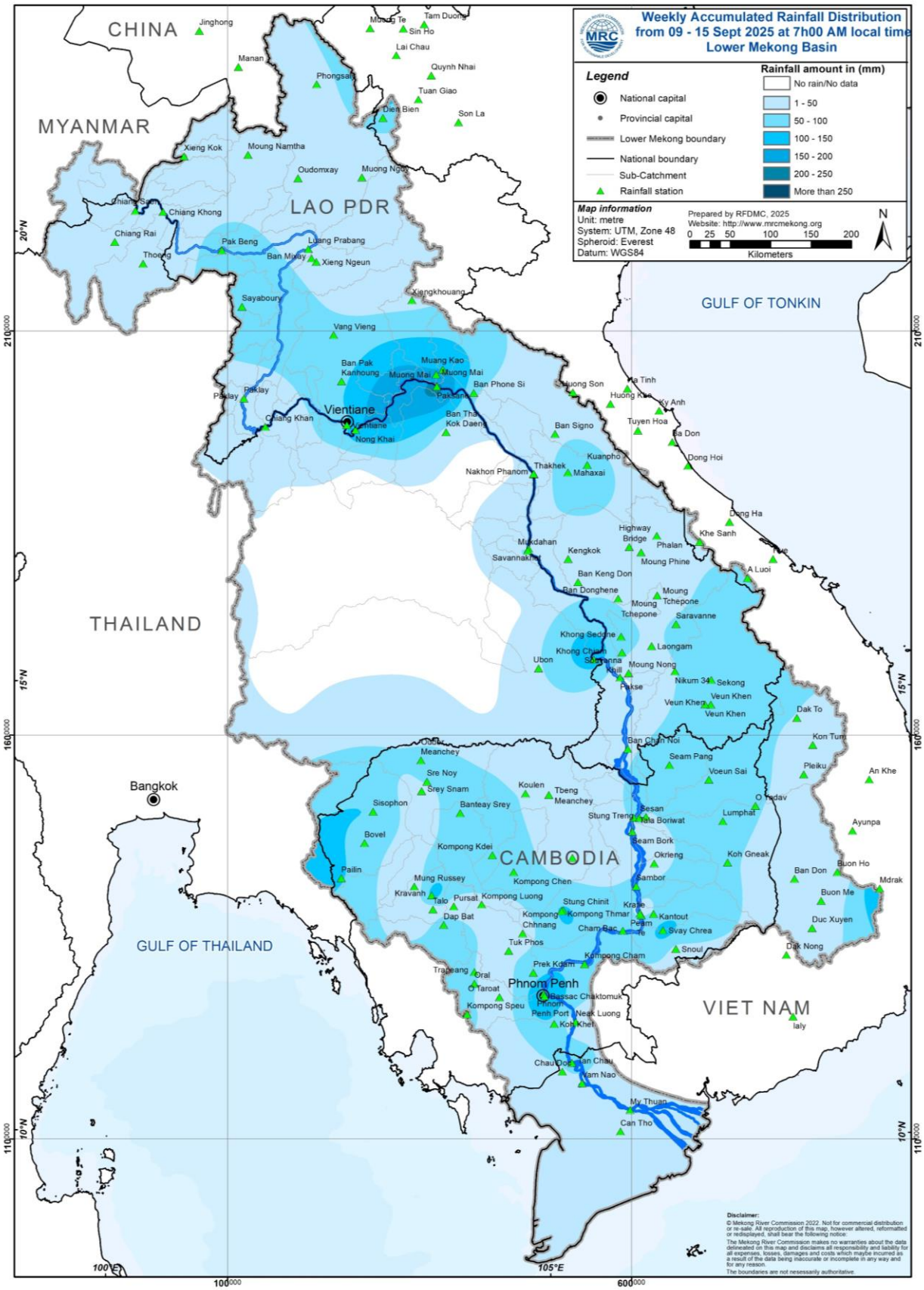


Figure 4: Weekly rainfall distribution over the LMB during 09 – 15 September 2025

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 09 – 15 September 2025, the observed water level (WL) at Jinghong hydrological station[1], was almost constant and ranges between 536.88 and 537.49 m, which are corresponding to the outflow between 2,050.00 m^3/s to 2,580.00 m^3/s (recorded on 7:00 am), respectively (**Figure 6**). The water level in Chiang Saen Station also indicated a slight fluctuation ranging from 4.31 m to 4.86 m. At the same period, the water level in Luang Prabang Station also decreased with an approximate value of -0.30 m from 11.58 m to 11.28 m as compared to the previous week. In addition, at Chiang khan, the water level has decreased from 9.50 m to 9.13 m.

The water levels at Vientiane, Nongkhai, Paksane, Nakhon Phanom, Thakhek, Mukdahan, avannakhet, Khong Chiam and Pakse stations have decreased from 7.83 m to 7.25 m, 7.55 m to 6.74 m, 9.20 m to 8.40 m, 8.81 m to 7.62 m, 9.98 m to 8.86 m, 9.12 m to 7.75 m, 7.53 m to 6.03 m, 11.63 m to 9.81 m, and 9.75 m to 8.10 m, respectively.

However, the water levels at Stung Treng, Kratie, Kompong Cham, Phnom Penh (Bassac), Phnom Penh Port, Koh Khel, Neak Luong and Prek Kdam also have decreased from 9.65 m to 8.11 m, 20.47 m to 18.53 m, 13.30 m to 12.36 m, 8.49 m to 8.29 m, 7.10 m to 6.95 m, 7.36 m to 7.16 m, 5.86 m to 5.94 m, and 7.29 m to 7.32 m, respectively.

Similar to the previous week, the water levels from 09 to 15 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 2.96 m and 2.98 m, while at the Chau Doc station, they ranged between 2.52 m and 2.60 m.

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

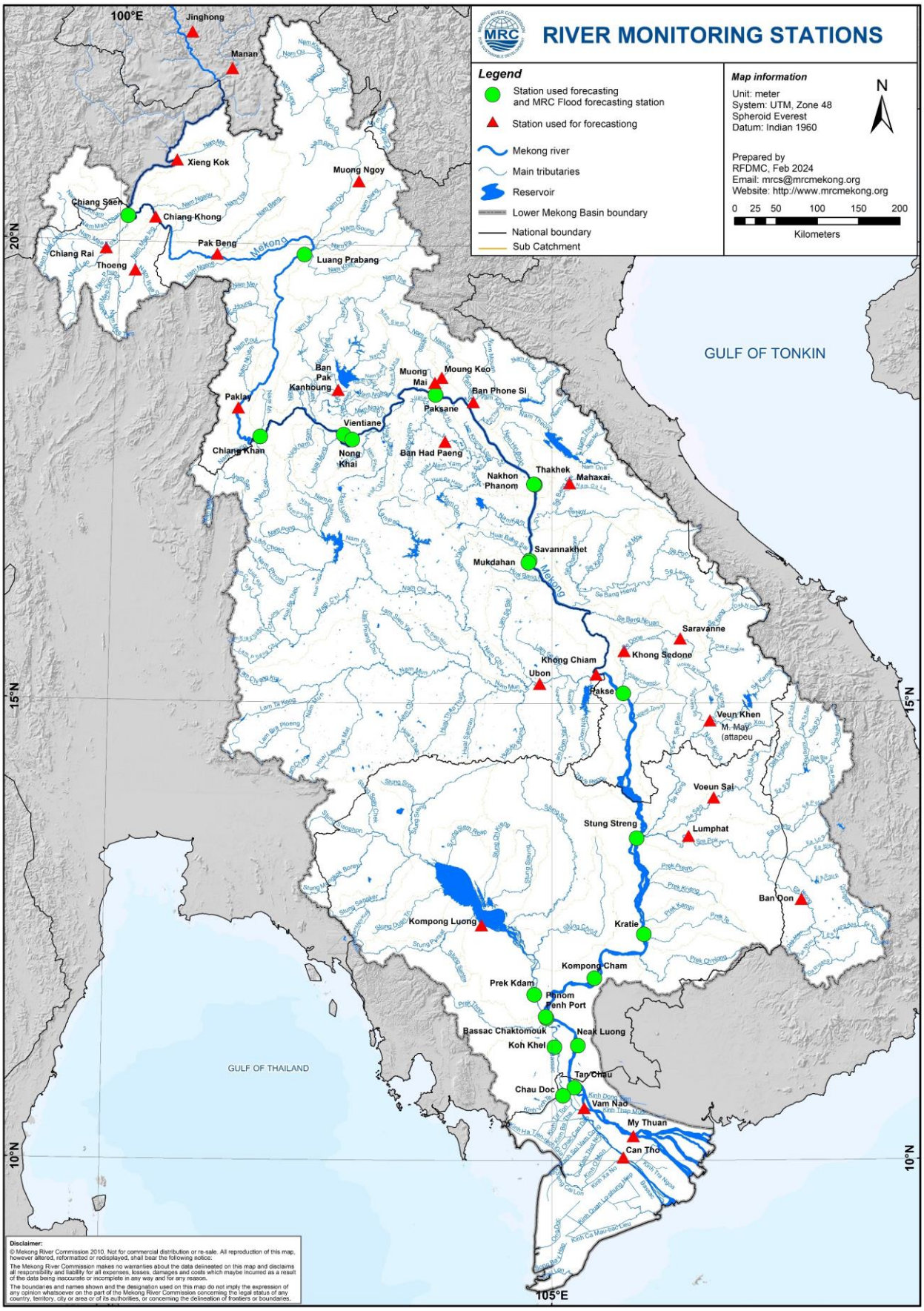


Figure 5: The key stations along LMB for river flood forecasting

The water levels in key monitoring stations on **15 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**.

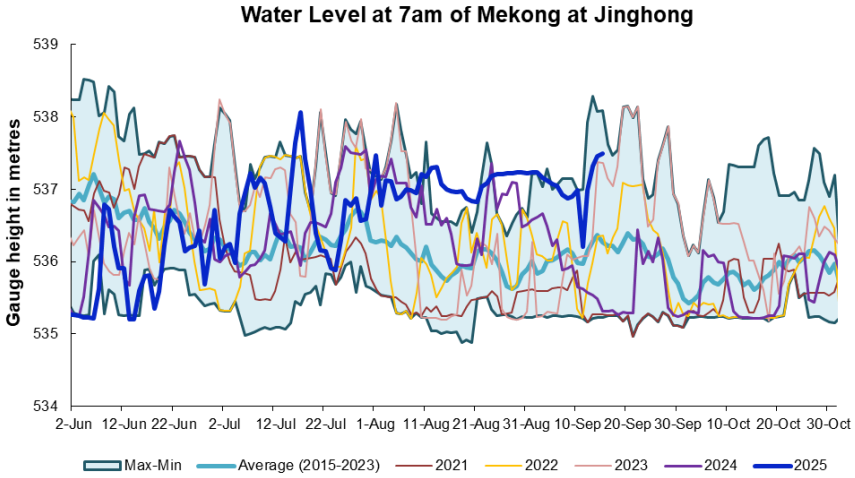


Figure 6. Water level at the Jinghong hydrological station up to 15 September 2025.

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:

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

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

The current total accumulated reverse flow to the lake is **26.15 Km^3** (**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 **15 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)**.

