



Mekong River Commission

Weekly Dry Season Situation Report in the Lower Mekong River Basin

06 – 12 February 2024

Prepared by
The Regional Flood and Drought Management Centre
13 February 2024

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Key Messages

Key messages for this weekly report are presented below.

Rainfall monitoring and forecast

- In the period of 06 – 12 February 2024, there was no significant rainfall recorded at the key stations along the Mekong River.
- The Mekong region was influenced by the rather strong northeast monsoon and the weak high-pressure push from China. There will be no significant rainfall accumulated for the next seven days over the lower part of the Mekong region from 13 - 19 February 2024.

Water level monitoring and forecast

- At 22 key monitoring stations along the Mekong mainstream from 06 – 12 February 2024, water levels are below the long-term averages (LTAs) except for water level at Luang Prabang, Vientiane, Khong Chiam, Stung Treng and Kratie monitoring stations. However, the 9 monitoring stations remains in normal condition with respect to the flow threshold (PMFM for Observed Water Level). It is also the same condition for Tan Chau and Chau Doc monitoring stations, which significantly influenced by sea tidal fluctuation.
- In the period of 13 –19 February 2024, the water level at 22 key stations is expected to slightly decrease at the upper to lower stretches of the Lower Mekong River Basin, except for Luang Prabang station, which is significantly affected by the backwater effect. However, only at Luang Prabang, Vientiane, Khong Chiam, Stung Treng, and Kratie, water levels are predicted to above the LTAs.

Drought condition and forecast

- During 6 – 12 February, the LMB was facing from moderate to extreme drought from the upper to the lower part. Middle and southern areas of Laos, lower region of Thailand and northern area of Cambodia were the driest areas during the monitoring week.
- In February the LMB is likely normal and wet all over the region; March is likely to be at moderate dry over the northern and western parts; while April is likely normal and wet except Phongsaly in the north that is forecasted to be at moderately and severely dry.

1 Introduction

This Weekly Dry Season Situation Report presents a preliminary analysis of the weekly hydrological situation in the Lower Mekong River Basin (LMB) for **06 – 12 February 2024**. 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. 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_wet.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

The weak high-pressure system covers the upper and center part of LMB while the rather strong northeast monsoon prevails over the lower part. As a result, isolated rainfall occurred in some areas of the LMB.

Figure 1 presents the weather map indicating no high- or low-pressure cells active in the South Sea of Viet Nam and the LMB. Generally, the Mekong region was influenced by the weak high-pressure push from China.

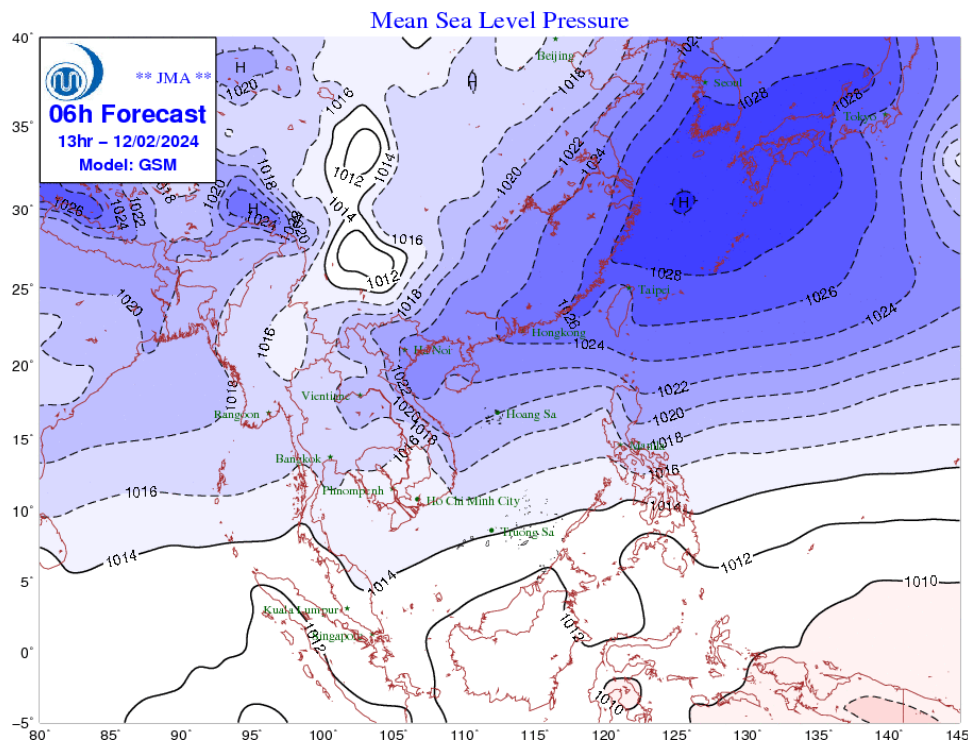


Figure 1: Weather conditions over the LMB

According to the ASEAN Specialised Meteorological Centre (ASMC, <http://asmc.asean.org/home/>), the subseasonal weather outlook (5 – 18 February 2024) indicates that the drier condition is predicted to occur in the Lower Mekong Basin (LMB), particularly the south-western part. Moreover, cooler condition will be observed at almost entire LMB and more significant at the central to upper part of the LMB. **Figure 2** shows the outlook of weather condition from 5 to 18 February 2024 in Southeast Asia based on results from the NCEP model (National Centres for Environmental Prediction).

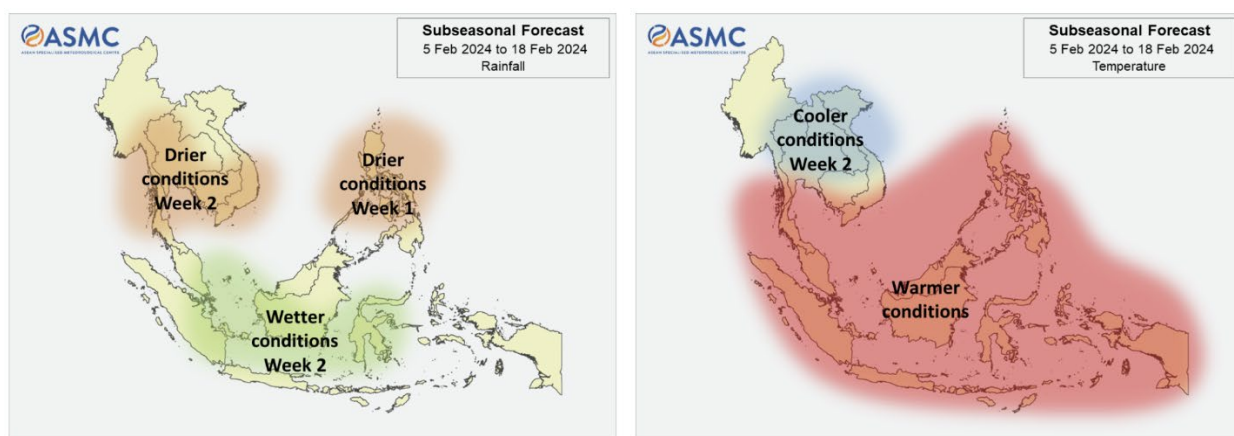


Figure 2: Outlook of wet and dry conditions over the Asian countries by ASMC.

Based on the tropical storm risk (TS) (<https://www.tropicalstormrisk.com/>), there is no active NW pacific system as of 12 February as displayed in Figure 3.

