



**Mekong River Commission**

# **Weekly Wet Season Situation Report in the Lower Mekong River Basin 22 – 28 July 2025**

Prepared by  
The Regional Flood and Drought Management Centre  
29 July 2025

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# Key Messages

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

## **Rainfall monitoring and forecast**

- In the period of 22 - 28 July 2025, Due to the impact from the Lower Pressuse Area which is weakened from the tropical storm – WIPHA, from 22 -23 July, thunderstorms and heavy to very heavy rains are expected in some areas in the northern and the central part of Lao PDR, the northern and the northeastern of Thailand near the border with Lao PDR, the 3S basin, and the southwestern part of Cambodia. The remaining areas are expected light to moderate rainfall.
- From 29 July – 02 August, thunderstorms and heavy are expected over the upper and central part of the LMB including the upper and central part of Lao PDR, the northern and northeastern part of Thailand near Lao PDR's border, and the 3S basin of Sesan, Sekong, Srepok. The remaining areas are likely to occur light to moderate rainfall.

## **Water level monitoring and forecast**

- At 22 key monitoring stations along the Mekong mainstream from 22 – 28 July 2025, water levels have neither reached alarm nor 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 July – 02 August 2025, the water level at Vientiane, Nongkhai, Nakhon Phanom, Khong Chiam and Pakse stations are expected to reach alarm level. 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 22 – 23 July 2025, the LMB was facing normal to wet conditions, except some areas in the lower part of Cambodia and Mekong delta. The monitored drought is caused primarily by meteorological indicator.
- The next three-month from August to October 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 lowland areas of Cambodia, and the Mekong Delta. Overall, in the next 3 months, rainfall will be mainly concentrated in the central part of the LMB and higher than the LTA from 10 – 25 mm.
- The forecast indicates that no drought conditions are expected in over the LMB from August to October 2025 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 **22 – 28 July 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://ffw.mrcmekong.org/ffg.php>

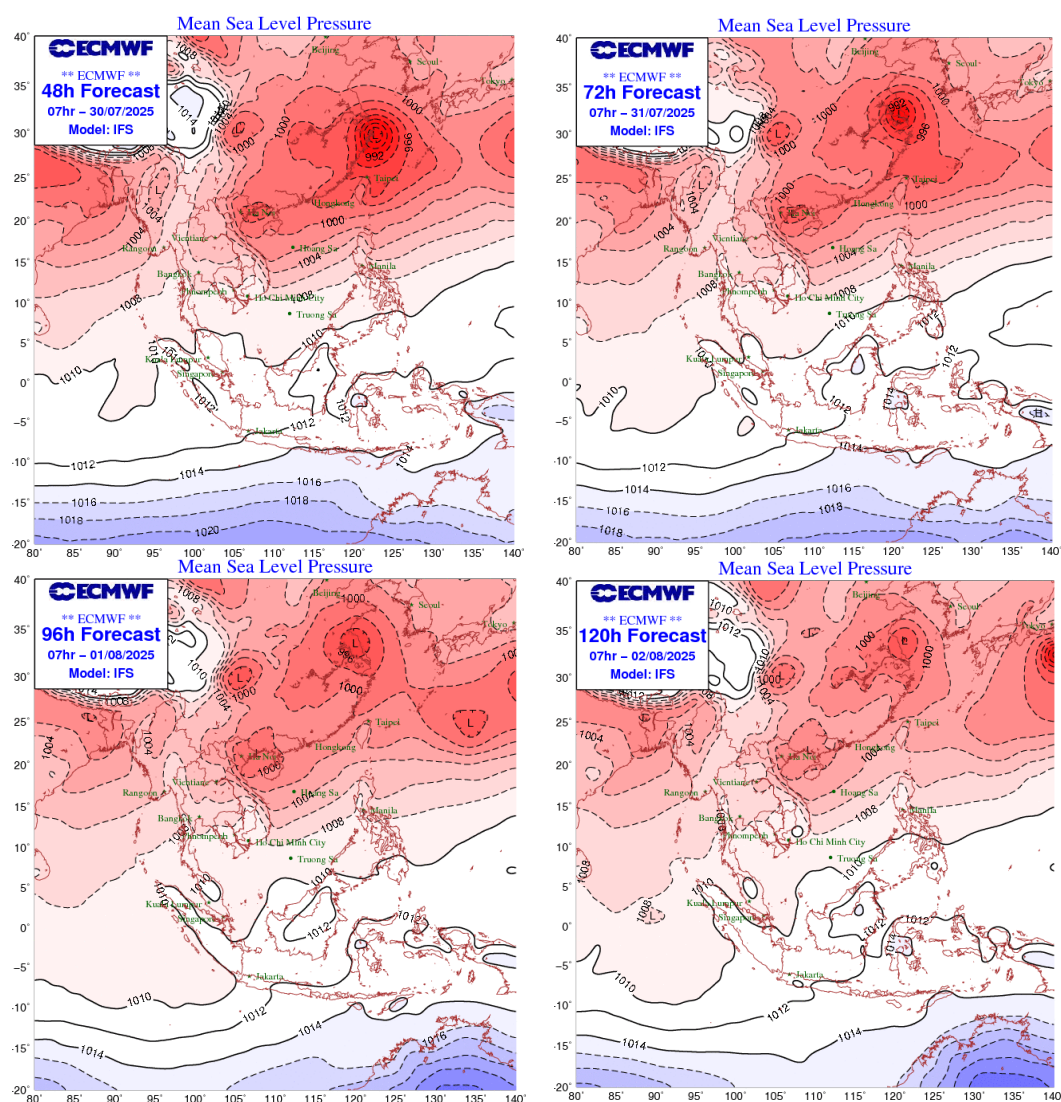


## 2 General Weather Patterns

Curently, due to the influence of the low pressure trough with an axis at about 23-26 degrees North latitude connecting to the low pressure area to the west while the lower part is still affected by the southwest monsoon with moderate to strong intensity. In the next 24 hours, heavy rain and thunderstorms are expected, with very heavy rainfall in some areas including: Bokeo, Luang Namtha, Oudomxay, Luang Prabang, Xieng Khouang, Bolikhamxay in Laos, Chiang Rai in Thailand; common total amount of rainfall ranging from 50 - 100mm/24hr, some places over 120mm/24hr.

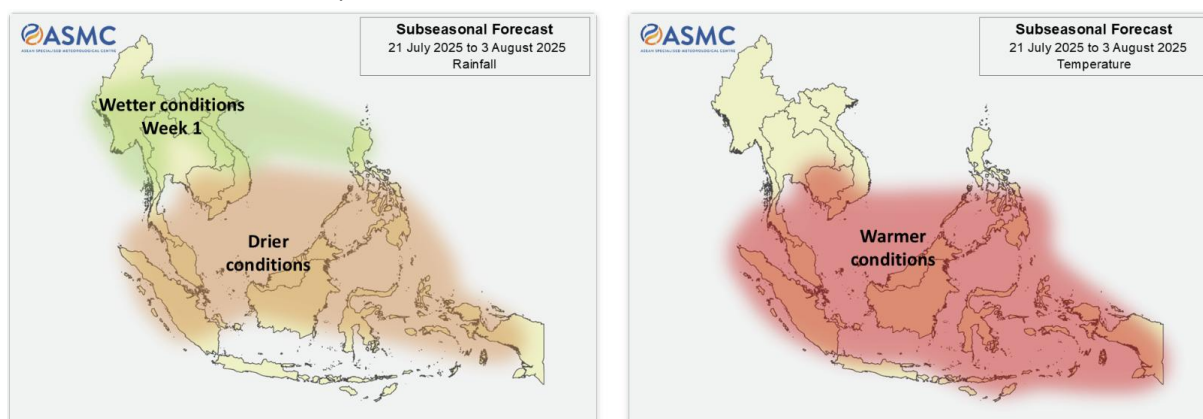
From 30<sup>th</sup> July to 2<sup>nd</sup> August, moderate to heavy rain and thunderstorms, with locally very heavy rain, are forecast in: Phong Saly, Bokeo, Luang Namtha, Oudomxay, Vientiane, Luang Prabang, Xieng Khouang, Bolikhamsai, Khammouane, Sekong, Champasak, Attapeu in Laos; Chiang Rai, Chiang Mai, Bueng Kan, Nakhon Phanom in Thailand; Ratana Kiri, Stung Treng in Cambodia and Dak Lak, Gia Lai and Kon Tum in Viet Nam

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



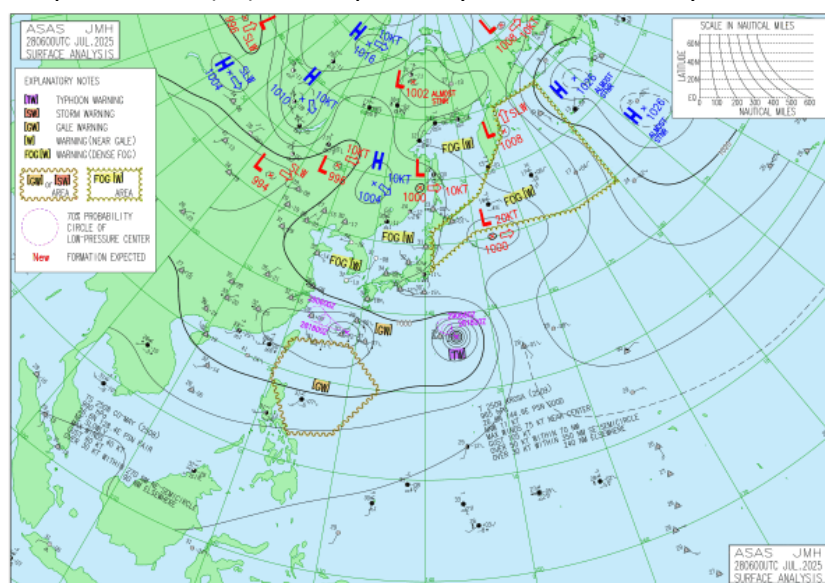
**Figure 1: Weather conditions over the LMB**

According to the ASEAN Specialised Meteorological Centre (ASMC, <http://asmc.asean.org/home/>), the sub seasonal weather outlook (21 July – 03 August 2025) indicates that the Lower Mekong Basin (LMB) is likely in wetter condition in from central to upper part, while drier condition at the lower part. However, it is also expected to experience warmer condition at the lower part. **Figure 2** shows the outlook of weather condition from 21 July to 03 August 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.ima.go.jp/bosai/weather\\_map/#lang=en](https://www.ima.go.jp/bosai/weather_map/#lang=en)), there is active Tropical Storm (TS) at NW pacific system as of 28 July 2025 shown in **Figure 3**.



**Figure 3: Tropical storm risk observed on 28 July 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 22 - 28 July 2025 (**Figure 4**). The heavy to very heavy rainfall has been observed over the LMB in the upper and central parts of Lao PDR, the northern and northeastern part of Thailand, and the 3S basin.

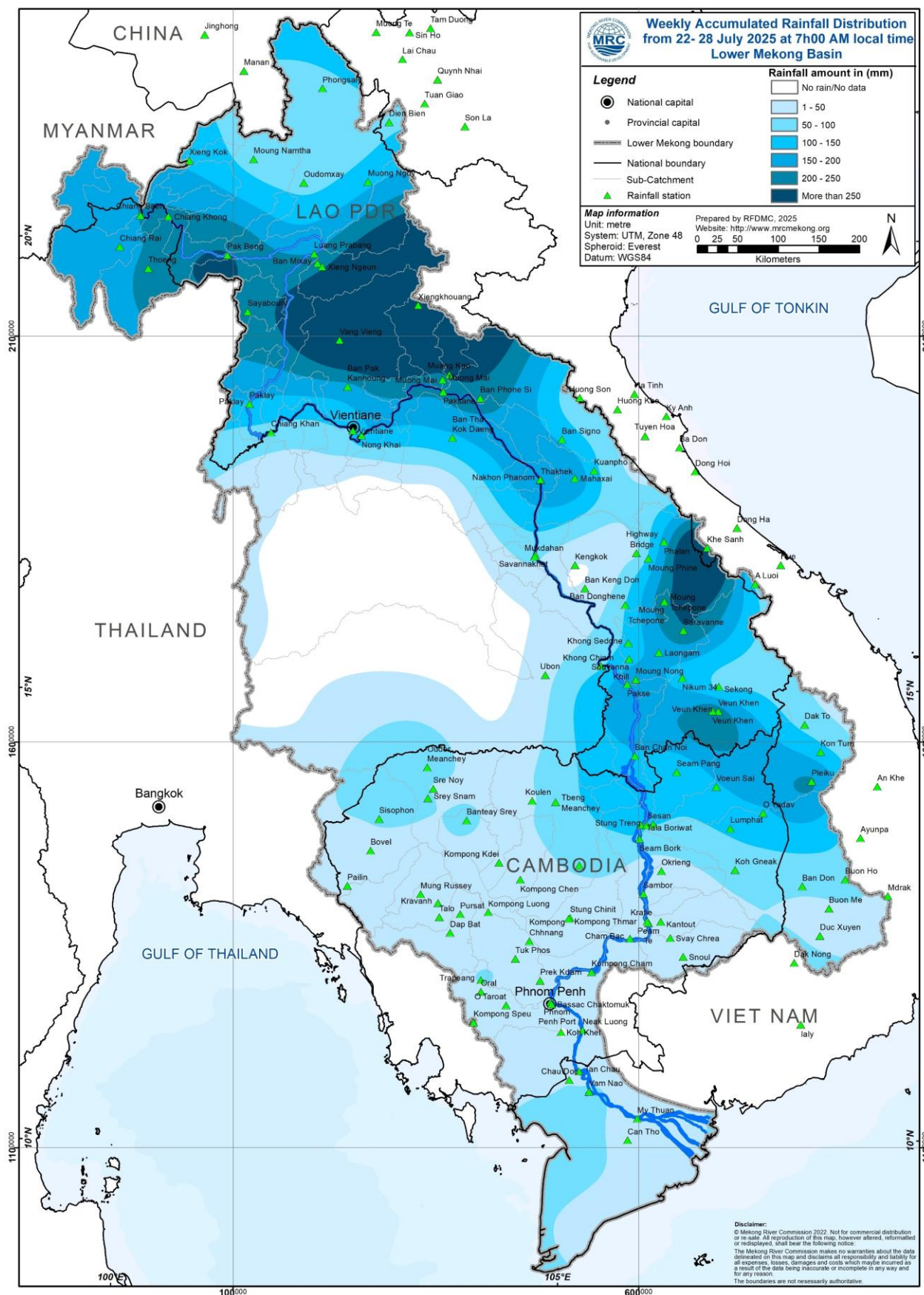


Figure 4: Weekly rainfall distribution over the LMB during 22 – 28 July 2025



### 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 22 – 28 July 2025, the observed water level (WL) at Jinghong hydrological station<sup>1</sup>, was almost constant and ranges between 536.16 and 536.88 m, which are corresponding to the outflow between 1,490.00 m<sup>3</sup>/s to 2,050.00 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 4.94 m to 5.51 m. At the same period, the water level in Luang Prabang Station also increased with an approximate value of 2.68 m from 13.44 m to 16.12 m as compared to the previous week.