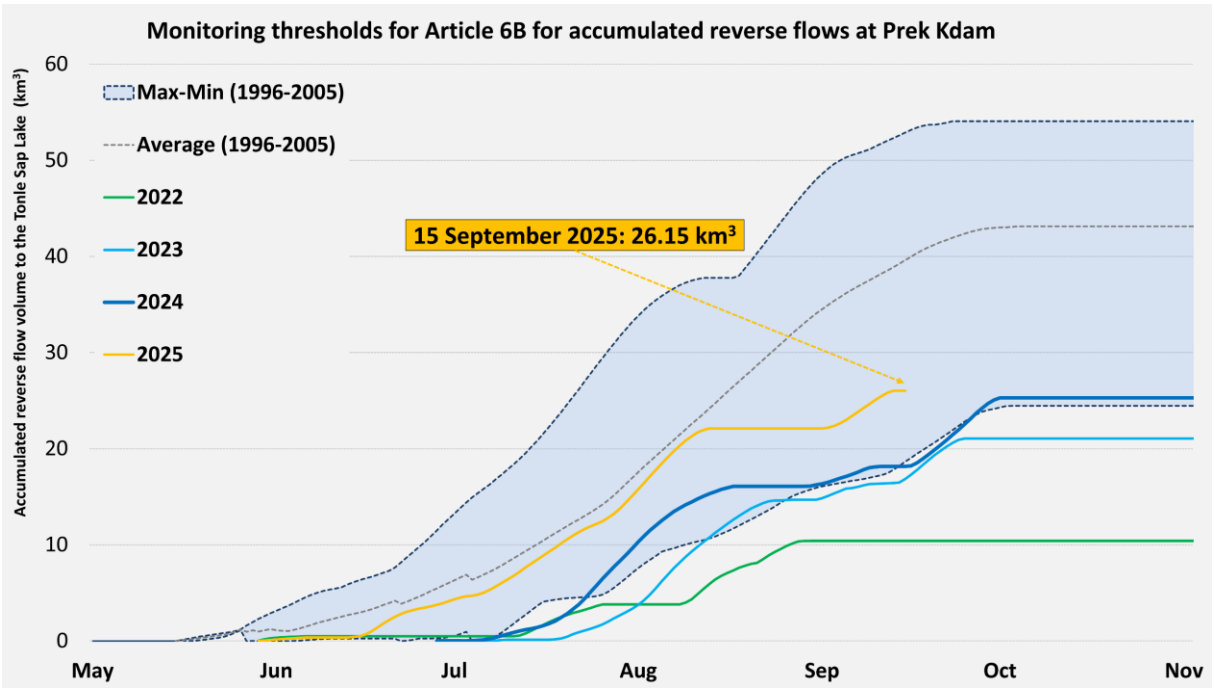


Figure 7: Total accumulated reverse flow to Tonle Sap Lake updated on 15 September.

The seasonal changes in monthly flow volumes up to **15 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)**.

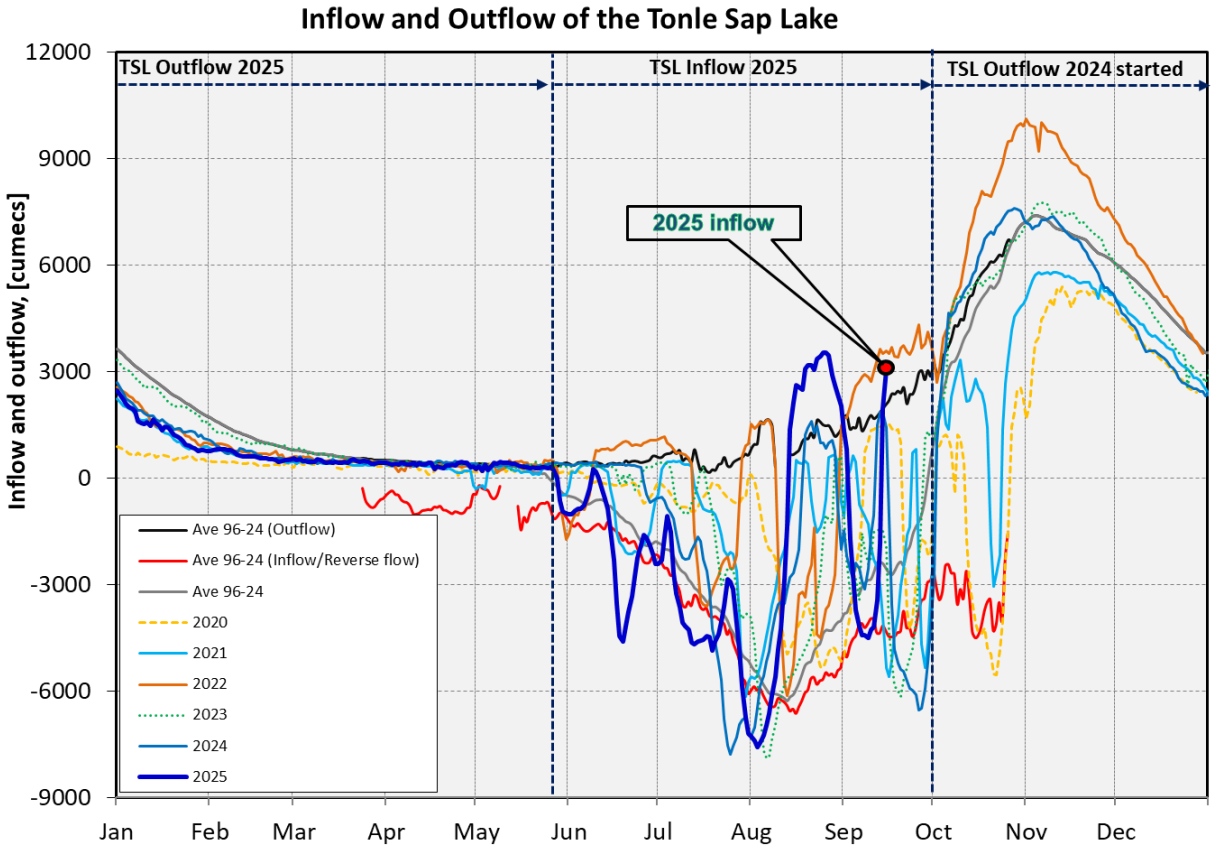


Figure 8: Seasonal change of inflows and outflows of Tonle Sap Lake.

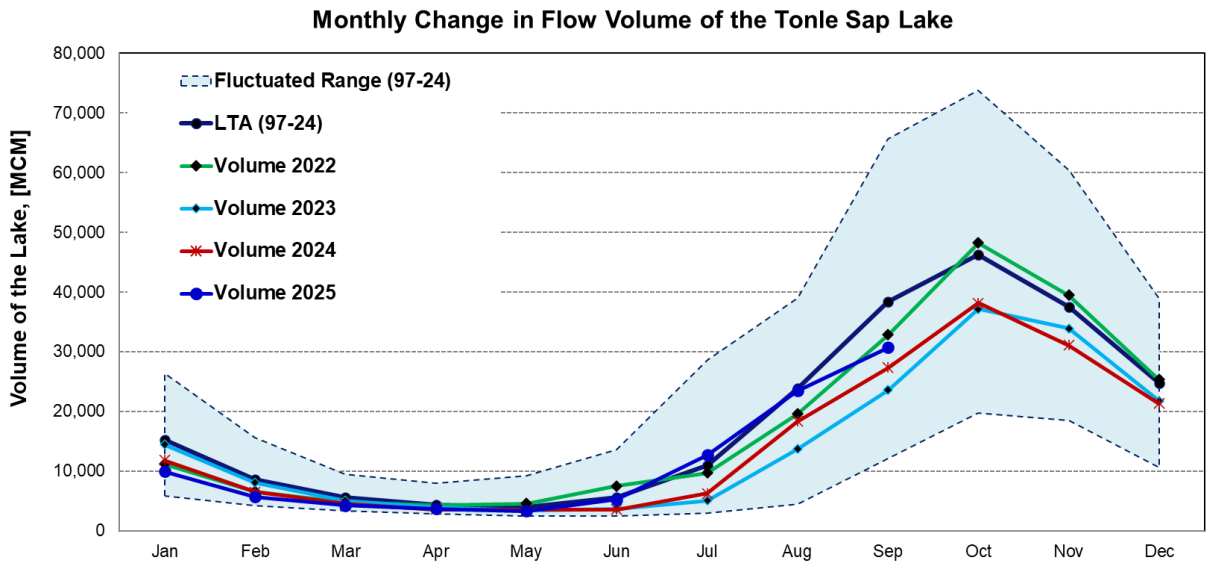


Figure 9. The seasonal change in monthly flow volume of Tonle Sap Lake.

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	30718.92	80.04
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 Km^3)											

Remarks: the volume of Tonle Sap Lake in 2025 is updated untill 15 September 2025.

4. Flash Flood in the Lower Mekong Basin

During the weekly monitoring period from 09 – 15 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 15 September

FLASH FLOOD GUIDANCE IN CAMBODIA								
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	Moderate	Kampong Cham	Stueng Trang	Moderate	Kampong Cham	Stueng Trang	Moderate
Kampong Chhnang	Tuek Phos	Moderate	Mondul Kiri	Ou Reang	Moderate	Mondul Kiri	Kaoh Nheaek	Moderate
Kampot	Chhuk	Moderate	Mondul Kiri	Pechr Chenda	Moderate	Mondul Kiri	Ou Reang	Moderate
Kratie	Preaek Prasab	Moderate	Ratana Kiri	Andoung Meas	Moderate	Mondul Kiri	Pechr Chenda	High
Mondul Kiri	Kaoh Nheaek	Moderate	Ratana Kiri	Koun Mom	High	Ratana Kiri	Andoung Meas	Moderate
Mondul Kiri	Ou Reang	High	Ratana Kiri	Ta Veaeng	High	Ratana Kiri	Koun Mom	High
Mondul Kiri	Pechr Chenda	High	Ratana Kiri	Veun Sai	Moderate	Ratana Kiri	Ta Veaeng	High
Mondul Kiri	Saen Monourom	Moderate	Stung Treng	Sesan	Moderate	Ratana Kiri	Veun Sai	Moderate
Ratana Kiri	Andoung Meas	Moderate	Stung Treng	Siem Pang	Moderate	Stung Treng	Sesan	Moderate
Ratana Kiri	Koun Mom	High	Stung Treng	Thala Barivat	Moderate	Stung Treng	Siem Pang	Moderate
Ratana Kiri	Ou Chum	Moderate						
Ratana Kiri	Ta Veaeng	High						
Ratana Kiri	Veun Sai	Moderate						
Stung Treng	Sesan	Moderate						
Stung Treng	Siem Bouk	Moderate						
Stung Treng	Siem Pang	Moderate						

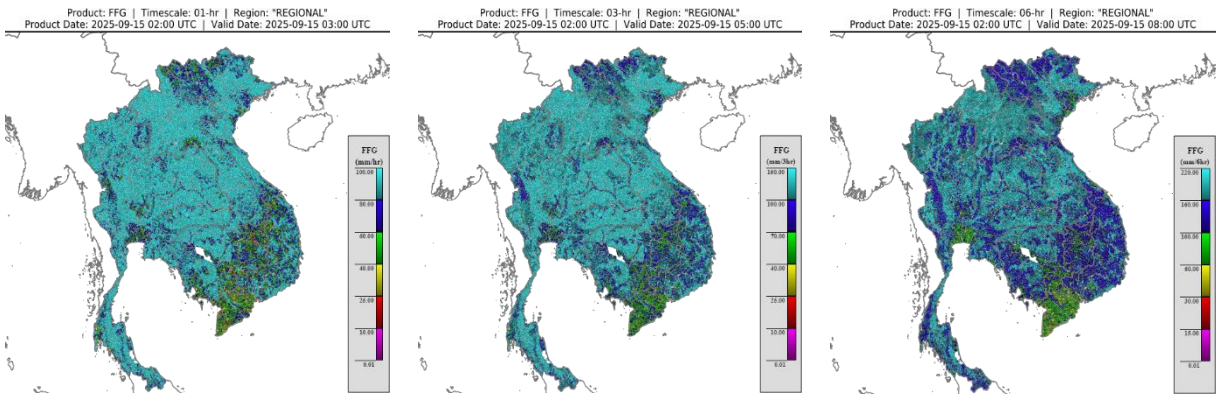


Figure 10. Flash Flood Guidance for the next 1-hr, 3-hr and 6-hr on 15 September

5. Drought Monitoring in the Lower Mekong Basin

5.2. Weekly drought monitoring from 09 - 15 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 09 - 15 September, as shown in Figure 9, the LMB were facing normal to wet conditions.

