

https://dspace.org/

Spatial assessment of environmental fate of Acid Mine Drainage (AMD) contaminants in engineered wetlands along the Varkenslaagte canal

Rampedi, Ike Sephothoma

2016

http://hdl.handle.net/10539/21641

Rampedi, Ike Sephothoma (2016) Spatial assessment of environmental fate of Acid Mine Drainage (AMD) contaminants in engineered wetlands along the Varkenslaagte canal, University of Witwatersrand, Johannesburg, <http://wiredspace.wits.ac.za/handle/10539/21641>

Downloaded from a DSpace repository. https://dspace.org/

Appendix A: The actual raw data of the selected sediment elements

Paddocks (Interval Depth)	Fe %	Ca %	S (mg/kg)	Cl (mg/kg)	Cr (mg/kg)	Cu (mg/kg)	Zn (mg/kg)	U (mg/kg)	Na	Hg
WW1.1 (0-2 cm)	4.677	0.3716	5.03	0.85	0.0051	0.0464	0.642	0.005	<14	<14
WW1.1 (2-10 cm)	9.491	0.1562	1.559	0.503	0.2914	0.048	0.4361	0.0012	<14	<14
WW1.1 (10-30cm)	9.491	0.1562	1.559	0.503	0.2914	0.048	0.4361	0.0012	<14	<14
WW1.2 (0-2cm)	6.546	0.1947	1.963	0.459	0.1435	0.0372	0.4341	0.0013	<14	<14
WW1.2 (2-10cm)	8.388	0.1746	1.402	0.22	0.191	0.0483	0.3861	0.0022	<14	<14
WW1.2 (10-30cm)	9.491	0.1562	1.559	0.503	0.2914	0.048	0.4361	0.0012	<14	<14
WW1.3 (0-2 cm)	6.058	0.3069	4.282	1.087	0.1195	0.0483	0.617	0.0036	<14	<14
WW1.3 (2-10cm)	7.008	0.1632	1.039	0.236	0.1441	0.0429	0.3285	0.0014	<14	<14
WW1.3 (10-30 cm)	7.968	0.1637	1.225	0.209	0.1623	0.0424	0.3184	0.0013	<14	<14
WW2.1 (0-2 cm)	6.074	0.1829	1.838	0.442	0.1106	0.0355	0.3909	0.0013	<14	<14
WW2.1 (2-10cm)	7.429	0.1123	0.4457	0.154	0.2692	0.0435	0.2914	0.0013	<14	<14
WW2.1 (10-30 cm)	6.02	0.1524	1.236	0.33	0.1497	0.0393	0.2915	0.0013	<14	<14
WW2.2 (0-2 cm)	5.629	0.4297	3.044	0.791	0.1098	0.0409	0.95	0.0038	<14	<14
WW2.2 (2-10 cm)	6.716	0.1375	1.05	0.182	0.1355	0.0348	0.3001	0.0013	<14	<14
WW2.2 (10-30 cm)	5.995	0.1295	1.018	0.306	0.139	0.034	0.2097	0.0013	<14	<14
WW2.3 (0-10 cm)	6.854	0.1499	1.222	0.406	0.1631	0.0405	0.3575	0.0019	<14	<14
WW2.3 (2-10 cm)	10.89	0.1399	1.067	0.313	0.2048	0.0447	0.4172	0.0015	<14	<14
WW2.3 (10-30 cm)	6.882	0.1329	1.226	0.366	0.13	0.039	0.4231	0.0014	<14	<14
WW4.1 (0-2 cm)	7.321	0.2184	1.968	0.784	0.1331	0.0384	0.498	0.0013	<14	<14
WW4.1 (2-10 cm)	8.286	0.1491	1.108	0.478	0.2203	0.035	0.523	0.0012	<14	<14
WW4.1 (10-30 cm)	9.62	0.1093	0.6077	0.29	0.463	0.0242	0.558	0.0012	<14	<14
WW4.2 (0-2cm)	9.95	0.3057	2.775	0.644	0.2654	0.0423	0.777	0.0014	<14	<14
WW4.2 (2-10 cm)	7.847	0.1686	1.516	0.643	0.2057	0.0386	0.537	0.0013	<14	<14
WW4.2 (10-30 cm)	8.793	0.1432	1.15	0.557	0.2153	0.0418	0.503	0.0014	<14	<14
WW4.3 (0-2 cm)	5.747	0.2474	2.069	1.22	0.1227	0.0354	0.708	0.0018	<14	<14
WW4.3 (2-10 cm)	7.06	0.1576	1.793	0.531	0.151	0.0405	0.638	0.0014	<14	<14
WW4.3 (10-30 cm)	7.978	0.1352	1.654	0.47	0.1762	0.039	0.601	0.0014	<14	<14
WW6.1 (0-2 cm)	6.279	0.1454	2.323	0.911	0.2309	0.0458	0.531	0.0018	<14	<14

Paddocks (Interval Depth)	Fe %	Ca %	S (mg/kg)	Cl (mg/kg)	Cr (mg/kg)	Cu (mg/kg)	Zn (mg/kg)	U (mg/kg)	Na	Hg
WW6.1 (2-10 cm)	7.23	0.1862	2.085	0.841	0.1899	0.0394	0.532	0.0013	<14	<14
WW6.1 (10-30 cm)	9.779	0.1607	1.901	0.559	0.386	0.0444	0.602	0.0014	<14	<14
WW6.2 (0-2 cm)	6.417	0.3358	3.483	0.994	0.1491	0.0399	0.5341	0.0013	<14	<14
WW6.2 (2-10 cm)	5.486	0.2861	2.985	0.745	0.1357	0.0361	0.3437	0.0013	<14	<14
WW6.2 (10-30 cm)	7.124	0.1642	1.856	0.475	0.2028	0.0401	0.441	0.0013	<14	<14
WW6.3 (0-2 cm)	4.824	0.4261	3.821	1.076	0.1454	0.0412	0.734	0.0051	<14	<14
WW6.3 (2-10 cm)	4.996	0.5146	5.208	1.039	0.1327	0.0322	0.601	0.0012	<14	<14
WW6.3 (10-30 cm)	5.878	0.262	2.752	0.618	0.1839	0.039	0.5286	0.0013	<14	<14
WW7.1 (0-2cm)	8.327	0.3198	3.411	0.984	0.214	0.0519	0.677	0.0089	<14	<14
WW7.1 (2-10cm)	8.298	0.1534	1.76	0.493	0.2327	0.035	0.481	0.0013	<14	<14
WW7.1 (10-30 cm)	8.067	0.1846	1.899	0.405	0.2545	0.0363	0.485	0.0013	<14	<14
WW7.2 (0-2 cm)	9.208	0.3427	2.87	0.509	0.2581	0.0453	0.545	0.0029	<14	<14
WW7.2 (2-10cm)	13.86	0.1844	1.809	0.533	0.3363	0.0494	0.663	0.0014	<14	<14
WW7.2 (10-30 cm)	11.71	0.1696	1.809	0.568	0.2536	0.0436	0.514	0.0014	<14	<14
WW7.3 (0-2 cm)	6.82	0.2653	2.272	0.588	0.277	0.0363	0.7	0.0035	<14	<14
WW7.3 (2-10 cm)	5.213	0.171	1.785	0.581	0.1981	0.034	0.5609	0.0037	<14	<14
WW7.3 (10-30 cm)	8.967	0.1748	1.147	0.314	0.2772	0.0394	0.537	0.0013	<14	<14

Appendix B 1 : The actual raw data of the selected plant elements

Paddocks and Plants	Elements									
	S	Cl	Ca	Cr	Fe	Cu	Zn	U	Na	Hg
	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg		
WW1 TOP P. AUSTRALIS SHOOTS	32.46	17.53	0.04608	0.0337	0.007785	0.0219	0.207	0.0111	Na	Hg
WW1 MID 1 P. AUSTRALIS SHOOTS	23.17	19.9	0.02766	0.0051	0.001336	0.0167	0.0907	0.0046	<14	<14
WW1 MID 2 P. AUSTRALIS SHOOTS	15.38	5.638	0.0176	0.0849	0.01224	0.0294	0.1316	0.0112	<14	<14
WW1 BOTTOM P. AUSTRALIS SHOOTS	23.53	16.65	0.01723	0.0051	0.001054	0.0119	0.0635	0.0068	<14	<14
WW1 TOP P. AUSTRALIS ROOTS	19.08	12.88	0.01112	0.0864	0.05383	0.079	0.3439	0.0211	<14	<14
WW1 MID 1 P. AUSTRALIS ROOTS	36.31	19.56	0.03771	0.027	0.005932	0.0376	0.1301	0.0158	<14	<14
WW1 MID 2 P. AUSTRALIS ROOTS	23.11	8.537	0.02025	0.1706	0.06536	0.2246	0.8138	0.0322	<14	<14
WW1 BOTTOM P. AUSTRALIS ROOTS	26.62	14.61	0.01734	0.0856	0.05197	0.2995	0.6383	0.0285	<14	<14
WW1 TOP P. AUSTRALIS RHIZOMES	19.35	12.56	0.02444	0.1206	0.04954	0.2453	0.4356	0.0189	<14	<14
WW1 MID 1 P. Australis RHIZOMES	7.667	6.403	0.007154	0.0051	0.003271	0.0161	0.121	0.0084	<14	<14
WW1 MID 2 P. AUSTRALIS RHIZOMES	20.4	16.75	0.00623	0.0138	0.01697	0.0302	0.2024	0.0085	<14	<14
WW1 BOTTOM P. AUSTRALIS RHIZOMES	11.53	17.76	0.003994	0.0052	0.009322	0.0156	0.1491	0.0073	<14	<14
WW2 TOP P. AUSTRALIS SHOOTS	24.62	14.78	0.03022	0.01	0.004665	0.03	0.1262	0.0089	<14	<14
WW2 MID 1 P. AUSTRALIS SHOOTS	16.7	6.51	0.0261	0.0687	0.009324	0.0259	0.1732	0.0099	<14	<14
WW2 MID 2 P. AUSTRALIS SHOOTS	20.32	32.46	0.01679	0.0051	0.001526	0.0326	0.0968	0.0105	<14	<14
WW2 BOTTOM P. AUSTRALIS SHOOTS	16.7	28.64	0.01807	0.0051	0.001767	0.0366	0.0869	0.0098	<14	<14
WW2 TOP P. AUSTRALIS ROOTS	25.24	6.109	0.02288	0.1431	0.06705	0.205	0.4195	0.0326	<14	<14
WW2 MID 1 P. AUSTRALIS ROOTS	18.73	9.492	0.01703	0.1575	0.05236	0.1354	0.4589	0.0183	<14	<14
WW2 MID 2 P. AUSTRALIS ROOTS	30.47	12.25	0.02123	0.0901	0.04287	0.2438	0.277	0.0227	<14	<14
WW2 BOTTOM P. AUSTRALIS ROOTS	30.16	18.36	0.01532	0.0881	0.03844	0.204	0.4437	0.0173	<14	<14
WW2 TOP P. AUSTRALIS RHIZOMES	9.662	8.419	0.003394	0.0092	0.008459	0.0542	0.3588	0.0094	<14	<14
WW2 MID 1 P. AUSTRALIS RHIZOMES	8.844	14.98	0.004439	0.0214	0.01859	0.0305	0.1577	0.0105	<14	<14
WW2 MID 2 P.AUSTRALIS RHIZOMES	10.76	7.094	0.004916	0.0148	0.01281	0.0498	0.1813	0.0088	<14	<14
WW2 BOTTOM P. AUSTRALIS RHIZOMES	23.22	14.69	0.01065	0.0704	0.01822	0.0553	0.1368	0.0115	<14	<14
WW4 TOP P. AUSTRALIS SHOOTS	17.36	21.07	0.01544	0.0051	0.001291	0.0242	0.1495	0.0085	<14	<14
WW4 MID 1 P. AUSTRALIS SHOOTS	14.5	8.129	0.01242	0.1004	0.03963	0.2009	0.2485	0.0235	<14	<14

Paddocks and Plants	Elements									
	S	Cl	Ca	Cr	Fe	Cu	Zn	U	Na	Hg
	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg		
WW4 Mid 2 P. AUSTRALIS SHOOTS	18.02	12.02	0.02056	0.137	0.04054	0.2304	0.442	0.0185	<14	<14
WW4 BOTTOM P. AUSTRALIS SHOOTS	10.32	8.76	0.0182	0.0343	0.003728	0.0167	0.1361	0.0068	<14	<14
WW4 TOP P. AUSTRALIS ROOTS	27.55	14.63	0.01666	0.0443	0.02043	0.177	0.5774	0.0173	<14	<14
WW4 MID 1 P. AUSTRALIS ROOTS	14.5	8.129	0.01242	0.1004	0.03963	0.2009	0.2485	0.0235	<14	<14
WW4 MID 2 P. AUSTRALIS ROOTS	25.53	10.48	0.01854	0.1166	0.04118	0.1615	0.596	0.0219	<14	<14
WW4 BOTTOM P. AUSTRALIS ROOTS	18.94	8.872	0.01748	0.0643	0.03061	0.177	0.3228	0.0167	<14	<14
WW4 TOP P. AUSTRALIS RHIZOMES	17.73	7.64	0.01656	0.0136	0.01083	0.0329	0.1205	0.0094	<14	<14
WW4 MID 1 P. P. AUSTRALIS RHIZOMES	7.785	8.884	0.003498	0.026	0.01386	0.0442	0.1923	0.0079	Na	Hg
WW4 MID 2 P. AUSTRALIS RHIZOMES	12.53	7.471	0.005752	0.0325	0.0152	0.0586	0.4001	0.0138	<14	<14
WW4 BOTTOM P. AUSTRALIS RHIZOMES	16.2	11.92	0.0127	0.0649	0.01422	0.0837	0.3891	0.0108	<14	<14
WW6 TOP P. AUSTRALIS SHOOTS	47.06	5.677	0.08251	0.103	0.0153	0.036	0.1603	0.0126	<14	<14
WW6 MID 1 P. AUSTRALIS SHOOTS	23.68	25.54	0.01876	0.0051	0.002673	0.0326	0.1644	0.0085	<14	<14
WW6 MID 2. P. AUSTRALIS SHOOTS	30.83	26.67	0.01871	0.0051	0.002516	0.0241	0.0959	0.0088	<14	<14
WW6 BOTTOM P. AUSTRALIS SHOOTS	24.5	15.92	0.01262	0.0737	0.0398	0.1011	0.2503	0.0141	<14	<14
WW6 TOP P. AUSTRALIS ROOTS	17.2	8.602	0.01524	0.0929	0.05908	0.1618	0.2494	0.0489	<14	<14
WW6 MID 1 P. AUSTRALIS ROOTS	24.74	16.2	0.01201	0.0734	0.03851	0.0892	0.207	0.0116	<14	<14
WW6 MID 2 P. AUSTRALIS ROOTS	21.61	11.78	0.01918	0.1765	0.05856	0.1373	0.2909	0.0226	<14	<14
WW6 BOTTOM P. AUSTRALIS ROOTS	34.04	34.31	0.02954	0.0073	0.003778	0.024	0.1314	0.0101	<14	<14
WW6 TOP P.AUSTRALIS RHIZOMES	13.19	16.91	0.004357	0.0051	0.01605	0.0265	0.2104	0.0107	<14	<14
WW6 MID 1 P. AUSTRALIS RHIZOMES	12.44	10.13	0.004883	0.0183	0.01255	0.0414	0.1886	0.0108	<14	<14
WW6 MID 2 P. AUSTRALIS RHIZOMES	15.29	10.67	0.005456	0.0303	0.0108	0.0414	0.1366	0.0116	<14	<14
WW6 BOTTOM P. AUSTRALIS RHIZOMES	13.05	4.927	0.006625	0.0688	0.02204	0.0438	0.1427	0.0072	<14	<14
WW7 TOP P. AUSTRALIS SHOOTS	31.65	5.677	0.08251	0.103	0.0153	0.036	0.1603	0.0126	<14	<14
WW7 MID 1 P. AUSTRALIS SHOOTS	24.25	25.54	0.01876	0.0051	0.002673	0.0326	0.1644	0.0085	<14	<14
WW7 MID 2 P. AUSTRALIS SHOOTS	26.18	26.67	0.01871	0.0051	0.002516	0.0241	0.0959	0.0088	<14	<14
WW7 BOTTOM P. AUSTRALIS SHOOTS	29.65	15.92	0.01262	0.0737	0.0398	0.1011	0.2503	0.0141	<14	<14
WW7 TOP P. P. AUSTRALIS ROOTS	15.76	8.602	0.01524	0.0929	0.05908	0.1618	0.2494	0.0489	<14	<14
WW7 MID 1 P. AUSTRALIS ROOTS	19.57	16.2	0.01201	0.0734	0.03851	0.0892	0.207	0.0116	<14	<14