The water levels at Chiang Khan, Vientiane, Nongkhai, Paksane, Nakhon Phanom, Thakhek, Mukdahan, Savannakhet, Khong Chiam and Pakse have increased from 10.78 m to 13.46 m, 9.30 m to 10.32 m, 8.58 m to 10.32 m, 9.64 m to 11.90 m, 8.82 m to 11.01 m, 10.02 m to 12.24 m, 8.61 m to 10.87 m, 7.05 m to 9.37 m, 9.65 m to 12.80 m, and 7.78 m to 10.62 m, respectively.

In addition, the water levels at Stung Treng, Kratie, Kompong Cham, Phnom Penh (Bassac), Phnom Penh Port, Koh Khel, Neak Luong and Prek Kdam also have increased from 7.43 m to 9.20 m, 17.17 m to 18.79 m, 10.50 m to 11.24 m, 6.34 m to 6.78 m, 5.14 m to 5.59 m, 5.64 m to 6.13 m, 4.36 m to 4.54 m, and 5.24 m to 5.56 m, respectively.

Similar to the previous week, the water levels from 22 to 28 July 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 1.85 m and 1.66 m, while at the Chau Doc station, they ranged from 1.66 m and 1.32 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>.

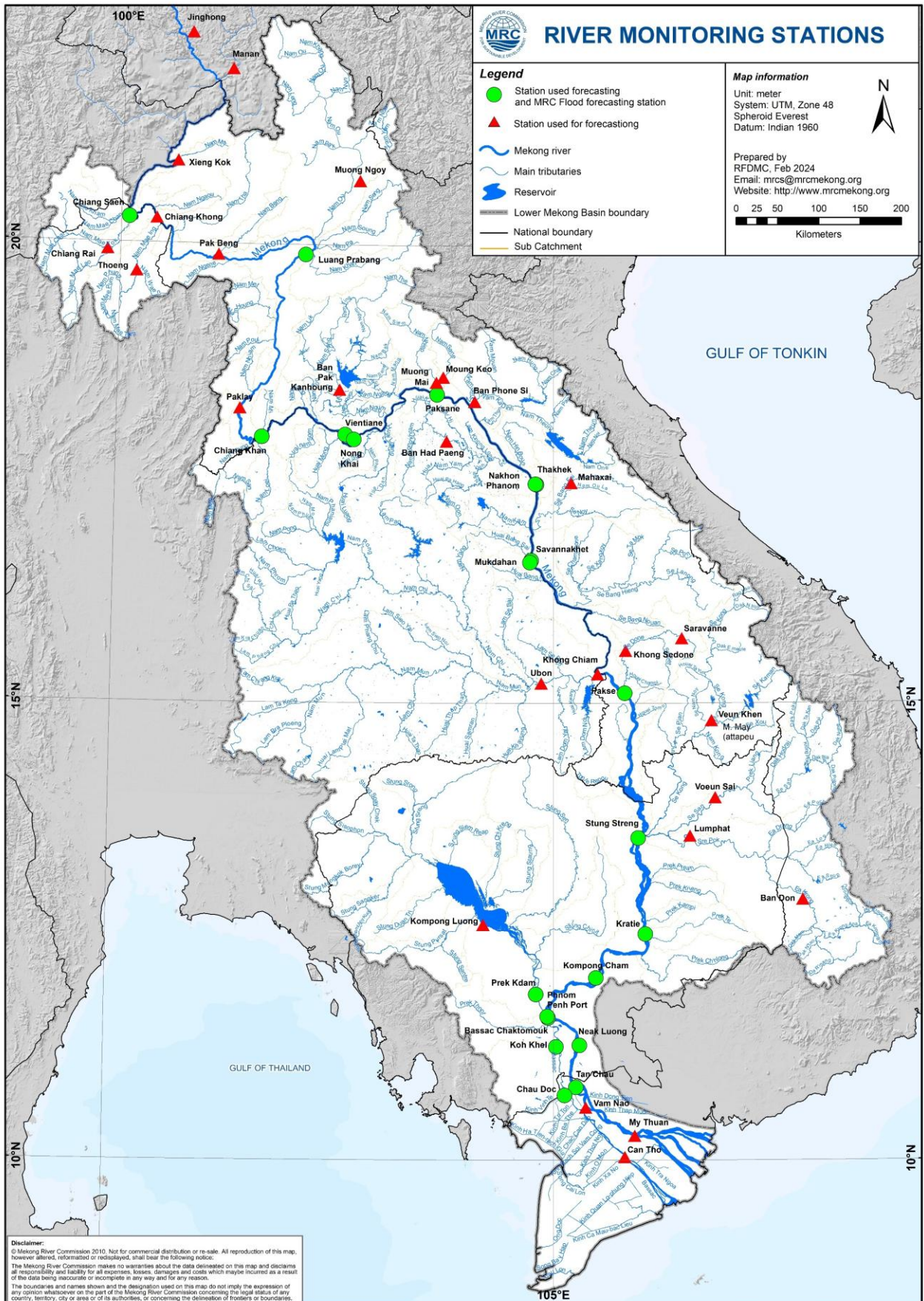
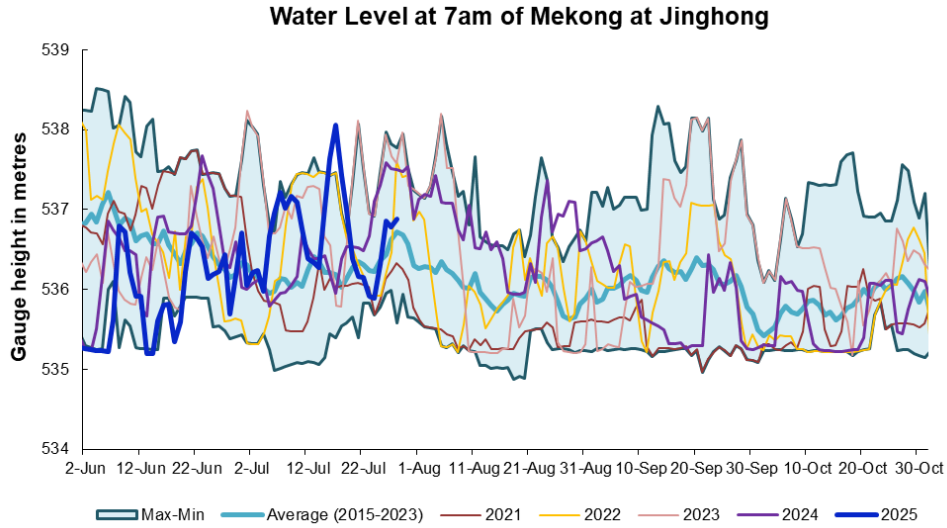


Figure 5: The key stations along LMB for river flood forecasting

The water levels in key monitoring stations on 28 July 2025 are in normal conditions, in which they do not reach alarm and flood levels at all stations. 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 28 July 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 slop and Prek Kdam as cross-section of the Lake. The formula of flow is as follows:

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

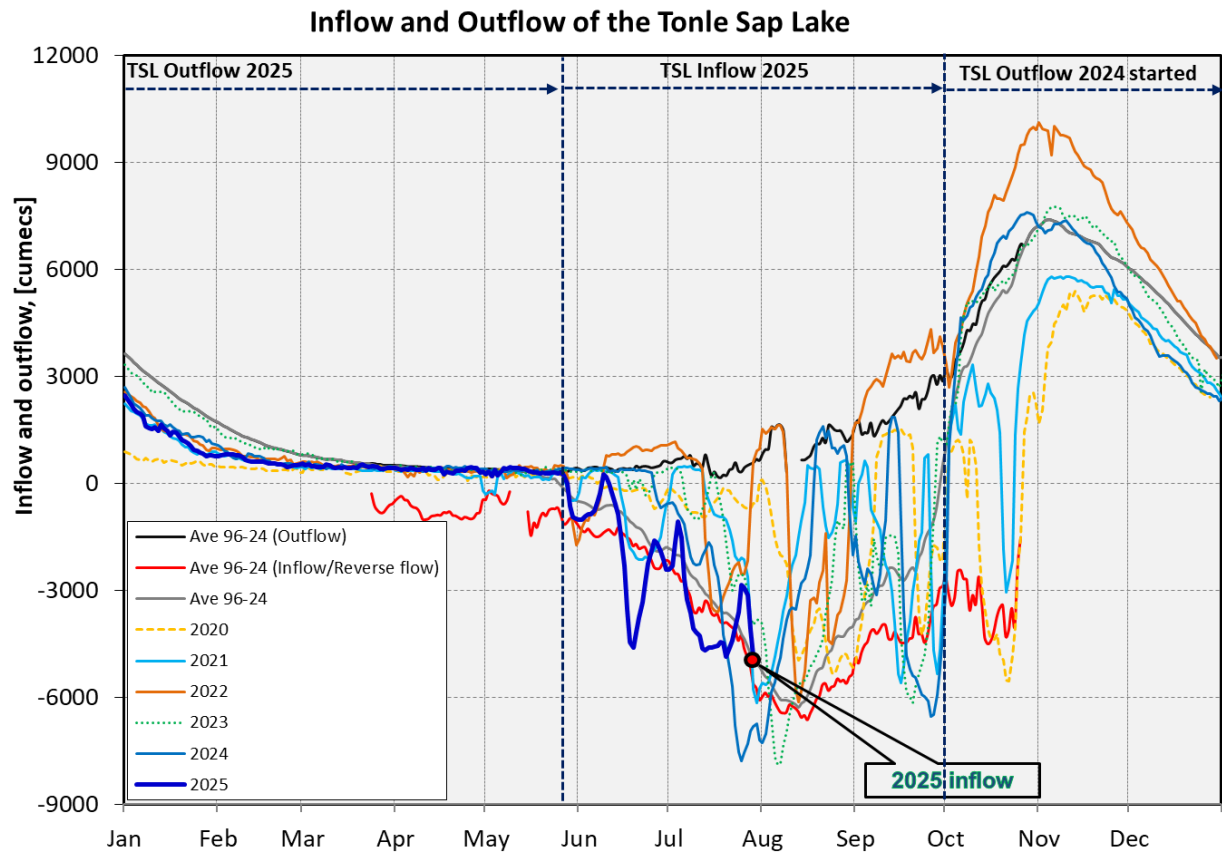
Where, WL is water level in m (msl).

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 7**. Up to 28 July 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 7**).