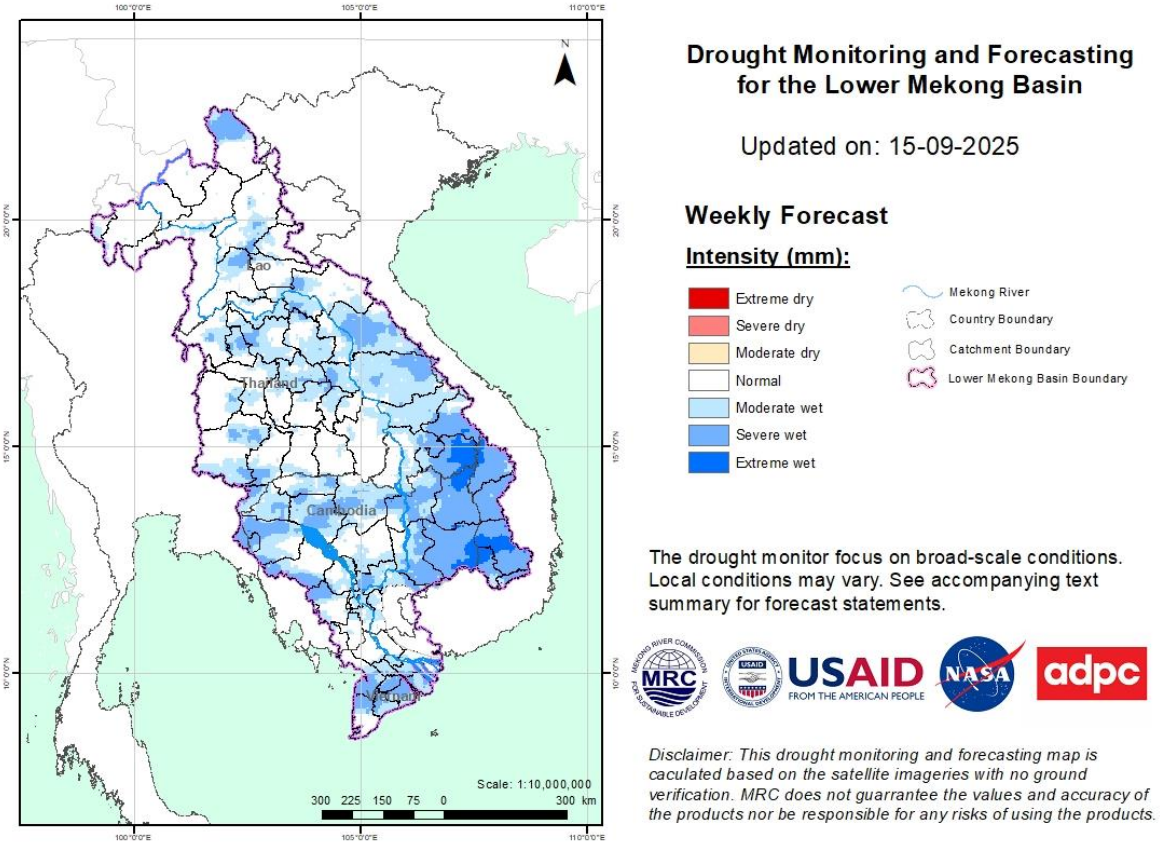


Figure 11: Weekly standardized precipitation index from 09 - 15 September

- **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 09 - 15 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.

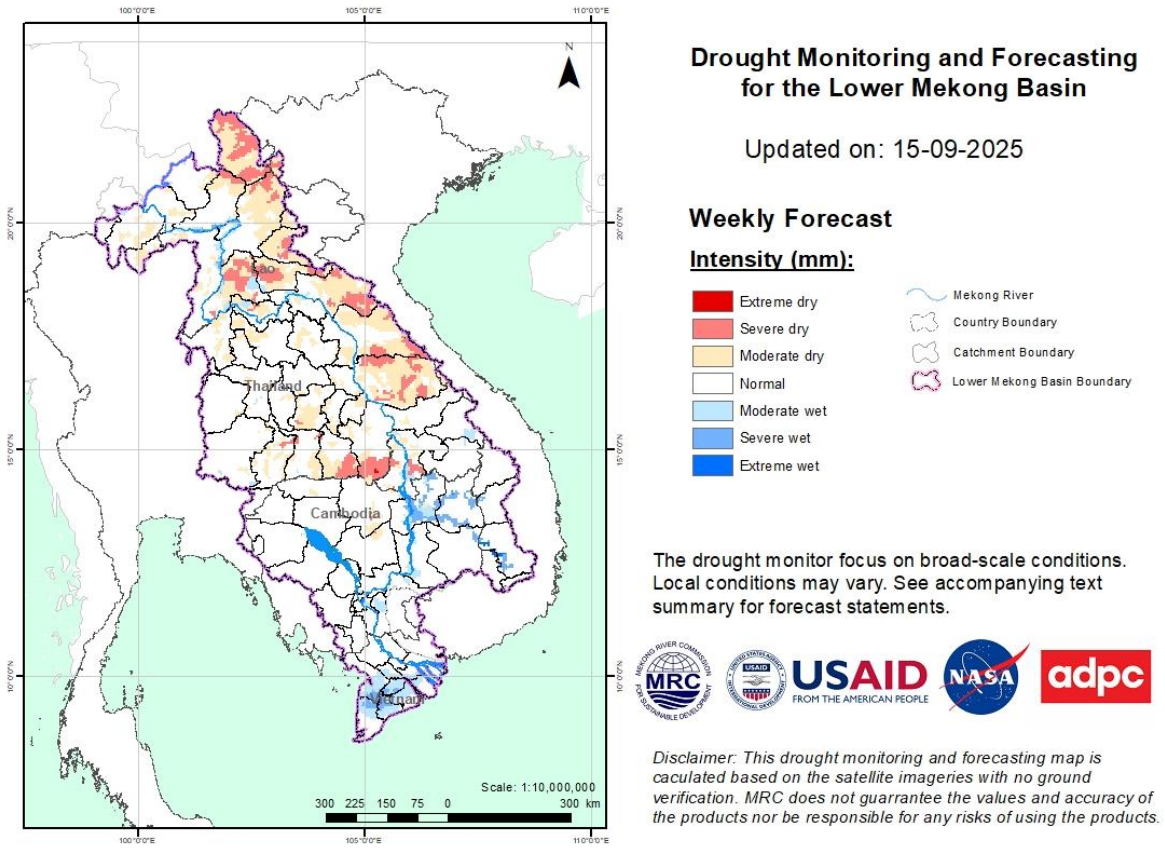


Figure 12: Weekly Index of Soil Water Fraction from 09 - 15 September.

- **Weekly Combined Drought Index (CDI)**

The combined drought indicator, **Figure 11**, shows that no drought in most areas, except some areas experienced moderate drought. The impacted areas are listed below:

Number	Country	Province	Moderate	Severe	Extreme	Exceptional	Number	Country	Province	Moderate	Severe	Extreme	Exceptional
1	Cambodia	Preah Vihear					9	Thailand	Chiang Rai				
2	Lao PDR	Bokeo					10	Thailand	Phayao				
3	Lao PDR	Champasak					11	Thailand	Si Sa Ket				
4	Lao PDR	Khammouan					12	Thailand	Surin				
5	Lao PDR	Louangphabang					13	Thailand	Ubon Ratchathani				
6	Lao PDR	Phongsali											
7	Lao PDR	Xaignabouli					Other provinces of the Mekong Delta of Viet Nam have no data						
8	Lao PDR	Xaisomboun						Moderate		Severe			
								Extreme		Exceptional			

Note: S: short-term drought, less than 1 months; L: long-term drought, more than 1 month

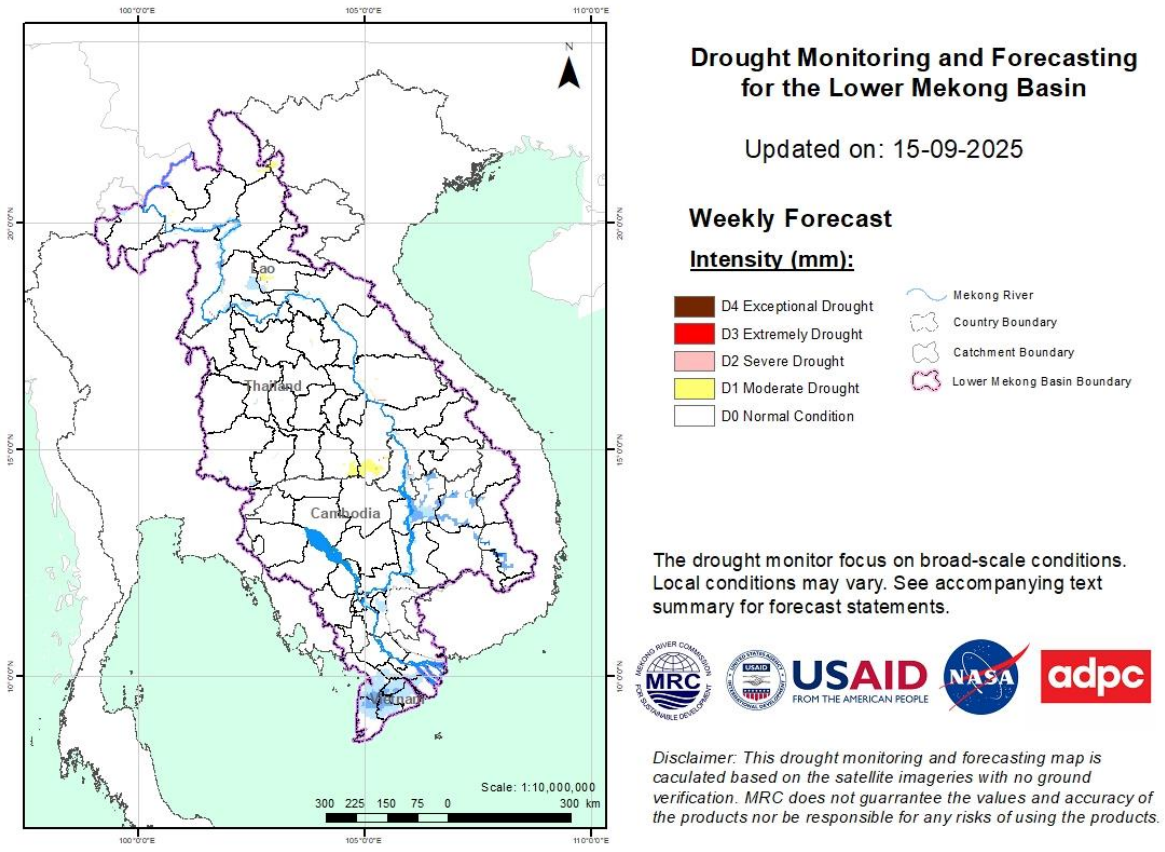


Figure 13: Weekly Combined Drought Index from 09 - 15 September

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 16 - 20 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 án central part of Lao PDR, the northeastern part of Thailand, the western and eastern part of Cambodia, and the 3S basin.

