

## APPENDIX 13.9 AQUATIC INVERTEBRATES

**Appendix 13.9.1.** Aquatic invertebrate species recorded in the Study Area in this and/or previous studies. Where study boundaries of previous studies extended beyond the current study area boundary, only records from within the area covered by this study are included. Note that for some sources, lists are incomplete and/or only some records are attributed to a specific locality.

Taxon	Conservation and Protection Status <sup>1</sup>	Present Study - KTN	Present Study - FLN	Other Studies <sup>2</sup>
Odonate Larvae				
Damselfly - Coenagrionidae sp.	-	Y	Y	
Damselfly - Platycnemididae sp.	-	Y		
Dragonfly - Aeshnidae sp.	-	Y	Y	
Dragonfly - Libellulidae sp.	-	Y	Y	
<i>Crocothemis servilia</i>			Y	
<i>Orthetrum</i> sp.	-	Y	Y	
<i>Pantala flavescens</i>	-	Y	Y	
Diptera Larvae				
Blood Worm - Chironomidae sp.	-	Y	Y	
True Fly - Tipulidae sp.	-	Y	Y	
Caddisfly Larvae				
Hydropsychidae sp.	-	Y		
Megaloptera Larvae				
Fishfly – Corydalidae sp.	-		Y	
Lepidoptera Larvae				
Moth - Pyralidae sp.	-	Y	Y	
Shrimp				
<i>Caridina cantonensis</i>	-	Y	Y	
<i>Macrobrachium</i> sp.	-		Y	
<i>Neocaridina palmata</i>	-		Y	
Freshwater Crab				
<i>Somanniathelphusa zanklon</i>	GC, IUCN(EN)	Y	Y	Y
Gastropoda				
<i>Bellamya</i> sp.	-	Y	Y	
<i>Biomphalaria straminea</i>	-	Y	Y	
<i>Brotia hainanensis</i>	-		Y	
<i>Melanoides tuberculata</i>	-	Y	Y	
<i>Physa acuta</i>	-	Y	Y	
<i>Pomacea canaliculata</i>	-	Y	Y	
<i>Sinotaia quadrata</i>	-	Y	Y	
Bivalvia				
<i>Corbicula fluminea</i>	-	Y	Y	
Leech				
Hirudinea sp.	-	Y	Y	
Polychaete				
Polychaeta sp.	-	Y	Y	

**Notes:**

1. Conservation status refers to: Fellowes *et al.* (2002): GC = Global Concern; IUCN (2013): EN = Endangered.

2. Includes field survey data from LMC Loop study

**Key:**

Y = Species recorded in the corresponding study.

**Appendix 13.9.2.** Maximum number of aquatic invertebrate recorded in stream fauna surveys in the Kwu Tung North NDA and observations during further surveys for this study.

Species	Conservation and Protection Status <sup>1</sup>	Habitat <sup>2</sup>										Streams <sup>3</sup>											
		PO	MW	MA	MTL				PSA	FK		TF/STL	HSH	KT	NP	LW	TY		SYR		LV		
					MTLST	MTL-L	MTL-M	MTL-U		FK-L	FK-M	TF-M						TY-U	TY-L	SYR-N	SYR-S	LV-L	LV-M
<u>Odonate Larvae</u> Damselfly - Coenagrionidae sp. Damselfly - Platycnemididae sp. Dragonfly - Aeshnidae sp. Dragonfly - Libellulidae sp. Dragonfly - Orthetrum sp. Dragonfly - <i>Pantala flavescens</i>	- - - - - -		10+		10 10 1 5 10 1	10 25 25 50	15 15 100+	10 10														1     1	
<u>Diptera Larvae</u> Blood Worm – Chironomidae sp. True Fly - Tipulidae sp.	- -						50+  1																
<u>Caddisfly Larvae</u> Hydropsychidae sp.	-					2	10+																
<u>Lepidoptera Larvae</u> Moth - Pyralidae sp.	-						1																
<u>Crustacean</u>																							
<u>Shrimp</u> <i>Caridina cantonensis</i>	-				2	30	30																
<u>Freshwater Crab</u> <i>Somanniathelphusa zanklon</i>	GC, IUCN(EN)				3						1												
<u>Gastropoda</u> <i>Bellamya</i> sp. <i>Biomphalaria straminea</i> <i>Melanoides tuberculata</i> <i>Physa acuta</i> <i>Pomacea canaliculata</i> <i>Sinotaia quadrata</i>	- - - - - -	100+  100+ 1 100+ 100+	50+  50+ 100+ 100+		1 10 10 10 10	100+  10 10 10 10	100+  10 10 10 10			10 10 100+ 100+ 100+ 30				100   10		100+   100+		50+  50+ 50+ 50+			100+  100+ 50+ 100+ 100+	20 1 20 5	100+      2
<u>Bivalvia</u> <i>Corbicula fluminea</i>	-				5																		
<u>Leech</u> Hirudinea sp.	-					5	5																
<u>Polychaete</u> Polychaeta sp.	-	1	5		10																		