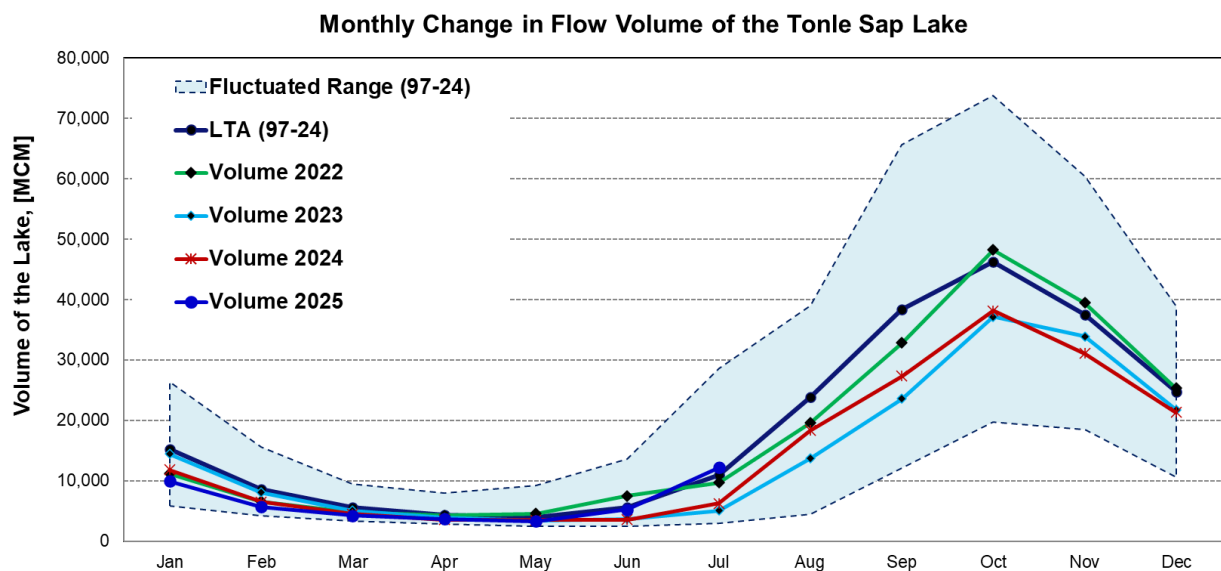
The seasonal changes in monthly flow volumes up to 21 July 2025 for the TSL compared with that in 2020, 2021, 2022, 2023, 2024 and their LTAs, and the fluctuation levels (1997–2024) are presented in **Table 8**. The mean monthly water volume of the Tonle Sap Lake in May 2025



is lower than its LTA (about 93.85 %), 2019, and 2023 but higher than that in 2020, 2021, 2022 and 2024 during the same period (**Figure 8 and Table 1**).



**Figure 7: Seasonal change of inflows and outflows of Tonle Sap Lake.**



**Figure 8. 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<br>(97-24)<br>[MCM]                                                              | Max<br>Volume<br>[MCM] | Min<br>Volume<br>[MCM] | Volume<br>2019<br>[MCM] | Volume<br>2020<br>[MCM] | Volume<br>2021<br>[MCM] | Volume<br>2022<br>[MCM] | Volume<br>2023<br>[MCM] | Volume<br>2024<br>[MCM] | Volume<br>2025<br>[MCM] | Volume in<br>2025 [%],<br>compared<br>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                 | 12199.27                | 110.78                                             |
| Aug                                                       | 23865.05                                                                             | 39015.12               | 4433.46                | 23407.37                | 7622.71                 | 5941.07                 | 10547.80                | 19554.70                | 13694.57                |                         |                                                    |
| Sep                                                       | 38377.57                                                                             | 65632.35               | 12105.31               | 39654.01                | 24194.19                | 12105.31                | 16382.34                | 32860.34                | 23550.60                |                         |                                                    |
| 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 <sup>3</sup> ) |                                                                                      |                        |                        |                         |                         |                         |                         |                         |                         |                         |                                                    |

**Remarks:** the volume of Tonle Sap Lake in 2025 is updated until 28 July 2025.

## 4. Flash Flood in the Lower Mekong Basin

During the weekly monitoring period from 22 - 28 July, 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 of Lao PDR and Thailand during the reporting period as shown in [Figure 14](#) & [Table 2](#).

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

| FLASH FLOOD GUIDANCE IN LAO PDR |           |          |                  |           |       |                  |           |       |
|---------------------------------|-----------|----------|------------------|-----------|-------|------------------|-----------|-------|
| In the next 1hrs                |           |          | In the next 3hrs |           |       | In the next 6hrs |           |       |
| Provinces                       | Districts | Level    | Provinces        | Districts | Level | Provinces        | Districts | Level |
| Khammuane                       | Xaybouath | High     | Khammuane        | Xaybouath | High  | Khammuane        | Xaybouath | High  |
| Luangnamtha                     | Sing      | Moderate |                  |           |       |                  |           |       |
| Phongsaly                       | Bountay   | Moderate |                  |           |       |                  |           |       |
| Xayaboury                       | Ngeun     | Moderate |                  |           |       |                  |           |       |
| Xayaboury                       | Xienghon  | Moderate |                  |           |       |                  |           |       |



| FLASH FLOOD RISK IN LAO PDR |           |          |                   |           |          |
|-----------------------------|-----------|----------|-------------------|-----------|----------|
| In the next 12hrs           |           |          | In the next 24hrs |           |          |
| Provinces                   | Districts | Level    | Provinces         | Districts | Level    |
| Attapeu                     | Sanxay    | Moderate | Attapeu           | Phouvong  | Moderate |
| Bokeo                       | Pha Oudo  | Moderate | Attapeu           | Sanamxay  | Moderate |
| Bolikhamxay                 | Bolikhanh | Moderate | Attapeu           | Sanxay    | Moderate |
| Bolikhamxay                 | Khamkheut | High     | Bokeo             | Meung     | Moderate |
| Bolikhamxay                 | Pakkading | Moderate | Bokeo             | Paktha    | Moderate |
| Bolikhamxay                 | Thaphabat | Moderate | Bokeo             | Pha Oudo  | Moderate |
| Bolikhamxay                 | Viengthon | High     | Bolikhamxay       | Bolikhanh | High     |
| Champasak                   | Paksong   | Moderate | Bolikhamxay       | Khamkheut | High     |
| Khammuane                   | Nakai     | High     | Bolikhamxay       | Pakkading | High     |
| Khammuane                   | Nhommalat | Moderate | Bolikhamxay       | Pakxanh   | Moderate |
| Luangprabang                | Luangprab | Moderate | Bolikhamxay       | Thaphabat | Moderate |
| Luangprabang                | Nan       | High     | Bolikhamxay       | Viengthon | High     |
| Luangprabang                | Ngoi      | Moderate | Champasak         | Bachiangc | Moderate |
| Luangprabang                | Pak xeng  | Moderate | Champasak         | Paksong   | Moderate |
| Luangprabang                | Park Ou   | Moderate | Champasak         | Pathoomph | Moderate |
| Luangprabang                | Phonxay   | Moderate | Khammuane         | Hinboon   | Moderate |
| Luangprabang                | Phoukhoun | Moderate | Khammuane         | Nakai     | High     |
| Luangprabang                | Viengkham | High     | Khammuane         | Nhommalat | High     |
| Luangprabang                | Xieng nge | Moderate | Luangnamtha       | Long      | Moderate |
| Oudomxay                    | Hoon      | Moderate | Luangnamtha       | Sing      | Moderate |
| Oudomxay                    | Pakbeng   | Moderate | Luangnamtha       | Viengphou | Moderate |
| Saravane                    | Ta oi     | Moderate | Luangprabang      | Chomphet  | Moderate |
| Vientiane                   | Kasy      | Moderate | Luangprabang      | Luangprab | Moderate |
| Vientiane                   | Keo oudom | Moderate | Luangprabang      | Nambak    | Moderate |
| Vientiane                   | Phonhong  | Moderate | Luangprabang      | Nan       | High     |
| Vientiane                   | Thoulakho | Moderate | Luangprabang      | Ngoi      | Moderate |
| Vientiane                   | Vangvieng | Moderate | Luangprabang      | Pak xeng  | Moderate |
| Xayaboury                   | Hongsa    | Moderate | Luangprabang      | Park Ou   | High     |
| Xayaboury                   | Khop      | Moderate | Luangprabang      | Phonxay   | High     |
| Xayaboury                   | Ngeun     | Moderate | Luangprabang      | Phoukhoun | High     |
| Xayaboury                   | Phieng    | Moderate | Luangprabang      | Viengkham | High     |
| Xayaboury                   | Xayabury  | Moderate | Luangprabang      | Xieng nge | High     |
| Xayaboury                   | Xienghon  | Moderate | Oudomxay          | Beng      | Moderate |
| Xaysomboun                  | Hom       | Moderate | Oudomxay          | Hoon      | Moderate |
| Xaysomboun                  | Longxan   | Moderate | Oudomxay          | Nga       | Moderate |
| Xaysomboun                  | Phoun     | Moderate | Oudomxay          | Pakbeng   | Moderate |
| Xaysomboun                  | Thathom   | Moderate | Oudomxay          | Xay       | Moderate |

| FLASH FLOOD RISK IN LAO PDR |           |          |                   |           |          |
|-----------------------------|-----------|----------|-------------------|-----------|----------|
| In the next 12hrs           |           |          | In the next 24hrs |           |          |
| Provinces                   | Districts | Level    | Provinces         | Districts | Level    |
| Xaysomboun                  | Xaysombou | Moderate | Phongsaly         | Bountay   | Moderate |
| Xiengkhuang                 | Kham      | Moderate | Saravane          | Lakhoneph | Moderate |
| Xiengkhuang                 | Khoune    | Moderate | Saravane          | Saravane  | Moderate |

| FLASH FLOOD RISK IN LAO PDR |           |          |                        |            |          |
|-----------------------------|-----------|----------|------------------------|------------|----------|
| In the next 12hrs           |           |          | In the next 24hrs      |            |          |
| Provinces                   | Districts | Level    | Provinces              | Districts  | Level    |
| Xiengkhuang                 | Morkmay   | High     | Saravane               | Ta oi      | Moderate |
| Xiengkhuang                 | Pek       | Moderate | Saravane               | Toomlarn   | Moderate |
| Xiengkhuang                 | Phookood  | Moderate | Saravane               | Vapy       | Moderate |
| Xiengkhuang                 | Souy      | Moderate | Savannakhet            | Phine      | Moderate |
|                             |           |          | Savannakhet            | Thapangth  | Moderate |
|                             |           |          | Sekong                 | Dakcheung  | Moderate |
|                             |           |          | Sekong                 | Kaleum     | Moderate |
|                             |           |          | Sekong                 | Lamarm     | Moderate |
|                             |           |          | Vientiane              | Feuang     | Moderate |
|                             |           |          | Vientiane              | Kasy       | High     |
|                             |           |          | Vientiane              | Keo oudom  | High     |
|                             |           |          | Vientiane              | Met        | Moderate |
|                             |           |          | Vientiane              | Phonhong   | Moderate |
|                             |           |          | Vientiane              | Thoulakho  | Moderate |
|                             |           |          | Vientiane              | Vangvieng  | Moderate |
|                             |           |          | Vientiane              | Xanakham   | Moderate |
|                             |           |          | Vientiane Municipality | Naxaithong | Moderate |
|                             |           |          | Vientiane Municipality | Pakngum    | Moderate |
|                             |           |          | Vientiane Municipality | Sangthong  | Moderate |
|                             |           |          | Vientiane Municipality | Xaythany   | Moderate |
|                             |           |          | Xayaboury              | Hongsa     | Moderate |
|                             |           |          | Xayaboury              | Khop       | Moderate |
|                             |           |          | Xayaboury              | Ngeun      | High     |
|                             |           |          | Xayaboury              | Paklai     | Moderate |
|                             |           |          | Xayaboury              | Phieng     | Moderate |
|                             |           |          | Xayaboury              | Xayabury   | High     |
|                             |           |          | Xayaboury              | Xienghon   | High     |
|                             |           |          | Xaysomboun             | Hom        | High     |

| FLASH FLOOD RISK IN LAO PDR |           |       |                   |           |          |
|-----------------------------|-----------|-------|-------------------|-----------|----------|
| In the next 12hrs           |           |       | In the next 24hrs |           |          |
| Provinces                   | Districts | Level | Provinces         | Districts | Level    |
|                             |           |       | Xaysomboun        | Longxan   | High     |
|                             |           |       | Xaysomboun        | Phoun     | Moderate |
|                             |           |       | Xaysomboun        | Thathom   | High     |
|                             |           |       | Xaysomboun        | Xaysombou | High     |
|                             |           |       | Xiengkhuang       | Kham      | High     |
|                             |           |       | Xiengkhuang       | Khoune    | High     |
|                             |           |       | Xiengkhuang       | Morkmay   | High     |
|                             |           |       | Xiengkhuang       | Pek       | High     |
|                             |           |       | Xiengkhuang       | Phookood  | High     |
|                             |           |       | Xiengkhuang       | Souy      | High     |

| FLASH FLOOD GUIDANCE IN THAILAND |           |          |                  |           |          |                  |           |          |
|----------------------------------|-----------|----------|------------------|-----------|----------|------------------|-----------|----------|
| In the next 1hrs                 |           |          | In the next 3hrs |           |          | In the next 6hrs |           |          |
| Provinces                        | Districts | Level    | Provinces        | Districts | Level    | Provinces        | Districts | Level    |
| Chiang Rai                       | Phan      | Moderate | Chiang Rai       | Phan      | Moderate | Chiang Rai       | Phan      | Moderate |

| FLASH FLOOD RISK IN THAILAND |                      |          |                   |                        |          |
|------------------------------|----------------------|----------|-------------------|------------------------|----------|
| In the next 12hrs            |                      |          | In the next 24hrs |                        |          |
| Provinces                    | Districts            | Level    | Provinces         | Districts              | Level    |
| Chiang Rai                   | King Amphoe Khun Tan | Moderate | Bueng Kan         | Bung Kan               | Moderate |
| Chiang Rai                   | Mae Chan             | High     | Bueng Kan         | Pak Khat               | Moderate |
| Chiang Rai                   | Muang Chiang Rai     | Moderate | Bueng Kan         | Phon Charoen           | Moderate |
| Chiang Rai                   | Phaya Meng Rai       | Moderate | Bueng Kan         | Si Wilai               | Moderate |
| Chiang Rai                   | Thoeng               | Moderate | Bueng Kan         | So Phisai              | Moderate |
|                              |                      |          | Chaiyaphum        | Khon San               | Moderate |
|                              |                      |          | Chiang Rai        | King Amphoe Khun Tan   | High     |
|                              |                      |          | Chiang Rai        | King Amphoe Wiang Kaen | Moderate |
|                              |                      |          | Chiang Rai        | Mae Chan               | High     |
|                              |                      |          | Chiang Rai        | Muang Chiang Rai       | Moderate |
|                              |                      |          | Chiang Rai        | Phan                   | Moderate |
|                              |                      |          | Chiang Rai        | Phaya Meng Rai         | Moderate |
|                              |                      |          | Chiang Rai        | Thoeng                 | High     |
|                              |                      |          | Nakhon Ratchasima | Khonburi               | Moderate |
|                              |                      |          | Nong Khai         | Phon Phisai            | Moderate |
|                              |                      |          | Nong Khai         | Rattana Wapi           | Moderate |

| FLASH FLOOD RISK IN THAILAND |           |       |                   |           |          |
|------------------------------|-----------|-------|-------------------|-----------|----------|
| In the next 12hrs            |           |       | In the next 24hrs |           |          |
| Provinces                    | Districts | Level | Provinces         | Districts | Level    |
|                              |           |       | Ubon Ratchathani  | Nam Yun   | Moderate |