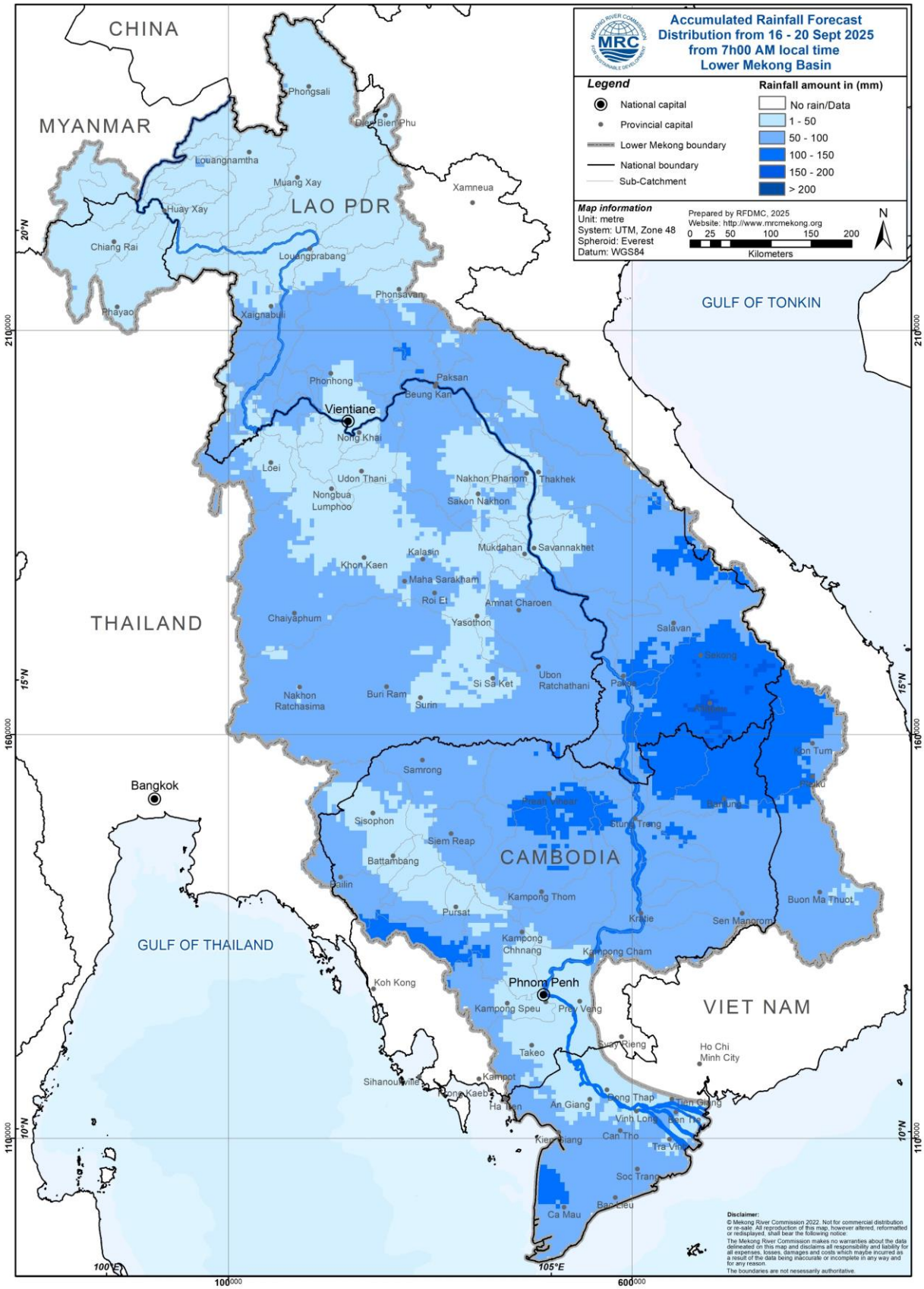


Figure 14: Accumulated rainfall forecast from CHIRPS-GFS (16 – 20 September 2025)

6.2 Water level forecast

During the wet season, from June 1st to October 31st 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 16 – 20 September 2025. Water levels at upper part of LMB (Luang Prabang to Paksane station) are expected to rise, while from Nakhon Phanom to Kompong Cham, they are expected to decline. In addition, from Phnom Penh (Bassac), water levels are expected to either rise or remain stable. 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 16 – 20 September 2025 with stable trend. The water level in Luang Prabang stations affected by backwater is likely slightly increasing within a range from 11.28 m to 11.76 m. In addition, at Chiang Khan, Vientiane, Nongkhai and Paksane stations, the water levels are also expected to rise approximately 0.37 m, 0.30 m, 0.38 m, and 0.17 m, respectively.

The water levels at Nakhon Phanom, Thakhek, Mukdahan, Savannakhet, Khong Chiam, and Pakse station, are expected to drop with approximate value of -0.12 m, -0.13 m, -0.27 m, -0.28 m, -0.49 m, and -0.15 m, respectively. Moreover, at Stung Treng, Kratie and Kompong Cham stations, the water levels are also expected to decrease approximately -0.19 m, -0.05 m, and -0.05 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 0.06 m, 0.06 m, -0.01 m, -0.01 m, and 0.04 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 2.98 m & 2.73 m and 2.60 m & 2.33 m, respectively, following daily tidal effects from the sea.

The weekly River Monitoring Bulletin and forecasting issued on **15 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

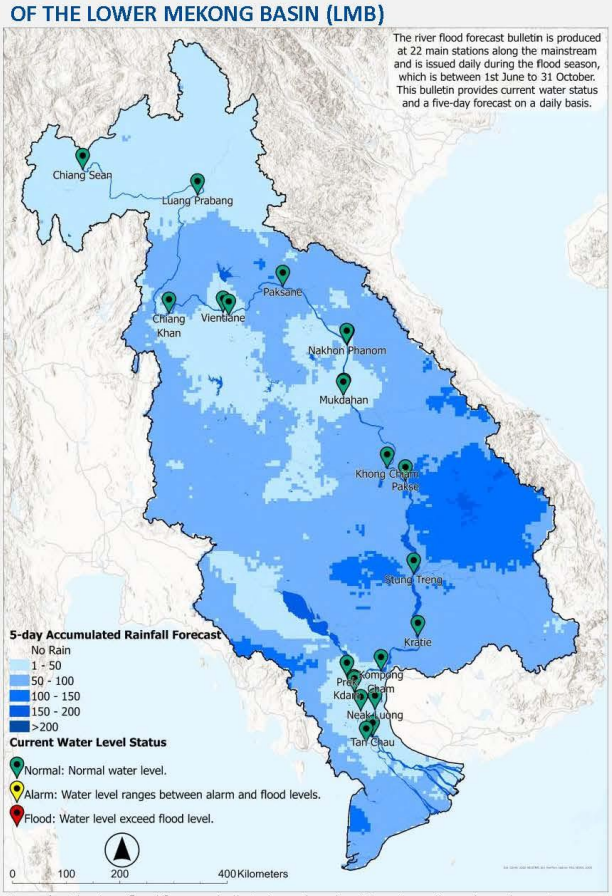
Table 3. River Monitoring and Forecasting Bulletin.

MEKONG RIVER MONITORING AND FORECASTING BULLETIN

Monitoring on 15 September 2025, 7:00 (UTC+7)

Highlights: *The water level at **all stations** along the Mekong mainstream are in **normal conditions**. The accumulated volume of **reverse flow** to **Tonle Sap Lake (TSL)** remains **26.15 km³**.*

THE FORECASTING HYDROLOGICAL STATION MAP OF THE LOWER MEKONG BASIN (LMB)



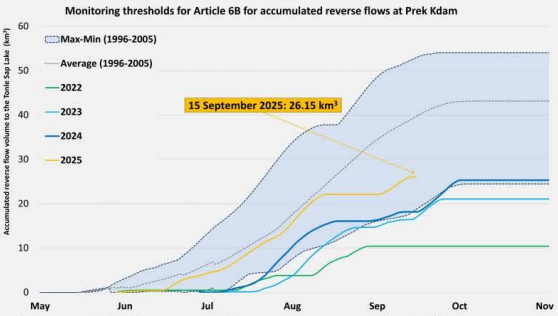
CURRENT WATER LEVEL STATUS

Monitoring Station	Water Level	Flow Threshold (PMFM*6C)
Jinghong	-	
Chiang Saen	Normal	Normal
Luang Prabang**	Normal	-
Chiang Khan	Normal	-
Vientiane	Normal	Normal
Nongkhai	Normal	-
Paksane	Normal	-
Nakhon Phanom	Normal	-
Thakhek	Normal	-
Mukdahan	Normal	-
Savannakhet	Normal	-
Khong Chiam	Normal	Normal
Pakse	Normal	Normal
Stung Treng	Normal	Normal
Kratie	Normal	Normal
Kompong Cham	Normal	-
Phnom Penh (Bassac)	Normal	-
Phnom Penh Port	Normal	-
Koh Khel	Normal	-
Neak Luong	Normal	-
Prek Kdam	Normal	-
Tan Chau	Normal	-
Chau Doc	Normal	-

** Procedures for Maintenance of Flows on the Mainstream*

*** Luang Prabang station is influenced by hydropowers at its upstream and downstream*

REVERSE FLOW VOLUME PREK KDAM (PMFM*6B)



Remarks: *The river flood forecast bulletin is produced at 22 main stations along the mainstream and is issued daily during the flood season, which runs from 1st June to 31st October. This bulletin provides information on the current water level status and a five-day forecast on a daily basis.*

WATER LEVEL STATUS DEFINITIONS

Normal	Normal water level.
Alarm	Alarm when the water level ranges between alarm and flood levels.
Flood	Flood is when the flood level exceeds. A flood level is determined by member countries.

