Project Title: Shuen Wan Golf Course
Project Number: 256383

Catchment Information

Area	Paved Area (km^2)	Unpaved Area (km^2)
Tolo Harbour	38.1	48.0

Note:

It is assumed that there would not be a significant change between Likely Future Case and the Existing Case.

Rainfall Information

Season	Runoff value (mm/year)	Runoff value (m/d)
Annual	1386	0.0038

Note:

According to "Stormwater Drainage Manual, annual rainfall in Hong Kong is around 2200mm. However, according to the report on "Update on Cumulative Water Quality and Hydrological Effect of Coastal Developments and Upgrading of Assessment Tool", only rainfall events of sufficient intensity and volume would give rise to runoff. It indicated that runoff percentage for the wet season is about 82% while dry season is only 44%. Therefore, only rainfall of 2200´(82%+44%)/2=1386mm can be generated into runoff and is adopted in this Study.

Event Mean Concentrations for Stormwater Runoff*

NH$_3$N (g/m^3)	TP (g/m^3)	TON (g/m^3)
0.2	0.2	0.4

Note:

Agreement No. CE 7/2005 (EP) Harbour Area Treatment Scheme Environmental Impact Assessment Study For The Provision Of Disinfection Facilities At Stonecutters Island Sewage Treatment Works – Investigation

Rainfall Related Load

Area	Paved Area (km^2)	Unpaved Area (km^2)	Average Daily Runoff - Paved (m^3/d)	Average Daily Runoff - Unpaved (m^3/d)	Total Daily Runoff (m^3/d)	NH$_3$N (kg/d)	TP (kg/d)	TON (kg/d)	TIN (kg/d)
Tolo Harbour	38.1	48.0	130108.0	63858.6	193966.7	38.8	38.8	77.6	116.4

Notes:

According to "Stormwater Drainage Manual, runoff coefficient depends on the impermeability, slope and retention characteristics of the ground surface. In this study, 0.9 of runoff coefficient is used for developed area and 0.35 is adopted for undeveloped area.

TIN is equal to NH$_3$N plus TON.

Avg. Daily Runoff = Area * Runoff value * Runoff coefficient; Tot. Daily Runoff = Avg. Daily Runoff for Paved + Avg. Daily Runoff for Unpaved

Some shown figures may have been rounded for easy reference.