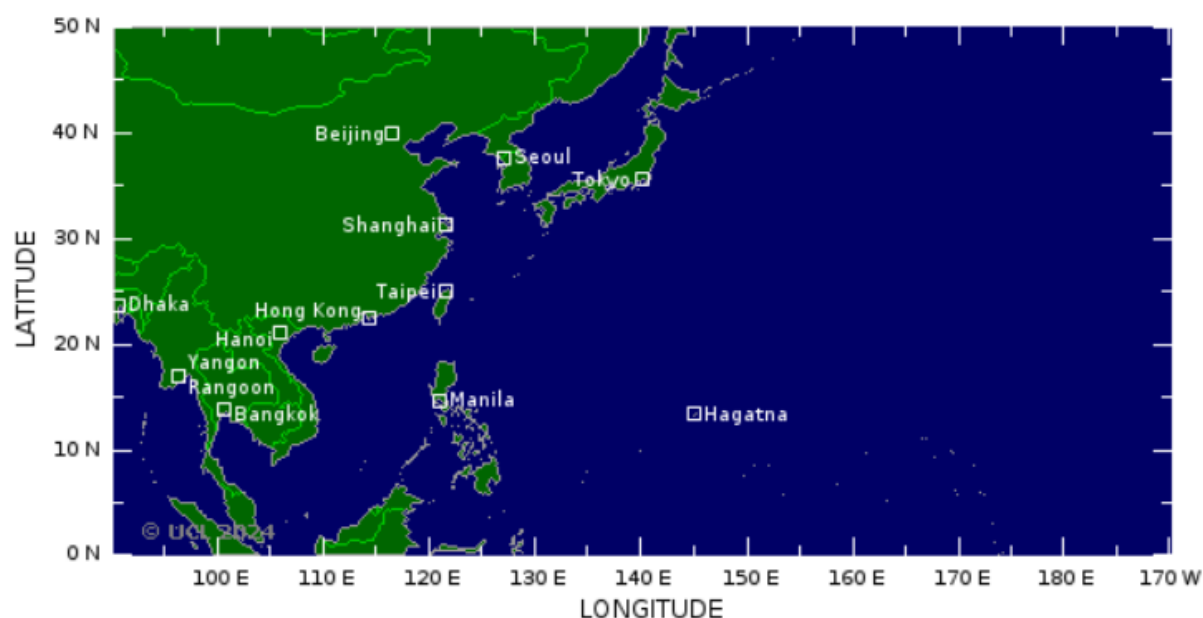


Figure 3: No tropical storm risk observed on 12 February 2024

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 06 to 12 February 2024 (**Figure 4**). Over the entire basin, the rainfall has been observed to be between no rain to relatively low. However, slight rainfall occurrence has been found in the eastern part of the basin, particularly in Lao PDR and Viet Nam.

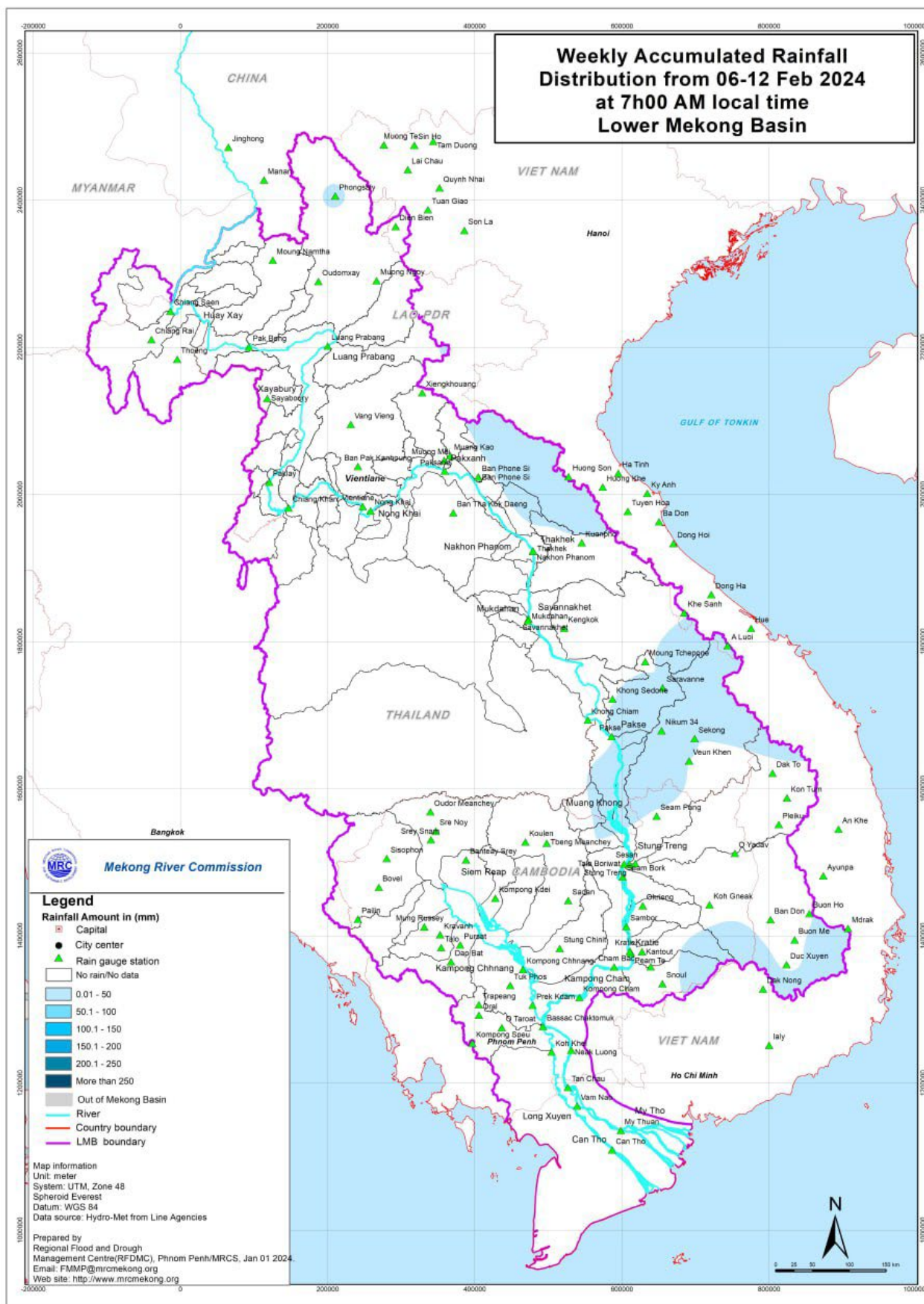


Figure 4: Weekly rainfall distribution over the LMB during 06 – 12 February 2024

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 06 – 12 February 2024, the observed water level (WL) at Jinghong hydrological station¹, was almost constant and ranges between 535.20 m and 535.22 m, which are corresponding to the outflow between 808.00 m³/s to 821.00 m³/s (recorded on 7:00 am), respectively (**Figure 6**). The water level in Chiang Saen station also indicated a slight fluctuation ranging from 1.62 m to 1.52 m with a decreasing trend. At the same period, the water level in Luang Prabang station also slightly increased with an approximate value of 0.06 m as compared to the previous week.

During the same period, the water level observed in Chiang Khan showed a slight decreasing trend ranging from 3.54 m to 3.46 m. In contrast, the water level at Vientiane monitoring station indicated a slight increasing trend, while Nong Khai station has a decreasing trend ranging from 1.27 m to 0.92 m as compared from previous week. In Paksane monitoring station, the water level is almost constant and ranges from 1.94 m to 1.95 m.

Further downstream, water levels from Nakhon Phanom to Stung Treng slightly changed with decreasing trends. From the previous week, the water levels at the Nakhon Phanom, Thakhek, Mukdahan, Savannakhet, Khong Chiam, Pakse, and Stung Treng slightly varied in range of 1.53 – 0.99 m, 2.85 – 2.34 m, 1.93 – 1.59 m, 1.0 – 0.8 m, 2.34 – 2.14 m, 1.26 – 1.12 m, and 2.72 – 2.70 m respectively.

The water levels at Kratie, Kampong Cham, Phnom Penh (Bassac), Phnom Penh Port, Koh Khel (Bassac), Prek Kdam, and Neak Luong stations slightly increased from 7.32 m to 7.46 m, 2.48 m to 3.16 m, 2.12 m to 2.31 m, 1.45 m to 1.61 m, 2.18 m to 2.26 m, 1.6 m to 1.82 m, and 1.25 m to 1.58 m, respectively from 06 to 12 February 2024.

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>.