Paddocks and Plants	Elements									
	S	Cl	Ca	Cr	Fe	Cu	Zn	U	Na	Hg
	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg		
WW7 MID 2 P. AUSTRALIS ROOTS	26.52	11.78	0.01918	0.1765	0.05856	0.1373	0.2909	0.0226	<14	<14
WW7 BOTTOM P. AUSTRALIS ROOTS	23.64	34.31	0.02954	0.0073	0.003778	0.024	0.1314	0.0101	<14	<14
WW7 TOP P. AUSTRALIS RHIZOMES	20	16.91	0.004357	0.0051	0.01605	0.0265	0.2104	0.0107	<14	<14
WW7 MID 1 P. AUSTRA RHIZOMES	12.59	10.13	0.004883	0.0183	0.01255	0.0414	0.1886	0.0108	<14	<14
WW7 MID 2 P. AUSTRALIS RHIZOMES	7.86	10.67	0.005456	0.0303	0.0108	0.0414	0.1366	0.0116	<14	<14
WW7 BOTTOM P. AUST RHIZOMES	9.446	4.927	0.006625	0.0688	0.02204	0.0438	0.1427	0.0072	<14	<14
WW1 TOP SCHOENO SHOOTS	31.08	27.2	2.202	0.0051	0.04661	0.021	0.0138	0.0118	<14	<14
WW1 MID 1 SCHOENO SHOOTS	30.89	19.95	3.393	0.0209	0.006252	0.041	0.011	0.0106	<14	<14
WW1 MID 2 SCHOENO SHOOTS	22.47	17	2.179	0.0077	0.003355	0.0232	0.0119	0.0104	<14	<14
WW1 BOTTOM SCHOENO SHOOTS	20.87	15.07	1.404	0.1785	0.004013	0.0805	0.0485	0.0147	<14	<14
WW1 TOP SCHOENO. ROOTS	23.56	14.81	2.301	0.0837	0.1003	0.0888	0.0234	0.0196	<14	<14
WW1 MID 1 SCHOENO. ROOTS	22.62	7.223	2.681	0.0927	0.04961	0.0806	0.0159	0.0139	<14	<14
WW1 MID 2 SCHOENO, ROOTS	18.93	4.492	1.397	0.0897	0.07733	0.0566	0.0427	0.0136	<14	<14
WW1 BOTTOM SCHOENO. ROOTS	22.86	15.93	1.595	0.0979	0.05338	0.095	0.0175	0.0131	<14	<14
WW1 TOP SCHOENO. RHIZOMES	17.48	5.865	0.9776	0.043	0.01589	0.0463	0.0342	0.0057	<14	<14
WW1 MID 1 SCHOENO. RHIZOMES	19.64	3.428	1.179	0.1053	0.02924	0.0428	0.0702	0.0086	<14	<14
WW1 MID 2 SCHOENO RHIZOMES	23.94	4.954	1.916	0.0898	0.03117	0.0448	0.0492	0.0092	<14	<14
WW1 BOTTOM SCHOENO. RHIZOMES	28.77	21.93	1.661	0.1006	0.02507	0.0527	0.0257	0.0128	<14	<14
WW2 TOP SCHOENO. SHOOTS	29.68	19.84	3.407	0.0324	0.007469	0.029	0.0166	0.0113	<14	<14
WW2 MID 1 SCHOENO. SHOOTS	24.41	23.08	2.541	0.0516	0.001974	0.0326	0.0054	0.006	<14	<14
WW2 MID 2 SCHOENO. SHOOTS	37.83	18.99	4.844	0.0518	0.004198	0.0297	0.0096	0.0095	<14	<14
WW2 BOTTOM SCHOENO SHOOT	26.96	23.62	2.973	0.0061	0.00501	0.0257	0.0112	0.0092	<14	<14
WW2 TOP SCHOENO. ROOTS	35.71	21.56	1.427	0.1035	0.05811	0.1404	0.0201	0.0186	<14	<14
WW2 MID 1 SCHOENO. ROOTS	16.85	7.282	1.828	0.0733	0.0534	0.1714	0.0247	0.0276	<14	<14
WW2 MID 2 SCHOENO. ROOTS	20.35	9.573	2.183	0.0676	0.04833	0.1373	0.0127	0.0213	<14	<14
WW2 BOTTOM SCHOENO. ROOTS	20.31	25.73	1.894	0.0437	0.03607	0.057	0.008	0.01	<14	<14
WW2 TOP SCHOENO. RHIZOMES	20.86	9.449	1.486	0.1842	0.03507	0.0935	0.0399	0.0146	<14	<14
WW2 MID 1 SCHOENO. RHIZOMES	24.7	8.471	1.955	0.1707	0.03671	0.0774	0.04	0.0137	<14	<14

Paddocks and Plants	Elements									
	S	Cl	Ca	Cr	Fe	Cu	Zn	U	Na	Hg
	mg/kg	mg/kg	%	mg/kg	%	mg/kg	mg/kg	mg/kg		
WW2 MID 2 SCHOENO. RHIZOMES	10.52	1.834	0.6049	0.1178	0.0308	0.0436	0.1062	0.0022	<14	<14
WW2 BOTTOM SCHOENO. RHIZOMES	19.46	5.253	1.355	0.0449	0.07364	0.0635	0.0287	0.018	<14	<14
WW4 TOP SCHOENO. SHOOTS	46.2	17.51	4.871	0.0387	0.01213	0.0255	0.0183	0.0093	<14	<14
WW4 MID 1 SCHOENO.SHOOTS	58.72	26.85	7.565	0.046	0.01073	0.0383	0.0188	0.012	<14	<14
WW4 MID 2 SCHOENO.SHOOTS	36.87	21.69	3.983	0.0073	0.005517	0.0214	0.0176	0.0114	<14	<14
WW4 BOTTOM SCHOENO.SHOOTS	26.56	20.73	2.858	0.0024	0.00246	0.0214	0.0066	0.0065	<14	<14
WW4 TOP SCHOENO. ROOTS	15.8	16.97	2.485	0.0723	0.03452	0.1133	0.0129	0.0096	<14	<14
WW4 MID 1 SCHOENO. ROOTS	19.97	11.05	2.138	0.0959	0.03426	0.2818	0.0162	0.0155	<14	<14
WW4 MID 2 SCHOENO. ROOTS	18.73	12.72	2.277	0.0866	0.03011	0.1584	0.0221	0.0133	<14	<14
WW4 BOTTOM SCHOENO. ROOTS	17.86	17.75	2.839	0.0857	0.03006	0.1285	0.0125	0.0147	<14	<14
WW4 TOP SHOENO. RHIZOMES	24.73	6.819	1.583	0.1505	0.03648	0.0801	0.0578	0.0127	<14	<14
WW4 MID 1 SCHOENO. RHIZOMES	20.09	9.346	1.253	0.0794	0.02442	0.0996	0.0362	0.0129	<14	<14
WW4 MID 2 SCHOENO. RHIZOMES	13.49	3.016	0.6681	0.0352	0.0146	0.0511	0.0297	0.002	<14	<14
WW4 BOTTOM SCHOENO. RHIZOMES	17.49	7.662	0.7543	0.061	0.02126	0.0736	0.0276	0.0067	<14	<14
WW6 TOP SCHOENO.SHOOTS	34.34	15.34	4.765	0.0262	0.005325	0.0216	0.0087	0.0067	<14	<14
WW6 MID 1 SCHOENO.SHOOTS	38.46	32.38	3.18	0.0248	0.008242	0.0314	0.0175	0.0109	<14	<14
WW6 MID 2 SCHOENO. SHOOTS	23.5	28.75	2.038	0.0104	0.004417	0.0276	0.011	0.0062	<14	<14
WW6 BOTTOM SCHOENO. SHOOTS	41.7	38.53	2.657	0.0227	0.008584	0.0349	0.0175	0.011	<14	<14
WW6 TOP SCHOENO. ROOTS	16.9	12.11	1.198	0.2792	0.05035	0.0744	0.0515	0.0105	<14	<14
WW6 MID 1 SCHOENO. ROOTS	20.08	16.37	1.358	0.0732	0.02308	0.0578	0.0207	0.0116	<14	<14
WW6 MID 2 SCHOENO. ROOTS	20.58	17.55	1.408	0.1304	0.03714	0.0608	0.0153	0.0085	<14	<14
WW6 BOTTOM SCHOENO. ROOTS	31.22	23.38	1.942	0.0531	0.02802	0.1131	0.0139	0.0131	<14	<14
WW6 TOP SCHOENO. RHIZOMES	22.64	5.817	0.7229	0.1039	0.02178	0.0484	0.0549	0.0065	<14	<14
WW6 MID 1 SCHOENO. RHIZOMES	28.69	17.77	1.37	0.1662	0.03486	0.0646	0.0459	0.0121	<14	<14
WW6 MID 2 SCHOENO RHIZOMES	22.47	9.807	0.8607	0.0459	0.01758	0.0575	0.0363	0.008	<14	<14
WW6 BOTTOM SCHOENO. RHIZOMES	23.89	14.59	1.464	0.0351	0.01876	0.0492	0.023	0.0079	<14	<14

Appendix B 2: The calculation of elemental mass and concentration in vegetation species

Paddock and Plants			Estimated Total number of plants in paddock	S	Pollutant Mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Cl	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	Dry Mass (g)	Dry Mass (kg)		mg/kg					mg/kg		mg/kg					mg/kg	
WW1 TOP P. AUSTRALIS SHOOTS	3.34	0.00334	150	32.46	0.1084	30.6742	47.3529	0.2226	23.9832	21.9415	17.53	0.0585502	20.06745375	30.9041801	0.1340942	14.449806	14.3544
WW1 MID 1 P. AUSTRALIS SHOOTS	8.51	0.00851		23.17	0.1972			0.3041	22.1156		19.90	0.169349			0.23355653	16.9859295	
WW1 MID 2 P. AUSTRALIS SHOOTS	10.55	0.01055		15.38	0.1623			0.3098	17.9613		5.64	0.0594809			0.13868964	8.03997913	
WW1 BOTTOM P. AUSTRALIS SHOOTS	14.88	0.01488		23.53	0.3501			0.4263	22.2704		16.65	0.247752			0.3177711	16.6024608	
WW1 TOP P. AUSTRALIS ROOTS	2.93	0.00293	150	19.08	0.0559	10.5397				25.3892	12.88	0.0377384	5.391894				12.9886
WW1 MID 1 P. AUSTRALIS ROOTS	2.33	0.00233		36.31	0.0846						19.56	0.0455748					
WW1 MID 2 P. AUSTRALIS ROOTS	4.02	0.00402		23.11	0.0929						8.54	0.0343187					
WW1 BOTTOM P. AUSTRALIS ROOTS	1.79	0.00179		26.62	0.0476						14.61	0.0261519					
WW1 TOP P. AUSTRALIS RHIZOMES	3.01	0.00301	150	19.35	0.0582	6.1390				14.7882	12.56	0.0378056	5.444832375				13.1161
WW1 MID 1 P. Australis RHIZOMES	2.91	0.00291		7.67	0.0223						6.40	0.0186327					
WW1 MID 2 P. AUSTRALIS RHIZOMES	2.68	0.00268		20.40	0.0547						16.75	0.04489					
WW1 BOTTOM P. AUSTRALIS RHIZOMES	2.47	0.00247		11.53	0.0285						17.76	0.0438672					
WW2 TOP P. AUSTRALIS SHOOTS	13.05	0.01305	300	24.62	0.3213	46.0378	75.6157	0.4358	22.2570	20.9286	14.78	0.192879	40.11693	55.33	0.24023207	12.2692579	18.2370
WW2 MID 1 P. AUSTRALIS SHOOTS	6.6	0.0066		16.70	0.1102			0.2004	15.4739		6.51	0.042966			0.11921028	9.20542703	
WW2 MID 2 P. AUSTRALIS SHOOTS	5.71	0.00571		20.32	0.1160			0.2267	21.6693		32.46	0.1853466			0.23461422	22.4296577	
WW2 BOTTOM P. AUSTRALIS SHOOTS	3.97	0.00397		16.70	0.0663			0.1999	22.8943		28.64	0.1137008			0.1958096	22.4295074	
WW2 TOP P. AUSTRALIS ROOTS	3.3	0.0033	300	25.24	0.0833	25.4905				25.9842	6.11	0.0201597	11.3071785				11.5262
WW2 MID 1 P. AUSTRALIS ROOTS	3.44	0.00344		18.73	0.0644						9.49	0.0326525					

