

APPENDIX 13.11 Representative photographs of habitats within the Study Area and photographs illustrating issues addressed in the Report.



Plate 1 Wet agriculture in Long Valley. Water cress as shown here is a dry season crop that is utilised by a number of wetland birds.



Plate 2 Wet agriculture in Long Valley. Shallow water habitats such as this are particularly good for waders and ardeids.



Plate 3 Wet agriculture in Long Valley. The rice shown here was grown as part of the Management Agreement with local farmers and is otherwise a very rare crop in HK. It is very important habitat for grain-feeding birds.



Plate 4 Wet agriculture at north side of Ng Tung River, FLN. An irrigation pond can be seen in the foreground plus pipes used for water distribution.



Plate 5 Dry agriculture at Long Valley: lettuce fields under intense cultivation. Crest Hill can be seen in the distance.



Plate 6 Dry agriculture at Long Valley. Such areas support fewer bird species and fewer faunal species of conservation significance.



Plate 7 Dry agriculture at Long Valley with fruit trees growing in the background. Little opportunities for wildlife are available in this habitat.



Plate 8 Dry Agriculture in KTN. Dry agriculture lends itself to smaller plots such as those shown here.



Plate 9 Pond at Long Valley for water fleas or bloodworms often used by wader species.



Plate 10 Active fishpond in KTN. Note functioning aerator and vegetation free banks typical of active fishponds.



Plate 11 Pond west of Sheung Yue River. The exposed muddy margins may be an important foraging area for wetland birds if disturbance is not too great but faunal diversity is relatively low.



Plate 12 Abandoned pond, FLN. Extensive exotic vegetation on the banks and over much of the pond surface. The lack of active management may result in such ponds becoming a refuge for disturbance-sensitive species and can result in a higher abundance of fauna.



Plate 13 Marsh in Ma Tso Lung. Note low floral and structural diversity which limits the ecological value of such habitats.



Plate 14 Marsh in Long Valley with low floral diversity, dominated by colonising species.



Plate 15 Marsh near Lo Wu Correctional Institution. Low floral diversity and areas of open shallow water.



Plate 16 Mitigation wetland on the Sheung Yue River northeast of Kwu Tung. This meander is somewhat overgrown with rank grasses and with low floral diversity. This meander will be directly impacted by the Project.



Plate 17 Mitigation wetland; a wider view the same meander as in Plate 16 showing limited connectivity with other wetland habitats.



Plate 18 Mitigation wetland, FLN. Closely mown banks and proximity to service roads increase disturbance at this site.



Plate 19 Mitigation wetland – proposed relocation site for Man Kam To Road egretty in FLN. Suitable tree and bamboo species will need to be planted to replicate existing conditions.



Plate 20 Mitigation plantation, FLN. Poor structural diversity and limited ground cover reduces ecological value.



Plate 21 Mitigation plantation. Poor structural diversity and limited ground cover reduces ecological value.



Plate 22 Mitigation plantation. Poor structural diversity and limited ground cover reduces ecological value.



Plate 23 Ma Tso Lung Stream. Active management of bankside vegetation is apparent in the photograph. The streambed is largely of natural materials but has been modified to facilitate flow.



Plate 24 Minor channelized watercourse, FLN. The effects of such channelization on stream ecology are extremely negative.



Plate 25 Minor channelized watercourse, KTN. Concrete lined watercourses such as this have very limited ecological function.



Plate 26 Major channelized watercourse, Ng Tung River, upstream of the fabridam. Concreted sides, deep water and poor riparian vegetation limit ecological value of this habitat but some large waterbirds forage from the banks.



Plate 27 Major channelized watercourse, Sheung Yue River at high tide. Large tidal channels such as this can support relatively large numbers but low diversity of wetland dependant birds.



Plate 28 Major channelized watercourse, Sheung Yue River at low tide. Exposed sediment on channel bed offers foraging opportunities for ardeids and wading birds.



Plate 29 Major channelized watercourse, Shek Sheung River, with low flow channel and grasscrete bed. Whilst of higher amenity value than a concrete-lined channel, fauna diversity and numbers are low.



Plate 30 Seasonally wet grassland, FLN; very low floral diversity and of limited ecological value.



Plate 31 Seasonally wet grassland at Ma Tso Lung Stream. Note low floral diversity and vegetation management along the stream.