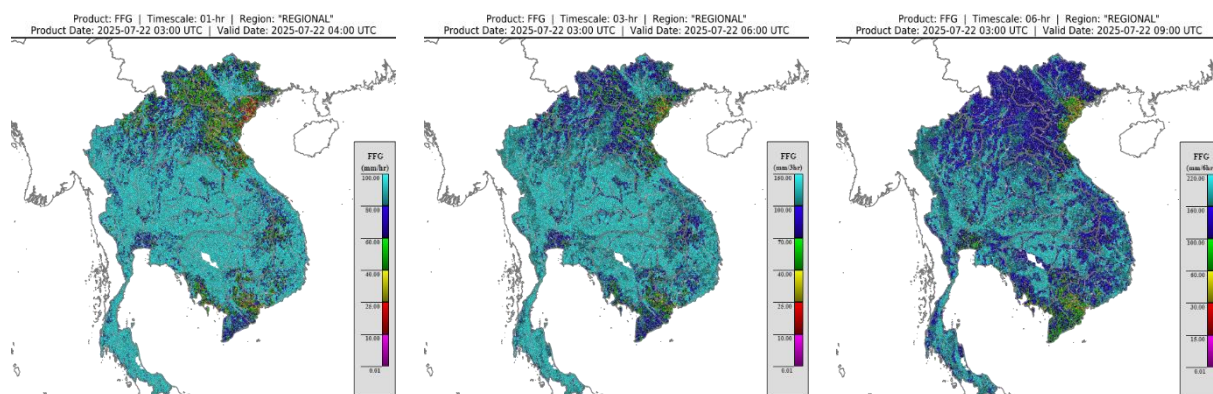


Figure 9. Flash Flood Guidance for the next 1-hr, 3-hr and 6-hr on 22 July

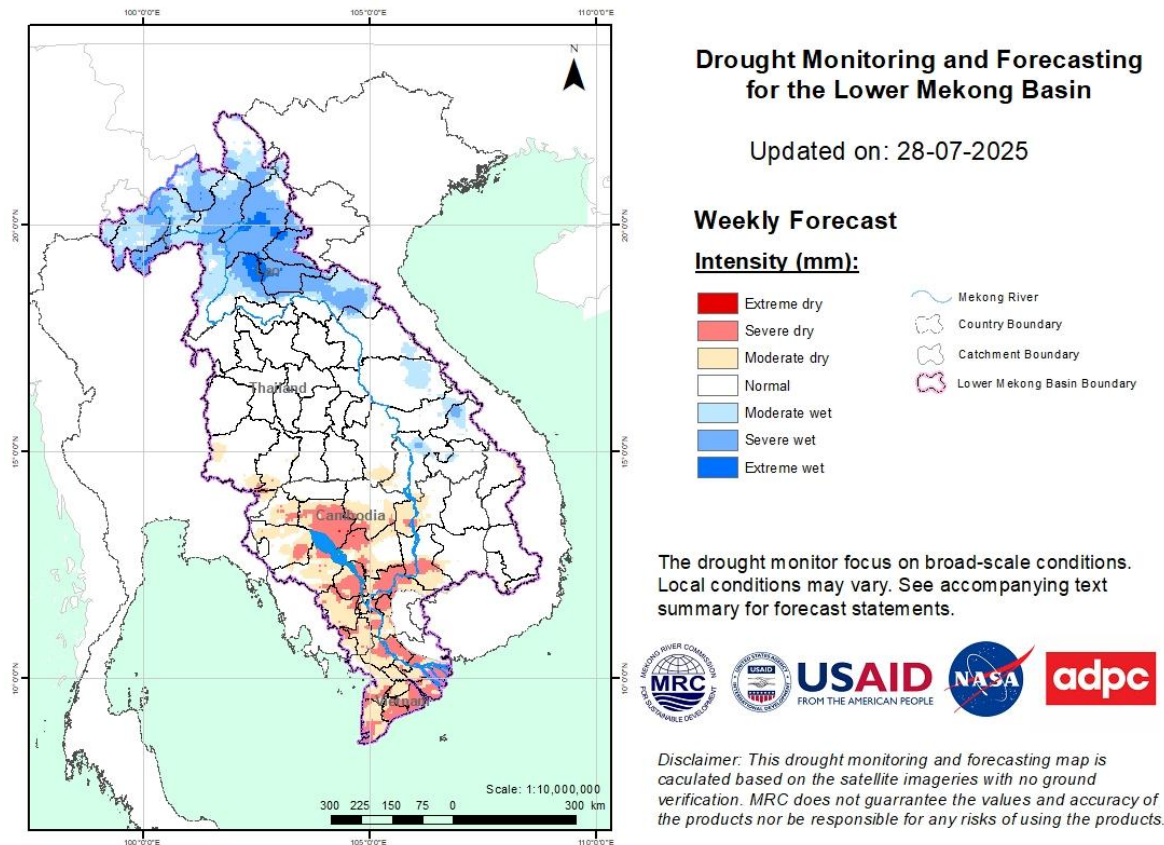
## 5. Drought Monitoring in the Lower Mekong Basin

### 5.2. Weekly drought monitoring from 22 – 28 July 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)**

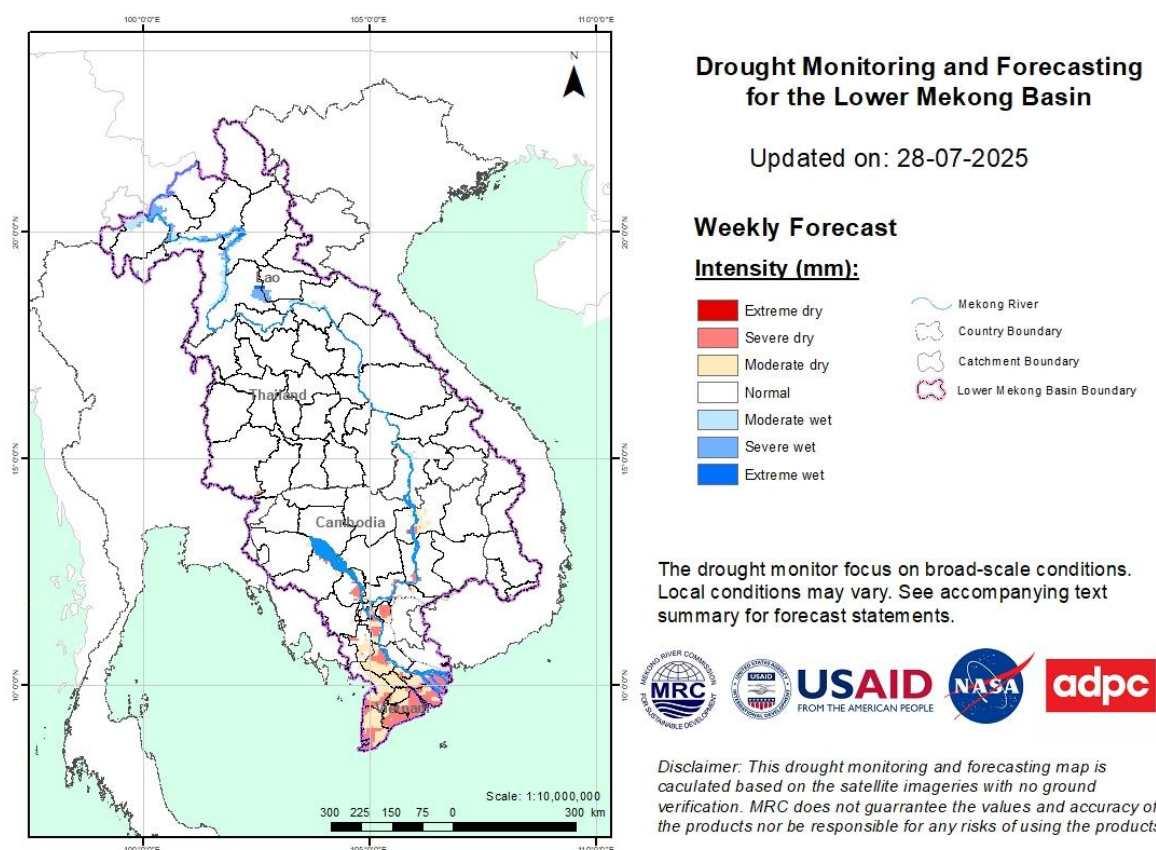
Meteorological indicator shows that from 22 – 28 July 2024, as shown in Figure 9, the LMB was facing normal to wet conditions, except some areas in the lower part of Cambodia and Mekong delta.



**Figure 10: Weekly standardized precipitation index from 22 – 28 July**

- **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 22 – 28 July. The LMB was facing normal to wet conditions, except some areas in the center part of Cambodia, and Mekong delta.



**Figure 11: Weekly Index of Soil Water Fraction from 22 – 28 July.**

- Weekly Combined Drought Index (CDI)**

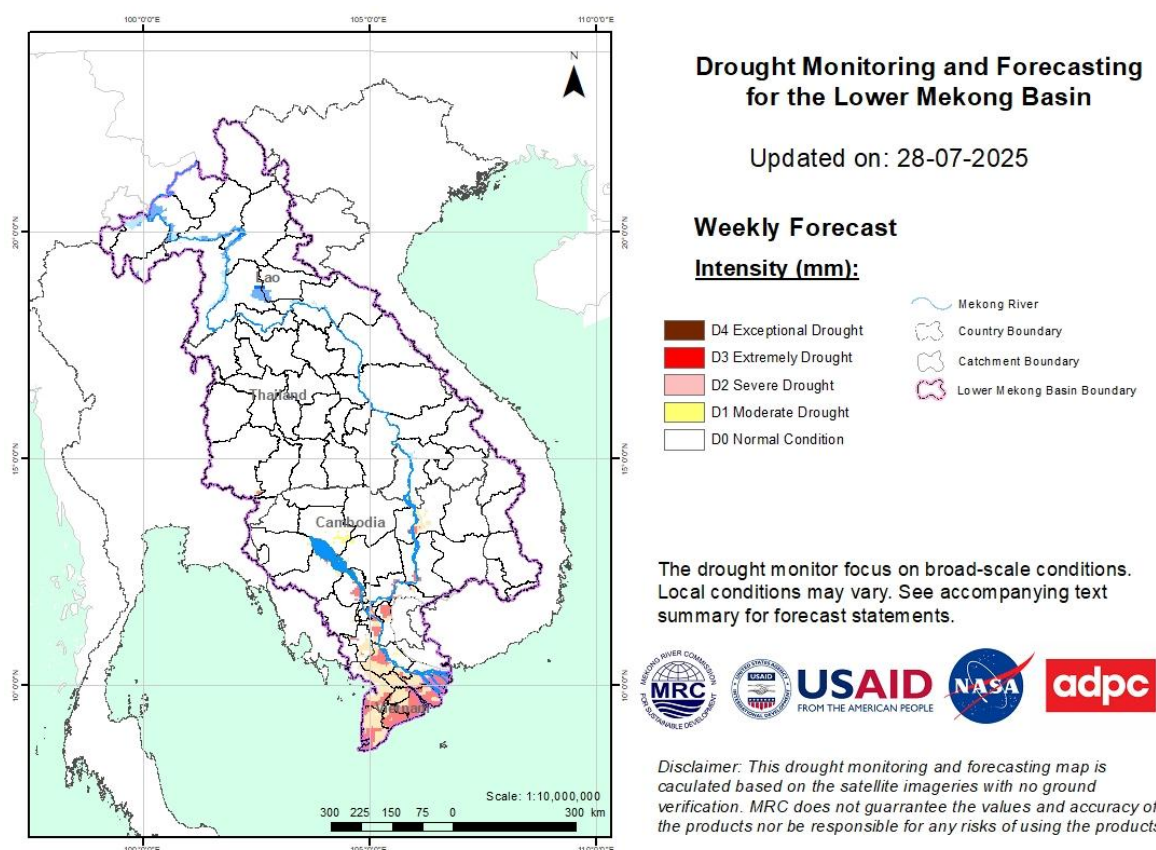
The combined drought indicator, **Figure 11**, that some areas experienced moderate drought in Cambodia (Kampong Thom, Preah Vihear, Siem Reap).