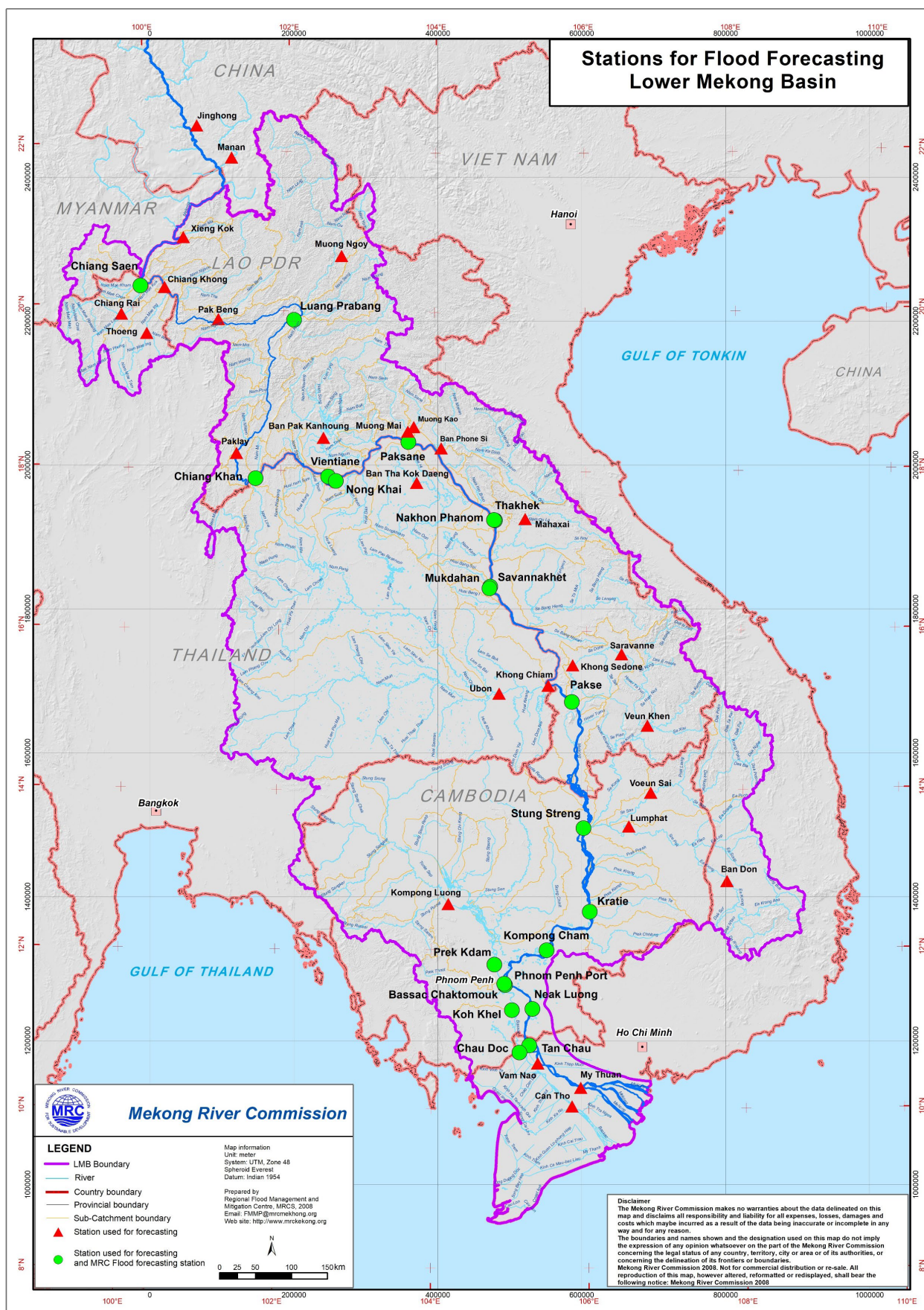


Figure 5: The key stations along LMB for river flood forecasting

Similar to the previous week, the water levels from 06 to 12 February 2024 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 0.3 m and 1.5 m, while at the Chau Doc station, they ranged from 0.46 m to 1.65 m.

It should be noted that the water levels in all key monitoring stations on 12 February 2024 are below their long-term averages (LTAs) except for the Luang Prabang, Vientiane, Khong Chiam, Stung Treng, Kratie, Tan Chau and Chau Doc monitoring stations. 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**.

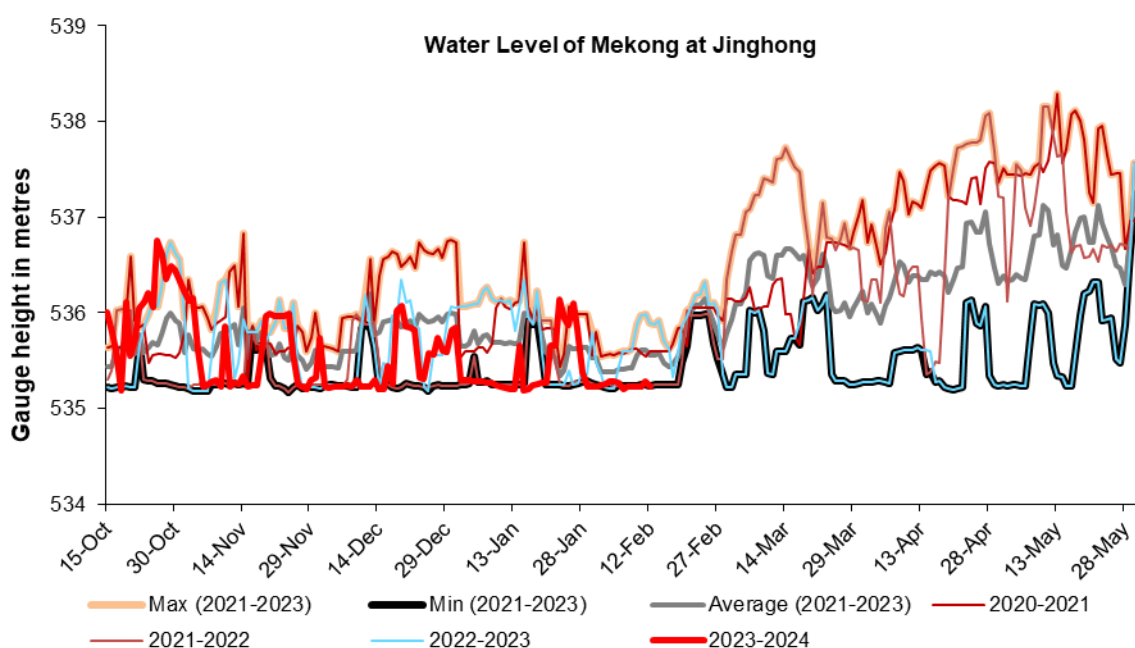


Figure 6. Water level at the Jinghong hydrological station up to 12 February 2024.

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 outflow of the Tonle Sap Lake took place since 28 September 2023.

The outflow 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 (1997-2023) are illustrated in **Figure 8**. Up to 12 February 2024, it was observed that the main outflow to Tonle Sap Lake decreased due to no rainfall and less inflows from upstream (**Figure 8**). This decreased outflow of Tonle Sap Lake was most likely caused by low inflows from its tributaries.

The seasonal changes in monthly flow volumes up to 12 February 2024 for the Tonle Sap Lake compared with that in 2020, 2021, 2022, 2023 and their LTAs, and the fluctuation levels (1997–2023) are presented in **Table 8**. The mean monthly water volume of the Tonle Sap Lake in January 2024 is lower than its LTA (about 77.17 %) and 2023 but higher than that in 2019, 2020, 2021 and 2022 during the same period (**Figure 8 and Table 1**).

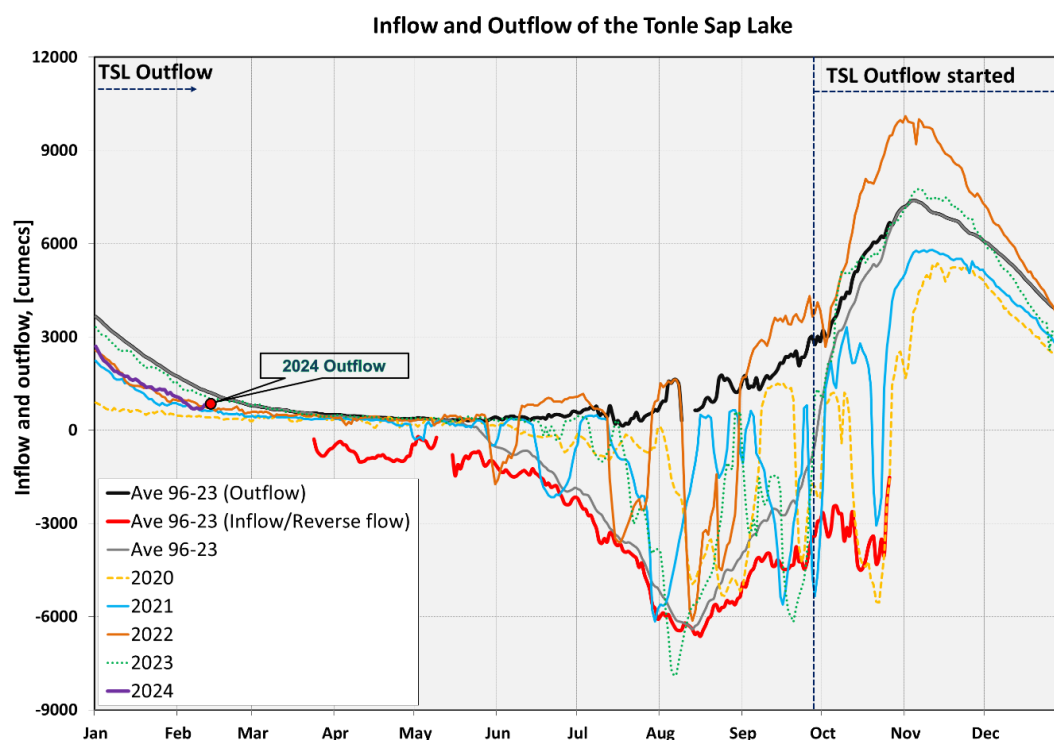


Figure 7: Seasonal change of inflows and outflows of Tonle Sap Lake.