Paddock and Plants			Estimated Total number of plants in paddock	S	Pollutant Mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Cl	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	Dry Mass (g)	Dry Mass (kg)		mg/kg					mg/kg		mg/kg					mg/kg	
WW2 MID 2 P. AUSTRALIS ROOTS	3.02	0.00302		30.47	0.0920						12.25	0.036995					
WW2 BOTTOM P. AUSTRALIS ROOTS	3.32	0.00332		30.16	0.1001						18.36	0.0609552					
WW2 TOP P. AUSTRALIS RHIZOMES	3.23	0.00323	150	9.66	0.0312	4.0873				11.7074	8.42	0.0271934	3.907927125				11.1935
WW2 MID 1 P. AUSTRALIS RHIZOMES	2.91	0.00291		8.84	0.0257						14.98	0.0435918					
WW2 MID 2 P.AUSTRALIS RHIZOMES	1.73	0.00173		10.76	0.0186						7.09	0.0122726					
WW2 BOTTOM P. AUSTRALIS RHIZOMES	1.44	0.00144		23.22	0.0334						14.69	0.0211536					
WW4 TOP P. AUSTRALIS SHOOTS	6.27	0.00627	500	17.36	0.1088	46.5608	90.0846	0.2496	19.8579	15.3984	21.07	0.1321089	38.57573125	61.74	0.2009313	15.9849881	12.7576
WW4 MID 1 P. AUSTRALIS SHOOTS	5.75	0.00575		14.50	0.0834			0.1437	13.6638		8.13	0.0467418			0.08650613	8.22301616	
WW4 Mid 2 P. AUSTRALIS SHOOTS	7.1	0.0071		18.02	0.1279			0.1874	18.6654		12.02	0.085342			0.1125424	11.2094024	
WW4 BOTTOM P. AUSTRALIS SHOOTS	5.07	0.00507		10.32	0.0523			0.1399	14.0200		8.76	0.0444132			0.09397928	9.41676152	
WW4 TOP P. AUSTRALIS ROOTS	2.96	0.00296	500	27.55	0.0815	28.9780				20.8850	14.63	0.0433048	14.4687525				10.4279
WW4 MID 1 P. AUSTRALIS ROOTS	3.46	0.00346		14.50	0.0502						8.13	0.0281263					
WW4 MID 2 P. AUSTRALIS ROOTS	1.74	0.00174		25.53	0.0444						10.48	0.0182352					
WW4 BOTTOM P. AUSTRALIS ROOTS	2.94	0.00294		18.94	0.0557						8.87	0.0260837					
WW4 TOP P. AUSTRALIS RHIZOMES	3.34	0.00334	500	17.73	0.0592	14.5458				14.8806	7.64	0.0255176	8.700405				8.9007
WW4 MID 1 P. P. AUSTRALIS RHIZOMES	1.31	0.00131		7.79	0.0102						8.88	0.011638					
WW4 MID 2 P. AUSTRALIS RHIZOMES	1.2	0.0012		12.53	0.0150						7.47	0.0089652					
WW4 BOTTOM P. AUSTRALIS RHIZOMES	1.97	0.00197		16.20	0.0319						11.92	0.0234824					
WW6 TOP P. AUSTRALIS SHOOTS	12.42	0.01242	150	47.06	0.5845	57.1544	64.8021	0.6342	41.2898	19.1397	5.68	0.0705083	32.46870525	38.44	0.0975429	6.35044922	18.0607

Paddock and Plants			Estimated Total number of plants in paddock	S	Pollutant Mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Cl	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	Dry Mass (g)	Dry Mass (kg)		mg/kg					mg/kg		mg/kg					mg/kg	
WW6 MID 1 P. AUSTRALIS SHOOTS	10.17	0.01017		23.68	0.2408			0.2988	23.8502		25.54	0.2597418			0.2977917	23.7662969	
WW6 MID 2. P. AUSTRALIS SHOOTS	12.28	0.01228		30.83	0.3786			0.3822	30.6990		26.67	0.3275076			0.3294991	26.4657912	
WW6 BOTTOM P. AUSTRALIS SHOOTS	13.07	0.01307		24.50	0.3202			0.4128	26.0112		15.92	0.2080744			0.30032261	18.92392	
WW6 TOP P. AUSTRALIS ROOTS	2.73	0.00273	150	17.20	0.0470	7.4604				25.2148	8.60	0.0234835	5.8020735				19.6099
WW6 MID 1 P. AUSTRALIS ROOTS	2.33	0.00233		24.74	0.0576						16.20	0.037746					
WW6 MID 2 P. AUSTRALIS ROOTS	0.16	0.00016		21.61	0.0035						11.78	0.0018848					
WW6 BOTTOM P. AUSTRALIS ROOTS	2.67	0.00267		34.04	0.0909						34.31	0.0916077					
WW6 TOP P.AUSTRALIS RHIZOMES	0.21	0.00021	150	13.19	0.0028	0.1872	39.6325			13.1382	16.91	0.0035511	0.172582875	27.05			12.1111
WW6 MID 1 P. AUSTRALIS RHIZOMES	0.03	3E-05		12.44	0.0004						10.13	0.0003039					
WW6 MID 2 P. AUSTRALIS RHIZOMES	0.01	0.00001		15.29	0.0002						10.67	0.0001067					
WW6 BOTTOM P. AUSTRALIS RHIZOMES	0.13	0.00013		13.05	0.0017						4.93	0.0006405					
WW7 TOP P. AUSTRALIS SHOOTS	8.14	0.00814	150	31.65	0.2576	33.0314	45.6523	0.3443	27.0497	19.1397	5.68	0.0462108	21.33	31.73	0.11385808	8.94407541	18.0448
WW7 MID 1 P. AUSTRALIS SHOOTS	9.36	0.00936		24.25	0.2270			0.3362	20.5989		25.54	0.2390544			0.3283155	20.1173713	
WW7 MID 2 P. AUSTRALIS SHOOTS	5.61	0.00561		26.18	0.1469			0.2005	23.8716		26.67	0.1496187			0.181275	21.5803571	
WW7 BOTTOM P. AUSTRALIS SHOOTS	8.41	0.00841		29.65	0.2494			0.3364	22.9438		15.92	0.1338872			0.22256546	15.1818186	
WW7 TOP P. P. AUSTRALIS ROOTS	1.2	0.0012	150	15.76	0.0189	6.4139				19.1397	8.60	0.0103224	5.55				18.5926
WW7 MID 1 P. AUSTRALIS ROOTS	3.09	0.00309		19.57	0.0605						16.20	0.050058					
WW7 MID 2 P. AUSTRALIS ROOTS	1.7	0.0017		26.52	0.0451						11.78	0.020026					
WW7 BOTTOM P. AUSTRALIS ROOTS	1.97	0.00197		23.64	0.0466						34.31	0.0675907					

Paddock and Plants			Estimated Total number of plants in paddock	S	Pollutant Mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Cl	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	Dry Mass (g)	Dry Mass (kg)		mg/kg					mg/kg		mg/kg					mg/kg	
WW7 TOP P. AUSTRALIS RHIZOMES	3.39	0.00339	150	20.00	0.0678	6.2070				19.1397	16.91	0.0573249	4.84671975				10.2332
WW7 MID 1 P. AUSTRA RHIZOMES	3.87	0.00387		12.59	0.0487						10.13	0.0392031					
WW7 MID 2 P. AUSTRALIS RHIZOMES	1.09	0.00109		7.86	0.0086						10.67	0.0116303					
WW7 BOTTOM P. AUST RHIZOMES	4.28	0.00428		9.45	0.0404						4.93	0.0210876					

NB. It should be noted that the dry mass and the estimated number of plant per are for all plants paddocks, these rows will be presented only in the first table in both species

Paddock and Plants	Cu	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Fe	Total pollutant mass (kg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	mg/kg					mg/kg		%					mg/kg	
WW1 TOP P. AUSTRALIS SHOOTS														
WW1 MID 1 P. AUSTRALIS SHOOTS	0.020	0.000073	0.026344	0.126197	0.00104	0.1124	0.0188	0.007785	0.00002600	0.006832	0.035124	0.00033	0.0359	0.0049
WW1 MID 2 P. AUSTRALIS SHOOTS	0.020	0.000142			0.00028	0.0201		0.001336	0.00001137			0.00001	0.0025	
WW1 BOTTOM P. AUSTRALIS SHOOTS	0.030	0.000310			0.00129	0.075		0.012240	0.00012913			0.00013	0.0254	
WW1 TOP P. AUSTRALIS ROOTS	0.010	0.000177			0.00075	0.0393		0.001054	0.00001568			0.00002	0.0069	
WW1 MID 1 P. AUSTRALIS ROOTS	0.080	0.000231	0.065928				0.1588	0.053830	0.00015772	0.019774				0.0476
WW1 MID 2 P. AUSTRALIS ROOTS	0.040	0.000088						0.005932	0.00001382					
WW1 BOTTOM P. AUSTRALIS ROOTS	0.220	0.000903						0.065360	0.00026275					
WW1 TOP P. AUSTRALIS RHIZOMES	0.300	0.000536						0.051970	0.00009303					
WW1 MID 1 P. Australis RHIZOMES	0.250	0.000738	0.033925				0.0817	0.049540	0.00014476	0.008518				0.0205
WW1 MID 2 P. AUSTRALIS RHIZOMES	0.020	0.000047						0.003271	0.00014912					
WW1 BOTTOM P. AUSTRALIS RHIZOMES	0.030	0.000081						0.016970	0.00000952					
WW2 TOP P. AUSTRALIS SHOOTS	0.020	0.000039						0.009322	0.00004548					
WW2 MID 1 P. AUSTRALIS SHOOTS	0.030	0.000392	0.067042	0.274839	0.00124	0.0635	0.0305	0.004665	0.00002303	0.010361	0.064614	0.00031	0.0158	0.0047
WW2 MID 2 P. AUSTRALIS SHOOTS	0.030	0.000171			0.00073	0.056		0.009324	0.00006088			0.00006	0.0228	
WW2 BOTTOM P. AUSTRALIS SHOOTS	0.030	0.000186			0.00101	0.0964		0.001526	0.00006154			0.00001	0.0153	
WW2 TOP P. AUSTRALIS ROOTS	0.040	0.000145			0.0009	0.1033		0.001767	0.00000871			0.00001	0.0184	
WW2 MID 1 P. AUSTRALIS ROOTS	0.210	0.000677	0.191687				0.1954	0.067050	0.00000701	0.049385				0.0503
WW2 MID 2 P. AUSTRALIS ROOTS	0.140	0.000466						0.052360	0.00022127					
WW2 BOTTOM P. AUSTRALIS ROOTS	0.240	0.000736						0.042870	0.00018012					
WW2 TOP P. AUSTRALIS RHIZOMES	0.200	0.000677						0.038440	0.00012947					
WW2 MID 1 P. AUSTRALIS RHIZOMES	0.050	0.000175	0.01611				0.0461	0.008459	0.00012762	0.004868				0.0139
WW2 MID 2 P.AUSTRALIS RHIZOMES	0.030	0.000089						0.018590	0.00002732					
WW2 BOTTOM P. AUSTRALIS RHIZOMES	0.050	0.000086						0.012810	0.00005410					
WW4 TOP P. AUSTRALIS SHOOTS	0.060	0.000080						0.018220	0.00002216					
WW4 MID 1 P. AUSTRALIS SHOOTS	0.020	0.000152	0.378427	0.681355	0.00079	0.0625	0.1252	0.001291	0.00002624	0.067838	0.125315	0.0001	0.0083	0.0224
WW4 Mid 2 P. AUSTRALIS SHOOTS	0.200	0.001155			0.00191	0.1814		0.039630	0.00000809			0.00023	0.0364	
WW4 BOTTOM P. AUSTRALIS SHOOTS	0.230	0.001636			0.00199	0.1979		0.040540	0.00022787			0.00029	0.0376	
WW4 TOP P. AUSTRALIS ROOTS	0.020	0.000085			0.00077	0.0771		0.003728	0.00028783			0.00002	0.0137	
WW4 MID 1 P. AUSTRALIS ROOTS	0.180	0.000524	0.252553				0.182	0.020430	0.00001890	0.044905				0.0324
WW4 MID 2 P. AUSTRALIS ROOTS	0.200	0.000695						0.039630	0.00006047					
WW4 BOTTOM P. AUSTRALIS ROOTS	0.160	0.000281						0.041180	0.00013712					
WW4 TOP P. AUSTRALIS RHIZOMES	0.180	0.000520						0.030610	0.00007165					
WW4 MID 1 P. P. AUSTRALIS RHIZOMES	0.030	0.000110	0.050375				0.0515	0.010830	0.00008999	0.012573				0.0129
WW4 MID 2 P. AUSTRALIS RHIZOMES	0.040	0.000058						0.013860	0.00003617					
WW4 BOTTOM P. AUSTRALIS RHIZOMES	0.060	0.000070						0.015200	0.00001816					
WW6 TOP P. AUSTRALIS SHOOTS	0.080	0.000165						0.014220	0.00001824					
WW6 MID 1 P. AUSTRALIS SHOOTS	0.040	0.000447	0.08985	0.117919	0.00089	0.0582	0.05	0.015300	0.00002801	0.028811	0.039206	0.00035	0.0231	0.016
WW6 MID 2. P. AUSTRALIS SHOOTS	0.030	0.000332			0.00054	0.0431		0.002673	0.00019003			0.00003	0.0094	

Paddock and Plants	Cu	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Fe	Total pollutant mass (kg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	mg/kg					mg/kg		%					mg/kg	
WW6 BOTTOM P. AUSTRALIS SHOOTS	0.020	0.000296			0.00032	0.0256		0.002516	0.00002718			0.00003	0.0032	
WW6 TOP P. AUSTRALIS ROOTS	0.100	0.001321			0.00139	0.0877		0.039800	0.00003090			0.00052	0.0336	
WW6 MID 1 P. AUSTRALIS ROOTS	0.160	0.000442	0.027585				0.0932	0.059080	0.00052019	0.010143				0.0343
WW6 MID 2 P. AUSTRALIS ROOTS	0.090	0.000208						0.038510	0.00016129					
WW6 BOTTOM P. AUSTRALIS ROOTS	0.140	0.000022						0.058560	0.00008973					
WW6 TOP P.AUSTRALIS RHIZOMES	0.020	0.000064						0.003778	0.00000937					
WW6 MID 1 P. AUSTRALIS RHIZOMES	0.030	0.000006	0.000484				0.034	0.016050	0.00001009	0.000252	0.030075			0.0177
WW6 MID 2 P. AUSTRALIS RHIZOMES	0.040	0.000001						0.012550	0.00000337					
WW6 BOTTOM P. AUSTRALIS RHIZOMES	0.040	0.000006						0.010800	0.00000038					
WW7 TOP P. AUSTRALIS SHOOTS	0.040	0.000006						0.022040	0.00000011					
WW7 MID 1 P. AUSTRALIS SHOOTS	0.040	0.000293	0.059386	0.105628	0.00058	0.0453	0.0502	0.015300	0.00000287	0.01869	0.037664	0.00025	0.0196	0.0158
WW7 MID 2 P. AUSTRALIS SHOOTS	0.030	0.000305			0.00074	0.0454		0.002673	0.00012454			0.00003	0.0118	
WW7 BOTTOM P. AUSTRALIS SHOOTS	0.020	0.000135			0.00041	0.0493		0.002516	0.00002502			0.00001	0.0149	
WW7 TOP P. P. AUSTRALIS ROOTS	0.100	0.000850			0.00108	0.074		0.039800	0.00001411			0.00033	0.0298	
WW7 MID 1 P. AUSTRALIS ROOTS	0.160	0.000194	0.028143				0.0943	0.059080	0.00033472	0.011133				0.0373
WW7 MID 2 P. AUSTRALIS ROOTS	0.090	0.000276						0.038510	0.00007090					
WW7 BOTTOM P. AUSTRALIS ROOTS	0.140	0.000233						0.058560	0.00011900					
WW7 TOP P. AUSTRALIS RHIZOMES	0.020	0.000047						0.003778	0.00009955					
WW7 MID 1 P. AUSTRA RHIZOMES	0.030	0.000090	0.018099				0.0382	0.016050	0.00000744	0.007841				0.0166
WW7 MID 2 P. AUSTRALIS RHIZOMES	0.040	0.000160						0.012550	0.00005441					
WW7 BOTTOM P. AUST RHIZOMES	0.040	0.000045						0.010800	0.00004857					

