

1. Nam Ngum 1 Hydropower Plant

Water Conditions at the Dam Site — 21 August 2026

Current Reservoir Observe level: 205.59 masl

Normal Level: 212.00 masl

Watch Level: 212.30 masl

Warning Level: 213.00 masl

Danger Level: 214.00 masl

Tail Observe level: 166.50 masl

Maximum Reservoir Inflow (Q_{in}): 684.76 m³/s

Discharge through Generating Units (Q_t): 157.10 m³/s

Maximum Spillway Discharge (Q_s): 0 m³/s

Available Reservoir Storage Capacity: 6.71 m

Observe level Monitoring Points Downstream

Three downstream Observe level monitoring points are monitored along the river:

1. Tha Lat Observe level Monitoring Point

Watch Level: 161.13 m.a.s.l.

Warning Level: 173.73 m.a.s.l.

Flood Level: 174.73 m.a.s.l.

Actual Water Level: 167.48 masl

2. Pak Kayung Observe level Monitoring Point

Watch Level: 159.53 m.a.s.l.

Warning Level: 170.53 m.a.s.l.

Flood Level: 171.53 m.a.s.l.

Actual Observe level: 163.03 masl

3. Vern Kham Observe level Monitoring Point

Watch Level: 154.32 m.a.s.l.

Warning Level: 166.32 m.a.s.l.

Flood Level: 176.32 m.a.s.l.

Actual Observe level : 159.56 masl

Condition of Generating Units and Transmission Lines

The generating units are in normal condition and are operated in accordance with the power management plan of EDL.

Units 1, 2, 3, 4, 5, 6, and 7 are available for operation.

Unit No. 8 is undergoing annual inspection.

The 115 kV transmission line is operating normally.

The 22 kV transmission line is operating normally.

Overall Dam Condition Summary

The maximum reservoir water level at Nam Ngum 1 Hydropower Plant on 20 August 2026 was 205.59 masl. Compared with the designed warning-level thresholds, the water level remained within the normal range.

Monitoring indicates that the distance from the Nam Ngum 1 powerhouse to Tha Lat Bridge is approximately 4 km, to Pak Kayung Bridge approximately 11 km, and to Vern San Village approximately 45 km. There was no impact on residential areas or local communities.

2. Nam Song Hydropower Plant

Nam Song Hydropower Plant is a Run-of-River hydropower plant with a catchment area of 1,330 km², a reservoir storage capacity of 14.40 Mm³, and a total installed capacity of 6 MW, consisting of three generating units.

The total turbine discharge capacity is 130 m³/s. The plant has four spillway bays with a total discharge capacity of 1,800 m³/s.

Design Observe level Thresholds

214.50 masl: Normal

219.20 masl: Watch / Warning

219.70 masl: Danger

Water Conditions at the Dam Site — 20 August 2026

Maximum Reservoir Observe level: 214.25 masl

Maximum Tail Observe level: 209.40 masl

Maximum Reservoir Inflow (Q_{in}): 161.11 m³/s

Discharge through Generating Units (Q_t): 33.68 m³/s

Maximum Spillway Discharge (Q_s): 0 m³/s

Maximum Discharge through Gates (Q_g): 128.43 m³/s

Condition of Generating Units and Transmission System

Units 2 and 3 are available for operation.

Unit No. 1 is out of service due to a malfunction.

The transmission system is operating normally.

Weather Conditions

Rainfall: Reported.

Downstream Observe level Monitoring

There are downstream monitoring points along the river, including:

1. Siwilai Village Observe level Monitoring Point

Watch Level: Not available

Warning Level: Not available

Danger Level: Not available

Actual Observe level: The source states that a gauge is installed, but the numerical reading is unclear.

2. Huai Pamon Bridge Observe level Monitoring Point

Watch Level: Not available
Warning Level: Not available
Danger Level: Not available
Actual Observe level: Not available

3. Wang Khee Village Observe level Monitoring Point

Watch Level: Not available
Warning Level: Not available
Danger Level: Not available
Actual Observe level: Not available
Overall Condition Summary

The maximum reservoir water level at Nam Song Hydropower Plant on 20 August 2026 was 214.25 masl. Compared with the designed warning thresholds, the water level remained within the normal range.

