

SCECAP 2007 -- Tidal Creeks

Sediment characteristics, contaminants, and toxicity

Station	Characteristics			Contaminants					Toxicity			
	Percent Silt/Clay	TOC % of Total	TAN (mg/l)	ERMQ	Metals*	PAHs*	Pest*	PCBs*	Microtox® Assay		Seed Clam Assay	
									EC ₅₀ Percent	Toxic	Mean Growth	Toxic
RT07038	64.5	2.5	1.6	0.028					0.5		25.5	†
RT07039	87.3	4.5	4.1	0.038	2				0.0	†	33.9	†
RT07040	25.1	1.6	2.7	0.024					0.5		34.6	
RT07042	2.6	0.1	0.5	0.004							32.9	
RT07043	5.7	0.1	1.1	0.005					7.2		37.4	
RT07048	38.9	1.4	1.1	0.021	1				0.3		33.9	
RT07049	1.0	0.1	2.3	0.002					15.9		17.2	†
RT07053	78.3	2.8	2.0	0.032	1				0.1	†	22.6	†
RT07055	33.9	1.6	3.9	0.021	1				0.1	†	35.1	
RT07056	35.6	1.4	3.2	0.024	1				0.4		37.0	
RT07057	28.4	0.3	1.2	0.011					1.6		38.8	
RT07058	36.7	0.9	1.9	0.020					0.2	†	34.6	
RT07060	45.7	1.6	1.7	0.023	1				0.1	†	39.8	
RT07062	43.9	2.0	1.1	0.033	1	2			0.6		37.4	
RT07065	83.3	5.0	2.2	0.042	2				0.0	†	3.5	†
Mean	40.7	1.7	2.0	0.022					2.0		30.9	

† = Toxic: Microtox, EC50 <0.5 if silt-clay < 20% , <0.2 if silt-clay > 20% (Ringwood et al., 1997, criterion #6); Seed Clam Assay, if mean clam growth is < 80% of mean clam control growth AND significantly different from mean clam control growth

█ Values exceed threshold representing moderate risk of benthic impacts (Hyland et al., 1999)

█ Values exceed threshold representing high risk of benthic impacts (Hyland et al., 1999)

* Number of analytes that exceed Effects Range Low (ER-L) guidelines (Long et al., 1995)