Paddock and Plants	Cu	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Zn	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	mg/kg					mg/kg		mg/kg					mg/kg	
WW1 TOP P. AUSTRALIS SHOOTS	0.02	7.32E-05	0.026344	0.126197	0.00104	0.1124	0.0188	0.21	0.000691	0.142369	0.453572	0.00301	0.3244	0.1018
WW1 MID 1 P. AUSTRALIS SHOOTS	0.02	0.000142			0.00028	0.0201		0.09	0.000772			0.00143	0.1038	
WW1 MID 2 P. AUSTRALIS SHOOTS	0.03	0.00031			0.00129	0.075		0.13	0.001388			0.0052	0.3016	
WW1 BOTTOM P. AUSTRALIS SHOOTS	0.01	0.000177			0.00075	0.0393		0.06	0.000945			0.00246	0.1283	
WW1 TOP P. AUSTRALIS ROOTS	0.08	0.000231	0.065928				0.1588	0.34	0.001008	0.21468				0.5171
WW1 MID 1 P. AUSTRALIS ROOTS	0.04	8.76E-05						0.13	0.000303					
WW1 MID 2 P. AUSTRALIS ROOTS	0.22	0.000903						0.81	0.003271					
WW1 BOTTOM P. AUSTRALIS ROOTS	0.3	0.000536						0.64	0.001143					
WW1 TOP P. AUSTRALIS RHIZOMES	0.25	0.000738	0.033925				0.0817	0.44	0.001311	0.096524				0.2325
WW1 MID 1 P. Australis RHIZOMES	0.02	4.69E-05						0.12	0.000352					
WW1 MID 2 P. AUSTRALIS RHIZOMES	0.03	8.09E-05						0.2	0.000542					
WW1 BOTTOM P. AUSTRALIS RHIZOMES	0.02	3.85E-05						0.15	0.000368					
WW2 TOP P. AUSTRALIS SHOOTS	0.03	0.000392	0.067042	0.274839	0.00124	0.0635	0.0305	0.13	0.001647	0.276581	0.751843	0.00419	0.214	0.1257
WW2 MID 1 P. AUSTRALIS SHOOTS	0.03	0.000171			0.00073	0.056		0.17	0.001143			0.00318	0.2456	
WW2 MID 2 P. AUSTRALIS SHOOTS	0.03	0.000186			0.00101	0.0964		0.1	0.000553			0.0017	0.1628	
WW2 BOTTOM P. AUSTRALIS SHOOTS	0.04	0.000145			0.0009	0.1033		0.09	0.000345			0.00202	0.2308	
WW2 TOP P. AUSTRALIS ROOTS	0.21	0.000677	0.191687				0.1954	0.42	0.001384	0.395444				0.4031
WW2 MID 1 P. AUSTRALIS ROOTS	0.14	0.000466						0.46	0.001579					
WW2 MID 2 P. AUSTRALIS ROOTS	0.24	0.000736						0.28	0.000837					
WW2 BOTTOM P. AUSTRALIS ROOTS	0.2	0.000677						0.44	0.001473					
WW2 TOP P. AUSTRALIS RHIZOMES	0.05	0.000175	0.01611				0.0461	0.36	0.001159	0.079818				0.2286
WW2 MID 1 P. AUSTRALIS RHIZOMES	0.03	8.88E-05						0.16	0.000459					
WW2 MID 2 P.AUSTRALIS RHIZOMES	0.05	8.62E-05						0.18	0.000314					
WW2 BOTTOM P. AUSTRALIS RHIZOMES	0.06	7.96E-05						0.14	0.000197					
WW4 TOP P. AUSTRALIS SHOOTS	0.02	0.000152	0.378427	0.681355	0.00079	0.0625	0.1252	0.15	0.000937	0.774308	1.58131	0.00305	0.2426	0.2561
WW4 MID 1 P. AUSTRALIS SHOOTS	0.2	0.001155			0.00191	0.1814		0.25	0.001429			0.00254	0.2415	
WW4 Mid 2 P. AUSTRALIS SHOOTS	0.23	0.001636			0.00199	0.1979		0.44	0.003138			0.00466	0.4637	
WW4 BOTTOM P. AUSTRALIS SHOOTS	0.02	8.47E-05			0.00077	0.0771		0.14	0.00069			0.00241	0.241	
WW4 TOP P. AUSTRALIS ROOTS	0.18	0.000524	0.252553				0.182	0.58	0.001709	0.569373				0.4104
WW4 MID 1 P. AUSTRALIS ROOTS	0.2	0.000695						0.25	0.00086					
WW4 MID 2 P. AUSTRALIS ROOTS	0.16	0.000281						0.6	0.001037					
WW4 BOTTOM P. AUSTRALIS ROOTS	0.18	0.00052						0.32	0.000949					
WW4 TOP P. AUSTRALIS RHIZOMES	0.03	0.00011	0.050375				0.0515	0.12	0.000402	0.237629				0.2431
WW4 MID 1 P. P. AUSTRALIS RHIZOMES	0.04	5.79E-05						0.19	0.000252					
WW4 MID 2 P. AUSTRALIS RHIZOMES	0.06	7.03E-05						0.4	0.00048					
WW4 BOTTOM P. AUSTRALIS RHIZOMES	0.08	0.000165						0.39	0.000767					

Paddock and Plants	Cu	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Zn	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	mg/kg					mg/kg		mg/kg					mg/kg	
WW6 TOP P. AUSTRALIS SHOOTS	0.04	0.000447	0.08985	0.117919	0.00089	0.0582	0.05	0.16	0.001991	0.304198	0.365335	0.00272	0.1768	0.1692
WW6 MID 1 P. AUSTRALIS SHOOTS	0.03	0.000332			0.00054	0.0431		0.16	0.001672			0.00216	0.1724	
WW6 MID 2. P. AUSTRALIS SHOOTS	0.02	0.000296			0.00032	0.0256		0.1	0.001178			0.00123	0.0984	
WW6 BOTTOM P. AUSTRALIS SHOOTS	0.1	0.001321			0.00139	0.0877		0.25	0.003271			0.00364	0.2294	
WW6 TOP P. AUSTRALIS ROOTS	0.16	0.000442	0.027585				0.0932	0.25	0.000681	0.058521				0.1978
WW6 MID 1 P. AUSTRALIS ROOTS	0.09	0.000208						0.21	0.000482					
WW6 MID 2 P. AUSTRALIS ROOTS	0.14	2.2E-05						0.29	0.000047					
WW6 BOTTOM P. AUSTRALIS ROOTS	0.02	6.41E-05						0.13	0.000351					
WW6 TOP P.AUSTRALIS RHIZOMES	0.03	5.57E-06	0.000484				0.034	0.21	0.000044	0.002616	0.271826			0.1836
WW6 MID 1 P. AUSTRALIS RHIZOMES	0.04	1.24E-06						0.19	0.000006					
WW6 MID 2 P. AUSTRALIS RHIZOMES	0.04	4.1E-07						0.14	0.000001					
WW6 BOTTOM P. AUSTRALIS RHIZOMES	0.04	5.69E-06						0.14	0.000019					
WW7 TOP P. AUSTRALIS SHOOTS	0.04	0.000293	0.059386	0.105628	0.00058	0.0453	0.0502	0.16	0.001305	0.205749	0.351815	0.00232	0.182	0.1741
WW7 MID 1 P. AUSTRALIS SHOOTS	0.03	0.000305			0.00074	0.0454		0.16	0.001539			0.00291	0.1782	
WW7 MID 2 P. AUSTRALIS SHOOTS	0.02	0.000135			0.00041	0.0493		0.1	0.000538			0.00118	0.1406	
WW7 BOTTOM P. AUSTRALIS SHOOTS	0.1	0.00085			0.00108	0.074		0.25	0.002105			0.00297	0.2029	
WW7 TOP P. P. AUSTRALIS ROOTS	0.16	0.000194	0.028143				0.0943	0.25	0.000299	0.063461				0.2126
WW7 MID 1 P. AUSTRALIS ROOTS	0.09	0.000276						0.21	0.00064					
WW7 MID 2 P. AUSTRALIS ROOTS	0.14	0.000233						0.29	0.000495					
WW7 BOTTOM P. AUSTRALIS ROOTS	0.02	4.73E-05						0.13	0.000259					
WW7 TOP P. AUSTRALIS RHIZOMES	0.03	8.98E-05	0.018099				0.0382	0.21	0.000713	0.082605				0.1744
WW7 MID 1 P. AUSTRA RHIZOMES	0.04	0.00016						0.19	0.00073					
WW7 MID 2 P. AUSTRALIS RHIZOMES	0.04	4.51E-05						0.14	0.000149					
WW7 BOTTOM P. AUST RHIZOMES	0.04	0.000187						0.14	0.000611					

Paddock and Plants	U	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	mg/kg					mg/kg	
WW1 TOP P. AUSTRALIS SHOOTS	0.01	0.000037	0.011084	0.02613	0.00016	0.0168	0.0079
WW1 MID 1 P. AUSTRALIS SHOOTS	0	0.000039			0.0001	0.0073	
WW1 MID 2 P. AUSTRALIS SHOOTS	0.01	0.000118			0.00027	0.0157	
WW1 BOTTOM P. AUSTRALIS SHOOTS	0.01	0.000101			0.00017	0.0089	
WW1 TOP P. AUSTRALIS ROOTS	0.02	0.000062	0.010466				0.0252
WW1 MID 1 P. AUSTRALIS ROOTS	0.02	0.000037					
WW1 MID 2 P. AUSTRALIS ROOTS	0.03	0.000129					
WW1 BOTTOM P. AUSTRALIS ROOTS	0.03	0.000051					
WW1 TOP P. AUSTRALIS RHIZOMES	0.02	0.000057	0.00458				0.011
WW1 MID 1 P. Australis RHIZOMES	0.01	0.000024					
WW1 MID 2 P. AUSTRALIS RHIZOMES	0.01	0.000023					
WW1 BOTTOM P. AUSTRALIS RHIZOMES	0.01	0.000018					
WW2 TOP P. AUSTRALIS SHOOTS	0.01	0.000116	0.021026	0.046741	0.00025	0.013	0.0096
WW2 MID 1 P. AUSTRALIS SHOOTS	0.01	0.000065			0.00016	0.0123	
WW2 MID 2 P. AUSTRALIS SHOOTS	0.01	0.00006			0.00014	0.0137	
WW2 BOTTOM P. AUSTRALIS SHOOTS	0.01	0.000039			0.00011	0.0129	
WW2 TOP P. AUSTRALIS ROOTS	0.03	0.000108	0.022239				0.0227
WW2 MID 1 P. AUSTRALIS ROOTS	0.02	0.000063					
WW2 MID 2 P. AUSTRALIS ROOTS	0.02	0.000069					
WW2 BOTTOM P. AUSTRALIS ROOTS	0.02	0.000057					
WW2 TOP P. AUSTRALIS RHIZOMES	0.01	0.00003	0.003476				0.01
WW2 MID 1 P. AUSTRALIS RHIZOMES	0.01	0.000031					
WW2 MID 2 P.AUSTRALIS RHIZOMES	0.01	0.000015					
WW2 BOTTOM P. AUSTRALIS RHIZOMES	0.01	0.000017					
WW4 TOP P. AUSTRALIS SHOOTS	0.01	0.000053	0.044281	0.081694	0.00014	0.0108	0
WW4 MID 1 P. AUSTRALIS SHOOTS	0.02	0.000135			0.00023	0.0216	
WW4 Mid 2 P. AUSTRALIS SHOOTS	0.02	0.000131			0.00019	0.0185	
WW4 BOTTOM P. AUSTRALIS SHOOTS	0.01	0.000034			0.0001	0.0105	
WW4 TOP P. AUSTRALIS ROOTS	0.02	0.000051	0.027465				0.0198
WW4 MID 1 P. AUSTRALIS ROOTS	0.02	0.000081					
WW4 MID 2 P. AUSTRALIS ROOTS	0.02	0.000038					
WW4 BOTTOM P. AUSTRALIS ROOTS	0.02	0.000049					
WW4 TOP P. AUSTRALIS RHIZOMES	0.01	0.000031	0.009948				0.0102
WW4 MID 1 P. P. AUSTRALIS RHIZOMES	0.01	0.00001					
WW4 MID 2 P. AUSTRALIS RHIZOMES	0.01	0.000017					
WW4 BOTTOM P. AUSTRALIS RHIZOMES	0.01	0.000021					
WW6 TOP P. AUSTRALIS SHOOTS	0.01	0.000156	0.020073	0.027376	0.00029	0.019	0.0112
WW6 MID 1 P. AUSTRALIS SHOOTS	0.01	0.000086			0.00011	0.0091	

Paddock and Plants	U	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	mg/kg					mg/kg	
WW6 MID 2. P. AUSTRALIS SHOOTS	0.01	0.000108			0.00011	0.009	
WW6 BOTTOM P. AUSTRALIS SHOOTS	0.01	0.000184			0.00021	0.0134	
WW6 TOP P. AUSTRALIS ROOTS	0.05	0.000133	0.007167				0.0242
WW6 MID 1 P. AUSTRALIS ROOTS	0.01	0.000027					
WW6 MID 2 P. AUSTRALIS ROOTS	0.02	0.000004					
WW6 BOTTOM P. AUSTRALIS ROOTS	0.01	0.000027					
WW6 TOP P.AUSTRALIS RHIZOMES	0.01	0.000002	0.000136	0.018995			0.0095
WW6 MID 1 P. AUSTRALIS RHIZOMES	0.01	0					
WW6 MID 2 P. AUSTRALIS RHIZOMES	0.01	0					
WW6 BOTTOM P. AUSTRALIS RHIZOMES	0.01	0.000001					
WW7 TOP P. AUSTRALIS SHOOTS	0.01	0.000103	0.013128	0.023417	0.0002	0.0155	0.0111
WW7 MID 1 P. AUSTRALIS SHOOTS	0.01	0.00008			0.00016	0.0096	
WW7 MID 2 P. AUSTRALIS SHOOTS	0.01	0.000049			0.0001	0.012	
WW7 BOTTOM P. AUSTRALIS SHOOTS	0.01	0.000119			0.00017	0.0115	
WW7 TOP P. P. AUSTRALIS ROOTS	0.05	0.000059	0.005732				0.0192
WW7 MID 1 P. AUSTRALIS ROOTS	0.01	0.000036					
WW7 MID 2 P. AUSTRALIS ROOTS	0.02	0.000038					
WW7 BOTTOM P. AUSTRALIS ROOTS	0.01	0.00002					
WW7 TOP P. AUSTRALIS RHIZOMES	0.01	0.000036	0.004557				0.0096
WW7 MID 1 P. AUSTRA RHIZOMES	0.01	0.000042					
WW7 MID 2 P. AUSTRALIS RHIZOMES	0.01	0.000013					
WW7 BOTTOM P. AUST RHIZOMES	0.01	0.000031					