Accumulated reverse flow volume at Prek Kdam

Flow volumes on **15 September 2025**:	**26.15 Km³**
Minimum reverse flow volume (1996-2005):	23.848 Km³
Average reverse flow volume (1996-2005):	42.84 Km³
Maximum reverse flow volume (1996-2005):	54.046 Km³

**Procedures for Maintenance of Flows on the Mainstream*

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http://www.mrcmekong.org/
http://ffw.mrcmekong.org/bulletin_wet.php
http://ffw.mrcmekong.org/reportflood.php
https://pmfm.mrcmekong.org/

MEKONG RIVER MONITORING AND FORECASTING BULLETIN

Forecasting from 16 to 20 September 2025

Highlights: ***Thunderstorm and moderate to heavy rainfall*** *are likely to occur in several parts* ***of LMB****. Water levels at* ***upper*** *and* ***downstream parts of LMB*** *are expected to slightly* ***rise****, while in* ***central part****, they are expected to* ***drop****.*

Forecasting Station	24 h Observed Rainfall (mm)	Zero gauge above M.S.L (m)	Observed Water Level againt 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)
	14-Sep		14-Sep	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep							
Jinghong	0.0	-	537.46	→ 537.49	-	-	-	-	-	-	-	-	-	-	-	-
Chiang Saen	0.0	357.110	4.47	↑ 4.86	↑ 5.14	→ 5.13	↓ 5.00	↓ 4.87	→ 4.82	11.50	12.80	-	→ -0.04	0.28	6.36	7.66
Luang Prabang	0.0	267.195	11.34	↓ 11.28	↑ 11.40	↑ 11.70	↑ 11.90	→ 11.90	↓ 11.76	17.50	18.00	-	↑ 0.48	0.62	5.60	6.10
Chiang Khan	17.1	194.118	9.07	→ 9.13	→ 9.16	→ 9.21	↑ 9.35	↑ 9.51	→ 9.50	14.50	16.00	-	↑ 0.37	0.38	4.99	6.49
Vientiane	13.4	158.040	7.27	↓ 7.25	→ 7.29	→ 7.33	→ 7.36	→ 7.40	↑ 7.55	11.50	12.50	-	↑ 0.30	0.30	3.95	4.95
Nongkhai	0.0	153.648	6.73	→ 6.74	→ 6.78	→ 6.85	→ 6.90	→ 6.95	↑ 7.12	11.40	12.20	7.35	↑ 0.38	0.38	4.28	5.08
Paksane	0.0	142.125	8.53	↓ 8.40	→ 8.35	→ 8.37	→ 8.40	→ 8.44	↑ 8.57	13.50	14.50	-	↑ 0.17	0.17	4.93	5.93
Nakhon Phanom	0.0	130.961	7.86	↓ 7.62	↓ 7.45	→ 7.38	→ 7.39	→ 7.44	→ 7.50	11.50	12.00	9.04	↓ -0.12	-0.24	4.00	4.50
Thakhek	0.0	129.629	9.13	↓ 8.86	↓ 8.71	↓ 8.61	→ 8.59	→ 8.64	→ 8.73	13.00	14.00	-	↓ -0.13	-0.27	4.27	5.27
Mukdahan	0.0	124.219	7.90	↓ 7.75	↓ 7.57	→ 7.48	→ 7.40	→ 7.42	→ 7.48	12.00	12.50	-	↓ -0.27	-0.35	4.43	4.93
Savannakhet	0.0	124.219	6.36	↓ 6.03	↓ 5.84	↓ 5.73	→ 5.65	→ 5.69	→ 5.75	12.00	13.00	-	↓ -0.28	-0.38	6.16	7.16
Khong Chiam	9.5	89.030	10.05	↓ 9.81	↓ 9.68	↓ 9.45	↓ 9.30	→ 9.26	→ 9.32	13.50	14.50	-	↓ -0.49	-0.55	3.82	4.82
Pakse	0.0	86.490	8.10	→ 8.10	→ 8.07	↓ 8.00	↓ 7.92	→ 7.90	→ 7.95	11.00	12.00	-	↓ -0.15	-0.20	2.93	3.93
Stung Treng	0.0	36.790	7.87	↑ 8.11	↑ 8.25	↓ 8.13	↓ 8.05	↓ 7.98	↓ 7.92	10.70	12.00	-	↓ -0.19	-0.19	2.45	3.75
Kratie	0.0	-1.080	18.69	↓ 18.53	↑ 18.79	↑ 18.89	↑ 19.04	↓ 18.96	↓ 18.82	22.00	23.00	-	↑ 0.29	0.26	2.96	3.96
Kompong Cham	6.5	-0.930	12.62	↓ 12.36	↓ 12.30	↑ 12.45	↑ 12.50	↓ 12.43	↓ 12.31	15.20	16.20	-	↓ -0.05	-0.06	2.70	3.70
Phnom Penh (Bassac)	24.7	-1.020	8.38	↓ 8.29	↓ 8.23	→ 8.25	→ 8.27	↑ 8.31	↑ 8.35	10.50	12.00	-	↑ 0.06	0.06	2.15	3.65
Phnom Penh Port	nr	0.070	7.04	↓ 6.95	↓ 6.89	→ 6.91	→ 6.93	↑ 6.97	↑ 7.01	9.50	11.00	-	↑ 0.06	0.06	2.49	3.99
Koh Khel	26.7	-1.000	7.22	↓ 7.16	↓ 7.13	→ 7.12	→ 7.12	→ 7.13	→ 7.15	7.90	8.40	-	→ -0.01	-0.04	0.75	1.25
Neak Luong	2.2	-0.330	6.00	↓ 5.94	↓ 5.91	→ 5.90	→ 5.90	→ 5.91	→ 5.93	7.50	8.00	-	→ -0.01	-0.04	1.57	2.07
Prek Kdam	0.0	0.080	7.38	↓ 7.32	↓ 7.28	→ 7.28	→ 7.31	↑ 7.35	→ 7.36	9.50	10.00	-	↑ 0.04	0.04	2.14	2.64
Tan Chau	0.0	0.000	3.01	↓ 2.98	→ 2.95	↓ 2.90	↓ 2.83	↓ 2.77	↓ 2.73	3.50	4.50	-	↓ -0.25	-0.25	0.55	1.55
Chau Doc	nr	0.000	2.61	↓ 2.60	↓ 2.55	↓ 2.50	↓ 2.43	↓ 2.37	↓ 2.33	3.00	4.00	-	↓ -0.27	-0.27	0.45	1.45

**: 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 **15 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 km³**.
- 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 **16 – 20 September**, water levels **Luang Prabang** to **Paksane** are expected to **slightly rise**, while from **Nakhon Phanom to Kompong Cham**, they are expected to **drop**. Water levels at **Phnom Penh (Bassac), Phnom Penh Port** & **Prek Kdam** stations are expected to **slightly rise**.

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http://www.mrcmekong.org/
http://ffw.mrcmekong.org/bulletin_wet.php
http://ffw.mrcmekong.org/reportflood.php
https://pmfm.mrcmekong.org/

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.

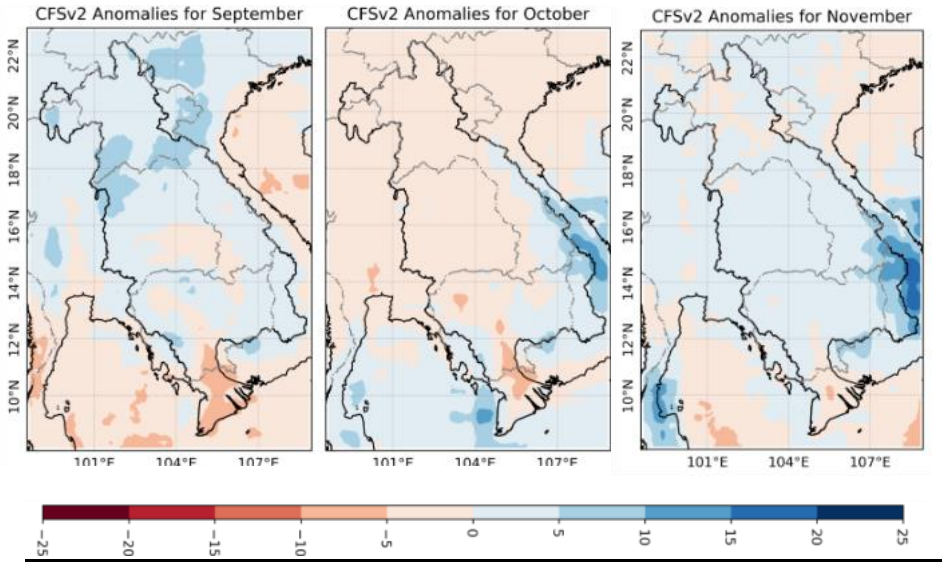


Figure 15: Seasonal forecast of rainfall anomalies for September to November 2025 based on CFSv2 (NCEP-NOAA)

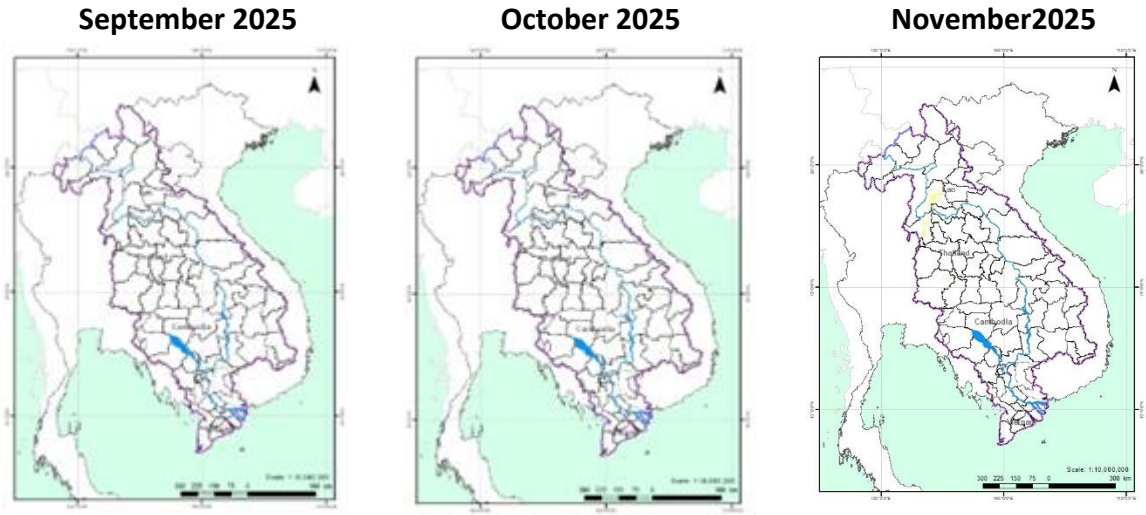


Figure 16. Monthly forecasts of combined drought indicators from September to November 2025

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 northeatern 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 09 - 15 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 16 - 22 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 09 – 15 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 16 – 20 September 2025, the water level all stations are not expected to reach alarm and flood levels. water levels Luang Prabang to Paksane are expected to slightly rise, while from Nakhon Phanom to Kompong Cham, they are expected to drop. Water levels at Phnom Penh (Bassac), Phnom Penh Port & Prek Kdam stations are expected to slightly 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.

