Annex 7D

Result Table for Construction Phase Dissolved Oxygen Depletion

Table 7D.1 Predicted Maximum Annual Dissolved Oxygen Depletion Among all Scenarios from Marine Construction

Sensitive Receivers	Model Output Location	Dissolved Oxygen (mg L^{-1})	
		Annual	
		Allowable DO Depletion	Maximum DO Depletion
Spawning/Nursery Grounds (Depth-averaged)			
Fisheries Spawning Ground in North Lantau	MPA-5	0.2	0.0
	AR1	0.9	0.0
	CR3	0.2	0.0
Fisheries Spawning/Nursery Grounds in South Lantau	MPC-8	0.8	0.0
	MPD-8	0.8	0.0
	MPD-9	1.1	0.1
	CR4	1.1	0.0
	CR5	0.8	0.0
	NB9	1.5	0.0
	NB10	0.5	0.0
	B8	1.4	0.0
	B9	1.4	0.0
	MPE	1.4	0.0
Artificial Reef Deployment Area (Depth-averaged)			
Sha Chau and Lung Kwu Chau	AR1	2.6	0.0
Fish Culture Zone (Depth-averaged)			
Cheung Sha Wan FCZ	FCZ1	0.5	0.0
Lo Tik Wan FCZ	FCZ2	0.0	0.0
Sok Kwu Wan FCZ	FCZ3	0.0	0.0
Oyster Production Area (Depth-averaged)			
Sheung Pak Nai	O1	0.0	0.0
Seagrass Beds (Bottom)			
Ha Pak Nai	H1	2.6	0.1
Tung Chung Bay	C8	2.1	0.0
Marine Park (Depth-averaged)			
Sha Chau and Lung Kwu Chau MP	MPA-5	0.2	0.0
Proposed AAHK 3RS MP	MPB	0.8	0.0
Proposed Southwest Lantau MP	MPC-7	0.8	0.0
	MPC-8	0.8	0.0
Proposed South Lantau MP, including the IWMF Compensatory MP	MPD-8	0.8	0.0
	MPD-9	1.1	0.1
Proposed South Lamma MP	MPE	1.4	0.0
Intertidal Mudflats / Mangroves / Horseshoe Crab Nursery Grounds			
Sheung Pak Nai	H9	0.8	0.0
Ha Pak Nai	H1	0.8	0.1
Ngau Hom Shek	H8	0.5	0.0
Lung Kwu Sheung Tan	NB1	0.2	0.0
Tung Chung Bay	C8	0.8	0.0
Sha Lo Wan	H2	0.8	0.0
Sham Wat Wan	H6	0.8	0.0
Tai O	H3	0.8	0.0
Yi O	H4	0.8	0.0
Fan Lau Tung Wan	MPC-5	0.8	0.0
	NB4	0.8	0.0

Sensitive Receivers	Model Output Location	Dissolved Oxygen (mg L^{-1})	
		Annual	
		Allowable DO Depletion	Maximum DO Depletion
Tong Fuk Miu Wan / Shui Hau	H5	1.6	0.0
Pui O	B4	1.6	0.0
Shek Kwu Chau North	H7	1.6	0.0
Corals (Bottom)			
Artificial Seawall at BPPS	CR1	2.1	0.2
	CR2	2.1	0.1
Pak Chau	CR3	1.1	0.1
Shek Kwu Chau	CR4	1.8	0.0
Siu A Chau	CR5	1.9	0.0
Tai A Chau	CR6	1.9	0.0
Cheung Chau	CR7	2.4	0.0
	CR8	2.4	0.0
Hei Ling Chau	CR9	2.4	0.0
	CR10	2.4	0.0
Sunshine Island	CR11	2.4	0.0
Shek Kok Tsui	CR12	2.4	0.0
Pak Kok	CR13	1.2	0.0
Sha Wan	CR14	1.2	0.0
Ap Lei Chau	CR15	1.3	0.0
Wong Chuk Kok	CR16	1.3	0.0
Sha Wan	CR17	1.3	0.0
Sham Wan	CR18	1.1	0.0
Luk Chau	CR19	1.3	0.0
Hung Shing Yeh	CR20	2.5	0.0
Ha Mei Wan	CR21	2.5	0.0
Chi Ma Wan Peninsula	CR22	3.3	0.0
Gazetted Beaches (Depth-averaged)			
Tong Fuk	B1	1.6	0.0
Upper Cheung Sha Beach	B2	1.6	0.0
Lower Cheung Sha Beach	B3	1.6	0.0
Pui O Beach	B4	1.6	0.0
Cheung Chau Tung Wan Beach	B5	1.1	0.0
Kwun Yam Wan Beach	B6	1.1	0.0
Hung Shing Yeh Beach	B8	1.4	0.0
Lo So Shing Beach	B9	1.4	0.0
Non-gazetted Beaches (Depth-averaged)			
Lung Kwu Sheung Tan	NB1	0.2	0.0
Lung Kwu Tan	NB12	0.2	0.0
Hau Hok Wan	NB2	0.8	0.0
Fan Lau Sai Wan	NB3	0.8	0.0
Fan Lau Tung Wan	NB4	0.8	0.0
Siu A Chau Wan	NB5	0.8	0.0
Yi Long Wan	NB6	1.5	0.0
Tai Long Wan	NB7	1.5	0.0
Tai Kwai Wan	NB8	1.5	0.0
Po Yue Wan	NB9	1.5	0.0
Shek Pai Wan	NB10	0.5	0.0
Mo Tat Wan	NB11	1.0	0.0

Sensitive Receivers	Model Output Location	Dissolved Oxygen (mg L^{-1})	
		Annual	
		Allowable DO Depletion	Maximum DO Depletion
Seawater Intakes (Bottom)			
Tai Kwai Wan	NB8	3.3	0.0
Ap Lei Chau	C12	1.3	0.0
Observation Points (Depth-averaged)			
Boundary of Existing & Proposed Marine Parks	MPA-1	0.2	0.0
	MPA-2	0.2	0.2
	MPA-3	0.9	0.2
	MPA-4	0.9	0.0
	MPC-1	0.8	0.0
	MPC-2	0.8	0.1
	MPC-3	0.8	0.1
	MPC-4	0.8	0.1
	MPC-5	0.8	0.0
	MPC-6	0.8	0.0
	MPD-1	0.8	0.0
	MPD-2	0.8	0.1
	MPD-3	1.1	0.0
	MPD-4	1.1	0.0
	MPD-5	1.1	0.1
	MPD-6	1.1	0.0
	MPD-7	1.1	0.0

Note: Maximum Annual DO depletion calculated based on maximum SS elevations taken among mitigated scenarios for both seasons.