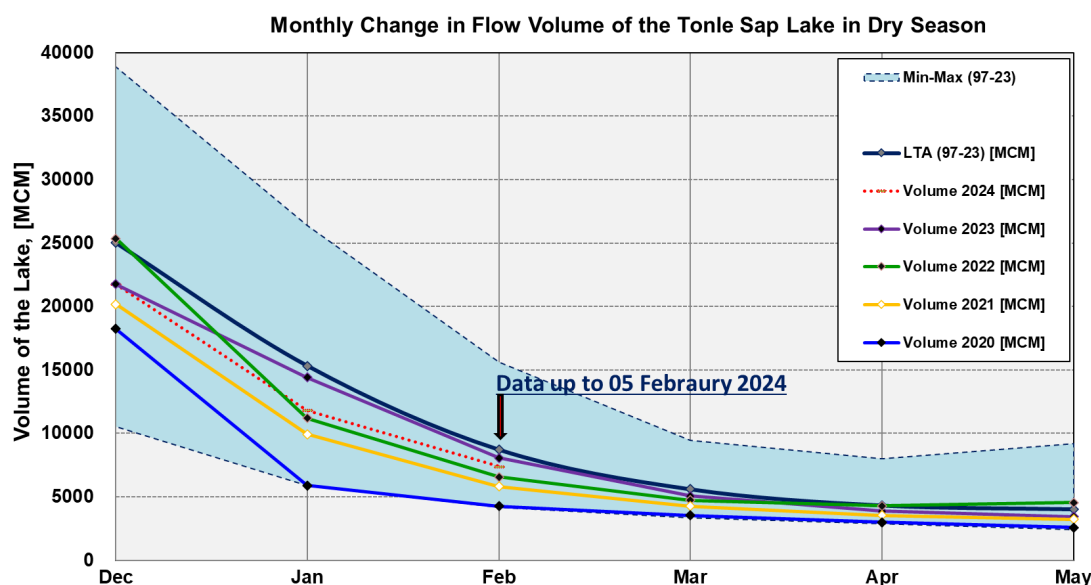


Figure 8. The seasonal change in monthly flow volume of Tonle Sap Lake.

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

Month	LTA (97-22) [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 in 2024 [%], compared with its LTA
Jan	15322.86	26357.53	5906.80	10285.31	5906.80	9923.80	11214.32	14422.11	11824.86	77.17
Feb	8723.39	15596.22	4198.60	6019.30	4264.19	5832.97	6558.79	8069.29	7404.34	84.88
Mar	5602.68	9438.24	3347.07	4354.62	3553.99	4264.88	4736.52	5080.64		
Apr	4327.36	8009.14	2866.91	3667.47	2992.61	3556.68	4288.31	3884.16		
May	4027.82	9176.93	2417.81	3266.43	2594.92	3240.78	4556.83	3438.66		
Jun	5699.50	13635.01	2468.70	3517.06	2641.88	3798.29	7489.04	3689.97		
Jul	11188.79	28599.56	2925.86	4001.99	2925.86	5346.73	9703.79	9953.41		
Aug	24070.98	39015.12	4433.46	7622.71	5941.07	10547.80	19554.70	13694.57		
Sep	38787.47	65632.35	12105.31	24194.19	12105.31	16382.34	32860.34	23550.60		
Oct	46562.09	73757.23	19705.50	30358.38	20799.13	27318.21	48199.12	37141.40		
Nov	37739.30	60367.33	18534.61	19112.65	27546.80	28982.93	39452.53	33929.52		
Dec	25009.52	38888.95	10563.49	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 min (LTMIN) and max (LTMAX) values									
	Low volume situation: lower than long-term average (LTA)									
Unit: Million Cubic Meter (1 MCM= 0.001 Km³)										

4. Flash Flood in the Lower Mekong Basin

During the weekly monitoring period from 06 - 12 February, the LMB received no rain to light rain in some areas.

According to the MRC-Flash Flood Guidance System (MRC-FFGS) and analysis, flash flood events were not detected during the reporting period over the LMB.

5. Drought Monitoring in the Lower Mekong Basin

5.2. Weekly drought monitoring from Feb 6 to 12

Drought monitoring data for 2024 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 drought conditions of the LMB from 6 to 12 February, as shown in **Figure 9**, were normal in all parts of the region. The conditions were similar to those of last week from Jan 30 to Feb 5.

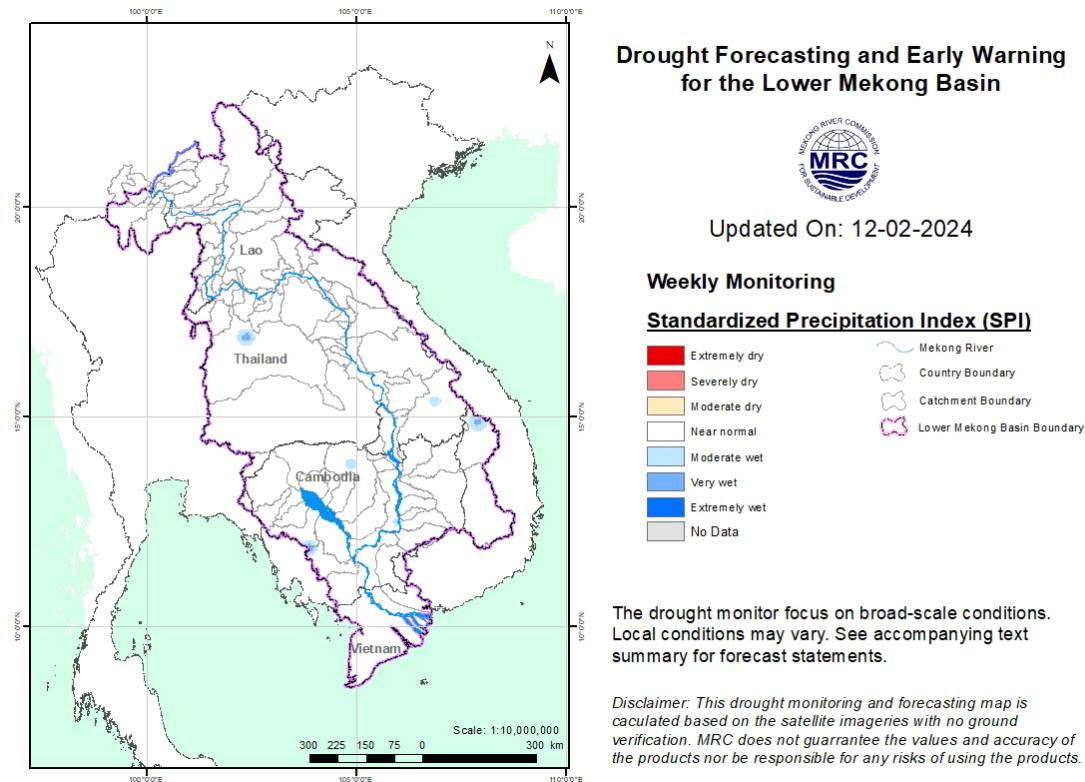


Figure 9: Weekly standardised precipitation index from 6 to 12 February.

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

Soil moisture conditions from 6 to 12 February, as displayed in **Figure 10**, were severely dry from the north to the south due to absence of rainfall. The conditions were similar to those of the previous week.

Note: The index of soil water fraction presents the current soil water fraction conditions compared with normal month; therefore, it normally shows extremely dry during dry season which is completely different from SPI that is standardized to its specific month of the years. However, this does not mean that the areas are threatened by agricultural drought as generally during transition period of wet and dry seasons and dry season only the irrigated areas are used for agricultural plantation.