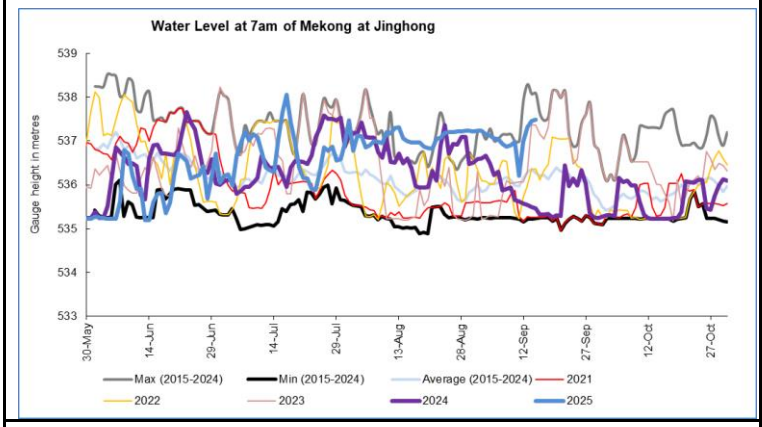
7.4. Drought condition and its forecast

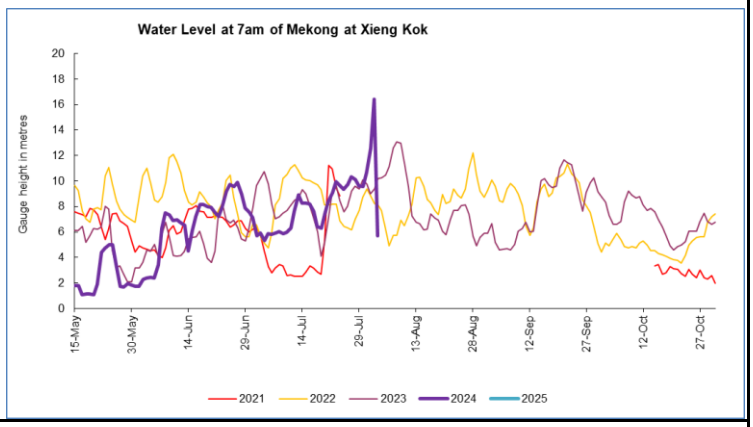
During 09 - 15 September, the LMB were facing normal to wet conditions.

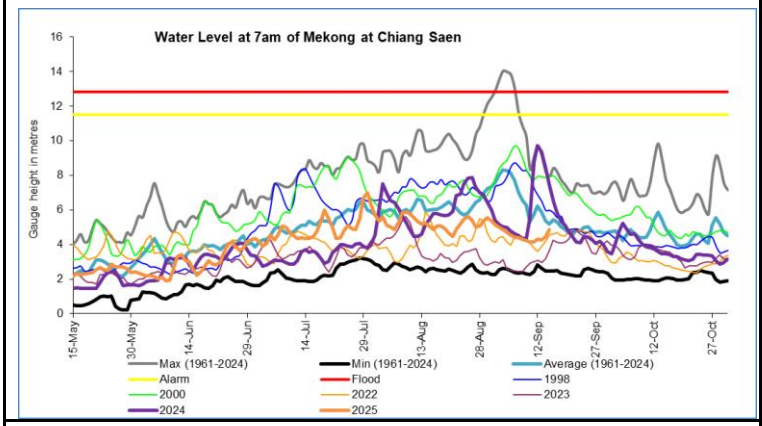
In September and November 2025, the total amount of rainfall in most areas of the LMB will be higher than the LTA by around 5 - 25 mm, except for some areas in the Mekong Delta. However, in October, the total amount of rainfall in most areas of the LMB will be lower than the LTA by around 5 - 15 mm,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

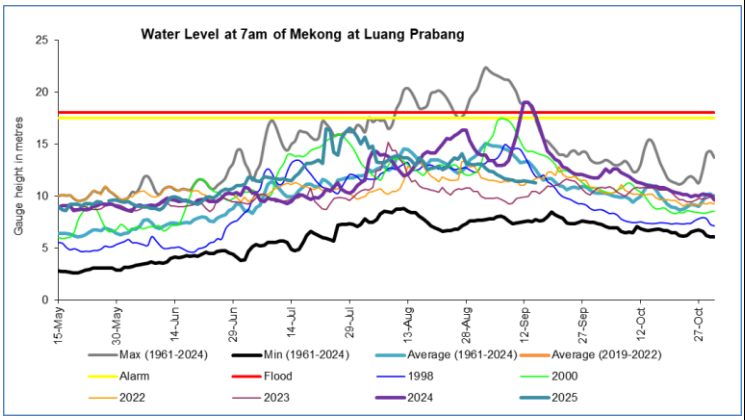
The forecast indicates that no drought conditions are expected in over the LMB in September and October. In November, some areas in the northern part of Lao PDR and northeatern part of Thailand are likely to occur moderate drought using the Combined Drought Indicator (CDI).

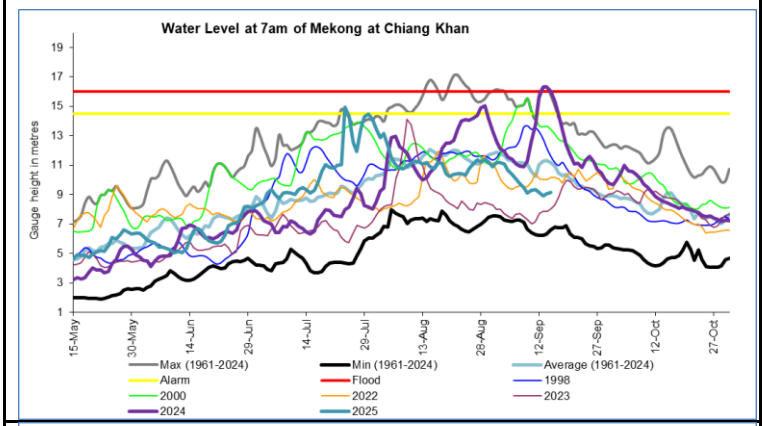
Annex A: Weekly water level monitoring at 22 key stations

