Appendix E. Table 2. Fluridone - Phase II APMP Porewater and Sediment Results at Costa Ponds, 2003.

StationCode	StationName	SampleDate	MediumName	ApplicationTime	Units	SampleTypeCode	StationTreatment	Species	TestDuration	% Fines	% Gravel	% Sand	Percent Moisture	Percent Solids	TOC	Cu, dry wt	Cu, Dissolved	Nitrate/Nitrite as N	Total Kjeldahl Nitrogen	Fluridone	Mean Growth	Mean Growth - Standard Deviation	mean root length	mean shoot length	Seed Germination	Percent Survival	Percent Survival - Standard Deviation
										%	%	%	%	%	%	µg/g	mg/L	mg/kg	mg/kg	ppb	mg/individual	NR	mm	mm	%	%	NR
CP-01	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Reference			36.8	0	63.2	82	18	6.2			ND	590								
CP-01	Costa Ponds	6/14/2003	Sediment	Pre-App		Duplicate	Reference								6.5												
CP-01	Costa Ponds	6/14/2003	Sediment	Pre-App		FieldBlank	Reference						1.43	98.6				ND	ND								
CP-02	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated			35.3	0	64.7			8.8			ND	260								
CP-02	Costa Ponds	6/14/2003	Sediment	Pre-App		Duplicate	Treated			40.7	0	59.3	87.7	12.3				ND	560								
CP-01	Costa Ponds	6/16/2003	Porewater	Pre-App		Integrated	Reference										0.0124			ND							
CP-02	Costa Ponds	6/16/2003	Porewater	Pre-App		Integrated	Treated										<RL			0.58							
CP-03	Costa Ponds	6/16/2003	Porewater	Pre-App		Integrated	Treated										<RL			0.73							
CP-04	Costa Ponds	6/16/2003	Porewater	Pre-App		Integrated	Treated										<RL			0.62							
CP-04	Costa Ponds	6/16/2003	Porewater	Pre-App		Duplicate	Treated										<RL			0.99							
CP-05	Costa Ponds	6/16/2003	Porewater	Pre-App		Integrated	Treated										<RL			0.55							
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	10 days												0.158	0.028				93	0.12
CP-01	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Reference	Hyalella azteca	10 days												0.23	0.014				90	0.11
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	28 days												0.624	0.09				92	0.07
CP-01	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Reference	Hyalella azteca	28 days												SIGG 0.462	0.044				96	0.07
CP-01	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Reference						82	18		75.3											
Control	Lab Control		Sediment	NA		Integrated	Reference	Typha latifolia	7 days														12.1	9.1	100		
CP-01	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Reference	Typha latifolia	7 days														SIGL 10.3	8.4	100		
CP-01	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Reference			78.5	0	21.5	80.7	19.3	5.9			ND	560								
CP-01	Costa Ponds	7/2/2003	Porewater	2	weeks	Integrated	Reference													ND							
CP-01	Costa Ponds	7/3/2003	Sediment	2	weeks	FieldBlank	Reference						0.09	99.9				ND	ND								
CP-02	Costa Ponds	7/2/2003	Porewater	2	weeks	Integrated	Treated													1.26							
CP-02	Costa Ponds	7/2/2003	Porewater	2	weeks	Duplicate	Treated													0.95							
CP-03	Costa Ponds	7/2/2003	Porewater	2	weeks	Integrated	Treated													1.58							
CP-04	Costa Ponds	7/2/2003	Porewater	2	weeks	Integrated	Treated													1.06							
CP-05	Costa Ponds	7/2/2003	Porewater	2	weeks	Integrated	Treated													1.51							
Control	Lab Control		Sediment	NA		Integrated	Reference	Typha latifolia	7 days														12.1	9.1	100		
CP-01	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Reference	Typha latifolia	7 days														SIGL 8.6	7.9	97.8		
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	10 days												0.158	0.028				93	0.12
CP-01	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Reference	Hyalella azteca	10 days												0.231	0.056				85	0.14
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	28 days												0.624	0.09				92	0.07
CP-01	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Reference	Hyalella azteca	28 days											ND	0.611	0.089				88	0.14
CP-01	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Reference						80	20	0.83			ND	580								
CP-01	Costa Ponds	7/31/2003	Sediment	6	weeks	FieldBlank	Reference						0	100				ND	ND								

Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	10 days												0.158	0.028				93	
CP-02	Costa Ponds	6/16/2003	Sediment	Pre-App		Duplicate	Treated	Hyalella azteca	10 days												0.209	0.033				96	
CP-02	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated	Hyalella azteca	10 days												0.225	0.027				96	0.12
CP-02	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated						87.2	12.8		84.1											0.05
Control	Lab Control		Sediment	NA		Integrated	Reference	Typha latifolia	7 days														12.1	9.1	100		0.11
CP-02	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated	Typha latifolia	7 days														SIGL 10.3	8	93.3		
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	10 days												0.158	0.028				93	
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Duplicate	Treated	Hyalella azteca	10 days											478	0.209	0.043				96	
