

Table 11.2 Summary of Capture Fisheries Data in the Study Area by Vessels < 15 m

	Western Buffer Water Control Zone	Victoria Harbour Water Control Zone	Eastern Buffer Water Control Zone
Relevant fishing areas	1, 2(part), 24, 25, 28(part), 34, 36, 37, 38, 78, 79, 80(part), 81, 82, 83, 84, 85, 86, 87, 88, 89	35, 151, 152, 153, 154, 155, 158, 160, 162, 163, 164, 165, 166, 167, 168	51, 52, 53, 54(part), 104(part), 105(part), 156, 157, 169, 172 (part), 173
<u>Size of Fishing Areas:</u>			
Total size	7,214.04 ha	3,562.65 ha	2,302.35 ha
% of Hong Kong waters	4.0%	2.0%	1.3%
<u>Adult Fish:</u>			
Total production	468,663.26 kg	233,287.27 kg	368,964.58 kg
Production per hectare	64.97 kg	65.48 kg	160.26 kg
% of Hong Kong waters	4.3%	2.1%	3.4%
<u>Fry:</u>			
Total production (tails)	45,967.74 tails	0 tail	219,756.90 tails
Production per hectare	6.37 tails	0 tail	95.45 tails
% of Hong Kong waters	0.7%	0%	3.4%
Total Value (HKD)	\$19,943,548.52	\$6,563,534.15	\$11,945,672.70
Value per hectare	\$2,764.55	\$1,842.32	\$5,188.47
% of Hong Kong waters	7.6%	2.5%	4.5%

11.2.4 In terms of adult fish production per hectare, the Eastern Buffer WCZ showed the highest production, while those for the Victoria Harbour and Western Buffer WCZs were comparable. Total adult fish production from the study area accounted for 9.8% of all adult fish production in Hong Kong waters.

11.2.5 Fry production in the study area accounted for 4.2% of total fry production in Hong Kong waters. Again, the Eastern Buffer WCZ showed considerably higher fry production per hectare than the other two WCZs. It should be noted that no fry production was recorded in the Victoria Harbour WCZ. This shows that the study area, particularly Victoria Harbour and the Western Buffer WCZs, was not a major nursery ground for species of commercial importance.

11.2.6 Production value per hectare was highest in the Eastern Buffer WCZ and lowest in the Victoria Harbour WCZ. Combined production value of the study area accounted for 14.6% of the total capture fisheries value in Hong Kong waters.

11.3 Assessment Methodology

11.3.1 Assessment of fisheries impact followed the criteria outlined in Annex 9 of the *Technical Memorandum on Environmental Impact Assessment Process* issued under EIAO. These included the nature of impact, size of affected area, loss of fisheries resources/production, destruction and disturbance of nursery and spawning grounds, impact on fishing activity, and impact on aquaculture activity.

11.4 Identification, Prediction and Evaluation of Potential Impacts

11.4.1 Capture Fisheries

11.4.1.1 Fisheries impact could arise from the removal of fishing areas due to dredging and reclamation. According to the latest layout plan, approximately 61 ha of the upper Kowloon Bay, 25 ha of the Kai Tak Approach Channel, and 39 ha of the existing Kwun Tong Typhoon Shelter would be reclaimed.

11.4.1.2 Those in or near Victoria Harbour are shown in **Drawing No. 22936/EN/007** (from the 96/97 Port Survey).

- 11.4.1.3 Of the fishing areas shown in the drawing, Areas 165 (To Kwa Wan), 166 (Kowloon Bay) and 167 (Kwun Tong) are relevant to this assessment because fishing habitats within these areas would be removed due to reclamation to be carried out in the South East Kowloon Development. **Table 11.3** shows the statistics on capture fisheries in these fishing areas, based on data given in the 96/97 Port Survey.

Table 11.3 Capture Fisheries Data for Fishing Areas 165, 166 and 167 from the 96/97 Port Survey

Fishing Area Number	Size of the Fishing Area	Adult Fish			Fry
		Production	Rank (out of 189)	% of Hong Kong Total	Production
165 (To Kwa Wan)	47.46 ha	933.12 kg	150	0.005%	0 kg
166 (Kowloon Bay)	219.72 ha	2974.32 kg	159	0.017%	0 kg
167 (Kwun Tong)	85.21 ha	0 kg	----	0%	0 kg

- 11.4.1.4 The reclamation areas in Kowloon Bay would lie within fishing areas 165 (To Kwa Wan) and 166 (Kowloon Bay). The size of these two fishing areas combined was 267.18 ha, making up 0.15% of the total fishing area (181,790.97 ha) in Hong Kong waters. Adult fish production totalled 3,907.44 kg, which was 0.022% of the total adult fish production (17,681,243 kg) in Hong Kong. These two fishing areas ranked 150th (for To Kwa Wan) and 159th (for Kowloon Bay) in terms of adult fish production among the 189 fishing areas. No fry production was recorded from these two fishing areas. Vessels fished in these two fishing areas were all less than 15 m in length. Their numbers made up only 0.4% of the total number of < 15 m length vessels (2,352) fishing in Hong Kong waters.
- 11.4.1.5 The above statistics established the fact that these fishing areas had very low commercial fishing activities and adult fish production compared to other fishing areas in Hong Kong. They were also not important spawning and nursery grounds since no fry was captured in these areas. The reclamation of 61 ha in Kowloon Bay would remove 23% of fishing areas in Areas 165 and 166, and 0.03% of the total fishing areas in Hong Kong waters. Further, the 61 ha are mostly located in an area being used as typhoon shelter. Commercial fishing activity occurring in a typhoon shelter is highly unlikely. In view of the very low commercial fishing activities and production in the Kowloon Bay area, the small size of the reclamation area in comparison with the total fishing areas in Hong Kong, the present use of the to be reclaimed area as a typhoon shelter, impacts on fisheries in Kowloon Bay is expected to be very low and would not adversely affect the commercial fishing industry in Hong Kong.
- 11.4.1.6 The Kai Tak Approach Channel and the existing Kwun Tong Typhoon Shelter lie within fishing area 167 (Kwun Tong) with a size of 85.21 ha. The 96/97 Port Survey recorded no adult fish and fry production from this fishing area. Reclamation of approximately 65 ha in the Kai Tai Approach Channel and existing Kwun Tong Typhoon Shelter should have no impact on fisheries.

11.4.2 Fish Culture Zones

The Tung Lung Chau Fish Culture Zone is located approximately 9 km to the southeast of the Study area. The Ma Wan Fish Culture Zone is more than 18 km away to the northwest. These fish culture zones should be far enough away. Adverse impacts on these fish culture zones during construction and operation of the project are unlikely. Even if there were potential impacts, there should be ample time to implement mitigation measures. These will be confirmed by water quality modelling in later stages of the EIA study. The revised scheme of SEKD is not expected to have insurmountable impact on fish culture zones.