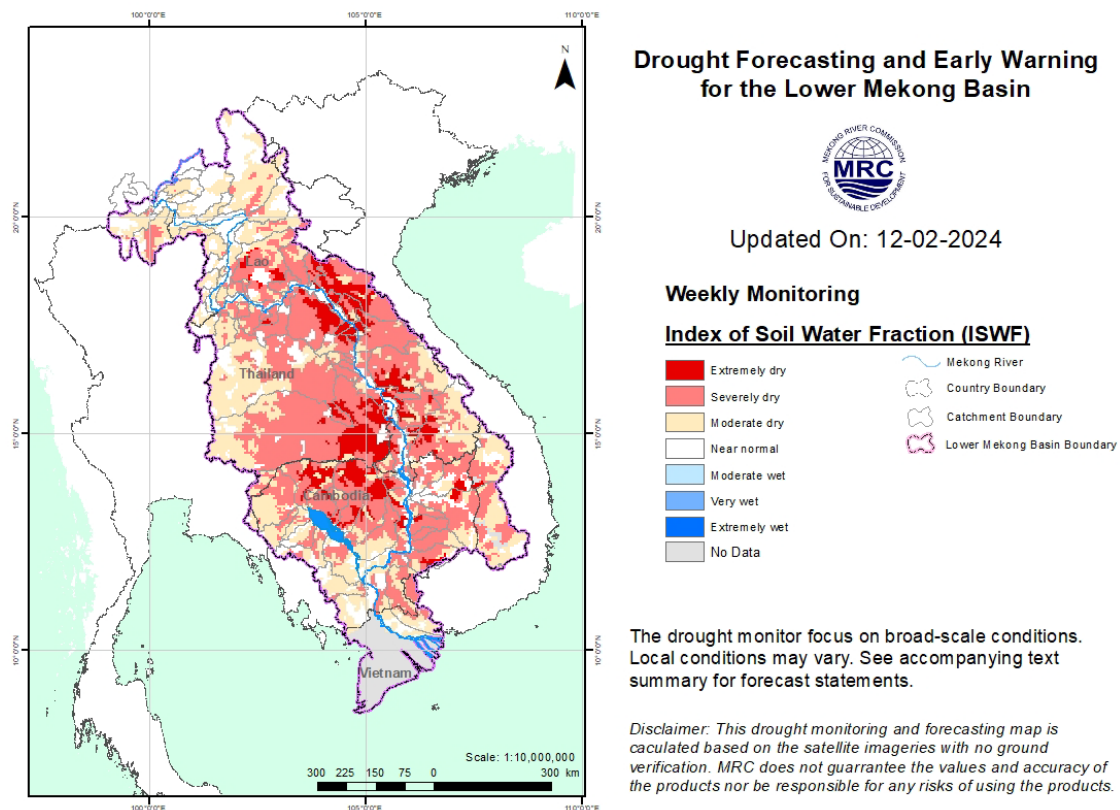


Figure 10: Weekly Index of Soil Water Fraction from 6 to 12 February.

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

With the dry conditions of soil moisture, the combined drought indicator (displayed in **Figure 11**) reveals that during 6-12 February, the LMB was facing from moderate to extreme drought from the upper to the lower part. Middle and southern areas of Laos, lower region of Thailand and northern area of Cambodia were the driest areas during the monitoring week.

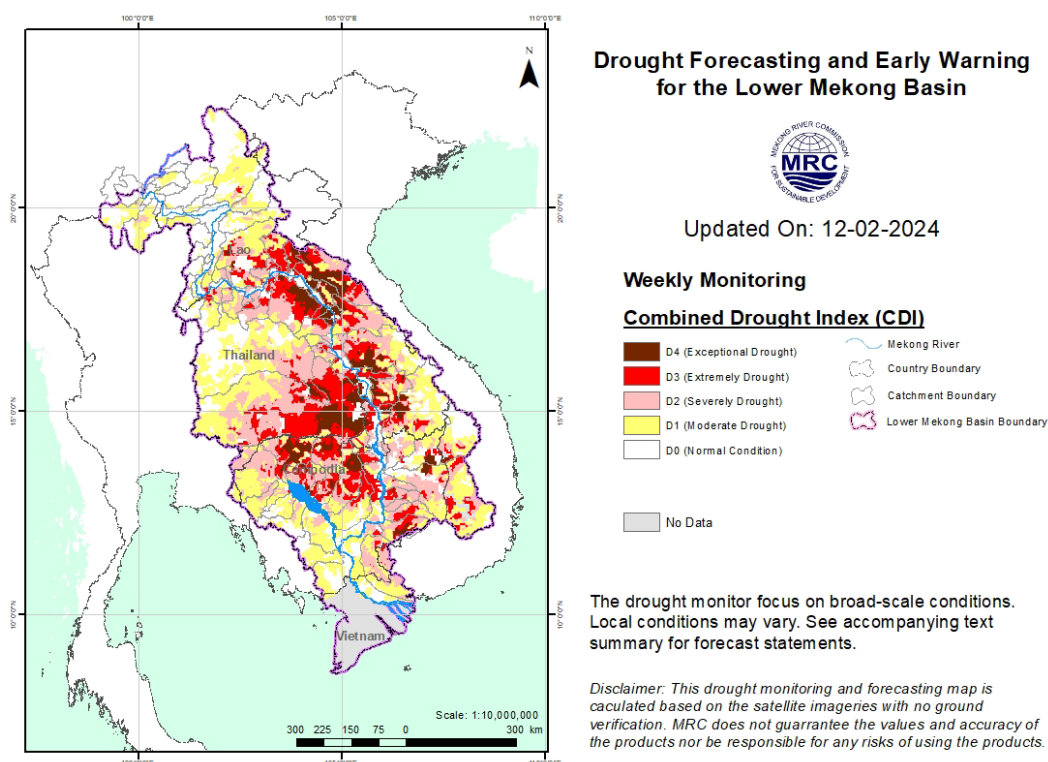


Figure 11: Weekly Combined Drought Index from Feb 6 to 12.

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 13 - 26 February 2024, the accumulated rainfall over the Lower Mekong Basin is distributed with no rain to light rain based on the result from CHIRPS-GFS (**Figure 12**). The distribution can be found across the entire basin.

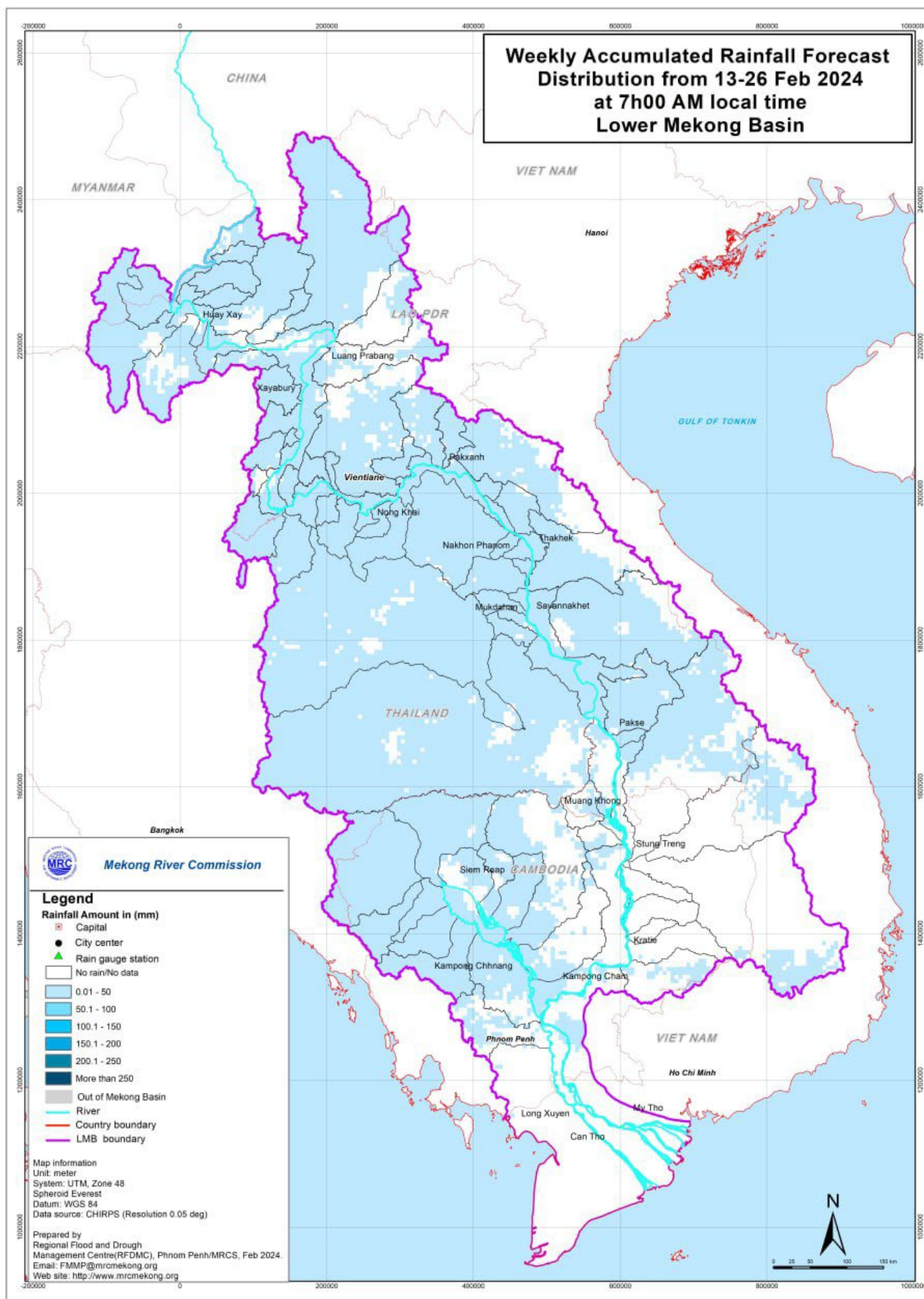


Figure 12: Accumulated rainfall forecast from CHIRP-GFS (13 - 19 February 2024)