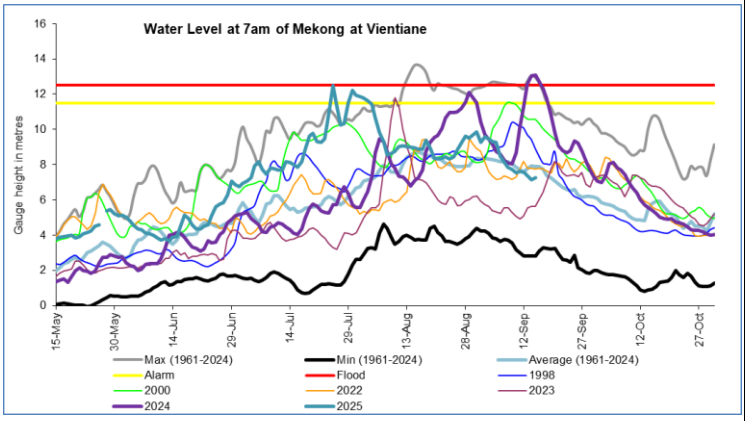


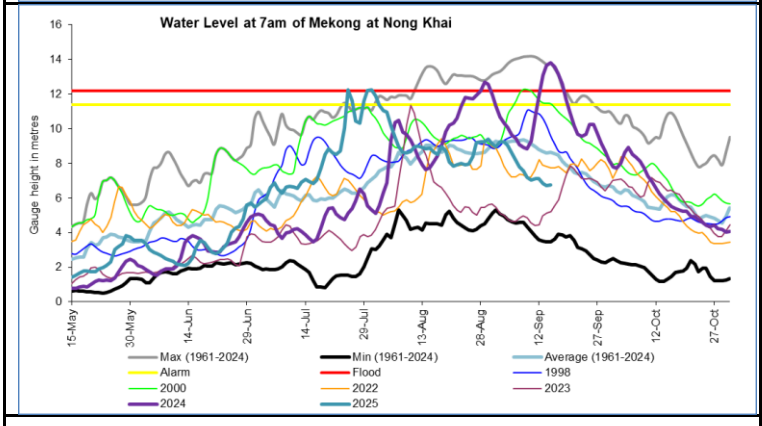


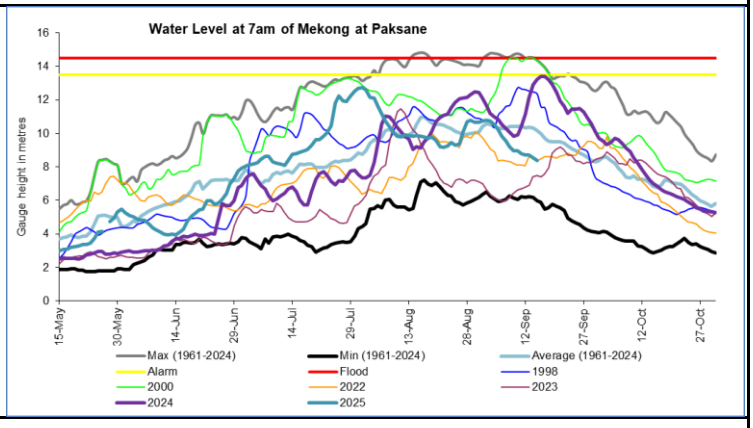


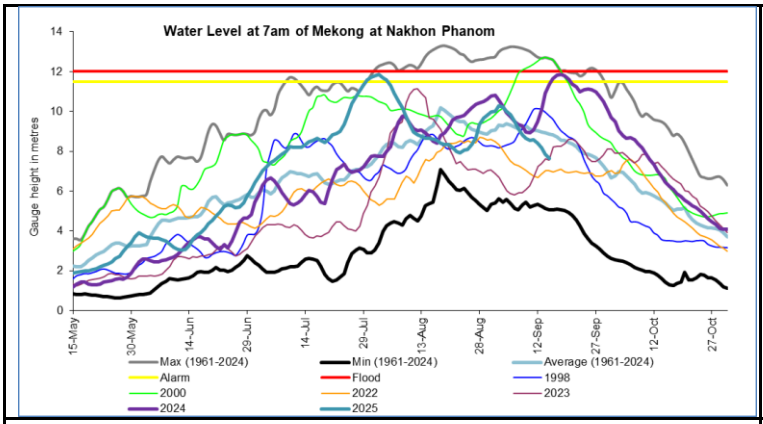


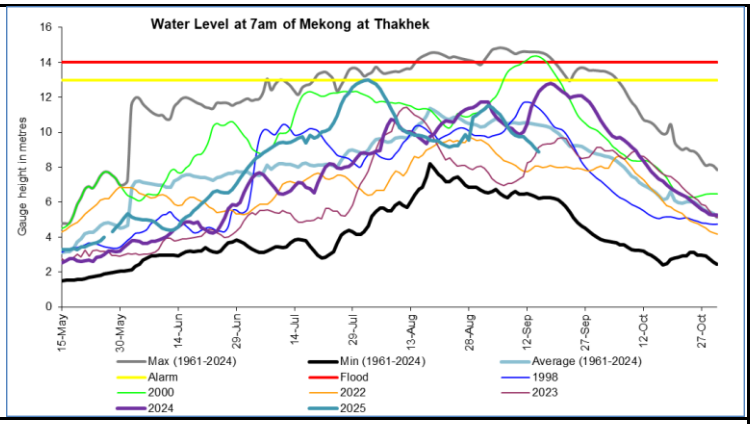


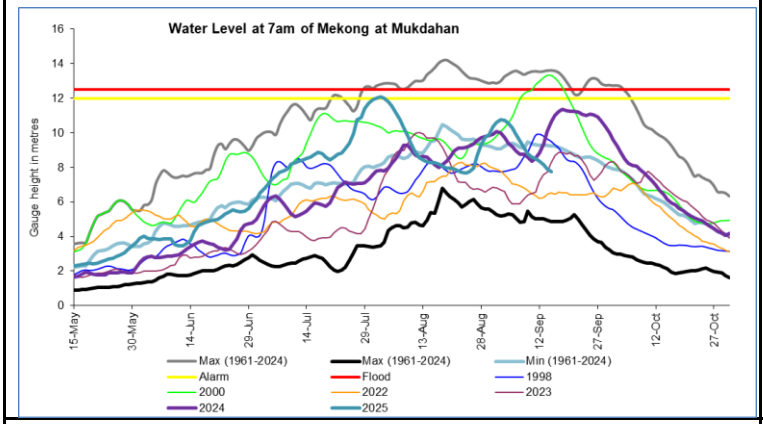


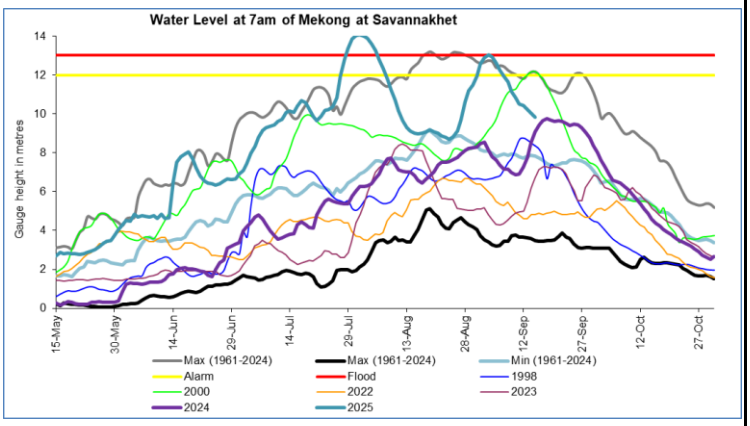


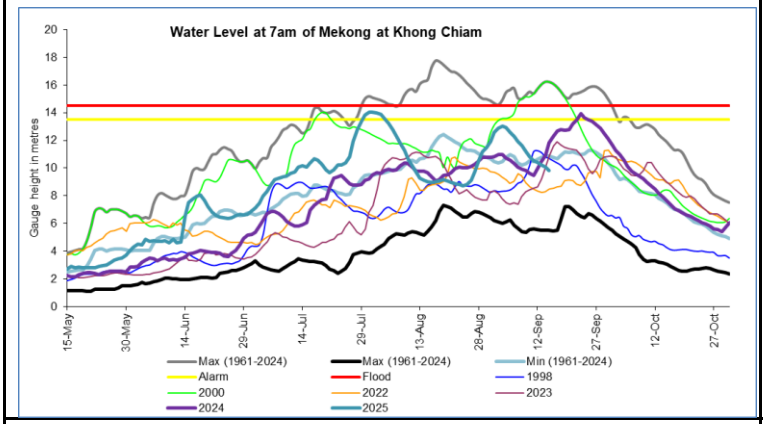


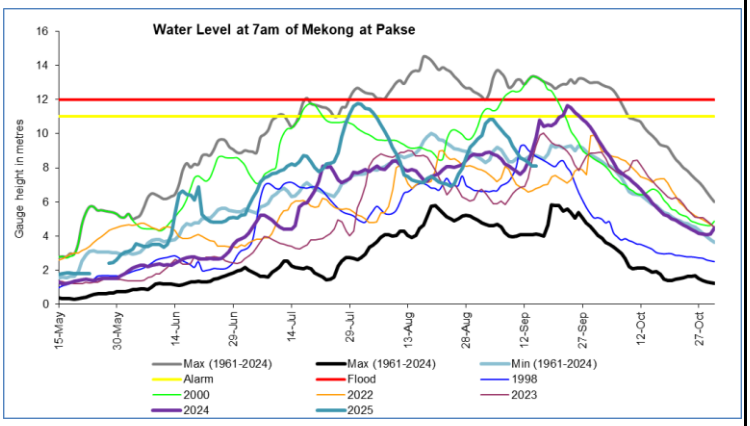

Water Level at 7am of Mekong at Nakhon Phanom
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Min (1961-2024)
Average (1961-2024)
Alarm
Flood
1998
2000
2022
2023
2024
2025

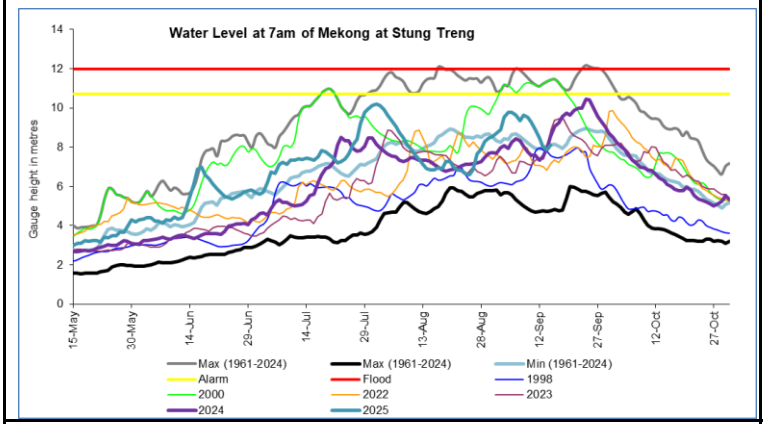

Water Level at 7am of Mekong at Thakhek
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Min (1961-2024)
Average (1961-2024)
Alarm
Flood
1998
2000
2022
2023
2024
2025

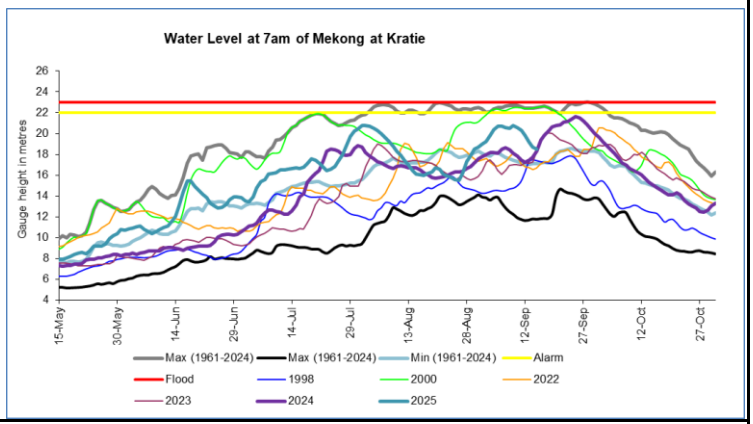

Water Level at 7am of Mekong at Mukdahan
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
2000
2022
2023
2024
2025

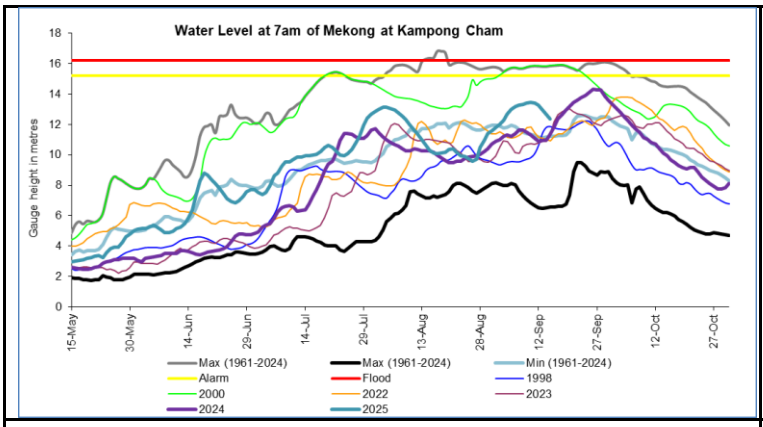

Water Level at 7am of Mekong at Savannakhet
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
2000
2022
2023
2024
2025

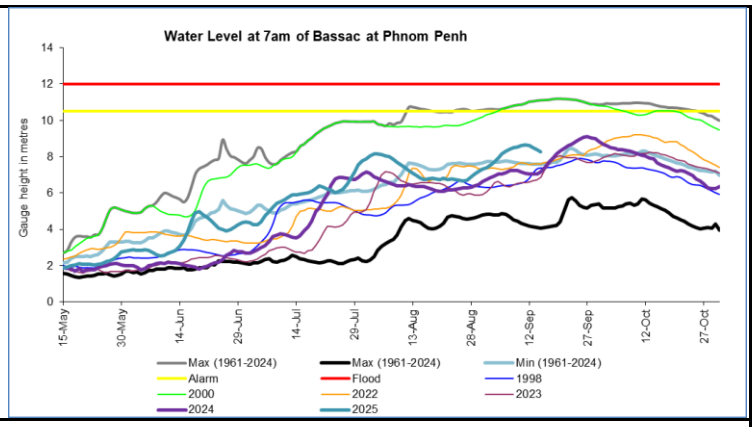

Water Level at 7am of Mekong at Khong Chiam
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
2000
2022
2023
2024
2025

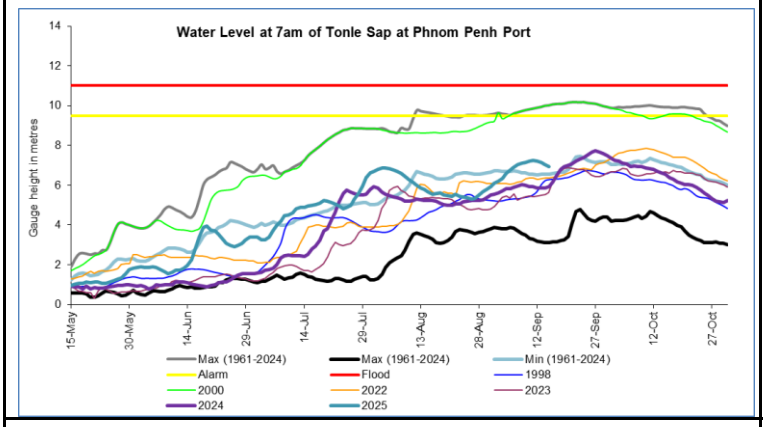

Water Level at 7am of Mekong at Pakse
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
2000
2022
2023
2024
2025


Water Level at 7am of Mekong at Stung Treng
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
2000
2022
2023
2024
2025


Water Level at 7am of Mekong at Kratie
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
2000
2022
2023
2024
2025


Water Level at 7am of Mekong at Kampong Cham
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
2000
2022
2023
2024
2025


