



Supplementary Materials: Distribution, Multi-Index Assessment, and Sources of Heavy Metals in Surface Sediments of Zhelin Bay, a Typical Mariculture Area in Southern China

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Table S1. The geo-accumulation index (I_{geo}) pollution classification.

I_{geo}	Range	The Degree of Pollution
≤ 0	0	Unpolluted
$0 < I_{geo} \leq 1$	1	From unpolluted to moderately polluted
$1 < I_{geo} \leq 2$	2	Moderately polluted
$2 < I_{geo} \leq 3$	3	From moderately to strongly polluted
$3 < I_{geo} \leq 4$	4	Strongly polluted
$4 < I_{geo} \leq 5$	5	From strongly to extremely polluted
> 5	6	Extremely polluted

Table S2. Potential ecological hazard assessment indicators.

Ecological Risk	Low	Moderate	Considerable	High	Very high
E_r^i	<30	30~50	50~100	100~150	≥ 150
RI	<100	100~150	150~200	200~300	≥ 300

Table S3. Pearson correlation matrix of heavy metals and OM in surface sediments of Zhelin Bay ($n = 17$).

Metals	Al	Fe	Cr	Mn	Co	Ni	Cu	Zn	Pb	OM	Media n Size
Al	1										
Fe	0.719**	1									
Cr	0.723**	0.885**	1								
Mn	0.409*	0.644*	0.691**	1							
Co	0.852*	0.947*	0.887**	0.631**	1						
Ni	-0.070	-0.021	0.007	0.029	-0.097	1					
Cu	-0.627**	-0.321	-0.384	-0.275	-0.343	-0.133	1				
Zn	0.386	0.510*	0.608**	0.465*	0.604**	0.159	0.232	1			
Pb	0.618**	0.627**	0.699**	0.498*	0.668**	-0.059	-0.310	0.508*	1		
OM	-0.148	0.256	0.193	0.292	0.144	-0.074	0.269	0.198	0.196	1	
Median Size	-0.151	0.042	0.028	0.142	0.036	0.401	0.305	0.443*	0.059	0.284	1

*: $p < 0.05$, Correlation is significant at the 0.05 level. ** : $p < 0.01$, Correlation is significant at the 0.01 level.

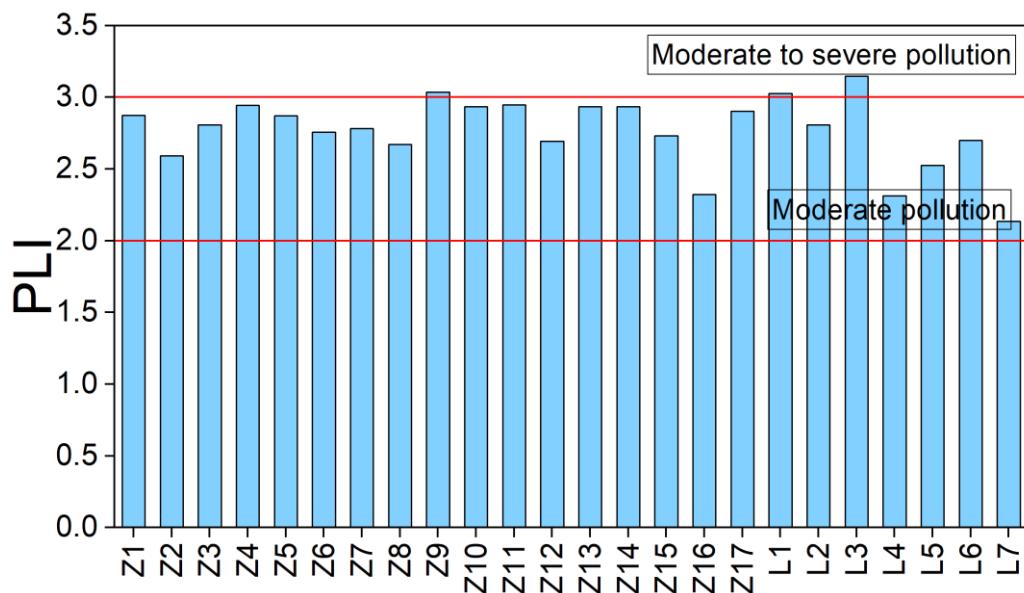


Figure S1. Pollution load index (PLI) values of the studied heavy metals for each sampling site of Zhelin Bay.