The impacted areas are listed below:

| Number | Country  | Province     | Moderate | Severe | Extreme | Exceptional |                                                              |          |  |             |  |
|--------|----------|--------------|----------|--------|---------|-------------|--------------------------------------------------------------|----------|--|-------------|--|
| 1      | Cambodia | Kampong Thom |          |        |         |             | Other provinces of the Mekong Delta of Viet Nam have no data |          |  |             |  |
| 2      | Cambodia | Preah Vihear |          |        |         |             |                                                              | Moderate |  | Severe      |  |
| 3      | Cambodia | Siem Reap    |          |        |         |             |                                                              | Extreme  |  | Exceptional |  |
|        |          |              |          |        |         |             |                                                              |          |  |             |  |

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





**Figure 12: Weekly Combined Drought Index from 22 – 28 July .**

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 29 July – 02 August 2025, the accumulated rainfall over the entire Lower Mekong Basin is distributed with light to heavy rain based on CHIRPS-GFS (**Figure 12**). Heavy rain is expected to occur in some areas in the LMB including the northern and central part of Lao PDR, the northern and northeastern part of Thailand, the 3S basin. The remaining areas are expected to occur light to moderate rain.

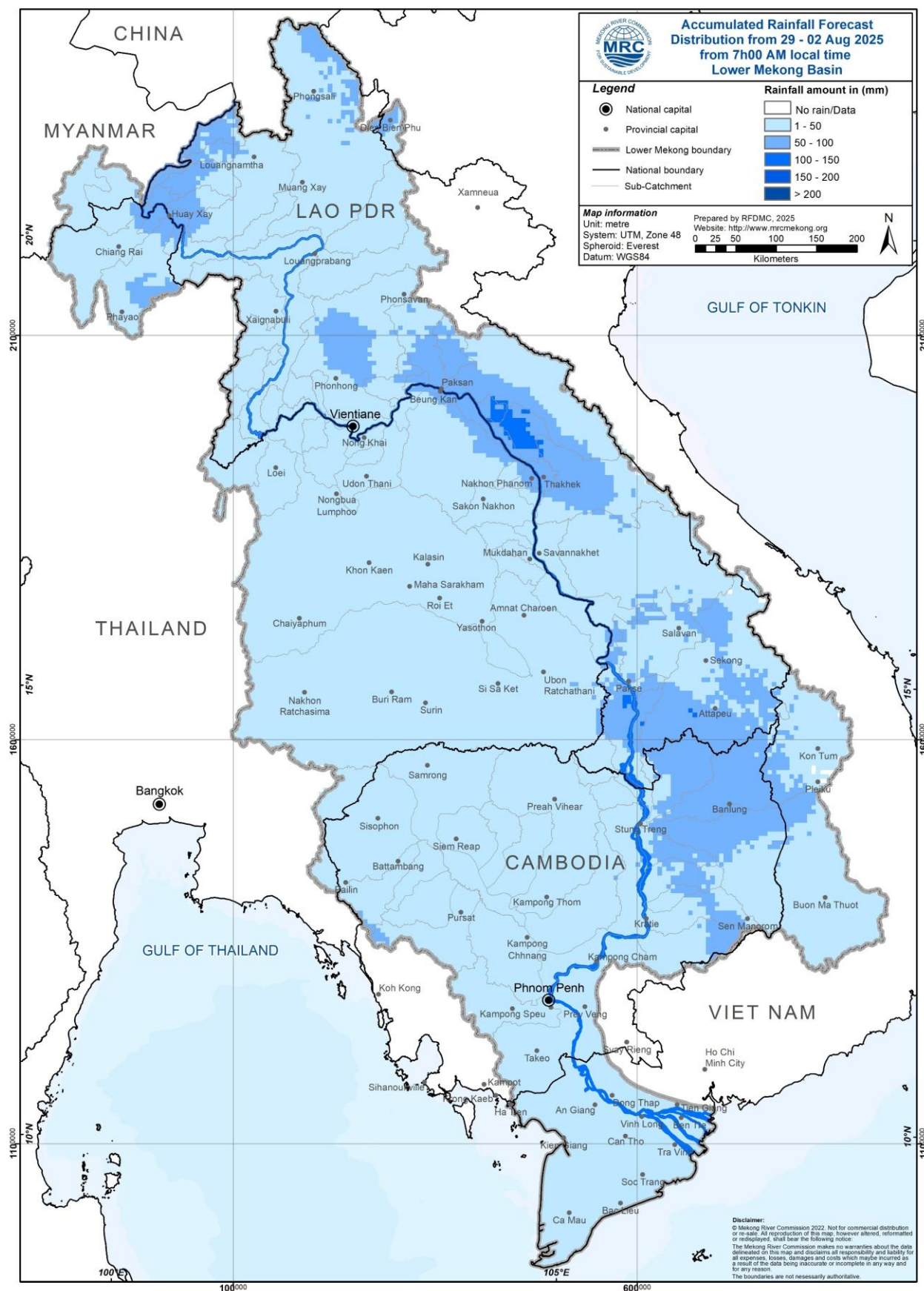


Figure 13: Accumulated rainfall forecast from CHIRPS-GFS (29 July – 02 August 2025)

## 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 29 July – 02 August 2025. The water level at Vientiane, Nongkhai, Nakhon Phanom, Khong Chiam and Pakse stations are expected to reach alarm level within the next 5 days.

In Chiang Saen monitoring station, the water level is expected to be fluctuated over the forecasting period of 23 July – 02 August 2025. However, it will be expected to slightly decrease from 5.51 m to 5.08 m. The water level in Luang Prabang stations affected by backwater is likely slightly decreasing within a range from 16.12 m to 14.99 m.

The water levels at Chaing Khan, Vientiane, Nongkhai, Nakhon Phanom and Thakhek stations are expected to slightly decrease in the next 5 days with approximately value of -0.72 m, -0.02 m, -0.01 m, -0.08 m, and -0.09 m, respectively. However, at Mukdahan, Savannakhet, Khong Chiam, Pakse, the water levels are expected to increase with approximately value of 0.78 m, 0.77 m, 0.08 m, and 0.07 m, respectively.

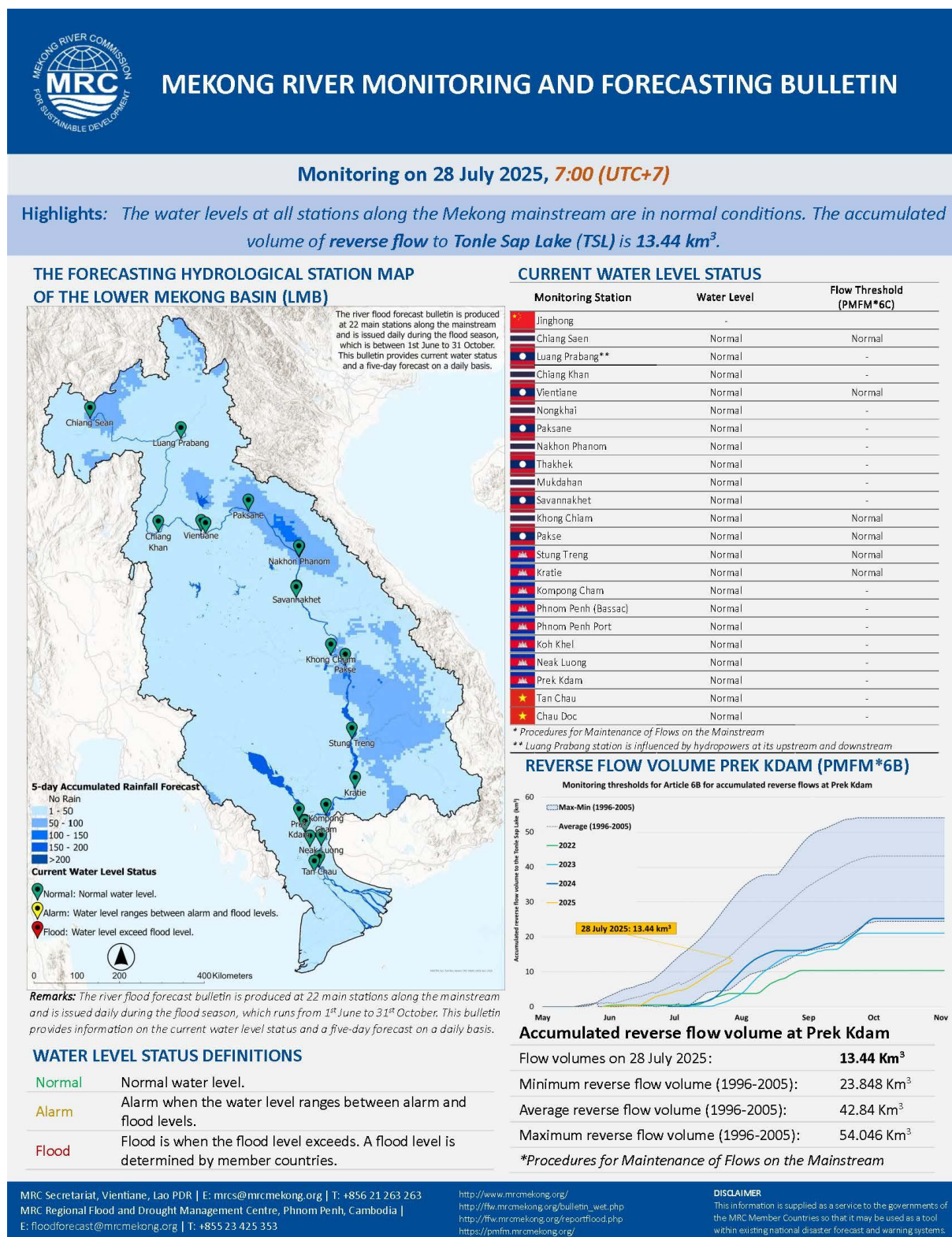
At the floodplain in Cambodia from Stung Treng station downstream, the water levels are expected to increase. At Stung Treng, Kratie, Kompong Cham, Phnom Penh (Bassac), Phnom Penh Port, Koh Khel, Neak Luong, and Prek Kdam, the water levels are expected to increase approximately 1.21 m, 30.5 m, 2.77 m, 1.68 m, 1.68 m, 1.04 m, 1.0 m, and 1.44 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 1.77 m and 2.46 m and 1.47 m and 2.16 m, respectively, following daily tidal effects from the sea.

The weekly River Monitoring Bulletin and forecasting issued on 28 July 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 29 July to 02 August 2025

**Highlights:** *Thunderstorm and heavy rainfall are forecast in parts of the LMB. The water levels at Vientiane and Nongkhai are expected to reach **ALARM LEVEL** on 30<sup>th</sup> July, while at Khong Chiam and Pakse, they are expected to reach **ALARM LEVELS** on 30<sup>th</sup> and 29<sup>th</sup> July.*

