

**Table I-11 Correlations between Biological Parameters and Physical/Chemical Sediment Parameters Percentage Parameters Arcsine Square Root Transformed in Twenty Station Sediment Data Analysis**

(.05>z>.01 = \*; .01>z>.001 = \*\*; z<.001 = \*\*\*)

Parameter	Associated Parameter	Pearson's Correlation	z	Significant	r-Square
Mean Pct Survival	Antimony	-0.7068	0.0005	***	0.4996
Mean Pct Survival	Barium	-0.5717	0.0084	**	0.3269
Mean Pct Survival	Beryllium	-0.6695	0.0012	**	0.4482
Mean Pct Survival	Cadmium	-0.6837	0.0009	***	0.4674
Mean Pct Survival	Calcium	0.6558	0.0017	**	0.4301
Mean Pct Survival	Chromium	-0.6075	0.0045	**	0.3690
Mean Pct Survival	Clay	-0.5369	0.0478	*	0.2882
Mean Pct Survival	Copper	-0.5833	0.0069	**	0.3403
Mean Pct Survival	Iron	-0.7002	0.0006	***	0.4903
Mean Pct Survival	Lead	-0.7375	0.0002	***	0.5439
Mean Pct Survival	Magnesium	-0.6937	0.0007	***	0.4812
Mean Pct Survival	Manganese	-0.4677	0.0376	*	0.2187
Mean Pct Survival	Nickel	-0.6594	0.0016	**	0.4348
Mean Pct Survival	Sand	0.7645	0.0015	**	0.5844
Mean Pct Survival	Silt	-0.6010	0.0230	*	0.3611
Mean Pct Survival	Thallium	-0.5437	0.0132	*	0.2956
Mean Pct Survival	Tin	-0.6970	0.0006	***	0.4858
Mean Pct Survival	Total Organic Carbon	-0.5741	0.0081	**	0.3296
Mean Pct Survival	Vanadium	-0.6981	0.0006	***	0.4874
Mean Pct Survival	Zinc	-0.8167	0.0000	***	0.6670
Mean Pct Survival	depth	-0.4750	0.0343	*	0.2256
Toxicity Equivalent	Clay	0.6108	0.0203	*	0.3731
Toxicity Equivalent	LALK	0.5043	0.0234	*	0.2543
Toxicity Equivalent	Magnesium	0.5050	0.0232	*	0.2550
Toxicity Equivalent	Petrogenic PAH	0.6894	0.0008	***	0.4753
Toxicity Equivalent	Sand	-0.5328	0.0498	*	0.2838
Toxicity Equivalent	Selenium	0.6596	0.0016	**	0.4350
Toxicity Equivalent	Total Organic Carbon	0.5428	0.0134	*	0.2946
Toxicity Equivalent	Total PAH	0.6830	0.0009	***	0.4665
Toxicity Equivalent	depth	0.4943	0.0267	*	0.2444
AVS Conc	Chromium	0.4686	0.0372	*	0.2196
AVS Conc	Mercury	0.6987	0.0006	***	0.4881
AVS Conc	Pyrogenic PAH	0.4963	0.0260	*	0.2463
AVS Conc	Silver	0.5642	0.0096	**	0.3183
AVS Conc	TPHC	0.5689	0.0089	**	0.3236
Total SEM - AVS	Mercury	-0.6751	0.0011	**	0.4558
Total SEM - AVS	Pyrogenic PAH	-0.4789	0.0326	*	0.2294
Total SEM - AVS	Silver	-0.5253	0.0174	*	0.2759
Total SEM - AVS	TPHC	-0.5494	0.0121	*	0.3018