**Notes:**

1. Conservation status refers to: Fellowes *et al.* (2002): GC = Global Concern; IUCN (2013): EN = Endangered.
2. Habitats: PO = Pond; MW = Mitigation Wetland; MA = Marsh.

3. Streams: MTL = Ma Tso Lung stream; MTL-S = Ma Tso Lung San Tsuen stream; MTL-L = Ma Tso Lung stream (lower section); MTL-M = Ma Tso Lung stream (middle section); MTL-U = Ma Tso Lung stream (upper stream); PSA = Pak Shek Au stream; FK = Fung Kong stream; FK-L = Fung Kong stream (lower section); FK-M = Fung Kong stream (middle section); FK-U = Fung Kong stream (upper section); TF/STL = Tung Fong/Shek Tsai Ling stream; TF-M = Tung Fong stream (middle section); TF-U = Tung Fong stream (upper section); HSH = Ho Sheung Heung stream; KT = Kwu Tung stream; NP = Ngam Pin stream; LW = Lo Wu Correctional Institution stream; TY = Tsung Yuen stream; TY-L = Tsung Yuen stream (lower section); SYR = Sheung Yue River; SYR-N = Sheung Yue river (North); SYR-S = Sheung Yue River (South); LV = Long Valley stream; LVM = Long Valley Marsh stream; LV-L = Long Valley stream (lower section); LV-M = Long Valley stream (middle section); LV-U = Long Valley stream (upper stream); NTR = Ng Tung River.

**Appendix 13.9.3.** Maximum number of aquatic invertebrate recorded in stream fauna surveys in the Fanling North NDA and observations during further surveys for this study.

Species	Conservation and Protection Status <sup>1</sup>	Habitat <sup>2</sup>		Streams <sup>3</sup>																											
		PO	MW	SHR	NTR	FTA	CPT	SWST	TPST			MKV	SSWS		MSP	SHST			SUT	MWR				MWW		TH	KT		KLH		NWP
									TPST-L	TPST-M	TPST-U		SSWS-W	SSWS-E		SHST-L	SHST-M	SHST-U		MWW-TH	TH-KT	KT	KT-NWP	MWW-L	MWW-U		KT-N	KT-S	KLH-C	KLH-N	
Water Skater- <i>Ptilomera tigrina</i>																										5					
<u>Odonate Larvae</u> Damselfly - Coenagrionidae sp. Dragonfly - Aeshnidae sp. Dragonfly - Libellulidae sp. Dragonfly - <i>Crocothemis servilia</i> Dragonfly - Orthetrum sp. Dragonfly - <i>Pantala flavescens</i>	- - - - - -		1				2		1			5	1								10+		20+	3							
<u>Diptera Larvae</u> Blood Worm - Chironomidae sp. True Fly - Tipulidae sp.	- - -						5			30								1													
<u>Megaloptera Larvae</u> Fishfly – Corydalidae sp.	- -																	1													
<u>Lepidoptera Larvae</u> Moth - Pyralidae sp.	- -																	2													
<u>Shrimp</u> <i>Caridina cantonensis</i> <i>Macrobrachium</i> sp. <i>Neocaridina palmata</i>	- - -						2											100 + 1												5 100 +	