| 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) | 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) |
|---------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------|---------------------------------------------|----------|----------------------------|---------|---------|---------|---------|-----------------|-----------------|----------------------------------------------|-------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|
|                                                                                                         | 27-Jul                      |                            | 27-Jul                                      | 28-Jul   | 29-Jul                     | 30-Jul  | 31-Jul  | 01-Aug  | 02-Aug  |                 |                 |                                              |                                                 |                                                     |                                                     |
|  Jinghong              | 25.5                        | -                          | 536.78                                      | ↑ 536.88 | -                          | -       | -       | -       | -       | -               | -               | -                                            | -                                               | -                                                   | -                                                   |
|  Chiang Saen           | 59.0                        | 357.110                    | 4.87                                        | ↑ 5.51   | ↑ 6.30                     | ↑ 6.50  | ↓ 6.00  | ↓ 5.46  | ↓ 5.08  | 11.50           | 12.80           | ↓ -0.43                                      | 0.99                                            | 5.00                                                | 6.30                                                |
|  Luang Prabang         | 52.2                        | 267.195                    | 15.56                                       | ↑ 16.12  | ↑ 16.30                    | ↑ 16.51 | ↓ 16.21 | ↓ 15.69 | ↓ 14.99 | 17.50           | 18.00           | ↓ -1.13                                      | 0.39                                            | 0.99                                                | 1.49                                                |
|  Chiang Khan           | 39.5                        | 194.118                    | 11.92                                       | ↑ 13.46  | ↑ 14.00                    | ↑ 14.45 | ↓ 14.15 | ↓ 13.45 | ↓ 12.74 | 14.50           | 16.00           | ↓ -0.72                                      | 0.99                                            | 0.05                                                | 1.55                                                |
|  Vientiane             | 24.1                        | 158.040                    | 10.25                                       | → 10.32  | ↑ 10.89                    | ↑ 11.63 | ↓ 11.15 | ↓ 10.70 | ↓ 10.30 | 11.50           | 12.50           | → -0.02                                      | 1.31                                            | -0.13                                               | 0.87                                                |
|  Nongkhai              | 40.0                        | 153.648                    | 10.43                                       | ↓ 10.32  | ↑ 10.85                    | ↑ 11.75 | ↓ 11.25 | ↓ 10.76 | ↓ 10.31 | 11.40           | 12.20           | → -0.01                                      | 1.43                                            | -0.35                                               | 0.45                                                |
|  Paksane               | 23.5                        | 142.125                    | 11.96                                       | ↓ 11.90  | ↓ 11.30                    | ↓ 12.15 | ↓ 12.62 | ↓ 12.91 | ↓ 12.45 | 13.50           | 14.50           | ↑ 0.55                                       | 1.01                                            | 0.59                                                | 1.59                                                |
|  Nakhon Phanom         | 21.6                        | 130.961                    | 10.75                                       | ↑ 11.01  | ↑ 11.19                    | ↑ 11.58 | ↓ 11.38 | ↓ 11.15 | ↓ 10.93 | 11.50           | 12.00           | → -0.08                                      | 0.57                                            | -0.08                                               | 0.42                                                |
|  Thakhek               | 19.3                        | 129.629                    | 12.00                                       | ↑ 12.24  | ↑ 12.44                    | ↑ 12.81 | ↓ 12.53 | ↓ 12.35 | ↓ 12.15 | 13.00           | 14.00           | → -0.09                                      | 0.57                                            | 0.19                                                | 1.19                                                |
|  Mukdahan              | 33.1                        | 124.219                    | 10.75                                       | ↑ 10.87  | ↑ 11.04                    | ↑ 11.40 | ↓ 11.76 | ↓ 11.86 | ↓ 11.65 | 12.00           | 12.50           | ↑ 0.78                                       | 0.99                                            | 0.14                                                | 0.64                                                |
|  Savannakhet           | 27.0                        | 124.219                    | 8.97                                        | ↑ 9.37   | ↑ 9.51                     | ↑ 9.91  | ↓ 10.24 | ↓ 10.37 | ↓ 10.14 | 12.00           | 13.00           | ↑ 0.77                                       | 1.00                                            | 1.63                                                | 2.63                                                |
|  Khong Chiam           | 13.5                        | 89.030                     | 11.93                                       | ↑ 12.80  | ↑ 13.40                    | ↑ 13.68 | ↓ 13.53 | ↓ 13.13 | ↓ 12.88 | 13.50           | 14.50           | → 0.08                                       | 0.88                                            | -0.18                                               | 0.82                                                |
|  Pakse                 | 14.0                        | 86.490                     | 9.82                                        | ↑ 10.62  | ↑ 11.07                    | ↑ 11.34 | ↓ 11.22 | ↓ 11.00 | ↓ 10.69 | 11.00           | 12.00           | ↑ 0.07                                       | 0.72                                            | -0.34                                               | 0.66                                                |
|  Stung Treng          | 7.0                         | 36.790                     | 8.39                                        | ↑ 9.20   | ↑ 9.76                     | ↑ 10.28 | ↓ 10.51 | ↓ 10.57 | ↓ 10.41 | 10.70           | 12.00           | ↑ 1.21                                       | 1.37                                            | 0.13                                                | 1.43                                                |
|  Kratie              | 0.0                         | -1.080                     | 17.96                                       | ↑ 18.79  | ↑ 19.88                    | ↑ 20.60 | ↓ 21.33 | ↓ 21.71 | ↓ 21.84 | 22.00           | 23.00           | ↑ 3.05                                       | 3.05                                            | 0.16                                                | 1.16                                                |
|  Kompong Cham        | 0.0                         | -0.930                     | 10.80                                       | ↑ 11.24  | ↑ 12.05                    | ↑ 12.74 | ↓ 13.30 | ↓ 13.76 | ↓ 14.01 | 15.20           | 16.20           | ↑ 2.77                                       | 2.77                                            | 1.19                                                | 2.19                                                |
|  Phnom Penh (Bassac) | 0.0                         | -1.020                     | 6.48                                        | ↑ 6.78   | ↑ 7.23                     | ↑ 7.54  | ↓ 7.90  | ↓ 8.24  | ↓ 8.46  | 10.50           | 12.00           | ↑ 1.68                                       | 1.68                                            | 2.04                                                | 3.54                                                |
|  Phnom Penh Port     | nr                          | 0.070                      | 5.29                                        | ↑ 5.59   | ↑ 6.04                     | ↑ 6.35  | ↓ 6.71  | ↓ 7.05  | ↓ 7.27  | 9.50            | 11.00           | ↑ 1.68                                       | 1.68                                            | 2.23                                                | 3.73                                                |
|  Koh Khel            | 0.0                         | -1.000                     | 5.82                                        | ↑ 6.13   | ↑ 6.30                     | ↑ 6.57  | ↓ 6.81  | ↓ 7.03  | ↓ 7.17  | 7.90            | 8.40            | ↑ 1.04                                       | 1.04                                            | 0.73                                                | 1.23                                                |
|  Neak Luong          | 0.0                         | -0.330                     | 4.38                                        | ↑ 4.54   | ↑ 4.69                     | ↑ 4.94  | ↓ 5.17  | ↓ 5.38  | ↓ 5.54  | 7.50            | 8.00            | ↑ 1.00                                       | 1.00                                            | 1.96                                                | 2.46                                                |
|  Prek Kdam           | 0.0                         | 0.080                      | 5.32                                        | ↑ 5.56   | ↑ 5.84                     | ↑ 6.21  | ↓ 6.52  | ↓ 6.82  | ↓ 7.00  | 9.50            | 10.00           | ↑ 1.44                                       | 1.44                                            | 2.50                                                | 3.00                                                |
|  Tan Chau            | 4.0                         | 0.000                      | 1.57                                        | ↑ 1.66   | ↑ 1.77                     | ↑ 1.91  | ↓ 2.10  | ↓ 2.30  | ↓ 2.46  | 3.50            | 4.50            | ↑ 0.80                                       | 0.80                                            | 1.04                                                | 2.04                                                |
|  Chau Doc            | 26.0                        | 0.000                      | 1.20                                        | ↑ 1.32   | ↑ 1.47                     | ↑ 1.61  | ↓ 1.80  | ↓ 2.00  | ↓ 2.16  | 3.00            | 4.00            | ↑ 0.84                                       | 0.84                                            | 0.84                                                | 1.84                                                |

### 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 **28 July**, the water levels at **all** stations are in **normal conditions**. As of now, the total **accumulated reverse flow** volume into the TSL is **13.44 km³**.
- In the **next 5 days**, during **29–30 July**, thunderstorm and heavy rainfall are expected over the **upper and central part** of the LMB including the **upper and central part** of Lao PDR, the **northern and northeastern part** of Thailand near Lao PDR's border, and the 3S basin of Sesan, Sekong, Srepok.
- For **29 July – 02 August**, the water levels at Vientiane and Nongkhai stations are expected to reach **ALARM LEVEL** on 30<sup>th</sup> July. However, At **Khong Chiam** and **Pakse**, the water levels are expected to reach **ALARM LEVELS** on 30<sup>th</sup> and 29<sup>th</sup> July, respectively.

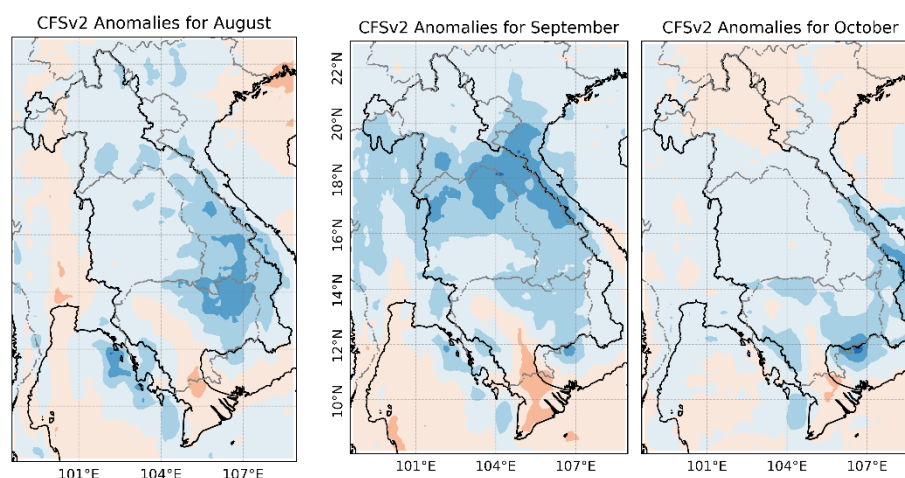


### 6.3 Flash Flood Information

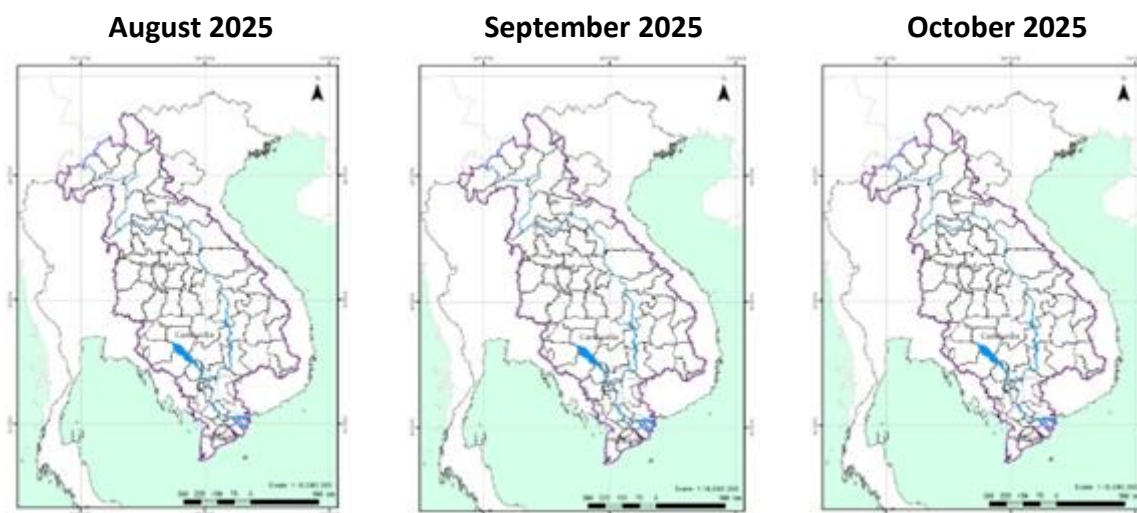
With heavy to very heavy rainfall for next week in 29 July – 04 August, flash floods might be detected in some areas in the LMB including in the northern and central part of Lao PDR, the northern part of Thailand. And local heavy rain in a short period of time is possible with unpredictable short flash floods. Further detailed information on Flash Flood Guidance Information, as well as on its explanation, is available for download [here](#).

### 6.4 Drought forecast

From August to October 2025 (**Figure 13**), 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 lowland areas of Cambodia, and the Mekong Delta. Overall, in the next 3 months, rainfall will be mainly concentrated in the central part of the LMB and higher than the LTA from 10 - 25mm.



**Figure 13** Seasonal forecast of rainfall anomalies for August to October 2025 based on CFSv2 (NCEP-NOAA)



**Figure 14.** Monthly forecasts of combined drought indicators for August, September and October 2025

**Figure 14** indicates that the monthly drought forecast for the upcoming three months (August, September, and October 2025) use the Combined Drought Indicator (CDI). The forecast shows that no drought conditions are expected in over the LMB from August to October 2025.



## **7 Summary and Possible Implications**

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

In the period of 22 - 23 July 2025, Due to the impact from the Lower Pressure Area which is weakened from the tropical storm – WIPHA, from 22 -23 July, thunderstorms and heavy to very heavy rains are expected in some areas in the northern and the central part of Lao PDR, the northern and the northeastern of Thailand near the border with Lao PDR, the 3S basin, and the southwestern part of Cambodia. The remaining areas are expected light to moderate rainfall.

From 29 July – 04 August, thunderstorms and heavy are expected over the upper and central part of the LMB including the upper and central part of Lao PDR, the northern and northeastern part of Thailand near Lao PDR's border, and the 3S basin of Sesan, Sekong, Srepok. The remaining areas are likely to occur light to moderate rainfall.

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

At 22 key monitoring stations along the Mekong mainstream from 22 – 28 July 2025, water levels have neither reached alarm nor 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 July – 02 August 2025, the water level at Vientiane, Nongkhai, Nakhon Phanom, Khong Chiam and Pakse stations are expected to reach alarm level. 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, including the northern and central part of Lao PDR, the northern part of Thailand, and the 3S Basin.

