

2 September 2013

The Editor
South China Morning Post

Dear Editor,

Letter to the Editor

I refer to the letter by Frank Lee ("Departments appear to be wasting water", August 28).

The Hong Kong West Drainage Tunnel is designed to intercept and convey surface run-off from the catchment above the lower urban area of Hong Kong Island to reduce the flooding risk in Wan Chai, Central and Western district. In taking forward this flood prevention project, we have examined various water reuse options in terms of the economic viability and the technical feasibility.

Since the tunnel is located at a level lower than that of the Aberdeen and Pok Fu Lam reservoirs, all the options for water harvesting required huge capital investments and land space for building additional tunnels, pipe works, pumping facilities and temporary storage facilities. As an illustration, the tunnel will collect about 486,000 cubic metres of water in one hour when it operates at its maximum carrying capacity of 135 cubic metres per second during those periods when there is extreme rainfall. This is equivalent to a volume of about 195 standard Olympic-size swimming pools. The land use constraints in the fully urbanised areas and the huge costs involved make the construction of large storage and pumping facilities practically not viable. Moreover, rainwater running through developed areas would be contaminated by the filth on the surface of buildings and roads. The filth is the result of exhaust gases from vehicles travelling on roads, bird droppings or animal excreta on the ground. To safeguard public health, the harvested rainwater must be treated before it can be recycled for safe potable use. As such, the cost of treatment is another factor to be considered.

Yours faithfully,
David HW LEUNG
Technical Secretary 2
Drainage Services Department