Water Level at 7am of Bassac at Phnom Penh
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
2000
2022
2023
2024
2025


Water Level at 7am of Tonle Sap at Phnom Penh Port
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
2000
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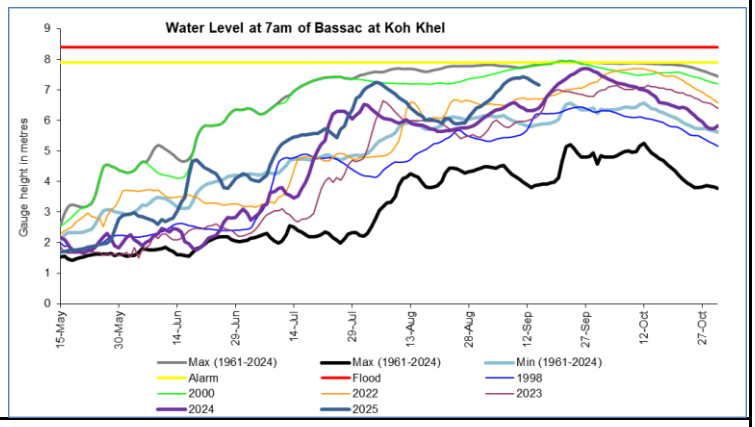
2023
2024
2025


Water Level at 7am of Bassac at Koh Khel
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
2000
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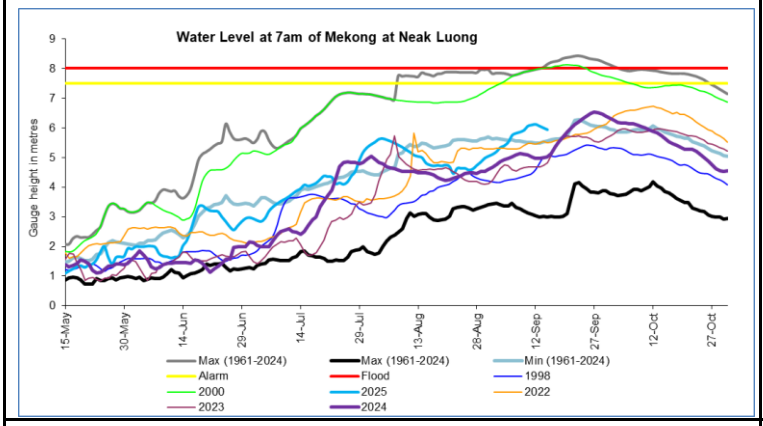
2023
2024
2025


Water Level at 7am of Mekong at Neak Luong
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
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12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
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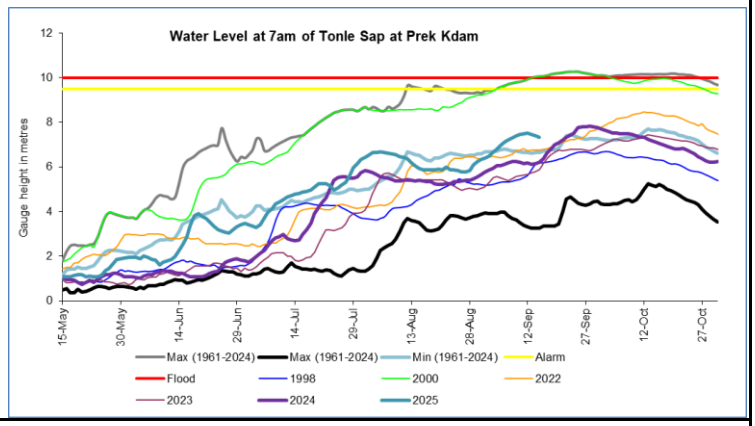
2022
2023
2024


Water Level at 7am of Tonle Sap at Prek Kdam
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
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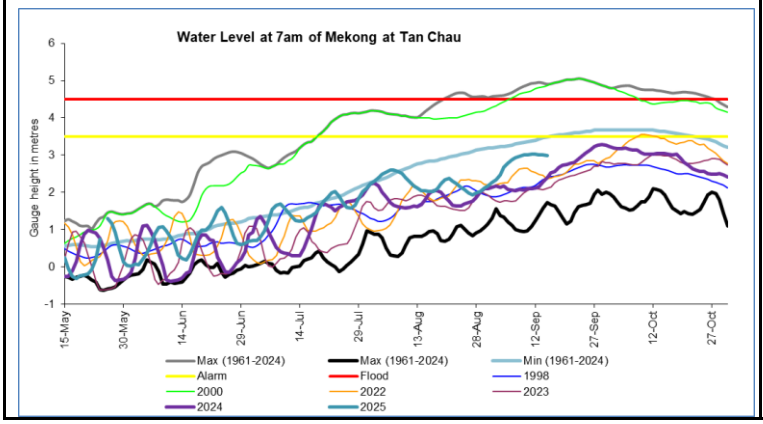
Water Level at 7am of Mekong at Tan Chau
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
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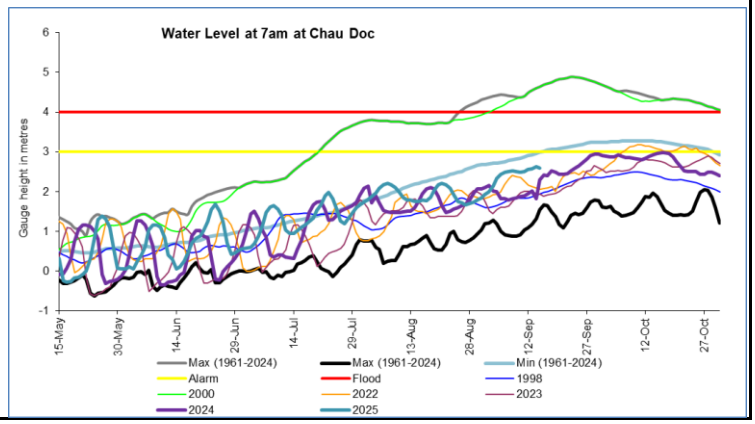
2023
2024
2025


Water Level at 7am at Chau Doc
Gauge height in metres
15-May
30-May
14-Jun
29-Jun
14-Jul
29-Jul
13-Aug
28-Aug
12-Sep
27-Sep
12-Oct
27-Oct
Max (1961-2024)
Max (1961-2024)
Min (1961-2024)
Alarm
Flood
1998
2000
2022
2023
2024
2025

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
09-09-2025	536.9	4.23	11.54	9.32	7.75	7.2	8.94	8.63	9.82	8.8	7.22	11.16	9.3	9.53	20.74	13.4	8.55	7.15	7.38	5.92	7.38	3	2.51
10-09-2025	536.99	4.15	11.42	9.3	7.53	7.05	8.94	8.53	9.73	8.59	7.04	10.84	8.92	9.27	20.59	13.46	8.63	7.2	7.38	6.06	7.45	3.01	2.48
11-09-2025	536.21	4.16	11.38	9.32	7.63	7.1	8.78	8.56	9.74	8.53	6.97	10.52	8.6	8.88	20.32	13.42	8.65	7.24	7.44	6.1	7.48	3.02	2.5
12-09-2025	536.99	4.32	11.44	9.13	7.56	7.12	8.7	8.39	9.56	8.35	6.81	10.43	8.46	8.46	19.83	13.28	8.6	7.2	7.38	6.12	7.52	3.03	2.56
13-09-2025	537.32	4.28	11.37	8.92	7.37	6.84	8.7	8.17	9.35	8.17	6.6	10.21	8.31	8	19.15	12.96	8.49	7.15	7.3	6.06	7.46	3.01	2.58
14-09-2025	537.46	4.47	11.34	9.07	7.27	6.73	8.53	7.86	9.13	7.9	6.36	10.05	8.1	7.87	18.69	12.62	8.38	7.04	7.22	6	7.38	3.01	2.61
15-09-2025	537.49	4.86	11.28	9.13	7.25	6.74	8.4	7.62	8.86	7.75	6.03	9.81	8.1	8.11	18.53	12.36	8.29	6.95	7.16	5.94	7.32	2.98	2.6
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

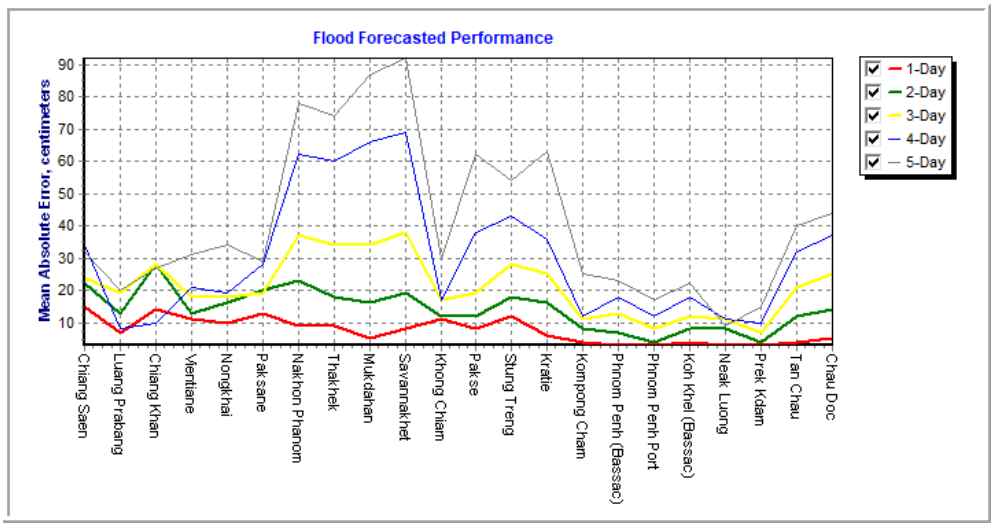
Table A2: Weekly observed rainfall

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
09-09-2025	0	0	0	4	2.8	4.4	54.9	13	8.8	0	1	3.5	4.5	3.5	0	8.5	0	0	0	0	0	17.7	13
10-09-2025	1.5	0	0	2	35.2	87.8	84.5	0	0	0.6	0.8	4.5	0	0	0	19.5	0	0	0	0	23.2	0.7	0.6
11-09-2025	19.5	1.2	0	1	0	0	2.4	0.3	9.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-09-2025	0.5	1	1.8	0	24	58.5	25.2	2.5	0.3	4.7	0	11.5	0	0	3.3	27	60.3	0	30.8	17.9	22.3	33.8	17
13-09-2025	6.5	4.5	31	0	2.3	0	36.6	0.1	0	53.8	20	29.5	0	0	15	0	0	0	0	0	0	0	0
14-09-2025	0	5.4	0	0	0	0	11	0	0	0	0	62	0	55.5	29.5	15.5	56.5	0	30	0	32.3	26.5	0
15-09-2025	0	0	0	17.1	13.4	0	0	0	0	0	0	9.5	0	0	0	6.5	24.7	0	26.7	2.2	0	0	0
Sum	28.0	80.8	20.6	20.0	77.7	150.7	214.6	15.9	18.7	59.1	21.8	120.5	4.5	59.0	47.8	77.0	141.5	0.0	87.5	20.1	77.8	78.7	30.6

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 09 to 15 September 2025.

The forecasting values from 09 to 15 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 influencing 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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