Water Supply Assessment Review

Rezoning Application from "Residential (Group D)" to "Residential (Group C)2" Zone
Lot No. 4822 in D.D. 104 & Adjoining Government Land, East of Kam Pok Road,
Mai Po, Yuen Long
25 September 2025

1. Introduction

This is a desktop Water Supply Assessment Review (WSAR) prepared in support of the rezoning application for a proposed medium-density residential development on the Application Site (refer to proposed MLP in **Appendix 1**). This WSAR is **not** a full technical impact assessment but by making reference to the demand assessment of an approved application (No. Y/YL-MP/10) in the immediate vicinity, a **broad review** is sufficient to conclude that **no adverse impact** on the water supply system is anticipated.

2. Development Overview

The proposed scheme will comprise:

- Approx. 1,303 residential units with supporting clubhouse
- A 6-classroom Kindergarten
- A Neighbourhood Elderly Centre (NEC)
- Ancillary parking and landscaping
- Target completion year: 2031

Summary Water Demand Estimation Table

Use Type	Population / Attendance	Fresh Water ¹	Flushing Water ¹	Fresh Water Demand ²	Flushing Water Demand ²
Residential ^{4&5}	3,519	40	104	140.76	365.98
Kindergarten - Students (6 CR ³) ⁴	180	40	_	7.20	-
Kindergarten - Staff ⁴	23	40	_	0.92	-
NEC – Attendees ⁵	57	230	104	13.11	5.93
NEC – Staff ⁴	19	40	-	0.76	_
TOTAL	_	_	_	162.75	371.91

Note 1: Unit Demand (L/head/day)

Note 2: m³/day

Note 3: Classroom CR) x 6 @30 students = 180 kindergarten students

Note 4: Residential Population, Kindergarten - Students & Staff, and NEC - Staff are subsumed under the unit demand of 40L of Fresh Water per head per day as Service Trade Consumption/Allowance

Note 5: The unit demand of 104L of Flushing Water per head per day has taken into account of the small consumption of Kindergarten - Students & Staff, and NEC - Staff

After estimation of the projected fresh and flushing water demand, the forecast demand is well below **1%** of the NTMFWTW daily capacity particularly the Ngau Tam Mei Fresh Water Primary Service Reservoir (NTMFWPSR) is of current capacity ~230,000 m³/day; with expansion, the capacity increase up to ~440,000 m³/day. Furthermore, the existing water supply situation would not be any major constraint:

- No salt water supply system is available in the area flushing demand will be temporarily supplied via the fresh water network until salt water mains are available in future.
- By making reference to the approved application (WSIA, Y/YL-MP/10), the nearby mains are implementable with appropriate improvement works:
 - 200 mm dia. main along Kam Pok Road adequate for fire-fighting only,
 but not for combined domestic + fire-fighting load.
 - 600 mm dia. main along San Tam Road adequate for the proposed demand.

3. Conclusion

The proposed development can be supported by the existing NTMFWTW as the proposed water demand about 0.23% of NTMFWPSR's capacity. No significant adverse impact to the overall water supply system is anticipated. Connection to the mains and necessary upgrading to be designed and submitted to Water Supplies Department (WSD) for approval. Similarly fire-fighting system will be designed to Fire Services Department (FSD)/WSD standards during General Building Plan (GBP) stage. Detailed schematic design of the water supply system and its waterworks will be provided at GBP submission stage to the satisfaction of the WSD. The applicant will fund and implement the waterworks proposed, covering management and maintenance responsibilities.