Paddock and Plants	Ca	Total pollutant mass (kg)	Average plants compartment pollutant mass (kg) within a paddock with number of plots	Total Average pollutant mass (kg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Cr	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	%					mg/kg		mg/kg					mg/kg	
WW1 TOP P. AUSTRALIS SHOOTS	0.05	0.00015	0.0312	0.0458	0.0003	0.0280	0.0223	0.03	0.00011256	0.0423	0.1084	0.0007	0.0785	0.0302
WW1 MID 1 P. AUSTRALIS SHOOTS	0.03	0.00024			0.0003	0.0250		0.01	0.00004340			0.0001	0.0088	
WW1 MID 2 P. AUSTRALIS SHOOTS	0.02	0.00019			0.0003	0.0165		0.08	0.00089570			0.0016	0.0938	
WW1 BOTTOM P. AUSTRALIS SHOOTS	0.02	0.00026			#REF!	#REF!		0.01	0.00007589					
WW1 TOP P. AUSTRALIS ROOTS	0.01	0.00003	0.0101				0.0218	0.09	0.00025315	0.0501				0.1080
WW1 MID 1 P. AUSTRALIS ROOTS	0.04	0.00009						0.03	0.00006291					
WW1 MID 2 P. AUSTRALIS ROOTS	0.02	0.00008						0.17	0.00068581					
WW1 TOP P. AUSTRALIS RHIZOMES	0.02	0.00007	0.0045				0.0109	0.12	0.00036301	0.0160				0.0386
WW1 MID 1 P. Australis RHIZOMES	0.01	0.00002						0.01	0.00001484					
WW1 MID 2 P. AUSTRALIS RHIZOMES	0.01	0.00002						0.01	0.00003698					
WW1 BOTTOM P. AUSTRALIS RHIZOMES	0.00	0.00001						0.01	0.00001284					
WW2 TOP P. AUSTRALIS SHOOTS	0.03	0.00039	0.0551	0.0755	0.0005	0.0246	0.0250	0.01	0.00013050	0.0475	0.1741	0.0006	0.0323	0.0216
WW2 MID 1 P. AUSTRALIS SHOOTS	0.03	0.00017			0.0002	0.0188		0.07	0.00045342			0.0011	0.0817	
WW2 MID 2 P. AUSTRALIS SHOOTS	0.02	0.00010			0.0002	0.0161		0.01	0.00002912			0.0003	0.0312	
WW2 BOTTOM P. AUSTRALIS SHOOTS	0.02	0.00007			0.0001	0.0158		0.01	0.00002025			0.0004	0.0474	
WW2 TOP P. AUSTRALIS ROOTS	0.02	0.00008	0.0187				0.0190	0.14	0.00047223	0.1184				0.1207
WW2 MID 1 P. AUSTRALIS ROOTS	0.02	0.00006						0.16	0.00054180					
WW2 MID 2 P. AUSTRALIS ROOTS	0.02	0.00006						0.09	0.00027210					
WW2 BOTTOM P. AUSTRALIS ROOTS	0.02	0.00005						0.09	0.00029249					
WW2 TOP P. AUSTRALIS RHIZOMES	0.00	0.00001	0.0018				0.0051	0.01	0.00002972	0.0082				0.0235
WW2 MID 1 P. AUSTRALIS RHIZOMES	0.00	0.00001						0.02	0.00006227					
WW2 MID 2 P.AUSTRALIS RHIZOMES	0.00	0.00001						0.01	0.00002560					
WW2 BOTTOM P. AUSTRALIS RHIZOMES	0.01	0.00002						0.07	0.00010138					
WW4 TOP P. AUSTRALIS SHOOTS	0.02	0.00010	0.0508	0.0843	0.0002	0.0160	0.0168	0.01	0.00003198	0.2195	0.3591	0.0002	0.0166	0.0726
WW4 MID 1 P. AUSTRALIS SHOOTS	0.01	0.00007			0.0001	0.0113		0.10	0.00057730			0.0010	0.0911	
WW4 Mid 2 P. AUSTRALIS SHOOTS	0.02	0.00015			0.0002	0.0184		0.14	0.00097270			0.0012	0.1210	
WW4 BOTTOM P. AUSTRALIS SHOOTS	0.02	0.00009			0.0002	0.0169		0.03	0.00017390			0.0005	0.0492	
WW4 TOP P. AUSTRALIS ROOTS	0.02	0.00005	0.0220				0.0159	0.04	0.00013113	0.1088				0.0784
WW4 MID 1 P. AUSTRALIS ROOTS	0.01	0.00004						0.10	0.00034738					
WW4 MID 2 P. AUSTRALIS ROOTS	0.02	0.00003						0.12	0.00020288					
WW4 BOTTOM P. AUSTRALIS ROOTS	0.02	0.00005						0.06	0.00018904					
WW4 TOP P. AUSTRALIS RHIZOMES	0.02	0.00006	0.0115				0.0117	0.01	0.00004542	0.0308				0.0315
WW4 MID 1 P. P. AUSTRALIS RHIZOMES	0.00	0.00000						0.03	0.00003406					
WW4 MID 2 P. AUSTRALIS RHIZOMES	0.01	0.00001						0.03	0.00003900					
WW4 BOTTOM P. AUSTRALIS RHIZOMES	0.01	0.00003						0.06	0.00012785					
WW6 TOP P. AUSTRALIS SHOOTS	0.08	0.00102	0.0604	0.0661	0.0011	0.0695	0.0336	0.10	0.00127926	0.0884	0.0914	0.0015	0.0999	0.0492
WW6 MID 1 P. AUSTRALIS SHOOTS	0.02	0.00019			0.0002	0.0175		0.01	0.00005187			0.0002	0.0178	

Paddock and Plants	Ca	Total pollutant mass (kg)	Average plants compartment pollutant mass (kg) within a paddock with number of plots	Total Average pollutant mass (kg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Cr	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	%					mg/kg		mg/kg					mg/kg	
WW6 MID 2. P. AUSTRALIS SHOOTS	0.02	0.00023			0.0002	0.0187		0.01	0.00006263			0.0001	0.0073	
WW6 BOTTOM P. AUSTRALIS SHOOTS	0.01	0.00016			0.0002	0.0154		0.07	0.00096326			0.0010	0.0625	
WW6 TOP P. AUSTRALIS ROOTS	0.02	0.00004	0.0057				0.0192	0.09	0.00025362	0.0030				0.0599
WW6 MID 1 P. AUSTRALIS ROOTS	0.01	0.00003						0.07	0.00017102					
WW6 MID 2 P. AUSTRALIS ROOTS	0.02	0.00000						0.18	0.00002824					
WW6 BOTTOM P. AUSTRALIS ROOTS	0.03	0.00008						0.01	0.00001949					
WW6 TOP P.AUSTRALIS RHIZOMES	0.00	0.00000	0.0001	0.0452			0.0052	0.01	0.00000107	0.0000	0.0105			0.0286
WW6 MID 1 P. AUSTRALIS RHIZOMES	0.00	0.00000						0.02	0.00000055					
WW6 MID 2 P. AUSTRALIS RHIZOMES	0.01	0.00000						0.03	0.00000030					
WW6 BOTTOM P. AUSTRALIS RHIZOMES	0.01	0.00000						0.07	0.00000894					
WW7 TOP P. AUSTRALIS SHOOTS	0.08	0.00067	0.0397	0.0455	0.0007	0.0554	0.0336	0.10	0.00083842	0.0073	0.0120	0.0010	0.0760	0.0487
WW7 MID 1 P. AUSTRALIS SHOOTS	0.02	0.00018			0.0002	0.0142		0.01	0.00004774			0.0003	0.0212	
WW7 MID 2 P. AUSTRALIS SHOOTS	0.02	0.00010			0.0001	0.0171		0.01	0.00002861			0.0004	0.0431	
WW7 BOTTOM P. AUSTRALIS SHOOTS	0.01	0.00011			0.0002	0.0131		0.07	0.00061982			0.0009	0.0633	
WW7 TOP P. P. AUSTRALIS ROOTS	0.02	0.00002	0.0055				0.0184	0.09	0.00011148	0.0031				0.0820
WW7 MID 1 P. AUSTRALIS ROOTS	0.01	0.00004						0.07	0.00022681					
WW7 MID 2 P. AUSTRALIS ROOTS	0.02	0.00003						0.18	0.00030005					
WW7 BOTTOM P. AUSTRALIS ROOTS	0.03	0.00006						0.01	0.00001438					
WW7 TOP P. AUSTRALIS RHIZOMES	0.00	0.00001	0.0004				0.0054	0.01	0.00001729	0.0015				0.0329
WW7 MID 1 P. AUSTRA RHIZOMES	0.00	0.00002						0.02	0.00007082					
WW7 MID 2 P. AUSTRALIS RHIZOMES	0.01	0.00001						0.03	0.00003303					
WW7 BOTTOM P. AUST RHIZOMES	0.01	0.00003						0.07	0.00029446					

Paddock and Plants	Total biomass Dry Mass (g)	Total biomass Dry Mass (kg)	Estimated Total number of plants (plots) in paddock	S (mg/kg)	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
				mg/kg					mg/kg	
WW1 TOP SCHOENO SHOOTS	4.05	0.00405	150	31.08	0.1259	13.9813	27.1194	0.1977	26.0426	26.0907
WW1 MID 1 SCHOENO SHOOTS	2.83	0.00283		30.89	0.0874			0.1781	25.3010	
WW1 MID 2 SCHOENO SHOOTS	3.06	0.00306		22.47	0.0688			0.1182	21.4097	
WW1 BOTTOM SCHOENO SHOOTS	4.35	0.00435		20.87	0.0908			0.2292	24.0019	
WW1 TOP SCHOENO. ROOTS	1.63	0.00163	150	23.56	0.0384	6.6838				22.0042
WW1 MID 1 SCHOENO. ROOTS	2.69	0.00269		22.62	0.0608					
WW1 MID 2 SCHOENO, ROOTS	1.89	0.00189		18.93	0.0358					
WW1 BOTTOM SCHOENO. ROOTS	1.89	0.00189		22.86	0.0432					
WW1 TOP SCHOENO. RHIZOMES	1.91	0.00191	150	17.48	0.0334	6.4543				23.5450
WW1 MID 1 SCHOENO. RHIZOMES	1.52	0.00152		19.64	0.0299					
WW1 MID 2 SCHOENO RHIZOMES	0.57	0.00057		23.94	0.0136					
WW1 BOTTOM SCHOENO. RHIZOMES	3.31	0.00331		28.77	0.0952					
WW2 TOP SCHOENO. SHOOTS	3.54	0.00354	300	29.68	0.1051	30.3794	65.7659	0.2548	29.9385	29.0573
WW2 MID 1 SCHOENO. SHOOTS	4.63	0.00463		24.41	0.1130			0.1975	22.6960	
WW2 MID 2 SCHOENO. SHOOTS	2.89	0.00289		37.83	0.1093			0.2222	23.9149	
WW2 BOTTOM SCHOENO SHOOT	2.88	0.00288		26.96	0.0776			0.2025	22.0565	
WW2 TOP SCHOENO. ROOTS	3.1	0.0031	300	35.71	0.1107	21.9659				23.6003
WW2 MID 1 SCHOENO. ROOTS	2.05	0.00205		16.85	0.0345					
WW2 MID 2 SCHOENO. ROOTS	4.63	0.00463		20.35	0.0942					
WW2 BOTTOM SCHOENO. ROOTS	2.63	0.00263		20.31	0.0534					
WW2 TOP SCHOENO. RHIZOMES	1.87	0.00187	300	20.86	0.0390	13.4206				19.1791
WW2 MID 1 SCHOENO. RHIZOMES	2.02	0.00202		24.70	0.0499					
WW2 MID 2 SCHOENO. RHIZOMES	1.77	0.00177		10.52	0.0186					
WW2 BOTTOM SCHOENO. RHIZOMES	3.67	0.00367		19.46	0.0714					
WW4 TOP SCHOENO. SHOOTS	3.42	0.00342	500	46.20	0.1580	96.7159	172.7819	0.3245	28.3696	42.9133
WW4 MID 1 SCHOENO.SHOOTS	5.73	0.00573		58.72	0.3365			0.5358	34.1464	
WW4 MID 2 SCHOENO.SHOOTS	4.21	0.00421		36.87	0.1552			0.2781	23.4073	
WW4 BOTTOM SCHOENO.SHOOTS	4.67	0.00467		26.56	0.1240			0.2439	21.2988	
WW4 TOP SCHOENO. ROOTS	3.56	0.00356	500	15.80	0.0562	40.0116				18.4385
WW4 MID 1 SCHOENO. ROOTS	6.71	0.00671		19.97	0.1340					
WW4 MID 2 SCHOENO. ROOTS	3.7	0.0037		18.73	0.0693					
WW4 BOTTOM SCHOENO. ROOTS	3.39	0.00339		17.86	0.0605					
WW4 TOP SHOENO. RHIZOMES	4.46	0.00446	500	24.73	0.1103	36.0543				19.1397
WW4 MID 1 SCHOENO. RHIZOMES	3.25	0.00325		20.09	0.0653					
WW4 MID 2 SCHOENO. RHIZOMES	3.97	0.00397		13.49	0.0536					
WW4 BOTTOM SCHOENO. RHIZOMES	3.39	0.00339		17.49	0.0593					
WW6 TOP SCHOENO.SHOOTS	3.8	0.0038	150	34.34	0.1305	16.4798	34.4467	0.2483	25.8057	19.1397
WW6 MID 1 SCHOENO.SHOOTS	3.01	0.00301		38.46	0.1158			0.2202	29.7189	
WW6 MID 2 SCHOENO. SHOOTS	4.85	0.00485		23.50	0.1140			0.2290	22.5824	
WW6 BOTTOM SCHOENO. SHOOTS	1.9	0.0019		41.70	0.0792			0.2211	30.0031	