Monitoring indicates that the distance from the Nam Song powerhouse to Siwilai Weir is approximately 2 km, to Huai Pamon Bridge approximately 7 km, and from the upstream area of Nam Song Hydropower Plant to Wang Khee Village approximately 2 km. There was no impact on residential areas or local communities.

3. Nam Luek Hydropower Plant

Water Conditions at the Dam Site — 21 August 2026

Current Reservoir Water Level: 402.29 masl

Normal Level: 402.00 masl

Watch Level: 409.50 masl

Warning Level: 409.550 masl

Danger Level: 409.80 masl

Tail Water Level: 212.89 masl

Maximum Reservoir Inflow (Q_{in}): 31.817 m³/s

Discharge through Generating Units (Q_t): 18.00 m³/s

Maximum Spillway Discharge (Q_s): 0 m³/s

Maximum Gate Discharge (Q_g): 0 m³/s

Available Reservoir Storage Capacity: 11.43 m

Downstream Observe level Monitoring

There are currently no formal water-level monitoring stations along the downstream river. However, monitoring of water conditions downstream toward the Nam Ngum Reservoir indicates that conditions remain normal.

Condition of Generating Units and Transmission Lines

The generating equipment is operating normally, with one 30 MW unit in operation.

The 115 kV transmission line is operating normally.

The 22 kV transmission line is operating normally.

The 34.5 kV transmission line is operating normally.

Overall Dam Condition Summary

The maximum reservoir water level at Nam Luek Hydropower Plant on 21 August 2026 was 402.29 masl. Compared with the designed warning-level thresholds, the water level remained within the normal range.

There are no downstream river Observe level monitoring stations; however, monitoring toward the Nam Ngum 1 Reservoir indicates that downstream water conditions remain normal.

The road between the powerhouse, intake gates, and dam has experienced landslides and potholes, making access difficult for maintenance personnel travelling to the intake gates and dam for equipment maintenance.

Water management and response measures are based on the actual reservoir Observe level, which is currently within the normal range.

4. Nam Mang 3 Hydropower Plant

Water Conditions at the Dam Site — 21 August 2026

Current Reservoir Observe level: 748.66 masl

Normal Level: 751.00 masl

Watch Level: 751.50 masl

Warning Level: 751.76 masl

Danger Level: 753.00 masl

Tail Observe level: 201.67 masl

Maximum Reservoir Inflow (Q_{in}): 8.11 m³/s

Discharge through Generating Units (Q_t): 4.67 m³/s

Maximum Spillway Discharge (Q_s): 0 m³/s

Maximum Discharge through Gates (Q_b): 0 m³/s

Downstream Observe level Monitoring

There are no formal downstream river monitoring stations. Monitoring of water conditions downstream toward the Nam Ngum River indicates that conditions remain normal.

Condition of Generating Units and Transmission Lines

The generating units are operating normally.

The 115 kV transmission line is operating normally.

The 22 kV transmission line is operating normally.

Overall Dam Condition Summary

The maximum reservoir Observe level at Nam Mang 3 Hydropower Plant on 21 August 2026 was 748.66 masl. Compared with the designed warning thresholds, the Observe level remained within the normal range.

The recorded rainfall was 11.50 mm. Monitoring indicates that the approximately 7 km road from the Nam Mang 3 powerhouse to the dam crest remains passable. No impact has been reported to the dam or residential areas.

5. Nam Jien Hydropower Plant

Water Conditions at the Dam Site — 21 August 2026

South Dam

Normal Water Level: 1060.00 masl
Watch / Warning Level: 1062.04 masl
Danger Level: 1062.63 masl
North Dam
Normal Water Level: 1061.60 masl
Watch / Warning Level: 1062.56 masl
Danger Level: 1065.38 masl
Current Conditions
Current Reservoir Observe level: 1060.39 masl
Tail Water Level: 458.65 masl
Maximum Reservoir Inflow (Q_{in}): 51.32 m³/s
Discharge through Generating Units (Q_t): 16.90 m³/s
Maximum Spillway Discharge (Q_s): 32.93 m³/s
Maximum Gate Discharge (Q_g): 0.00 m³/s
Downstream Observe level Monitoring

There is one downstream Observe level monitoring point:

458.00 masl: Normal
460.00 masl: Watch / Warning
462.00 masl: Danger
Maximum recorded water level: 458.65 m.a.s.l.
Condition of Generating Units and Transmission Lines
The generating units are operating normally, with two units in operation: Unit 1 at 38 MW and Unit 2 at 38 MW.
115 kV transmission line — Line 1: Operating normally.
Overall Dam Condition Summary

The maximum reservoir Observe level at Nam Jien Hydropower Plant on 21 August 2026 was 1060.39 masl, representing an increase of 0.13 m compared with the previous day.