6.2 Water level forecast

In Chiang Saen monitoring station, the water level is expected to be fluctuated over the forecasting period of 13 - 19 February 2024. However, it will slightly decrease from 1.52 m to 1.43 m. The water level in Luang Prabang stations affected by backwater is likely slightly increasing from 8.66 to 8.74 m. It is observed that the remain stations along the Mekong mainstream, the water levels are predicted to have decreasing trends for the next 7 days. The significant decreasing water levels of between 0.1 m to 0.2 m will be predicted to Chiang Khan, Vientiane, Nongkhai, Nakhon Phanom, Thakhek, Mukdahan, Khong Chiam, Pakse, Stung Treng, Kratie, Kampong Cham, and Prek Kdam. At other stations such as Paksane, Savannakhet, Phnom Penh (Bassac), Phnom Penh Port, Koh Khel, and Neak Luong, water levels are predicted to decrease of approximately less than 0.5 m in the next seven days starting from 13 to 19 February 2024.

For the Tan Chau station on the Mekong River and Chau Doc station on the Bassac River, water levels will decrease approximately 1.15 m and 1.96 m, respectively, following daily tidal effects from the sea.

The weekly River Monitoring Bulletin and forecasting issued on 12 February 2024 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 2. Weekly River Monitoring Bulletin.



Mekong Bulletin

Mekong River Commission Secretariat (MRCS)

Regional Flood and Drought Management Centre (RFDMC)

P.O. Box 623 #576, National Road #2, Chak Angre Krom, Meanchey, Phnom Penh, Cambodia

Tel: (855-23) 425353, Fax: (855-23) 425363, Email: floodforecast@mrcmekong.org

Forecast period from: 13 February to 19 February 2024

Date: 12 February 2024

LOCATION	Country	Observed Rainfall (mm)	Zero gauge above M.S.L (m)	Min water level against zero gauge (m)	Observed W. level against zero gauge (m)		Forecasted Water Levels (m)						
		11-Feb			11-Feb	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb	17-Feb	18-Feb	19-Feb
Jinhong		0.0	-	-	535.28	535.22							
Chiang Saen		0.0	357.110	0.00	1.51	1.52	1.55	1.52	1.50	1.49	1.48	1.46	1.43
Luang Prabang		0.0	267.195	2.53	8.52	8.66	8.72	8.72	8.73	8.74	8.75	8.75	8.74
Chiang Khan		0.0	194.118	1.91	3.50	3.46	3.44	3.42	3.41	3.38	3.37	3.35	3.33
Vientiane		0.0	158.040	-0.28	1.63	1.62	1.61	1.60	1.58	1.57	1.55	1.53	1.52
Nongkhai		0.0	153.648	0.33	0.97	0.92	0.90	0.88	0.87	0.86	0.84	0.82	0.81
Paksane		0.0	142.125	0.10	1.90	1.95	1.95	1.96	1.97	1.95	1.93	1.91	1.90
Nakhon Phanom		0.0	130.961	0.18	1.08	0.99	0.95	0.90	0.88	0.85	0.83	0.81	0.81
Thakhek		0.0	129.629	1.38	2.40	2.34	2.28	2.25	2.22	2.20	2.18	2.17	2.16
Mukdahan		0.0	124.219	0.72	1.68	1.59	1.54	1.51	1.48	1.46	1.44	1.42	1.42
Savannakhet		0.0	125.410	-0.65	0.86	0.80	0.77	0.73	0.70	0.66	0.68	0.70	0.71
Khong Chiam		0.0	89.030	1.02	2.26	2.14	2.10	2.05	2.02	2.00	1.98	1.96	1.95
Pakse		0.0	86.490	0.03	1.22	1.12	1.05	1.00	0.96	0.94	0.92	0.90	0.89
Stung Treng		0.0	36.790	0.32	2.75	2.70	2.67	2.64	2.61	2.59	2.57	2.55	2.54
Kratie		0.0	-1.080	3.06	7.46	7.46	7.41	7.38	7.35	7.32	7.30	7.27	7.25
Kompong Cham		0.0	-0.930	0.65	3.02	3.16	3.22	3.26	3.21	3.16	3.11	3.07	3.03
Phnom Penh (Bassac)		0.0	-1.020	1.58	2.24	2.31	2.35	2.40	2.37	2.34	2.31	2.28	2.25
Phnom Penh Port		nr	0.000	0.14	1.55	1.61	1.66	1.71	1.68	1.65	1.62	1.59	1.56
Koh Khel		0.0	-1.000	1.52	1.97	2.26	2.27	2.30	2.32	2.29	2.26	2.23	2.21
Neak Luong		0.0	-0.330	0.81	2.02	1.82	1.72	1.71	1.72	1.71	1.69	1.66	1.64
Prek Kdam		0.0	0.080	0.58	1.56	1.58	1.66	1.68	1.65	1.60	1.55	1.51	1.47
Tan Chau		0.0	0.000	-0.37	1.66	1.50	1.33	0.88	0.63	0.50	0.43	0.39	0.35
Chau Doc		nr	0.000	-0.60	1.85	1.65	1.29	0.91	0.29	-0.02	-0.18	-0.26	-0.31

REMARKS:

-: not available.

*: reference stations without forecast.

nr: no rain.

River Flood Forecaster

NOTE: Discharge at Luang Prabang may be influenced by hydropower operations (at both upstream and downstream).

For more info, please refer to this link:

<http://www.mrcmekong.org/>; http://ffw.mrcmekong.org/bulletin_wet.php; <http://ffw.mrcmekong.org/reportflood.php>

6.3 Flash Flood Information

Flash flood events are not likely to happen in the LMB next week. However, local heavy rain in a short period of time might still be possible with unexpected short flash floods. During the dry season if extreme weather occurs, the information on flash flood guidance for the next one, three, and six hours is updated at <http://ffw.mrcmekong.org/ffg.php>.

Further detailed information on Flash Flood Information Warning, as well as on its explanation, is available for download [here](#).

6.4 Drought forecast

There are several climate-prediction models with different scenarios in the upcoming months. The MRC's DFEWS adopts an ensemble model called the North America Multi-Model Ensemble (NMME) with a downscaling method to 5km resolution.

Figure 13 below shows the Combined Drought Indicator (CDI) forecast for February, March, and April 2024 over the LMB area.