Paddock and Plants	Total biomass Dry Mass (g)	Total biomass Dry Mass (kg)	Estimated Total number of plants (plots) in paddock	S (mg/kg)	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
				mg/kg					mg/kg	
WW6 TOP SCHOENO. ROOTS	2.44	0.00244	150	16.90	0.0412	6.8171				21.2867
WW6 MID 1 SCHOENO. ROOTS	2.53	0.00253		20.08	0.0508					
WW6 MID 2 SCHOENO. ROOTS	2.04	0.00204		20.58	0.0420					
WW6 BOTTOM SCHOENO. ROOTS	1.53	0.00153		31.22	0.0478					
WW6 TOP SCHOENO. RHIZOMES	3.38	0.00338	150	22.64	0.0765	11.1498				23.9009
WW6 MID 1 SCHOENO. RHIZOMES	1.87	0.00187		28.69	0.0537					
WW6 MID 2 SCHOENO RHIZOMES	3.25	0.00325		22.47	0.0730					
WW6 BOTTOM SCHOENO. RHIZOMES	3.94	0.00394		23.89	0.0941					

Paddock and Plants	Total biomass Dry Mass (g)	Total biomass Dry Mass (kg)	Estimated Total number of plants (plots) in paddock	Cl	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
				mg/kg					mg/kg	
WW1 TOP SCHOENO SHOOTS	4.05	0.00405	150	27.20	0.11016	10.6572375	17.18195775	0.14550245	19.1702833	19.8875
WW1 MID 1 SCHOENO SHOOTS	2.83	0.00283		19.95	0.056459			0.08109893	11.5197344	
WW1 MID 2 SCHOENO SHOOTS	3.06	0.00306		17.00	0.05202			0.06333366	11.4734891	
WW1 BOTTOM SCHOENO SHOOTS	4.35	0.00435		15.07	0.065555			0.1682505	17.6178534	
WW1 TOP SCHOENO. ROOTS	1.63	0.00163	150	14.81	0.02414	3.081290625				10.1442
WW1 MID 1 SCHOENO. ROOTS	2.69	0.00269		7.22	0.01943					
WW1 MID 2 SCHOENO, ROOTS	1.89	0.00189		4.49	0.00849					
WW1 BOTTOM SCHOENO. ROOTS	1.89	0.00189		15.93	0.030108					
WW1 TOP SCHOENO. RHIZOMES	1.91	0.00191	150	5.87	0.011202	3.443429625				12.5615
WW1 MID 1 SCHOENO. RHIZOMES	1.52	0.00152		3.43	0.005211					
WW1 MID 2 SCHOENO RHIZOMES	0.57	0.00057		4.95	0.002824					
WW1 BOTTOM SCHOENO. RHIZOMES	3.31	0.00331		21.93	0.072588					
WW2 TOP SCHOENO. SHOOTS	3.54	0.00354	300	19.84	0.070234	22.5000525	41.33	0.15473923	18.1832233	21.5209
WW2 MID 1 SCHOENO. SHOOTS	4.63	0.00463		23.08	0.10686			0.13889992	15.965508	
WW2 MID 2 SCHOENO. SHOOTS	2.89	0.00289		18.99	0.054881			0.10245027	11.0280161	
WW2 BOTTOM SCHOENO SHOOT	2.88	0.00288		23.62	0.068026			0.15497401	16.8817004	
WW2 TOP SCHOENO. ROOTS	3.1	0.0031	300	21.56	0.066836	14.53177425				15.6130
WW2 MID 1 SCHOENO. ROOTS	2.05	0.00205		7.28	0.014928					
WW2 MID 2 SCHOENO. ROOTS	4.63	0.00463		9.57	0.044323					
WW2 BOTTOM SCHOENO. ROOTS	2.63	0.00263		25.73	0.06767					
WW2 TOP SCHOENO. RHIZOMES	1.87	0.00187	300	9.45	0.01767	4.2979305				6.1421
WW2 MID 1 SCHOENO. RHIZOMES	2.02	0.00202		8.47	0.017111					
WW2 MID 2 SCHOENO. RHIZOMES	1.77	0.00177		1.83	0.003246					
WW2 BOTTOM SCHOENO. RHIZOMES	3.67	0.00367		5.25	0.019279					
WW4 TOP SCHOENO. SHOOTS	3.42	0.00342	500	17.51	0.059884	50.2323375	92.80	0.15071014	13.1739633	22.2883
WW4 MID 1 SCHOENO.SHOOTS	5.73	0.00573		26.85	0.153851			0.2583705	16.4672084	
WW4 MID 2 SCHOENO.SHOOTS	4.21	0.00421		21.69	0.091315			0.15035242	12.6559276	
WW4 BOTTOM SCHOENO.SHOOTS	4.67	0.00467		20.73	0.096809			0.18295578	15.9786707	
WW4 TOP SCHOENO. ROOTS	3.56	0.00356	500	16.97	0.060413	30.2244				13.9283
WW4 MID 1 SCHOENO. ROOTS	6.71	0.00671		11.05	0.074146					
WW4 MID 2 SCHOENO. ROOTS	3.7	0.0037		12.72	0.047064					
WW4 BOTTOM SCHOENO. ROOTS	3.39	0.00339		17.75	0.060173					
WW4 TOP SHOENO. RHIZOMES	4.46	0.00446	500	6.82	0.030413	12.3418675				6.5518
WW4 MID 1 SCHOENO. RHIZOMES	3.25	0.00325		9.35	0.030375					
WW4 MID 2 SCHOENO. RHIZOMES	3.97	0.00397		3.02	0.011974					
WW4 BOTTOM SCHOENO. RHIZOMES	3.39	0.00339		7.66	0.025974					
WW6 TOP SCHOENO.SHOOTS	3.8	0.0038	150	15.34	0.058292	13.81501125	24.49	0.10750186	11.1748295	27.1682
WW6 MID 1 SCHOENO.SHOOTS	3.01	0.00301		32.38	0.097464			0.1721098	23.2266937	
WW6 MID 2 SCHOENO. SHOOTS	4.85	0.00485		28.75	0.139438			0.20711225	20.4252712	
WW6 BOTTOM SCHOENO. SHOOTS	1.9	0.0019		38.53	0.073207			0.166463	22.5865672	
WW6 TOP SCHOENO. ROOTS	2.44	0.00244	150	12.11	0.029548	5.34517125				16.6906

Paddock and Plants	Total biomass Dry Mass (g)	Total biomass Dry Mass (kg)	Estimated Total number of plants (plots) in paddock	Cl	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
				mg/kg					mg/kg	
WW6 MID 1 SCHOENO. ROOTS	2.53	0.00253		16.37	0.041416					
WW6 MID 2 SCHOENO. ROOTS	2.04	0.00204		17.55	0.035802					
WW6 BOTTOM SCHOENO. ROOTS	1.53	0.00153		23.38	0.035771					
WW6 TOP SCHOENO. RHIZOMES	3.38	0.00338	150	5.82	0.019661	5.334326625				11.4348
WW6 MID 1 SCHOENO. RHIZOMES	1.87	0.00187		17.77	0.03323					
WW6 MID 2 SCHOENO RHIZOMES	3.25	0.00325		9.81	0.031873					
WW6 BOTTOM SCHOENO. RHIZOMES	3.94	0.00394		14.59	0.057485					

Paddock and Plants	Ca	Total pollutant mass (kg)	Average plants compartment pollutant mass (kg) within a paddock with number of plots	Total Average pollutant mass (kg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Cr	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	%					mg/kg		mg/kg					mg/kg	
WW1 TOP SCHOENO SHOOTS	0.02	0.00009	0.0117	0.0218	0.0001	0.0192	0.0219	0.01	0.00002066	0.0330	0.0842	0.0002	0.0315	0.0616
WW1 MID 1 SCHOENO SHOOTS	0.03	0.00010			0.0002	0.0264		0.02	0.00005915			0.0005	0.0666	
WW1 MID 2 SCHOENO SHOOTS	0.02	0.00007			0.0001	0.0188		0.01	0.00002356			0.0002	0.0443	
WW1 BOTTOM SCHOENO SHOOTS	0.01	0.00006			0.0001	0.0153		0.18	0.00077648			0.0013	0.1355	
WW1 TOP SCHOENO. ROOTS	0.02	0.00004	0.0062				0.0205	0.08	0.00013643	0.0278				0.0914
WW1 MID 1 SCHOENO. ROOTS	0.03	0.00007						0.09	0.00024936					
WW1 MID 2 SCHOENO, ROOTS	0.01	0.00003						0.09	0.00016953					
WW1 BOTTOM SCHOENO. ROOTS	0.02	0.00003						0.10	0.00018503					
WW1 TOP SCHOENO. RHIZOMES	0.01	0.00002	0.0038				0.0140	0.04	0.00008213	0.0235				0.0857
WW1 MID 1 SCHOENO. RHIZOMES	0.01	0.00002						0.11	0.00016006					
WW1 MID 2 SCHOENO RHIZOMES	0.02	0.00001						0.09	0.00005119					
WW1 BOTTOM SCHOENO. RHIZOMES	0.02	0.00005						0.10	0.00033299					
WW2 TOP SCHOENO. SHOOTS	0.03	0.00012	0.0348	0.0618	0.0002	0.0226	0.0333	0.03	0.00011470	0.0391	0.1862	0.0008	0.0917	0.0374
WW2 MID 1 SCHOENO. SHOOTS	0.03	0.00012			0.0002	0.0224		0.05	0.00023891			0.0007	0.0844	
WW2 MID 2 SCHOENO. SHOOTS	0.05	0.00014			0.0003	0.0271		0.05	0.00014970			0.0007	0.0722	
WW2 BOTTOM SCHOENO SHOOT	0.03	0.00009			0.0002	0.0202		0.01	0.00001757			0.0003	0.0324	
WW2 TOP SCHOENO. ROOTS	0.01	0.00004	0.0174				0.0187	0.10	0.00032085	0.0674				0.0724
WW2 MID 1 SCHOENO. ROOTS	0.02	0.00004						0.07	0.00015027					
WW2 MID 2 SCHOENO. ROOTS	0.02	0.00010						0.07	0.00031299					
WW2 BOTTOM SCHOENO. ROOTS	0.02	0.00005						0.04	0.00011493					
WW2 TOP SCHOENO. RHIZOMES	0.01	0.00003	0.0096				0.0137	0.18	0.00034445	0.0797				0.1139
WW2 MID 1 SCHOENO. RHIZOMES	0.02	0.00004						0.17	0.00034481					
WW2 MID 2 SCHOENO. RHIZOMES	0.01	0.00001						0.12	0.00020851					
WW2 BOTTOM SCHOENO. RHIZOMES	0.01	0.00005						0.04	0.00016478					
WW4 TOP SCHOENO. SHOOTS	0.05	0.00017	0.1127	0.1846	0.0003	0.0285	0.0500	0.04	0.00013235	0.0547	0.4032	0.0011	0.0927	0.0243
WW4 MID 1 SCHOENO.SHOOTS	0.08	0.00043			0.0006	0.0394		0.05	0.00026358			0.0012	0.0743	
WW4 MID 2 SCHOENO.SHOOTS	0.04	0.00017			0.0003	0.0234		0.01	0.00003073			0.0005	0.0413	
WW4 BOTTOM SCHOENO.SHOOTS	0.03	0.00013			0.0003	0.0223		0.00	0.00001121			0.0005	0.0444	
WW4 TOP SCHOENO. ROOTS	0.02	0.00009	0.0516				0.0238	0.07	0.00025739	0.1890				0.0871
WW4 MID 1 SCHOENO. ROOTS	0.02	0.00014						0.10	0.00064349					
WW4 MID 2 SCHOENO. ROOTS	0.02	0.00008						0.09	0.00032042					
WW4 BOTTOM SCHOENO. ROOTS	0.03	0.00010						0.09	0.00029052					

Paddock and Plants	Ca	Total pollutant mass (kg)	Average plants compartment pollutant mass (kg) within a paddock with number of plots	Total Average pollutant mass (kg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Cr	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	%					mg/kg		mg/kg					mg/kg	
WW4 TOP SHOENO. RHIZOMES	0.02	0.00007	0.0204				0.0108	0.15	0.00067123	0.1595				0.0847
WW4 MID 1 SCHOENO. RHIZOMES	0.01	0.00004						0.08	0.00025805					
WW4 MID 2 SCHOENO. RHIZOMES	0.01	0.00003						0.04	0.00013974					
WW4 BOTTOM SCHOENO. RHIZOMES	0.01	0.00003						0.06	0.00020679					
WW6 TOP SCHOENO.SHOOTS	0.05	0.00018	0.0160	0.0256	0.0002	0.0244	0.0314	0.03	0.00009956	0.0100	0.0912	0.0011	0.1177	0.0197
WW6 MID 1 SCHOENO.SHOOTS	0.03	0.00010			0.0002	0.0210		0.02	0.00007465			0.0006	0.0770	
WW6 MID 2 SCHOENO. SHOOTS	0.02	0.00010			0.0002	0.0153		0.01	0.00005044			0.0005	0.0459	
WW6 BOTTOM SCHOENO. SHOOTS	0.03	0.00005			0.0001	0.0187		0.02	0.00004313			0.0003	0.0356	
WW6 TOP SCHOENO. ROOTS	0.01	0.00003	0.0046				0.0143	0.28	0.00068125	0.0455				0.1421
WW6 MID 1 SCHOENO. ROOTS	0.01	0.00003						0.07	0.00018520					
WW6 MID 2 SCHOENO. ROOTS	0.01	0.00003						0.13	0.00026602					
WW6 BOTTOM SCHOENO. ROOTS	0.02	0.00003						0.05	0.00008124					
WW6 TOP SCHOENO. RHIZOMES	0.01	0.00002	0.0051				0.0109	0.10	0.00035118	0.0356				0.0763
WW6 MID 1 SCHOENO. RHIZOMES	0.01	0.00003						0.17	0.00031079					
WW6 MID 2 SCHOENO RHIZOMES	0.01	0.00003						0.05	0.00014918					
WW6 BOTTOM SCHOENO. RHIZOMES	0.01	0.00006						0.04	0.00013829					