Compared with the designed warning thresholds, the reservoir Observe level remained within the normal range.

The area extending approximately 13.67 km from the South Dam to the powerhouse consists of natural forest with no residents. The distance from the powerhouse to Nam Jien 1 Hydropower Plant is approximately 1.50 km. There was no impact on residential areas.

6. Nam Khan 2 Hydropower Plant

Water Conditions at the Dam Site — 21 August 2026
Current Reservoir Observe level: 465.29 masl
Normal Level: 475.00 masl
Watch Level: 475.23 masl
Warning Level: 475.23 masl
Danger Level: 477.86 masl
Tail Water Level: 361.20 masl

Maximum Reservoir Inflow (Qin): 299.65 m³/s
Discharge through Generating Units (Qt): 105.64 m³/s
Maximum Spillway Discharge (Qs): 252.34 m³/s
Maximum Gate Discharge (Qb): 0.00 m³/s
Recorded Rainfall: 25 mm
Available Reservoir Storage Capacity: 1.70 m
Upstream Observe level Monitoring

1. Xam Neua District, Houaphanh Province
Monitoring is conducted through CCTV.

Normal Level: 682.00 masl
Watch Level: 684.00 masl
Warning Level: 686.00 masl
Danger Level: 688.00 masl
Actual Observe level: 682.80 masl

2. Phoukoud District, Xieng Khouang Province
Monitoring is conducted through CCTV.

Normal Level: 591.00 masl
Watch Level: 593.00 masl
Warning Level: 594.00 masl
Danger Level: 595.00 masl
Actual Observe level: 592.00 masl

3. Sop Khao Village, Xieng Khouang Province
Water levels are monitored and reported photographically by local residents.

Normal Level: 551.00 masl
Watch Level: 553.00 masl
Warning Level: 554.00 masl
Danger Level: 555.00 masl
Actual Observe level: 553.20 masl
Downstream Observe level Monitoring

Two downstream monitoring points are identified.

1. Nam Khan 2 Tailwater Monitoring Point

357.30 masl: Maximum tailwater level
35.65 masl: Minimum tailwater level (as stated in the source)
356.44 masl: Tailwater level with one 65 MW unit operating
357.30 masl: Tailwater level with 130 MW operation
Actual Tailwater Level: 361.20 masl

2. Downstream Monitoring Point at the Nam Khan 3 Reservoir

348.00 masl: Watch

348.50 masl: Warning

350.00 masl: Danger

Actual Water Level: 345.19 masl

Condition of Generating Units and Transmission Lines

The generating units are operating normally at 100 MW.

The 115 kV transmission line is operating normally.

The 22 kV transmission line is operating normally.

Overall Dam Condition Summary

The source states that the maximum reservoir Observe level at Nam Khan 2 Hydropower Plant on 21 August 2026 was 473.43 masl. Compared with the designed warning thresholds, the condition remained normal.

Monitoring indicates that the distance from the Nam Khan 2 powerhouse to Kaeng Kung Pier is approximately 7 km, while the distance from Kaeng Kung Pier to the Nam Khan 3 reservoir is approximately 48 km. There was no impact on residential areas or local communities.

7. Nam Khan 3 Hydropower Plant

Water Conditions at the Dam Site — 21 August 2026

Current Reservoir Observe level: 345.19 masl

Normal Level: 348.00 masl

Watch Level: 348.20 masl

Warning Level: 350.00 masl

Danger Level: 350.80 masl

Tail Observe level: 308.12 masl

Maximum Reservoir Inflow (Q_{in}): 483.42 m³/s

Discharge through Generating Units (Q_t): 168.59 m³/s

Maximum Spillway Discharge (Q_s): 310.38 m³/s

Available Reservoir Storage Capacity: 2.81 m

Recorded Rainfall: 25 mm

Downstream Observe level Monitoring

Two monitoring areas are identified at:

1. Samakkhixay Village Bridge

Watch Level: Not yet established

Warning Level: 309.00 masl

Danger Level: Not yet established

Actual Observe level: 302.00 m.a.s.l.

