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Penang's major dams at optimal levels ahead of dry season



GEORGE TOWN: Penang's three major dams have reached optimal water levels for the first time in eight years, placing the state in a strong position ahead of the dry season expected to begin in January 2026.

According to data released by the Penang Water Supply Corporation (PBAPP), the effective capacities of the Air Itam Dam, the Teluk Bahang Dam and the Expanded Mengkuang Dam are all above 90 per cent as of today.

PBAPP chief executive officer Datuk K. Pathmanathan said this marked the first time since December 2017 that both the Air Itam and Teluk Bahang dams recorded more than 90 per cent capacity at year's end.

He said the Teluk Bahang Dam stood at 98.9 per cent capacity, the Air Itam Dam at 93.4 per cent and the Expanded Mengkuang Dam at 92.2 per cent.

"The primary reason for the recovery was high rainfall in dam water catchment areas between September and November 2025, driven by the North-East monsoon and strengthened by a La Niña climate phenomenon.

"Rainfall totals during the period were significant, with Teluk Bahang recording 1,287mm, Air Itam 792mm and the Expanded Mengkuang Dam 2,014mm. December rainfall has since tapered off," he said in a statement today.

Pathmanathan said the secondary factor contributing to the improved dam levels included operational measures implemented by PBAPP. This included the Air Itam Dam Action Plan, which supported efficient refilling of the 2,159 million-litre dam after its capacity dropped to 49.1 per cent during a dry spell in August 2025.

At Teluk Bahang, strategic refilling was carried out using raw water channelled from the Batu Feringghi and Sungai Pinang water catchment areas. The dam had earlier dipped to 45.3 per cent in April 2025 following low rainfall.

Meanwhile, the Expanded Mengkuang Dam — a pumped water storage scheme upgraded and reopened in 2021 — has maintained generally stable levels throughout the year due to ongoing protocols that prioritise raw water abstraction from Sungai Muda and minimise drawdowns except during emergencies.

PBAPP reported that Sungai Muda river levels at the Lahar Tiang Intake ranged between 2.15m and 2.56m so far in December, allowing efficient raw water abstraction to support operations at the Sungai Dua Water Treatment Plant. The safe abstraction level is 2.0m.

In Kedah, the Muda and Beris dams, which release water into Sungai Muda, had reportedly recovered to 97.5 per cent and 99.2 per cent capacity respectively as of Dec 18.

Pathmanathan said, historically, Penang is now in its strongest water position in eight years heading into a dry season.

"Looking ahead, the favourable situation may be tested in the coming months. Weather forecasts indicate that the dry season is likely to begin in the second week of January 2026, with February and March expected to be dry.

"These months coincide with major festive celebrations, including Thaipusam, Chinese New Year and Hari Raya Aidilfitri, which can lead to significant drawdowns at Air Itam and Teluk Bahang dams due to increased water demand and tourism.

"Despite the current positive outlook, we remind consumers that Penang remains a water-stressed state heavily dependent on Sungai Muda as its primary raw water source. We urge residents to continue using water wisely," he said.