Paddock and Plants	Fe	Total pollutant mass (kg)	Average plants compartment pollutant mass (kg) within a paddock with number of plots	Total Average pollutant mass (kg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	%					mg/kg	
WW1 TOP SCHOENO SHOOTS	0.05	0.000189	0.0087820	0.0357642	0.00038	0.0504	0.0164
WW1 MID 1 SCHOENO SHOOTS	0.01	0.000018			0.00002	0.0278	
WW1 MID 2 SCHOENO SHOOTS	0.00	0.000010			0.00001	0.0316	
WW1 BOTTOM SCHOENO SHOOTS	0.00	0.000017			0.00002	0.0211	
WW1 TOP SCHOENO. ROOTS	0.10	0.000163	0.0203993				0.0672
WW1 MID 1 SCHOENO. ROOTS	0.05	0.000133					
WW1 MID 2 SCHOENO, ROOTS	0.08	0.000146					
WW1 BOTTOM SCHOENO. ROOTS	0.05	0.000101					
WW1 TOP SCHOENO. RHIZOMES	0.02	0.000030	0.0065829				0.0240
WW1 MID 1 SCHOENO. RHIZOMES	0.03	0.000044					
WW1 MID 2 SCHOENO RHIZOMES	0.03	0.000018					
WW1 BOTTOM SCHOENO. RHIZOMES	0.03	0.000083					
WW2 TOP SCHOENO. SHOOTS	0.01	0.000026	0.0046606	0.0851170	0.00027	0.0320	0.0045
WW2 MID 1 SCHOENO. SHOOTS	0.00	0.000009			0.00001	0.0222	
WW2 MID 2 SCHOENO. SHOOTS	0.00	0.000012			0.00001	0.0313	
WW2 BOTTOM SCHOENO SHOOT	0.01	0.000014			0.00001	0.0413	
WW2 TOP SCHOENO. ROOTS	0.06	0.000180	0.0456182				0.0490
WW2 MID 1 SCHOENO. ROOTS	0.05	0.000109					
WW2 MID 2 SCHOENO. ROOTS	0.05	0.000224					
WW2 BOTTOM SCHOENO. ROOTS	0.04	0.000095					
WW2 TOP SCHOENO. RHIZOMES	0.04	0.000066	0.0348382				0.0498
WW2 MID 1 SCHOENO. RHIZOMES	0.04	0.000074					
WW2 MID 2 SCHOENO. RHIZOMES	0.03	0.000055					
WW2 BOTTOM SCHOENO. RHIZOMES	0.07	0.000270					
WW4 TOP SCHOENO. SHOOTS	0.01	0.000041	0.0172103	0.1344835	0.00033	0.0286	0.0076
WW4 MID 1 SCHOENO.SHOOTS	0.01	0.000061			0.00006	0.0236	
WW4 MID 2 SCHOENO.SHOOTS	0.01	0.000023			0.00002	0.0162	
WW4 BOTTOM SCHOENO.SHOOTS	0.00	0.000011			0.00001	0.0162	
WW4 TOP SCHOENO. ROOTS	0.03	0.000123	0.0707608				0.0326

Paddock and Plants	Fe	Total pollutant mass (kg)	Average plants compartment pollutant mass (kg) within a paddock with number of plots	Total Average pollutant mass (kg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	%					mg/kg	
WW4 MID 1 SCHOENO. ROOTS	0.03	0.000230					
WW4 MID 2 SCHOENO. ROOTS	0.03	0.000111					
WW4 BOTTOM SCHOENO. ROOTS	0.03	0.000102					
WW4 TOP SHOENO. RHIZOMES	0.04	0.000163	0.0465124				0.0247
WW4 MID 1 SCHOENO. RHIZOMES	0.02	0.000079					
WW4 MID 2 SCHOENO. RHIZOMES	0.01	0.000058					
WW4 BOTTOM SCHOENO. RHIZOMES	0.02	0.000072					
WW6 TOP SCHOENO.SHOOTS	0.01	0.000020	0.0031041	0.0244692	0.00022	0.0225	0.0061
WW6 MID 1 SCHOENO.SHOOTS	0.01	0.000025			0.00002	0.0200	
WW6 MID 2 SCHOENO. SHOOTS	0.00	0.000021			0.00002	0.0152	
WW6 BOTTOM SCHOENO. SHOOTS	0.01	0.000016			0.00002	0.0181	
WW6 TOP SCHOENO. ROOTS	0.05	0.000123	0.0112456				0.0351
WW6 MID 1 SCHOENO. ROOTS	0.02	0.000058					
WW6 MID 2 SCHOENO. ROOTS	0.04	0.000076					
WW6 BOTTOM SCHOENO. ROOTS	0.03	0.000043					
WW6 TOP SCHOENO. RHIZOMES	0.02	0.000074	0.0101195				0.0217
WW6 MID 1 SCHOENO. RHIZOMES	0.03	0.000065					
WW6 MID 2 SCHOENO RHIZOMES	0.02	0.000057					
WW6 BOTTOM SCHOENO. RHIZOMES	0.02	0.000074					

Paddock and Plants	Cu	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Zn	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	mg/kg					mg/kg		mg/kg					mg/kg	
WW1 TOP SCHOENO SHOOTS	0.02100	0.00009	0.0233343	0.0608922	0.00032	0.0419	0.0435	0.01380	0.00006	0.0125403	0.0305339	0.00016	0.0164	0.0234
WW1 MID 1 SCHOENO SHOOTS	0.04100	0.00012			0.00040	0.0565		0.01100	0.00003			0.00018	0.0216	
WW1 MID 2 SCHOENO SHOOTS	0.02320	0.00007			0.00020	0.0369		0.01190	0.00004			0.00015	0.0181	
WW1 BOTTOM SCHOENO SHOOTS	0.08050	0.00035			0.00070	0.0737		0.04850	0.00021			0.00033	0.0311	
WW1 TOP SCHOENO. ROOTS	0.08880	0.00014	0.0243031				0.0800	0.02340	0.00004	0.0073009				0.0240
WW1 MID 1 SCHOENO. ROOTS	0.08060	0.00022						0.01590	0.00004					
WW1 MID 2 SCHOENO, ROOTS	0.05660	0.00011						0.04270	0.00008					
WW1 BOTTOM SCHOENO. ROOTS	0.09500	0.00018						0.01750	0.00003					
WW1 TOP SCHOENO. RHIZOMES	0.04630	0.00009	0.0132548				0.0484	0.03420	0.00007	0.0106926				0.0390
WW1 MID 1 SCHOENO. RHIZOMES	0.04280	0.00007						0.07020	0.00011					
WW1 MID 2 SCHOENO RHIZOMES	0.04480	0.00003						0.04920	0.00003					
WW1 BOTTOM SCHOENO. RHIZOMES	0.05270	0.00017						0.02570	0.00009					
WW2 TOP SCHOENO. SHOOTS	0.02900	0.00010	0.0310085	0.1970307	0.00071	0.0838	0.0297	0.01660	0.00006	0.0107825	0.0588951	0.00020	0.0192	0.0103
WW2 MID 1 SCHOENO. SHOOTS	0.03260	0.00015			0.00066	0.0757		0.00540	0.00003			0.00016	0.0138	
WW2 MID 2 SCHOENO. SHOOTS	0.02970	0.00009			0.00080	0.0860		0.00960	0.00003			0.00027	0.0264	
WW2 BOTTOM SCHOENO SHOOT	0.02570	0.00007			0.00046	0.0498		0.01120	0.00003			0.00016	0.0189	
WW2 TOP SCHOENO. ROOTS	0.14040	0.00044	0.1179164				0.1267	0.02010	0.00006	0.0144590				0.0155
WW2 MID 1 SCHOENO. ROOTS	0.17140	0.00035						0.02470	0.00005					
WW2 MID 2 SCHOENO. ROOTS	0.13730	0.00064						0.01270	0.00006					
WW2 BOTTOM SCHOENO. ROOTS	0.05700	0.00015						0.00800	0.00002					
WW2 TOP SCHOENO. RHIZOMES	0.09350	0.00017	0.0481058				0.0687	0.03990	0.00007	0.0336537				0.0481
WW2 MID 1 SCHOENO. RHIZOMES	0.07740	0.00016						0.04000	0.00008					
WW2 MID 2 SCHOENO. RHIZOMES	0.04360	0.00008						0.10620	0.00019					
WW2 BOTTOM SCHOENO. RHIZOMES	0.06350	0.00023						0.02870	0.00011					
WW4 TOP SCHOENO. SHOOTS	0.02550	0.00009	0.0620876	0.6182424	0.00085	0.0741	0.0275	0.01830	0.00006	0.0344035	0.1426138	0.00037	0.0352	0.0153
WW4 MID 1 SCHOENO.SHOOTS	0.03830	0.00022			0.00243	0.1551		0.01880	0.00011			0.00033	0.0184	
WW4 MID 2 SCHOENO.SHOOTS	0.02140	0.00009			0.00088	0.0740		0.01760	0.00007			0.00027	0.0226	
WW4 BOTTOM SCHOENO.SHOOTS	0.02140	0.00010			0.00079	0.0686		0.00660	0.00003			0.00017	0.0131	
WW4 TOP SCHOENO. ROOTS	0.11330	0.00040	0.4144901				0.1910	0.01290	0.00005	0.0348464				0.0161
WW4 MID 1 SCHOENO. ROOTS	0.28180	0.00189						0.01620	0.00011					
WW4 MID 2 SCHOENO. ROOTS	0.15840	0.00059						0.02210	0.00008					
WW4 BOTTOM SCHOENO. ROOTS	0.12850	0.00044						0.01250	0.00004					
WW4 TOP SHOENO. RHIZOMES	0.08010	0.00036	0.1416646				0.0752	0.05780	0.00026	0.0733639				0.0389
WW4 MID 1 SCHOENO. RHIZOMES	0.09960	0.00032						0.03620	0.00012					
WW4 MID 2 SCHOENO. RHIZOMES	0.05110	0.00020						0.02970	0.00012					
WW4 BOTTOM SCHOENO. RHIZOMES	0.07360	0.00025						0.02760	0.00009					
WW6 TOP SCHOENO.SHOOTS	0.02160	0.00008	0.0141287	0.0625022	0.00043	0.0444	0.0278	0.00870	0.00003	0.0064626	0.0331063	0.00034	0.0343	0.0127

Paddock and Plants	Cu	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock	Zn	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	mg/kg					mg/kg		mg/kg					mg/kg	
WW6 MID 1 SCHOENO.SHOOTS	0.03140	0.00009			0.00036	0.0488		0.01750	0.00005			0.00019	0.0223	
WW6 MID 2 SCHOENO. SHOOTS	0.02760	0.00013			0.00044	0.0439		0.01100	0.00005			0.00020	0.0173	
WW6 BOTTOM SCHOENO. SHOOTS	0.03490	0.00007			0.00043	0.0588		0.01750	0.00003			0.00015	0.0272	
WW6 TOP SCHOENO. ROOTS	0.07440	0.00018	0.0234317				0.0732	0.05150	0.00013	0.0086441				0.0270
WW6 MID 1 SCHOENO. ROOTS	0.05780	0.00015						0.02070	0.00005					
WW6 MID 2 SCHOENO. ROOTS	0.06080	0.00012						0.01530	0.00003					
WW6 BOTTOM SCHOENO. ROOTS	0.11310	0.00017						0.01390	0.00002					
WW6 TOP SCHOENO. RHIZOMES	0.04840	0.00016	0.0249419				0.0535	0.05490	0.00019	0.0179996				0.0386
WW6 MID 1 SCHOENO. RHIZOMES	0.06460	0.00012						0.04590	0.00009					

Paddock and Plants	U	Total pollutant mass (mg)	Average plants compartment pollutant mass (mg) within a paddock with number of plots	Total Average pollutant mass (mg) within paddock	Total pollutant mass per plant (N=4) within a paddock	weighted concentration per plant (N=4) within a paddock	weighted concentration per kg of Shoot, Roots and Rhizomes (N=3) within a paddock
	mg/kg					mg/kg	
WW1 TOP SCHOENO SHOOTS	0.0118	0.000048	0.0065084	0.0136849	0.00009	0.0119	0.0121
WW1 MID 1 SCHOENO SHOOTS	0.0106	0.000030			0.00008	0.0114	
WW1 MID 2 SCHOENO SHOOTS	0.0104	0.000032			0.00006	0.0114	
WW1 BOTTOM SCHOENO SHOOTS	0.0147	0.000064			0.00013	0.0137	
WW1 TOP SCHOENO. ROOTS	0.0196	0.000032	0.0044926				0.0148
WW1 MID 1 SCHOENO. ROOTS	0.0139	0.000037					
WW1 MID 2 SCHOENO, ROOTS	0.0136	0.000026					
WW1 BOTTOM SCHOENO. ROOTS	0.0131	0.000025					
WW1 TOP SCHOENO. RHIZOMES	0.0057	0.000011	0.0026839				0.0098
WW1 MID 1 SCHOENO. RHIZOMES	0.0086	0.000013					
WW1 MID 2 SCHOENO RHIZOMES	0.0092	0.000005					
WW1 BOTTOM SCHOENO. RHIZOMES	0.0128	0.000042					
WW2 TOP SCHOENO. SHOOTS	0.0113	0.000040	0.0091300	0.0364367	0.00012	0.0119	0.0087
WW2 MID 1 SCHOENO. SHOOTS	0.0060	0.000028			0.00011	0.0114	
WW2 MID 2 SCHOENO. SHOOTS	0.0095	0.000027			0.00013	0.0114	
WW2 BOTTOM SCHOENO SHOOT	0.0092	0.000026			0.00012	0.0137	
WW2 TOP SCHOENO. ROOTS	0.0186	0.000058	0.0179369				0.0193
WW2 MID 1 SCHOENO. ROOTS	0.0276	0.000057					
WW2 MID 2 SCHOENO. ROOTS	0.0213	0.000099					
WW2 BOTTOM SCHOENO. ROOTS	0.0100	0.000026					
WW2 TOP SCHOENO. RHIZOMES	0.0146	0.000027	0.0093698				0.0134
WW2 MID 1 SCHOENO. RHIZOMES	0.0137	0.000028					
WW2 MID 2 SCHOENO. RHIZOMES	0.0022	0.000004					
WW2 BOTTOM SCHOENO. RHIZOMES	0.0180	0.000066					
WW4 TOP SCHOENO. SHOOTS	0.0093	0.000032	0.0223644	0.0681699	0.00012	0.0119	0.0000
WW4 MID 1 SCHOENO.SHOOTS	0.0120	0.000069			0.00021	0.0114	
WW4 MID 2 SCHOENO.SHOOTS	0.0114	0.000048			0.00011	0.0114	
WW4 BOTTOM SCHOENO.SHOOTS	0.0065	0.000030			0.00010	0.0137	
WW4 TOP SCHOENO. ROOTS	0.0096	0.000034	0.0296530				0.0137
WW4 MID 1 SCHOENO. ROOTS	0.0155	0.000104					
WW4 MID 2 SCHOENO. ROOTS	0.0133	0.000049					
WW4 BOTTOM SCHOENO. ROOTS	0.0147	0.000050					
WW4 TOP SHOENO. RHIZOMES	0.0127	0.000057	0.0161525				0.0086
WW4 MID 1 SCHOENO. RHIZOMES	0.0129	0.000042					
WW4 MID 2 SCHOENO. RHIZOMES	0.0020	0.000008					
WW4 BOTTOM SCHOENO. RHIZOMES	0.0067	0.000023					
WW6 TOP SCHOENO.SHOOTS	0.0067	0.000025	0.0040965	0.0113742	0.00007	0.0119	0.0081
WW6 MID 1 SCHOENO.SHOOTS	0.0109	0.000033			0.00008	0.0114	
WW6 MID 2 SCHOENO. SHOOTS	0.0062	0.000030			0.00007	0.0114	
WW6 BOTTOM SCHOENO. SHOOTS	0.0110	0.000021			0.00007	0.0137	
WW6 TOP SCHOENO. ROOTS	0.0105	0.000026	0.0034632				0.0108
WW6 MID 1 SCHOENO. ROOTS	0.0116	0.000029					
WW6 MID 2 SCHOENO. ROOTS	0.0085	0.000017					
WW6 BOTTOM SCHOENO. ROOTS	0.0131	0.000020					
WW6 TOP SCHOENO. RHIZOMES	0.0065	0.000022	0.0038146				0.0082
WW6 MID 1 SCHOENO. RHIZOMES	0.0121	0.000023					