2. Wang Ngern Village Bridge

Watch Level: Not yet established

Warning Level: 295.00 masl

Danger Level: Not yet established
Actual Observe level: 288.00 masl

3. Phamxay Monitoring Point

Watch Level: Not yet established
Warning Level: 293.00 masl
Danger Level: Not yet established
Actual Water Level: 288.20 masl
Condition of Generating Units and Transmission Lines
The generating units are operating normally.
Unit 1: 26 MW
Unit 2: 26 MW
Total generation: 52 MW
The 115 kV transmission line is operating normally.
Overall Dam Condition Summary

The maximum reservoir Observe level at Nam Khan 3 Hydropower Plant on 21 August 2026 was 345.19 masl. Compared with the designed warning thresholds, the water level remained within the normal range.

Monitoring indicates that the downstream Observe level remained within the monitored range, and the operating condition of the hydropower plant remained normal.

8. Xe Set 1 Hydropower Plant

Water Conditions at the Dam Site on 21 August 2026
Current Observe level: 482.36 masl
482.00 masl: Normal
483.00 masl: Watch
484.00 masl: Warning
485.00 masl: Danger
Tail Observe level: 326.50 masl
Maximum Inflow to Reservoir (Q_{in}): 148.74 m³/s
Water Discharge through Generating Units (Q_t): 25.22 m³/s
Maximum Spillway Discharge (Q_s): 32.77 m³/s
Maximum Discharge through Gates (Q_g): 91.28 m³/s
Downstream Observe level Monitoring

In the downstream area of the dam, there are monitoring points along the river. However, water-level gauges have not yet been installed at the monitoring points. Monitoring is therefore conducted through visual observation and photographic reporting.

Condition of Generating Units, Transmission Lines, and Other Facilities
The generating units are operating normally.
The 115 kV transmission line is operating normally.
The 22 kV transmission line is operating normally.
Overall Dam Condition Summary

The maximum upstream Observe level of Xe Set 1 on 21 August 2026 was 482.36 masl. Compared with the designed water-level thresholds for the different warning levels, the current condition remains normal.

Monitoring indicates that the distance from the downstream powerhouse of Xe Set 1 to San Wang Yai Village is approximately 3 km, while the distance from the downstream powerhouse to Hua Khua Set Village is approximately 5 km. There is no impact on residential areas or local communities.

9. Xe Set 2 Hydropower Plant

Water Conditions at the Dam Site on 21 August 2026

Current Observe level: 813.44 masl

813.00 masl: Normal

814.00 masl: Watch

815.00 masl: Warning

816.00 masl: Danger

Tail Observe level: 542.27 masl

Maximum Inflow to Reservoir (Qin): 122.00 m³/s

Water Discharge through Generating Units (Qt): 34.69 m³/s

Maximum Spillway Discharge (Qs): 45.85 m³/s

Discharge through Gates (Qg): 41.52 m³/s

Downstream Observe level Monitoring

In the downstream area of the dam, there are water-level monitoring points along the river. However, Observe level gauges have not yet been installed at the monitoring points. Monitoring is conducted through visual observation and photographic reporting.

Condition of Generating Units, Transmission Lines, and Other Facilities

The generating units are operating normally.

The 115 kV transmission line is operating normally.

The 22 kV transmission line is operating normally.

Overall Dam Condition Summary

The maximum upstream Observe level of Xe Set 2 on 21 August 2026 was 813.44 masl. Compared with the designed warning-level thresholds, the current condition remains normal.

Monitoring indicates that the distance from the downstream powerhouse of Xe Set 2 to Bak Village is approximately 9 km, while the distance from the downstream powerhouse to Phou Tok Village is approximately 10 km. There is no impact on residential areas or local communities.

10. Xe Set 3 Hydropower Plant

Water Conditions at the Dam Site on 21 August 2026

Current Observe level: 1022.45 masl

1022.00 masl: Normal

1023.50 masl: Watch

1023.50 masl: Warning

1023.50 masl: Danger

Tail Observe level: 859.30 masl

Maximum Inflow to Reservoir (Qin): 93.24 m³/s

Water Discharge through Generating Units (Qt): 17.40 m³/s

Maximum Spillway Discharge (Qs): 45.42 m³/s

Discharge through Gates (Qg): 30.42 m³/s
Observe level at Downstream Monitoring Points

There are currently no water-level monitoring points along the downstream river for monitoring purposes. There is only a water-level monitoring point downstream of the powerhouse, with the following thresholds:

859.70 masl: Watch
859.80 masl: Warning
860.00 masl: Danger

Current Observe level Downstream of Powerhouse: 859.30 masl

Condition of Generating Units, Transmission Lines, and Other Facilities

The generating units are operating normally and are operated according to the reservoir inflow.