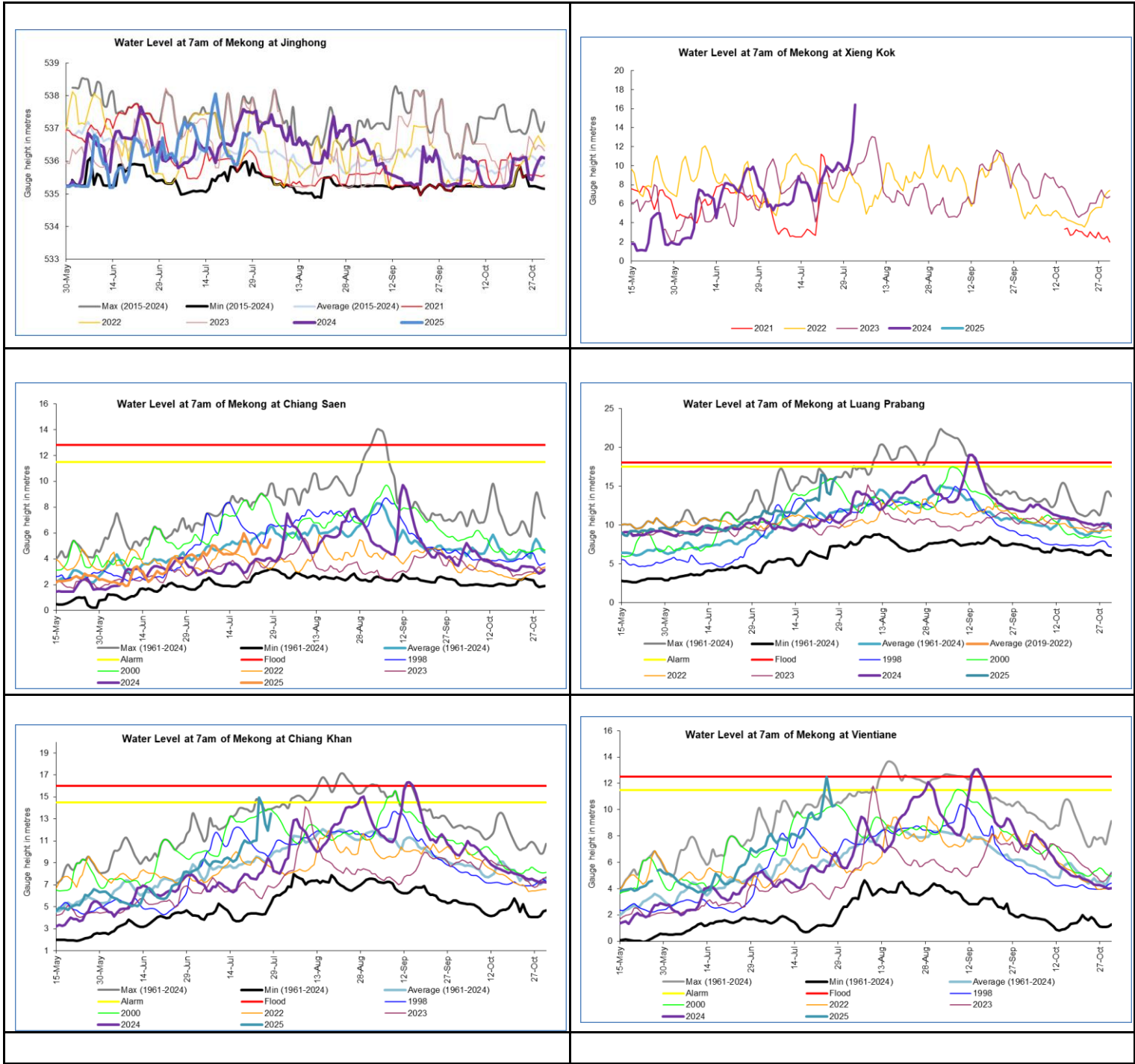
### **7.4. Drought condition and its forecast**

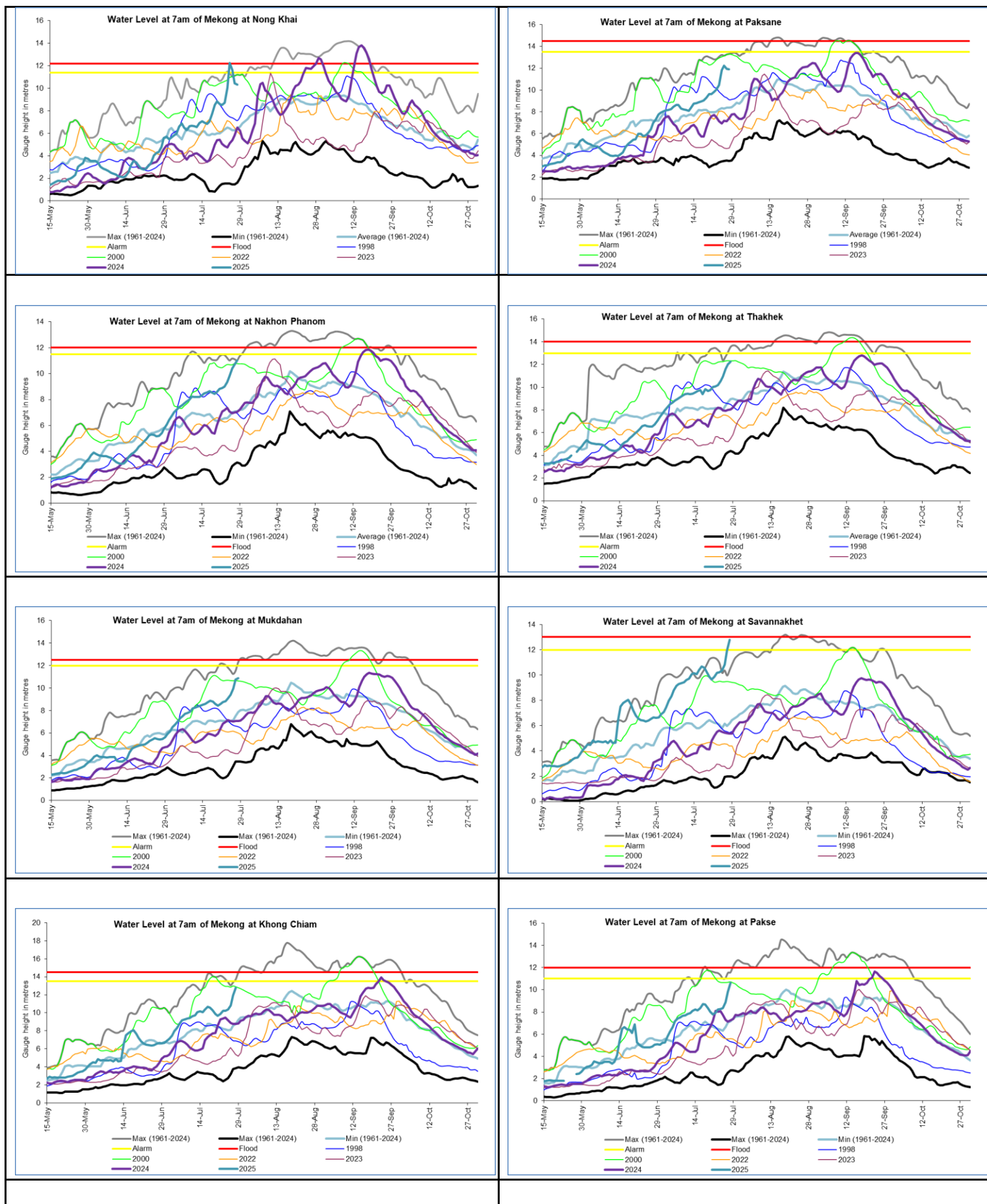
During 28 – 22 July 2025, the LMB is experiencing normal to wet conditions, except some areas in the lower part of Cambodia and Mekong delta. The monitored drought is caused primarily by meteorological indicator.

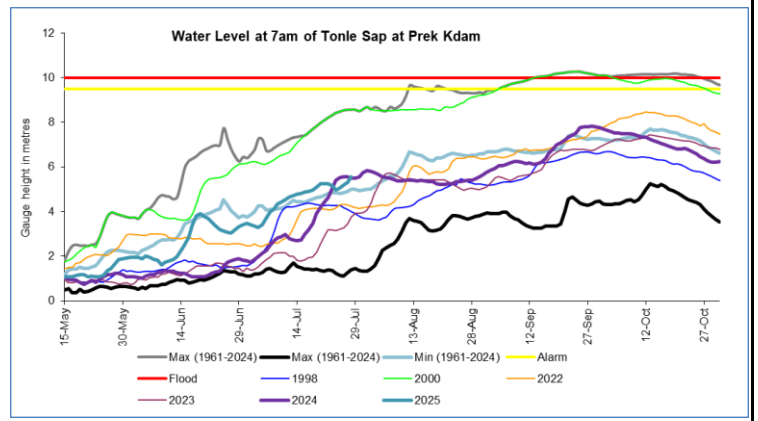
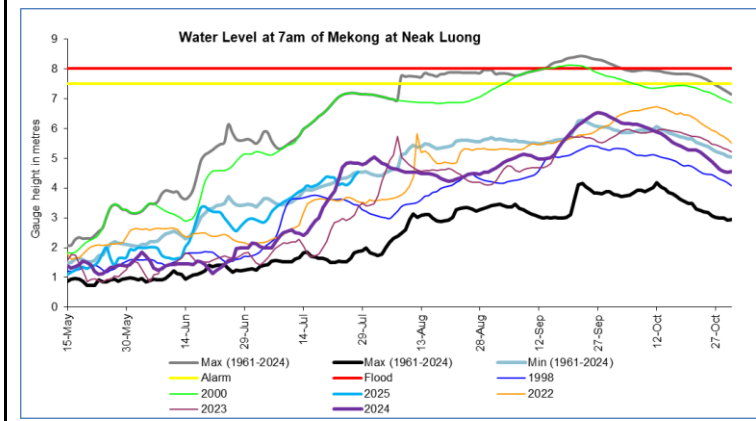
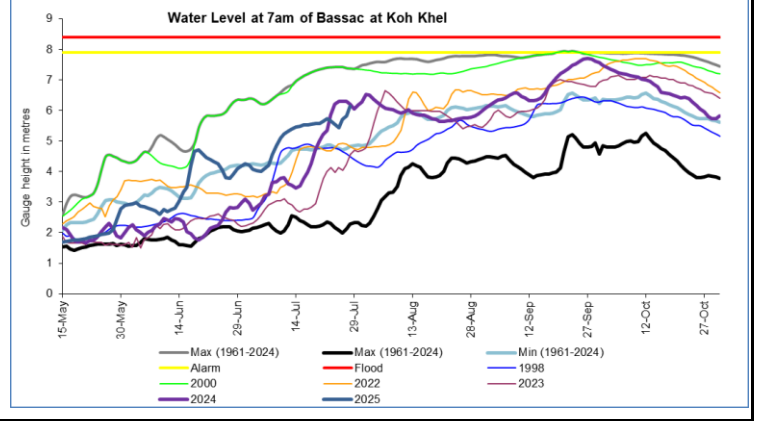
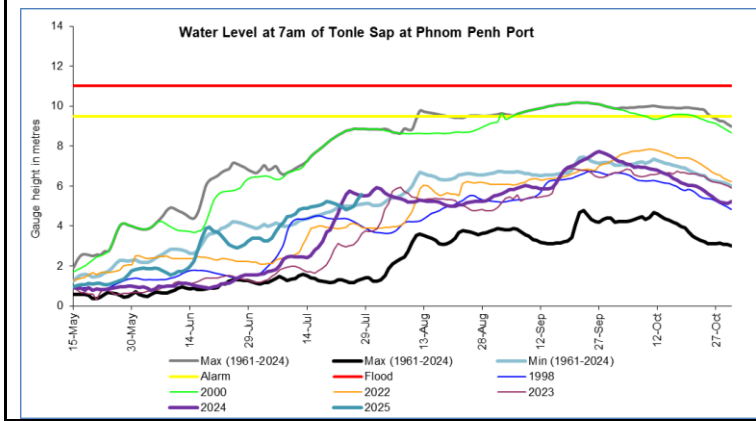
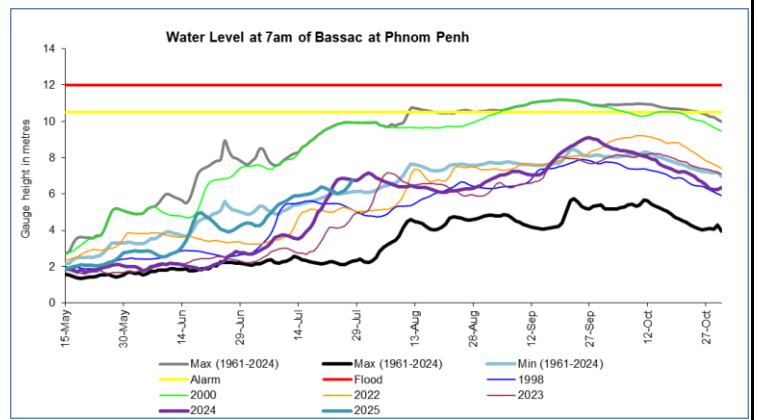
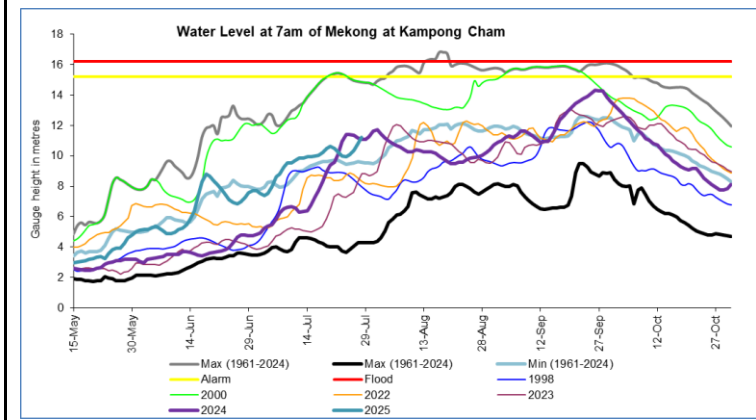
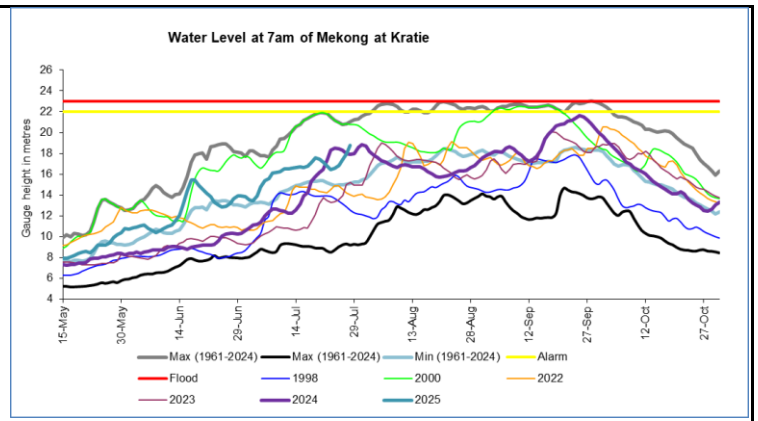
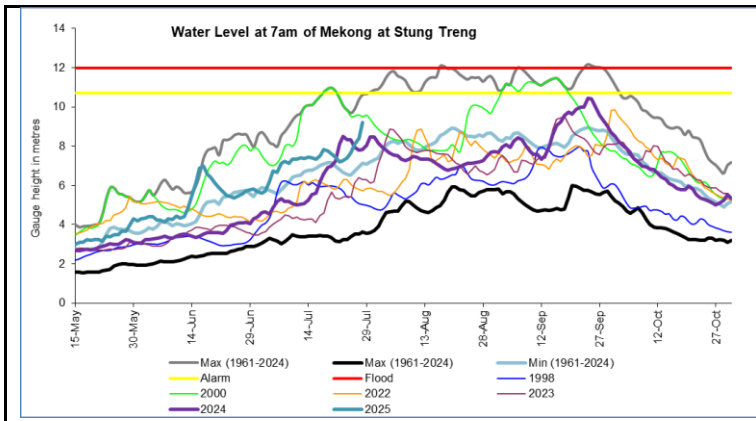
The next three-month from August - October 2025, the total amount of rainfall in most areas of the LMB will be higher than the LTA by around 5 - 25 mm, except for some areas in the lowland areas of Cambodia, and the Mekong Delta. Overall, in the next 3 months, rainfall will be mainly concentrated in the central part of the LMB and higher than the LTA from 10 - 25mm.