Plate 32 Seasonally wet grassland at Long Valley. Note very low floral diversity. Such habitats support relatively few birds at Long Valley.



Plate 33 Grassland at Crest Hill. A simple vegetation structure due to the effects of occasional hill fires limiting the establishment of woody species. In view of its limited current ecological value and absence of other major constraints this hillside has been identified as suitable for compensatory woodland planting.



Plate 34 Lowland grassland at FLN near the Ng Tung River. Managed through regular mechanical cutting. Poor species and structural diversity.



Plate 35 Grassland around a mitigation wetland on the Ng Tung River. Again, species diversity and structural complexity is constrained by the management regime.



Plate 36 Grassland/shrubland at Crest Hill. This habitat has slightly higher structural complexity and floral diversity than grassland but faunal diversity is low.



Plate 37 Intermediate stage shrubland at Crest Hill.



Plate 38 Closed canopy shrubland at Crest Hill: species and structural diversity and fauna diversity are all relatively high, but faunal numbers are relatively low.



Plate 39 Ho Sheung Heung *fung shui* Wood. This provides habitat for woodland fauna that are otherwise rare in the Study Area.



Plate 40 Highly degraded and disturbed *fung shui* wood.



Plate 41 Secondary woodland at Ho Sheung Heung.



Plate 42 Secondary Woodland at Ho Sheung Heung. This area will be directly impacted by the Project.



Plate 43 Orchard at KTN; a habitat of limited ecological value.



Plate 44 Orchard at KTN



Plate 45 Hillside plantation at Ma Tso Lung; some flora species present are exotic but many native tree and shrub species have colonised.



Plate 46 Hillside plantation at Ma Tso Lung. The original plantation species are exotic, but the understorey is largely of native trees and shrubs which will become dominant as the relatively short-lived *Acacia confusa* dies back. This area will be directly impacted by the Project.



Plate 47 Amenity plantation near Ng Tung River the open and disturbed nature of such areas limits their ecological value.



Plate 48 Village area, Ho Sheung Heung. A highly disturbed habitat of low ecological value.



Plate 49 Village area, Ho Sheung Heung. A highly disturbed habitat of low ecological value.



Plate 50 Village Area/ Open Storage, FLN. A highly disturbed habitat of low ecological value. Man Kam To egret is in the background.



Plate 51 Golf course, Fanling. Intensively managed fairways and vegetation which comprises predominantly exotic plant species.



Plate 52 Waste ground, KTN. A highly disturbed habitat of low ecological value.



Plate 53 Waste ground, KTN. Bare earth and colonising, ruderal vegetation are features of such areas of disturbed ground.



Plate 54 Urban/Residential area, Fanling. High density residential areas such as this support only a few common and widespread fauna species.



Plate 55 Lo Wu Correctional Institution. This facility is close to the ardeid flight-lines that run between Ho Sheung Egretty and Long Valley. Flight-lines are also constrained by high voltage power-lines and pylons.



Plate 56 Urban/Residential area Fanling, roadside planting. A highly disturbed habitat of low ecological value. Trees are native and provide pleasant conditions for residents, but opportunities for wildlife are limited in this highly disturbed environment.



Plate 57 Mitigation Meander on the northern side of Ng Tung River east of Man Kan To Road. This feature will be lost as part of this Project. High levels of human disturbance limit the ecological value of this meander.



Plate 58 Mitigation Meander on the southern side of Ng Tung River east of Man Kan To Road. This feature will be lost as part of this Project. High levels of disturbance limit the ecological value of this meander.



Plate 59 Second Mitigation Meander on the northern side of Ng Tung River east of Man Kan To Road. This feature will be lost as part of this Project. Limited water supply and disturbance limit the ecological value and potential value of this meander.



Plate 60. Mitigation Meander on the eastern side of Sheung Yue River. This feature will be lost as part of this Project. It is heavily vegetated with Water Lettuce and is subject to disturbance.



Plate 61. Fanling Highway Bridge over the Sheung Yue River.



Plate 62. Fabridam on the Sheung Yue River above the Fanling Highway Bridge.



Plate 63. Bridge over the Lower Sheung Yue River (view upstream towards Long Valley).



Plate 64. Bridge over the Lower Sheung Yue River (view downstream).