

LOW WATER LEVELS

'Penang does not need bigger Air Itam Dam'

AUDREY DERMAWAN
GEORGE TOWN
audreymd@nst.com.my

EXPANDING the Air Itam Dam to cater to increasing water demand will not lower the risk of facing water dearth, the Penang Water Supply Corporation (PBAPP) said.

Its chief executive officer, Datuk Jaseni Maidinsa, said a bigger dam would not store more water if the size of its water catchment area remained the same.

He said the 60-year-old Air Itam Dam, located on a hill, could not be expanded without taking into account "safety factors".

"Penang does not need a bigger Air Itam Dam. It needs the timely and precise implementation of the Raw Water Contingency Plan 2030 and the Penang Water Supply Initiative 2050 projects to ensure continuous good water supply services until 2050," he said yesterday.

PBAPP recently issued an alert for water consumers in the state,

particularly those staying in the Air Itam township and surrounding areas, to use water wisely following a drop in the Air Itam Dam effective capacity and high water demand.

This prompted Penang Gerakan spokesman for Air Itam, Eric Woo to urge the state government and PBAPP not to use the present situation to increase water tariffs.

He had said that the dam had been in use since 1962 until today, with no upgrading work done to boost the effective capacity storage.

Jaseni said expanding the dam to cater to increasing water demand, from an engineering standpoint, would not "hold water" due to several reasons.

"Up to April 2022, the Air Itam Dam's water reserves have depleted. This scenario is not due to inadequate dam capacity. It is due to lack of rainfall in the dam's water catchment area (WCA) and high water demand in Air Itam and its surrounding areas.

"So, building a bigger Air Itam Dam does not make sense. Water supply engineers will propose to increase the size of a dam only if rainfall data shows that its WCA can deliver more water than the existing maximum capacity of the dam.

"Expanding the dam without increasing the size of its WCA is pointless. It is akin to pouring the same amount of soup from a smaller bowl into a bigger bowl. The serving may look nicer but the volume of soup remains the same," he said, adding that the protected Air Itam WCA could not be expanded because Penang was a crowded state and there were not many areas of rainforests left to gazette.

He said the dam was designed to be filled and refilled by rainfall in the surrounding Air Itam WCA.

"Before the dam was built, water supply engineers calculated its optimal size based on the potential water yield of the WCA. Then, they built a dam that can



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safely withstand the pressure of up to 2.16 billion litres of effective water capacity.

"The 1960s water supply engineering calculations have been proven to be correct. The dam has clearly withstood the test of time in terms of both maximum effective capacity and structural integrity."

"It took years to build the Air Itam Dam. Any proposed expansion will involve extensive re-engineering and rebuilding work, which will require shutting down the dam. This is not plausible because it could deprive some people living in Air Itam (and its surrounding areas) of water supply for several years."