The 115 kV transmission line is operating normally.

The 22 kV transmission line is operating normally.

Overall Dam Condition Summary

The maximum upstream Observe level of Xe Set 3 on 21 August 2026 was 1022.45 masl. Compared with the designed water levels for the Watch, Warning, and Danger thresholds, the current water level remains normal.

Monitoring of the approximately 16 km distance from the downstream powerhouse of Xe Set 3 to the Xe Set 2 reservoir indicates no impact on residential areas or local communities. Other conditions at the hydropower plant are normal.

12. Selabam Hydropower Plant

Water Conditions at the Dam Site on 21 August 2026

Current Observe level: 121.50 masl

119.50 masl: Normal

121.80 masl: Watch

122.00 masl: Warning

122.40 masl: Danger

Tail Observe level: 106.40 masl

Maximum Inflow to Reservoir (Qin): 4,562.93 m³/s

Water Discharge through Generating Units (Qt): 73.99 m³/s

Maximum Spillway Discharge (Qs): 4,488.94 m³/s

Discharge through Gates (Qg): 0.00 m³/s

Downstream Observe level Monitoring

There are no Observe level monitoring points along the downstream river. There is only a downstream water-level monitoring point:

Downstream Monitoring Point

106.60 masl: Watch
107.80 masl: Warning
109.00 masl: Danger

Current Downstream Observe level: 106.40 masl

Condition of Generating Units, Transmission Lines, and Other Facilities

The generating units are operating normally.

The 115 kV transmission line is operating normally.

On 21 August 2026, the 22 kV transmission line was able to supply electricity normally.

Overall Dam Condition Summary

The maximum upstream Observe level of the Selabam Hydropower Plant from 18–21 August 2026 was 121.50 masl. The designed upstream water level is 119.50 masl.

The current Observe level on 21 August 2026 was 121.50 masl, compared with the warning level of 122.00 masl. The water level was therefore 0.50 m below the warning threshold and remained in a normal condition.

Monitoring indicates that the distance from the downstream powerhouse of the Selabam Hydropower Plant to Don Sae Village and Kaeng Kok Village is approximately 7 km, with no impact on residential areas or local communities.

13. Huay Lamphan Yai Hydropower Plant

Water Conditions at the Dam Site on 21 August 2026

Current Water Level: 807.60 masl

820.00 masl: Normal

820.20 masl: Watch

820.70 masl: Warning

820.70 masl: Danger

Tail Water Level: 202.18 masl

Maximum Inflow to Reservoir (Qin): 76.04 m³/s

Water Discharge through Generating Units (Qt): 7.93 m³/s

Maximum Spillway Discharge (Qs): 0 m³/s

Discharge through Gates (Qg): 0.00 m³/s

Rainfall: 50.00 mm

Observe level at the Downstream Powerhouse — 21 August 2026, 09:00

Downstream Powerhouse Observe level Monitoring Point

202.60 masl: Watch

203.00 masl: Warning

204.00 masl: Danger

Actual Observe level at the Monitoring Point: 202.18 masl

Condition of Generating Units, Transmission Lines, and Other Facilities

The generating units are operating normally.

The 115 kV transmission line is operating normally.

The 22 kV transmission line is operating normally.

Downstream Observe level Monitoring

There are currently no Observe level monitoring points along the downstream river. There is only a water-level monitoring point downstream of the powerhouse, with the following thresholds:

202.60 masl: Watch

203.00 masl: Warning

204.00 masl: Danger

Current Downstream Powerhouse Water Level: 202.00 masl

Overall Dam Condition Summary

The maximum upstream Observe level of Huai Lamphan Yai Hydropower Plant on 21 August 2026 was 807.60 masl. Compared with the full reservoir level of 820.00 masl, the Observe level remained in a normal condition, approximately 12.40 m below the full reservoir level.

Monitoring indicates that the distance from Huai Lamphan Yai Dam downstream to the Huai Lamphan Lower Reservoir is approximately 17 km. There is no impact, and the dam remains in a safe condition.