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Duplicate	Treated								9.9												0.12
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Duplicate	Treated											ND									0.05
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Duplicate	Treated												330								
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Duplicate	Treated			58.9	0	41.1															
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Duplicate	Treated						86.5	13.5													
Control	Lab Control		Sediment	NA		Integrated	Reference	Typha latifolia	7 days														12.1	9.1	100		
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Duplicate	Treated	Typha latifolia	7 days														10.5	SIGL 7.2	100		
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	10 days												0.158	0.028				93	
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated	Hyalella azteca	10 days											474	0.208	0.036				94	
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated								10												0.12
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated											ND									0.07
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated												500								
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated			86.7	0	13.3															
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated						86.3	13.7													
Control	Lab Control		Sediment	NA		Integrated	Reference	Typha latifolia	7 days														12.1	9.1	100		
CP-02	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated	Typha latifolia	7 days														10.5	SIGL 6.9	100		
CP-02	Costa Ponds	7/31/2003	Sediment	6	weeks	Duplicate	Treated								1.59												
CP-02	Costa Ponds	7/31/2003	Sediment	6	weeks	Duplicate	Treated												880								
CP-02	Costa Ponds	7/31/2003	Sediment	6	weeks	Duplicate	Treated											ND									
CP-02	Costa Ponds	7/31/2003	Sediment	6	weeks	Duplicate	Treated						89.6	10.4													
CP-02	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated								1.6												
CP-02	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated												730								
CP-02	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated											ND									
CP-02	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated						89.1	10.9													
CP-03	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated			42.5	0	57.5															
CP-03	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated											ND									
CP-03	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated												310								
CP-03	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated								7.2												
CP-03	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated						81.9	18.1													
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	10 days												0.158	0.028				93	
CP-03	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated	Hyalella azteca	10 days												0.196	0.022				98	
CP-03	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated						81.9	18.1		65.2											0.12
Control	Lab Control		Sediment	NA		Integrated	Reference	Typha latifolia	7 days														12.1	9.1	100		0.05
CP-03	Costa Ponds	6/17/2003	Sediment	Pre-App		Duplicate	Treated	Typha latifolia	7 days														11.1	SIGL 7	88.9		
CP-03	Costa Ponds	6/17/2003	Sediment	Pre-App		Integrated	Treated	Typha latifolia	7 days														SIGL 9.1	SIGL 6.7	100		
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	10 days												0.158	0.028				93	
CP-03	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated	Hyalella azteca	10 days											385	0.186	0.04				85	
CP-03	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated								10												0.12
CP-03	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated											ND									0.31
CP-03	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated												470								
CP-03	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated			89.3	0	10.7															
CP-03	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated						81.7	18.3													
Control	Lab Control		Sediment	NA		Integrated	Reference	Typha latifolia	7 days														12.1	9.1	100		
CP-03	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated	Typha latifolia	7 days														SIGL 9.3	7.7	97.8		
CP-03	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated								1.04												
CP-03	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated												490								
CP-03	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated											ND									
CP-03	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated						84.7	15.3													
CP-04	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated			29.5	0	70.5															
CP-04	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated											ND									

Appendix E. Table 2. Fluridone - Phase II APMP Porewater and Sediment Results at Costa Ponds, 2003.

