

SMART

NST 13/10/12
MS 18'

doing better than expected

WE refer to "Flood trauma is no myth" (NST, Oct 23). We wish to highlight that while we appreciate the writer's call that the nation should hold a more concerted effort in managing this year's deluge brought by the monsoon season, we are disheartened with the misconception on SMART, saying it is incapable of managing excess stormwater from inundations.

We would like to clarify that the paragraph, "Yes, four hours of continuous downpours could easily see the city hit by flash floods. The SMART tunnel (which, by the way, stands for Stormwater Management and Road Tunnel), a project under the Federal Government initiated to alleviate the flooding problem in the Kuala Lumpur city centre, hasn't quite helped to mitigate the problem of flash floods of late as the city saw unusually large volumes of floodwater that the holding pond, bypass tunnel and storage reservoir were unable to cope with," — is a simplified generalisation of the flooding problem in Kuala Lumpur and alludes to a misleading interpretation of the design purpose of SMART.

We wish to emphasise that SMART was built for preparedness against floods within its coverage areas caused by rainstorms; it is not built to prevent flash floods.

For a clearer picture, rainstorms result in continuously heavy rainfall thereby causing river water lev-

els to rise, whereas flash floods are a direct consequence of overwhelmed waterways and drains.

SMART was constructed to prevent the bursting of river banks in the catchment area of the Klang River basin, particularly at the confluence with the Ampang River and Gombak River, which would lead to the spilling of stormwater into critical stretches of Kuala Lumpur. It also serves as an alternative route into and out of the city centre during the dry season.

Since January this year, SMART's stormwater bypass tunnel has been used 29 times, out of which 6 involved closure of the motorway tunnel and of that, two closures (one in March and the other in May 2012) were sustained for more than 48 hours to allow for stabilisation of river water levels and cleaning of the tunnel.

Thanks to the quick action of SMART, specific coverage areas such as KLCC, Pavilion, Sungei Wang, Bukit Bintang, Daya Bumi, Pasar Seni, Leboh Pasar, Dang Wangi, Dataran Merdeka, Jalan Melaka, Leboh and Masjid Jamek were spared from flood damage.

Undoubtedly, there was an occasion of flash flood in Kuala Lumpur this year that did not trigger the closure of SMART tunnel, nonetheless it was caused by the overflowing of rainwater from congested drains and water channels.

Since SMART first opened in 2007, its stormwater bypass tunnel has been used 236 times, equivalent to an average of 40 times a



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year, or three times a month.

According to a study by the Department of Irrigation and Drainage, SMART has since averted potential flood disasters amounting to an estimated total of RM500 million.

Till now, SMART has performed well above expectations.

SMART's conversion into a flood relief system, based on a 4-mode operation system, is dependent on the water intensity at the confluence of the Klang River and Ampang River, located upstream near Kampung Berembang in Ampang. The water flow and velocity at the confluence is measured in cubic metres per second (cumec). The entire stormwater carrying capacity of SMART is 3 million cubic metres.

If the cumec reading registers less than 70, SMART operates only as a motorway tunnel. This is known as Mode 1.

If the reading goes above 70 but less than 150, SMART will operate in Mode 2, as an underground highway, with the lower culvert opened to divert surplus floodwater from the holding pond in Kampung Berembang to the storage reservoir in Taman Desa, to be released to the Kerayong River.

And if water levels surge above 150 cumec, SMART will enter Mode 3 and issue a notice of evacuation of the motorway tunnel within one hour, after which the motorway will be closed to the public.

The closure is necessary to allow

time to prepare the tunnel, in anticipation of it being filled with excess stormwater to avoid flooding in Kuala Lumpur.

Should a rainstorm persist and water levels continue to intensify, SMART will run into Mode 4, where the floodgates will open to allow excess floodwater to be diverted through the tunnel.

We appeal to the public to be patient and understand that it is the shutting of the motorway tunnel that potentially saves Kuala Lumpur from floods — as SMART was specifically designed to.

Since last month, the SMART team has been on high alert and has doubled its manpower for tunnel patrol and river monitoring at the Stormwater Control Centre in Kampung Berembang, in view of possible rises in water levels during this time of the year.

We request the public to be observant of the latest announcements from SMART on road tunnel closures, and to use a different route to reach their respective destinations instead.

The public is encouraged to check the latest SMART tunnel updates at <http://smarttunnel.com.my> and direct enquiries and feedback to the SMART Helpline at 1300-88-7188.

Mohd Fuad Kamal Ariffin,
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