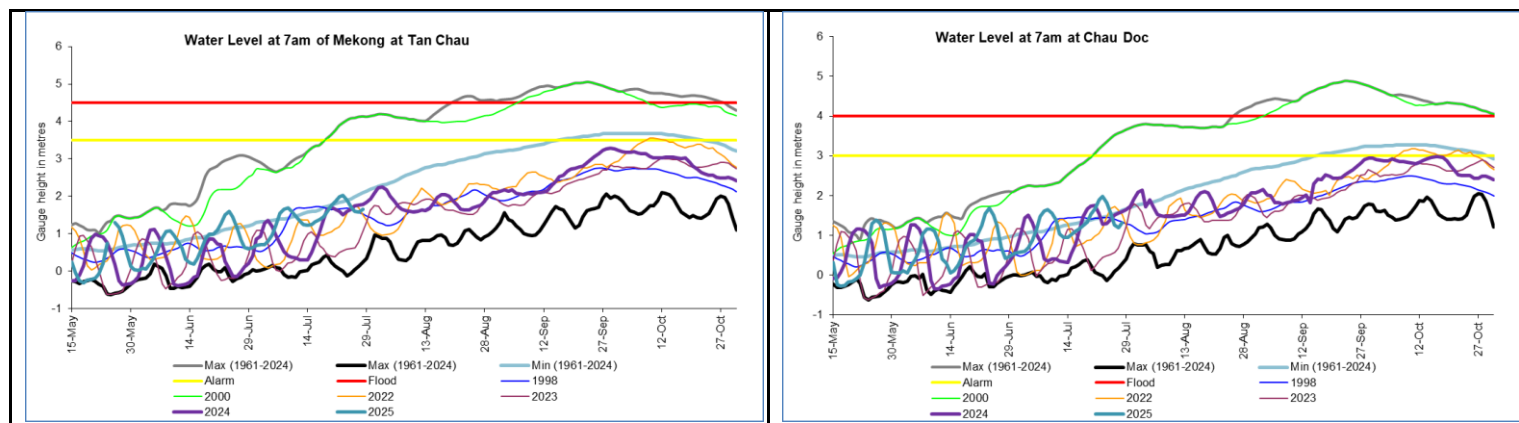
The forecast indicates that no drought conditions are expected in over the LMB from August - October 2025 using the Combined Drought Indicator (CDI)

# 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 |
|-------------|----------|-------------|---------------|-------------|-----------|----------|---------|---------------|---------|----------|-------------|-------------|-------|-------------|--------|--------------|---------------------|-----------------|----------|------------|-----------|----------|----------|
| 22-07-2025  | 536.15   | 4.36        | 13.12         | 11          | 9.28      | 8.52     | 9.85    | 8.89          | 10.07   | 8.77     | 7.19        | 9.85        | 7.93  | 7.2         | 16.8   | 10.28        | 6.21                | 5.05            | 5.74     | 4.34       | 5.26      | 1.99     | 1.89     |
| 23-07-2025  | 535.91   | 4.39        | 16.44         | 11.1        | 9.48      | 8.72     | 10.03   | 8.99          | 10.18   | 8.82     | 7.29        | 10.2        | 8.22  | 7.25        | 16.47  | 10           | 6.16                | 4.95            | 5.67     | 4.12       | 5.16      | 2.03     | 1.98     |
| 24-07-2025  | 535.89   | 4.78        | 16.3          | 14.9        | 10.9      | 10       | 10.47   | 9.34          | 10.53   | 9.09     | 7.51        | 10.21       | 8.28  | 7.42        | 16.56  | 9.92         | 6                   | 4.81            | 5.55     | 4.15       | 4.98      | 1.89     | 1.82     |
| 25-07-2025  | 536.31   | 5.11        | 14.2          | 14.3        | 12.5      | 12.3     | 11.8    | 9.8           | 10.95   | 9.41     | 7.83        | 10.36       | 8.36  | 7.67        | 16.87  | 10.06        | 6.09                | 4.88            | 5.44     | 4.1        | 5.06      | 1.7      | 1.54     |
| 26-07-2025  | 536.85   | 4.9         | 13.92         | 12.5        | 11.4      | 11.6     | 12.25   | 10.4          | 11.63   | 9.98     | 8.45        | 10.84       | 8.88  | 8.12        | 17.35  | 10.35        | 6.21                | 4.98            | 5.71     | 4.18       | 5.18      | 1.59     | 1.27     |
| 27-07-2025  | 536.78   | 4.87        | 15.56         | 11.9        | 10.3      | 10.4     | 11.96   | 10.75         | 12      | 10.8     | 8.97        | 11.93       | 9.82  | 8.39        | 17.96  | 10.8         | 6.48                | 5.29            | 5.82     | 4.38       | 5.32      | 1.57     | 1.2      |
| 28-07-2025  | 536.88   | 5.51        | 16.12         | 13.5        | 10.3      | 10.3     | 11.9    | 11.01         | 12.24   | 10.9     | 9.37        | 12.8        | 10.6  | 9.2         | 18.79  | 11.24        | 6.78                | 5.59            | 6.13     | 4.54       | 5.56      | 1.66     | 1.32     |
| 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           | 7.90     | 8.00       | 10.00     | 4.50     | 4.00     |

Table A2: Weekly observed rainfall

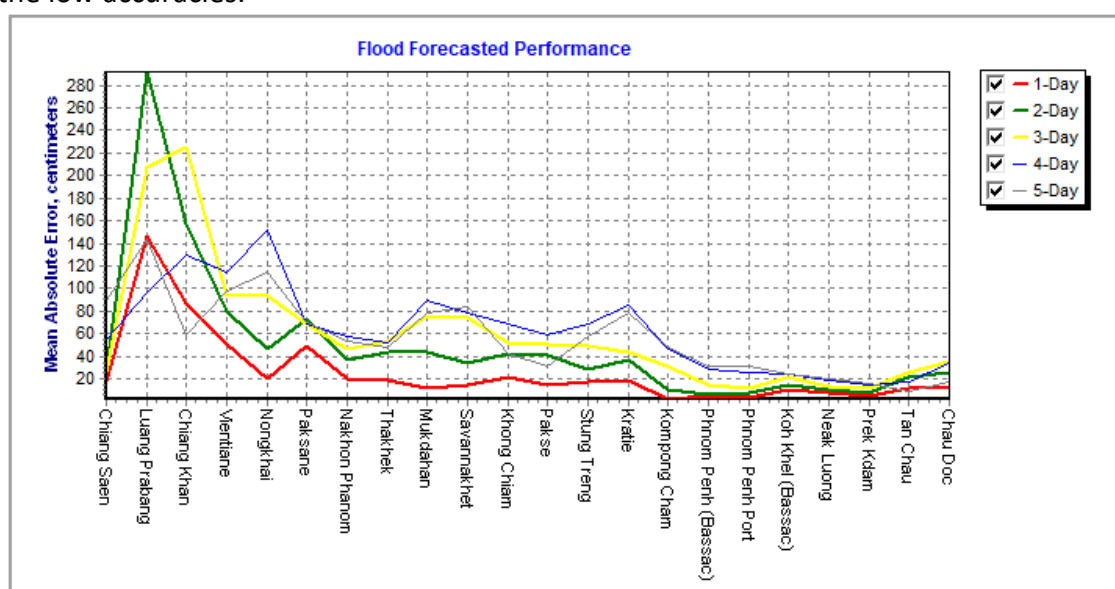
| 2025       | Jinghong | Chiang Saen | Luang Prabang | Chiang Khan | Vientiane | Nongkhai | Paksane | Nakhon Phanom | Thakhek | Mukdahan | Savannakhet | Khong Chiam | Pakse | Stung Treng | Kratie | Kompong Cham | Phnom Penh (Bassac) | Phnom Penh Port | Koh Khel | Neak Luong | Prek Kdam | Tan Chau | Chau Doc |
|------------|----------|-------------|---------------|-------------|-----------|----------|---------|---------------|---------|----------|-------------|-------------|-------|-------------|--------|--------------|---------------------|-----------------|----------|------------|-----------|----------|----------|
| 22-07-2025 | 13       | 49.4        | 25.8          | 0           | 1.4       | 0.8      | 26      | 66.9          | 68.8    | 3.3      | 2           | 0           | 0.6   | 0           | 0.8    | 5            | 12.6                | 0               | 0        | 5.8        | 21.4      | 10.9     | 11       |
| 23-07-2025 | 11       | 30          | 83.4          | 28.7        | 41.4      | 49.7     | 72.1    | 10.7          | 10.5    | 4.5      | 4.3         | 0           | 0     | 3           | 3.3    | 0            | 0                   | 0               | 0        | 0          | 0         | 0        | 0        |
| 24-07-2025 | 17       | 29.4        | 8.4           | 3.1         | 5         | 5.6      | 12.5    | 3.3           | 3.4     | 3.5      | 2.2         | 1.5         | 9     | 19          | 1.6    | 0            | 3.2                 | 0               | 0        | 5.2        | 0         | 0        | 0.3      |
| 25-07-2025 | 6        | 16.3        | 1.8           | 3.2         | 1.7       | 12.5     | 18.9    | 31.3          | 31.6    | 9.2      | 7.2         | 16          | 10    | 0           | 0      | 0            | 0                   | 0               | 0        | 0          | 0         | 0        | 0        |
| 26-07-2025 | 4        | 0.6         | 12.6          | 3.2         | 5.5       | 7.4      | 37.5    | 32.9          | 35.2    | 5        | 5.8         | 53.2        | 61    | 43          | 16     | 11           | 0                   | 0               | 0        | 0          | 0         | 0        | 4        |
| 27-07-2025 | 28       | 18.4        | 18.4          | 3           | 23.1      | 28.2     | 23      | 24.5          | 25.9    | 8.3      | 7.4         | 12          | 89    | 15          | 0      | 0            | 0                   | 0               | 0        | 0          | 0         | 0        | 0.5      |
| 28-07-2025 | 25.5     | 59          | 52.2          | 39.5        | 24.1      | 40       | 23.5    | 21.6          | 19.3    | 33.1     | 27          | 13.5        | 14    | 7           | 0      | 0            | 0                   | 0               | 0        | 0          | 0         | 4        | 26       |
| Sum        | 104.5    | 80.8        | 20.6          | 20.0        | 102.2     | 144.2    | 213.5   | 191.2         | 194.7   | 66.9     | 55.9        | 96.2        | 183.6 | 87.0        | 21.7   | 16.0         | 15.8                | 0.0             | 0.0      | 11.0       | 21.4      | 14.9     | 41.8     |

## 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 22 to 28 July 2025.

The forecasting values from 22 to 28 July 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. However, at Luang Prabang station, the accuracy is unacceptable due to the significant increase in water level, which was caused by tropical storm namely Wipha. 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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