StationCode	StationName	SampleDate	MediumName	ApplicationTime	Units	SampleTypeCode	StationTreatment	Species	TestDuration	% Fines	% Gravel	% Sand	Percent Moisture	Percent Solids	TOC	Cu, dry wt	Cu, Dissolved	Nitrate/Nitrite as N	Total Kjeldahl Nitrogen	Fluridone	Mean Growth	Mean Growth - Standard Deviation	mean root length	mean shoot length	Seed Germination	Percent Survival	Percent Survival - Standard Deviation
										%	%	%	%	%	%	µg/g	mg/L	mg/kg	mg/kg	ppb	mg/individual	NR	mm	mm	%	%	NR
CP-04	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated								3.3				310								
CP-04	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated						74.8	25.2													
CP-04	Costa Ponds	6/16/2003	Sediment	Pre-App		Duplicate	Treated									51.8											
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	10 days												0.158	0.028				93	
CP-04	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated	Hyalella azteca	10 days												0.184	0.079				91	
CP-04	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated						74.8	25.2		51.4											0.12
Control	Lab Control		Sediment	NA		Integrated	Reference	Typha latifolia	7 days														12.1	9.1	100		0.18
CP-04	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated	Typha latifolia	7 days														11.1	SIGL 7	100		
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	10 days												0.158	0.028				93	
CP-04	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated	Hyalella azteca	10 days											324	0.177	0.019				96	
CP-04	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated								9.1												0.12
CP-04	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated											ND									0.11
CP-04	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated												380								
CP-04	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated			98.1	0	1.9															
CP-04	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated						85.8	14.2													
Control	Lab Control		Sediment	NA		Integrated	Reference	Typha latifolia	7 days														12.1	9.1	100		
CP-04	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated	Typha latifolia	7 days														11.1	7.9	91.1		
CP-04	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated								1.19												
CP-04	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated												350								
CP-04	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated											ND									
CP-04	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated						86.1	13.9													
CP-05	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated			42.7	0	57.3															
CP-05	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated											ND									
CP-05	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated												630								
CP-05	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated								6.9												
CP-05	Costa Ponds	6/14/2003	Sediment	Pre-App		Integrated	Treated						84.6	15.4													
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	10 days												0.158	0.028				93	
CP-05	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated	Hyalella azteca	10 days												0.209	0.029				99	
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	28 days												0.624	0.09				92	0.12
CP-05	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated	Hyalella azteca	28 days												0.592	0.059				95	0.06
CP-05	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated						84.6	15.4		81.7											0.07
Control	Lab Control		Sediment	NA		Integrated	Reference	Typha latifolia	7 days														12.1	9.1	100		0.08
CP-05	Costa Ponds	6/16/2003	Sediment	Pre-App		Integrated	Treated	Typha latifolia	7 days														SIGL 10.5	SIGL 7.5	97.8		
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	10 days												0.158	0.028				93	
CP-05	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated	Hyalella azteca	10 days											415	0.212	0.037				100	
Control	Lab Control		Sediment	NR		Integrated	Reference	Hyalella azteca	28 days												0.624	0.09				92	0.12
CP-05	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated	Hyalella azteca	28 days												0.617	0.069				95	0
CP-05	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated								7												0.07
CP-05	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated											ND									0.08
CP-05	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated												510								
CP-05	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated			94.8	0	5.2															
CP-05	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated						81.4	18.6													
Control	Lab Control		Sediment	NA		Integrated	Reference	Typha latifolia	7 days														12.1	9.1	100		
CP-05	Costa Ponds	7/2/2003	Sediment	2	weeks	Integrated	Treated	Typha latifolia	7 days														SIGL 9.8	SIGL 7.1	93.3		
CP-05	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated								0.87												
CP-05	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated												420								
CP-05	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated											ND									
CP-05	Costa Ponds	7/31/2003	Sediment	6	weeks	Integrated	Treated						84.9	15.1													