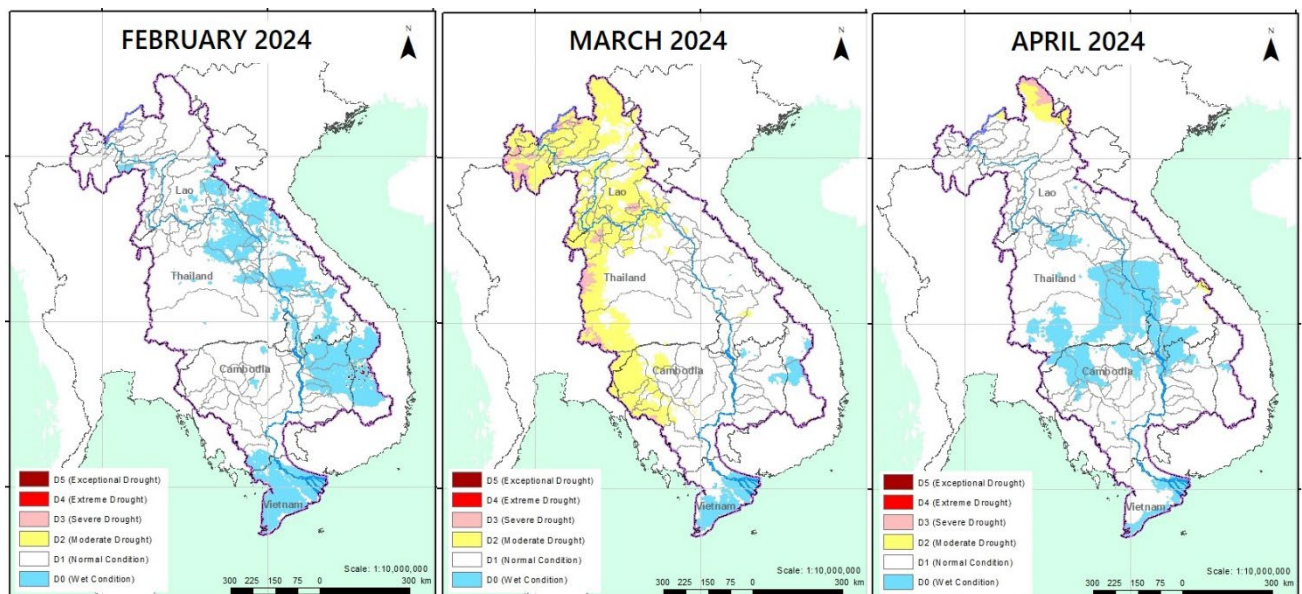


Figure 13. Monthly forecast of CDI for February, March, and April 2024.

Figure 18 above shows that in February the LMB is likely normal and wet all over the region; March is likely to be at moderate dry over the northern and western parts; while April is likely normal and wet except Phongsaly in the north that is forecasted to be at moderately and severely dry.

7 Summary and Possible Implications

7.1 Rainfall and its forecast

In the period of 06 - 12 February 2024, there is no significant rainfall recorded at the key stations along the Mekong River. The light rainfall has been observed at the central part of Lower Mekong Basin, particularly in Thailand.

The Mekong region was influenced by north-easterly monsoon wind and the high-pressure push from China. There will be no rainfall to light rain accumulated for the next seven days over entire Mekong region from 13 to 19 February 2024.

7.2 Water level and its forecast

At 22 key monitoring stations along the Mekong mainstream from 06 – 12 February 2024, water levels are below the long-term averages (LTAs) except for water level at Luang Prabang, Vientiane, Khong Chiam, Stung Treng and Kratie monitoring stations. However, the 9 monitoring stations remains in normal condition with respect to the flow threshold (PMFM for Observed Water Level). It is also the same condition for Tan Chau and Chau Doc monitoring stations, which significantly influenced by sea tidal fluctuation.

In the period of 13-19 February 2024, the water level at 22 key stations is expected to slightly decrease at the upper to lower stretches of the Lower Mekong River Basin, except for Luang Prabang station, which is significantly affected by the backwater effect. However, only at Luang Prabang, Vientiane, Khong Chiam, Stung Treng, and Kratie, water levels are predicted to above the LTAs.

7.3 Flash flood and its trends

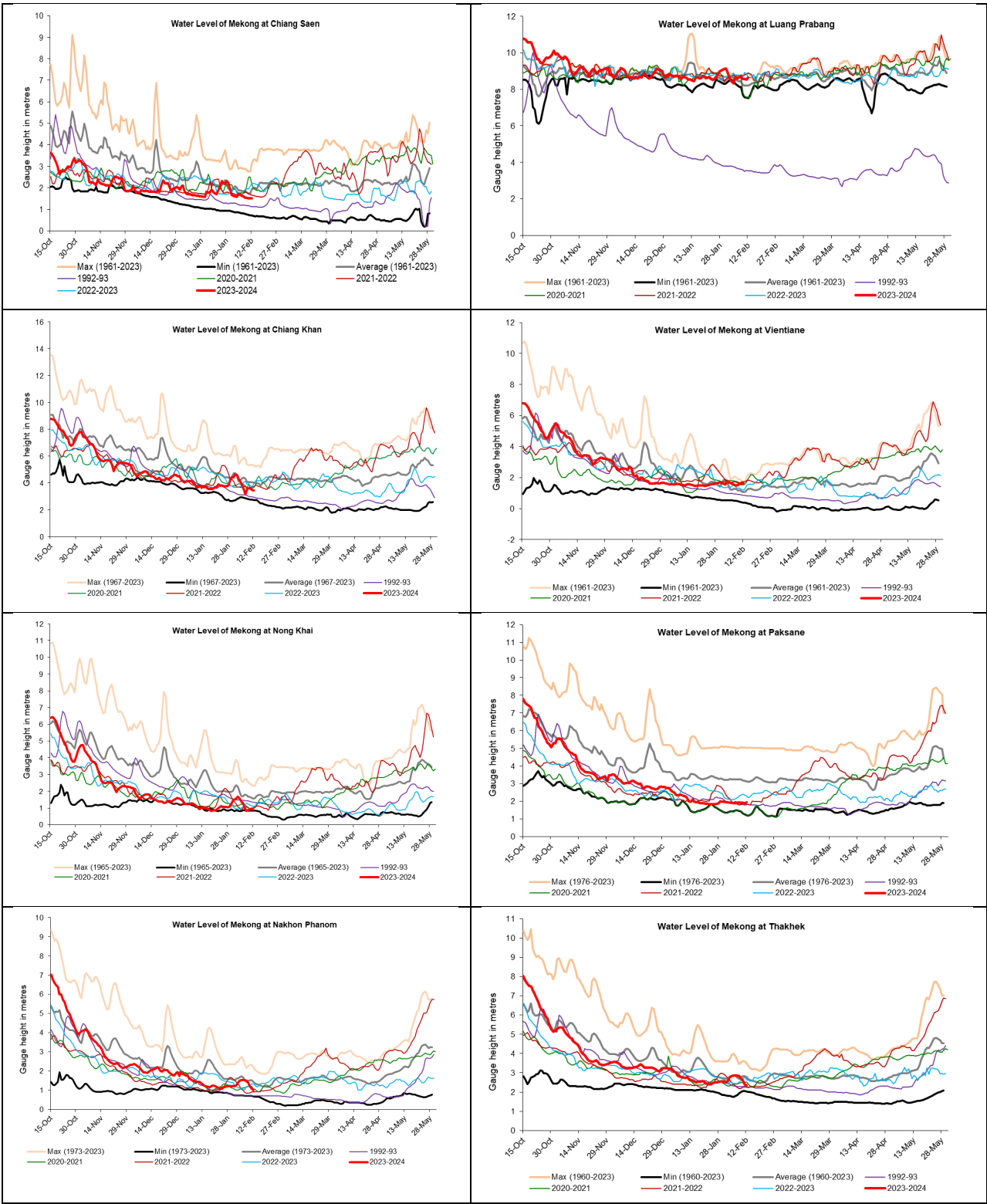
With the predicted of rainfall for the coming week as mentioned earlier in [section 6.1](#), major flash floods are not likely to happen in the LMB.

