

**Appendix 4C-2: Summary of
PSTA Mesocosm Research at
STA-1W South Supplemental
Technology Site
(TP Means Presented are
Arithmetic Means)**

Substrate	Scale L:W (m)	HLR (cm/d)	HRT (d)	Depth (cm)	Mean TP inflow (ppb)	Mean TP outflow (ppb)	Rep. (N)	Other Considerations
PSTA Phase 1- Apr. 1999 to Mar. 2000 (Post-STA)								
Peat	6:1	6	10.00	60	20	14	3	
Shellrock	6:1	6	10.00	60	20	13	3	
Peat	6:1	6	5.00	30	25	15	3	
Shellrock	6:1	6	5.00	30	25	14	3	
Shellrock	6:1	12	5.00	60	25	17	3	
Shellrock	6:1	0 to 12	0.08 to 72.00	0 to 60	26	15	3	Monthly alterations to depth and HLR
Sand	6:1	6	5.00	30	25	15	1	
Sand	6:1	6	10.00	60	20	16	1	
Peat	6:1	6	10.00	60	26	20	1	Aquashade®, no macrophytes
Shellrock	6:1	6	10.00	60	26	15	1	Aquashade®, no macrophytes
Shellrock	6:3	6	5.00	30	25	16	1	
Peat	6:3	6	5.00	30	25	17	1	
PSTA Phase 2 – Apr. 2000 to Oct. 2000 (Post STA)								
Peat	6:1	6	5.00	30	30	19	3	Peat soils amended with calcium
Limerock	6:1	6	5.00	30	29	16	3	
Peat	6:1	6	5.00	30	29	19	3	
Shellrock	6:1	6	5.00	30	29	15	3	
Substrate	Scale L:W (m)	HLR (cm/d)	HRT (d)	Depth (cm)	Mean TP inflow (ppb)	Mean TP outflow (ppb)	Rep. (N)	Other Considerations

PSTA Phase 2 Continued – Apr. 2000 to Oct. 2000 (Post STA)								
Shellrock	6:1	6	5.00	30	29	18	3	Velocity 0.5 cm/s (Recirculating pump)
Shellrock	6:1	0 to 6	0 to INF	0 to 30	25	17	3	Monthly alterations to depth and HLR - including dryout
Sand	6:1	6	5.00	30	28	15	1	
Sand	6:1	6	5.00	30	29	15	1	Sand acid rinsed before restart
No substrate	6:1	6	5.00	30	29	17	1	
Synthetic substrate	6:1	6	5.00	30	28	15	1	Aquamat® substrate used
Shellrock	6:3	6	5.00	30	29	20	1	
Peat	6:3	6	5.00	30	28	21	1	