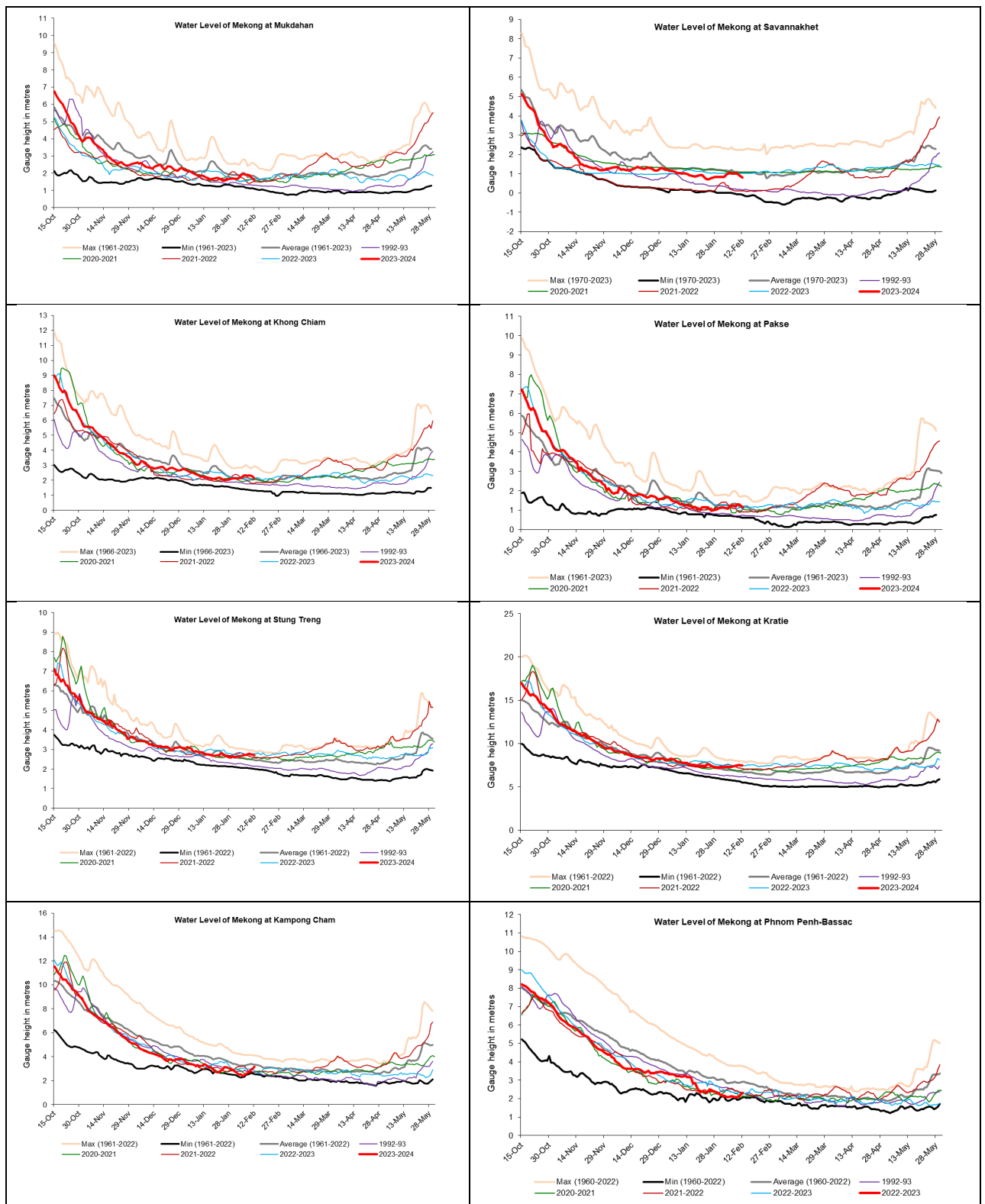
7.4 Drought condition and its forecast

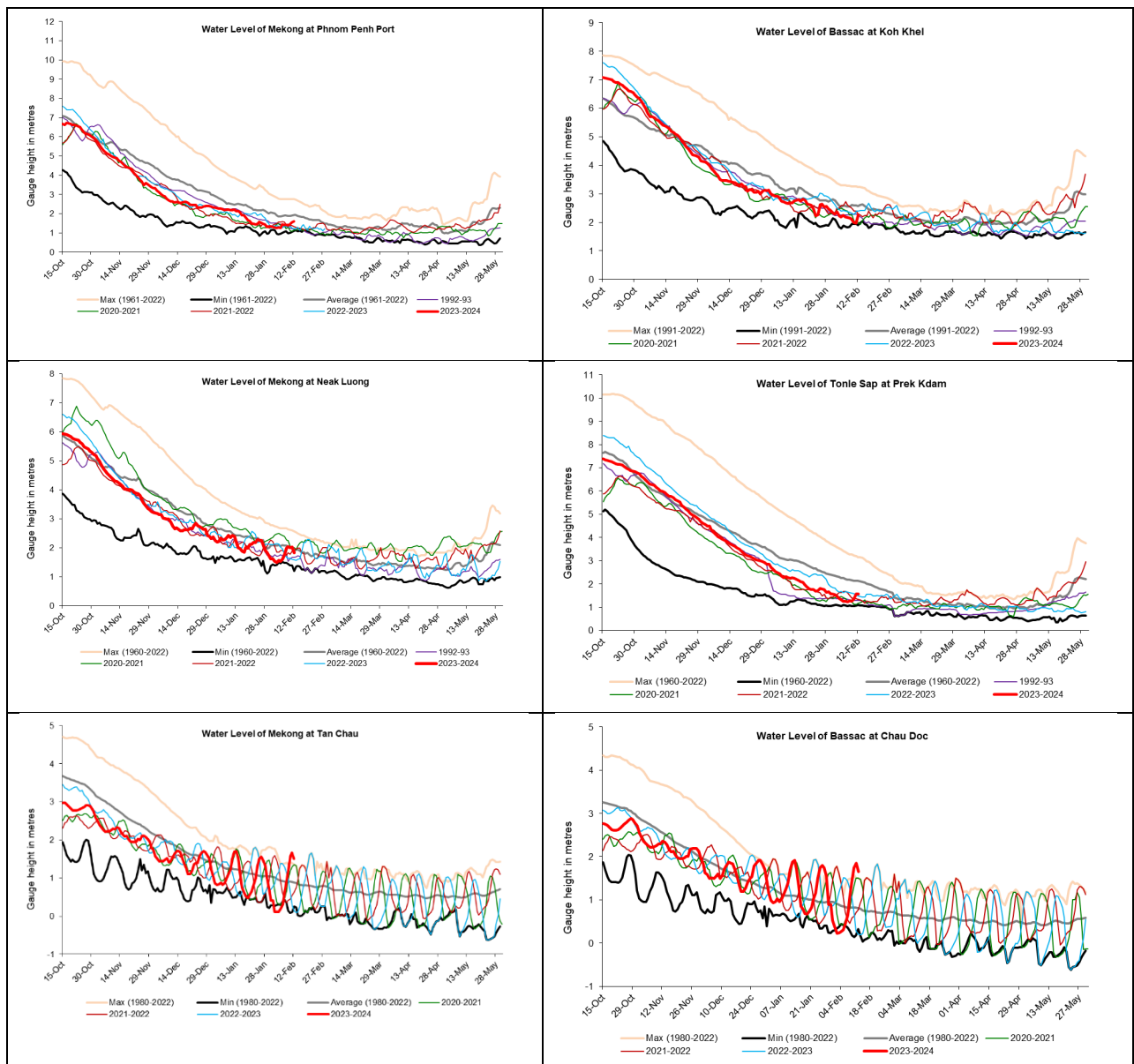
During Feb 6-12, the LMB was facing from moderate to extreme drought from the upper to the lower part. Middle and southern areas of Laos, lower region of Thailand and northern area of Cambodia were the driest areas during the monitoring week.

In February the LMB is likely normal and wet all over the region; March is likely to be at moderate dry over the northern and western parts; while April is likely normal and wet except Phongsaly in the north that is forecasted to be at moderately and severely dry.

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







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

Table A1: Weekly observed water levels

2024	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
06-02-2024	535.20	1.62	8.60	3.54	1.58	1.27	1.94	1.53	2.85	1.93	1.00	2.34	1.26	2.72	7.32	2.48	2.12	1.45	2.18	1.60	1.25	0.30	0.46
07-02-2024	535.23	1.60	8.66	3.18	1.53	1.00	1.92	1.53	2.86	1.92	1.00	2.34	1.22	2.73	7.38	2.60	2.11	1.43	2.17	1.76	1.22	0.55	0.64
08-02-2024	535.22	1.53	8.70	3.54	1.50	0.82	1.94	1.49	2.82	1.92	1.01	2.31	1.20	2.78	7.43	2.66	2.09	1.42	2.14	1.98	1.28	0.88	1.01
09-02-2024	535.22	1.54	8.56	3.62	1.51	0.88	1.91	1.36	2.68	1.89	1.00	2.34	1.30	2.79	7.50	2.74	2.08	1.40	2.10	2.04	1.26	1.20	1.40
10-02-2024	535.23	1.52	8.56	3.60	1.61	0.93	1.92	1.21	2.62	1.78	0.93	2.32	1.30	2.74	7.54	2.90	2.11	1.44	2.00	2.01	1.36	1.57	1.74
11-02-2024	535.28	1.51	8.52	3.50	1.63	0.97	1.90	1.08	2.40	1.68	0.86	2.26	1.22	2.75	7.46	3.02	2.24	1.55	1.97	2.02	1.56	1.66	1.85
12-02-2024	535.22	1.52	8.66	3.46	1.62	0.92	1.95	0.99	2.34	1.59	0.80	2.14	1.12	2.70	7.46	3.16	2.31	1.61	2.26	1.82	1.58	1.50	1.65

Table A2: Weekly observed rainfall

2024	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
06-02-2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
07-02-2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
08-02-2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
09-02-2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
10-02-2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
11-02-2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
12-02-2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0
Sum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0



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