Appendix C: The actual *in situ* stream raw data

West Wits collected byIke Ramped, Maxine Joubert and Tinyiko Salome Mthomben	20/12/2013									
Sampling *In Situ* Data										
ww 1 = Inflow, ww 2 = middle and ww3 = outflow										
Total number of water samples collected 15 (Paddock) + 2 (Main road and Mangaan drive) = 17										
Paddock (Paddock)	**Co-ordinates**		**Temp. (°C)**	**DO (mg/l) 20/12/2013**	**EC (mS/cm)**	**EC (µS/cm) 20/12/2013**	**pH**	**Redox (mV) 20/12/2013**	**Nitrate (mg/l)**	**Sample Type**
1 ww 1	26.43024	27.37124	27.2	7.45	4.25	4250	7.17	85.5	0.11	water
Paddock 1 ww 2	26.43032	27.37118	28.8	6.15	4.58	4580	6.76	100.4	0.1	water
Paddock 1 ww 3	26.43035	27.37115	28.8	6.15	4.83	4830	6.76	143.3	0.1	water
Paddock 2 ww 1	26.43044	27.37108	27.9	7.38	4.57	4570	7.65	137.1	0.16	water
Paddock 2 ww 2	.	.	28.1	5.18	7.21	7210	7.61	169.1	0.22	water
Paddock 2 ww 3	26.43057	27.37098	28.9	5.18	5.6	5600	7.04	148.9	0.16	water
Paddock 3 ww 1	26.43069	27.37087	28.9	4.85	4.88	4880	7.01	168.3	0.1	water
Paddock 3 ww 2	.	.	28.9	3.94	2.65	2650	7.11	126.6	0.12	Water
Paddock 3 ww 3	26.43083	27.37077	28.9	4.86	4.86	4860	7.07	145.3	0.15	water
Paddock 4 ww 1	26.43093	27.37068	28.6	5.09	4.61	4610	7.23	125.5	0.12	water
Paddock 4 ww 2	26.43104	27.37063	28.6	4.85	5.11	5110	7.2	116.2	0.16	water
Paddock 4 ww 3	26.43116	27.37059	27.9	4.28	4.93	4930	6.87	127.2	0.09	water
Paddock 5 ww 1	26.43128	27.37052	28.7	5.19	4.71	4710	6.94	125	0.11	water
Paddock 5 ww 2	.	.	29.4	4.98	4.81	4810	6.79	124.8	0.11	water
Paddock 5 ww 3	26.43139	27.37048	26.8	3.39	4.5	4500	6.94	127	0.5	water
Paddock 6 ww 1	26.43157	27.37035	28.8	5.28	5.19	5190	6.25	84.9	0.07	water
Paddock 6 ww 2	.	.	29.1	5.42	5.72	5720	6.34	70.9	0.08	water
Paddock 6 ww 3	26.4317	27.37029	26.8	4.09	5.05	5050	6.77	125.3	0.12	water
Paddock 7 ww 1	26.43183	27.37021	26.6	3.94	5.42	5420	6.71	110.1	0.8	Water
Paddock 7 ww 2	26.43192	27.37021	28.4	5.7	5.64	5640	6.73	84.6	0.9	Water
Paddock 7 ww 3	26.43195	27.37015	28.1	3.94	5.23	5230	6.72	84.2	0.9	water
8.1	26.43255	27.36989	26.2	7.03	4.32	4320	6.9	126.5	0.1	Water
8.2	.	.	26.8	6.41	5.83	5830	6.92	88.9	0.1	Water
8.3	26.43263	27.36951	26.8	6.63	5.97	5970	6.91	101.1	0.1	Water
9.1	26.43274	27.3694	26.8	5.97	5.81	5810	6.78	72.1	0.9	Water
9.2	.	.	26.6	6.15	5.55	5550	6.77	78.9	0.9	Water
9.3	26.43289	27.36932	26.1	6.21	5.28	5280	6.73	79.4	0.9	Water
10.1	26.43303	27.36928	24.8	6.6	4.98	4980	6.56	110.7	0.5	Water
10.2	26.43315	27.36923	26.8	7.8	4.6	4600	6.13	88.6	0.05	Water
10.3	26.43323	27.36919	26.6	6.94	4.71	4710	6.06	94.5	0.08	Water
11.1	26.43331	27.36913	26.4	5.09	4.69	4690	6.05	98.2	0.05	Water
11.2	.	.	25.3	5.92	4.62	4620	6.28	111.8	0.06	Water
11.3	26.43348	27.36894	24.5	6.99	4.2	4200	6.7	85.2	0.07	Water
12.1	26.43366	27.3688	24.2	7.34	4.44	4440	6.62	148.8	0.07	Water

West Wits collected byIke Ramped, Maxine Joubert and Tinyiko Salome Mthomben	20/12/2013									
Sampling *In Situ* Data										
ww 1 = Inflow, ww 2 = middle and ww3 = outflow										
Total number of water samples collected 15 (Paddock) + 2 (Main road and Mangaan drive) = 17										
Paddock (Paddock)	**Co-ordinates**		**Temp. (°C)**	**DO (mg/l) 20/12/2013**	**EC (mS/cm)**	**EC (µS/cm) 20/12/2013**	**pH**	**Redox (mV) 20/12/2013**	**Nitrate (mg/l)**	**Sample Type**
12.2	.	.	23.4	7.11	4.14	4140	6.51	138.2	0.07	Water
12.3	26.43386	27.36864	22.1	6.11	4.57	4570	6.59	130.9	0.04	Water
13.1	26.43402	27.36847	22.6	7.34	4.44	4440	6.59	128.3	0.07	Water
13.2	26.43409	27.3684	23.4	7.11	4.14	4140	6.41	151.9	0.06	Water
13.3	26.4341	27.36833	22.1	6.11	4.57	4570	6.03	194.3	0.4	Water
14.1	26.43446	27.36837	20.8	4.02	3.88	3880	5.87	101.3	0.05	Water
14.2	.	.	20.8	4.35	3.94	3940	5.86	63.8	0.05	Water
14.3	26.43499	27.36805	20.8	6.39	4.89	4890	5.9	60.5	0.05	Water
15.1	26.43506	27.36787	20.2	2.35	4.51	4510	6.03	54.4	0.08	Water
15.2	26.43511	27.36782	21.8	6.51	4.21	4210	5.69	75.5	0.04	Water
15.3	26.43521	27.3678	20.2	4.66	3.93	3930	5.75	54.9	0.04	Water
16.1	26.4351	27.36796	21.6	5.71	4.49	4490	5.8	94.3	0.04	Water
16.2	26.43511	27.36782	22.9	4.65	4.45	4450	6.02	55.5	0.07	Water
16.3	26.43521	27.3678	23.01	3.17	4.21	4210	6.17	75.5	0.06	Water
M drive	26.26123	27.22061	22.2	6.51	1.04	1040	7.75	201.9	0.03	Water
-1.1	26.26158	27.23027	21.2	5.92	1.75	1750	6.73	148.7	0.15	Water
-1.2	26.26161	27.2202	22.7	5.14	1.48	1480	6.96	169.6	0.7	Water
-1.3	26.26165	27.22014	23.4	5.41	5.41	5410	7.01	104.7	0.18	Water
-2.1	26.26195	27.21995	22.4	5.25	5.44	5440	7.18	185.2	0.35	Water
-2.2	26.43656	27.36665	22.6	5.77	4.66	4660	7.25	157.2	0.33	Water
-2.3	26.43665	27.3665	22.2	5.23	4.321	4321	7.34	159.9	0.18	Water
Main road drive	26. 26683	27. 21572	18	5.63	0.47	470	7.1	154.6	0.03	Water

Appendix C2 the sediment mass pool and concentration calculation by paddock compartment

Paddocks (Interval Depth)	Fe (%)	Depth Weight	Fe weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (kg)	whole sediment mass core	Actual mass pool (kg)	Sum of mass whole core pool (kg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (kg)	Mass SUM (kg) (whole depth 30 cm)
WW1.1 (0-2 cm)	4.677	2	9.354	9.170067	0.000663	353.4292	0.234316	3.51474	0.010959	0.322304	121.18	0.017671	6857.385	75.14981	2210.163
WW1.1 (2-10 cm)	9.491	8	75.928		0.000663	1413.717	0.937264		0.088956		121.18	0.017671	6857.385	610.0037	
WW1.1 (10-30cm)	9.491	20	189.82		0.000663	3534.292	2.34316		0.222389		121.18	0.017671	6857.385	1525.009	
WW1.2 (0-2cm)	6.546	2	13.092	9.000533	0.000663	353.4292	0.234316		0.015338	0.316345	121.18	0.017671	6857.385	105.1808	2169.302
WW1.2 (2-10cm)	8.388	8	67.104		0.000663	1413.717	0.937264		0.078618		121.18	0.017671	6857.385	539.1119	
WW1.2 (10-30cm)	9.491	20	189.82		0.000663	3534.292	2.34316		0.222389		121.18	0.017671	6857.385	1525.009	
WW1.3 (0-2 cm)	6.058	2	12.116	7.584667	0.000663	353.4292	0.234316		0.014195	0.266581	121.18	0.017671	6857.385	97.33965	1828.051
WW1.3 (2-10cm)	7.008	8	56.064		0.000663	1413.717	0.937264		0.065683		121.18	0.017671	6857.385	450.4168	
WW1.3 (10-30 cm)	7.968	20	159.36		0.000663	3534.292	2.34316		0.186703		121.18	0.017671	6857.385	1280.294	
WW2.1 (0-2 cm)	6.074	2	12.148	6.399333	0.000663	353.4292	0.234316		0.014232	0.22492	121.18	0.017671	6857.385	97.59673	1542.363
WW2.1 (2-10cm)	7.429	8	59.432		0.000663	1413.717	0.937264		0.069629		121.18	0.017671	6857.385	477.4752	
WW2.1 (10-30 cm)	6.02	20	120.4		0.000663	3534.292	2.34316		0.141058		121.18	0.017671	6857.385	967.2906	
WW2.2 (0-2 cm)	5.629	2	11.258	6.162867	0.000663	353.4292	0.234316		0.01319	0.216609	121.18	0.017671	6857.385	90.4465	1485.37
WW2.2 (2-10 cm)	6.716	8	53.728		0.000663	1413.717	0.937264		0.062947		121.18	0.017671	6857.385	431.6494	
WW2.2 (10-30 cm)	5.995	20	119.9		0.000663	3534.292	2.34316		0.140472		121.18	0.017671	6857.385	963.2737	
WW2.3 (0-10 cm)	6.854	2	13.708	7.948933	0.000663	353.4292	0.234316		0.01606	0.279384	121.18	0.017671	6857.385	110.1297	1915.846
WW2.3 (2-10 cm)	10.89	8	87.12		0.000663	1413.717	0.937264		0.102068		121.18	0.017671	6857.385	699.9199	
WW2.3 (10-30 cm)	6.882	20	137.64		0.000663	3534.292	2.34316		0.161256		121.18	0.017671	6857.385	1105.796	
WW4.1 (0-2 cm)	7.321	2	14.642	9.111	0.000663	353.4292	0.234316		0.017154	0.320228	121.18	0.017671	6857.385	117.6335	2195.926
WW4.1 (2-10 cm)	8.286	8	66.288		0.000663	1413.717	0.937264		0.077662		121.18	0.017671	6857.385	532.5562	
WW4.1 (10-30 cm)	9.62	20	192.4		0.000663	3534.292	2.34316		0.225412		121.18	0.017671	6857.385	1545.737	
WW4.2 (0-2cm)	9.95	2	19.9	8.617867	0.000663	353.4292	0.234316		0.023314	0.302896	121.18	0.017671	6857.385	159.8761	2077.072
WW4.2 (2-10 cm)	7.847	8	62.776		0.000663	1413.717	0.937264		0.073547		121.18	0.017671	6857.385	504.3408	
WW4.2 (10-30 cm)	8.793	20	175.86		0.000663	3534.292	2.34316		0.206034		121.18	0.017671	6857.385	1412.855	
WW4.3 (0-2 cm)	5.747	2	11.494	7.584467	0.000663	353.4292	0.234316		0.013466	0.266574	121.18	0.017671	6857.385	92.34251	1828.003
WW4.3 (2-10 cm)	7.06	8	56.48		0.000663	1413.717	0.937264		0.066171		121.18	0.017671	6857.385	453.7589	
WW4.3 (10-30 cm)	7.978	20	159.56		0.000663	3534.292	2.34316		0.186937		121.18	0.017671	6857.385	1281.901	
WW6.1 (0-2 cm)	6.279	2	12.558	8.865933	0.000663	353.4292	0.234316		0.014713	0.311615	121.18	0.017671	6857.385	100.8907	2136.861
WW6.1 (2-10 cm)	7.23	8	57.84		0.000663	1413.717	0.937264		0.067764		121.18	0.017671	6857.385	464.6851	
WW6.1 (10-30 cm)	9.779	20	195.58		0.000663	3534.292	2.34316		0.229138		121.18	0.017671	6857.385	1571.285	

Paddocks (Interval Depth)	Fe (%)	Depth Weight	Fe weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (kg)	whole sediment mass core	Actual mass pool (kg)	Sum of mass whole core pool (kg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (kg)	Mass SUM (kg) (whole depth 30 cm)
WW6.2 (0-2 cm)	6.417	2	12.834	6.640067	0.000663	353.4292	0.234316		0.015036	0.233381	121.18	0.017671	6857.385	103.108	1600.384
WW6.2 (2-10 cm)	5.486	8	43.888		0.000663	1413.717	0.937264		0.051418		121.18	0.017671	6857.385	352.5951	
WW6.2 (10-30 cm)	7.124	20	142.48		0.000663	3534.292	2.34316		0.166927		121.18	0.017671	6857.385	1144.681	
WW6.3 (0-2 cm)	4.824	2	9.648	5.572533	0.000663	353.4292	0.234316		0.011303	0.19586	121.18	0.017671	6857.385	77.51179	1343.088
WW6.3 (2-10 cm)	4.996	8	39.968		0.000663	1413.717	0.937264		0.046826		121.18	0.017671	6857.385	321.1019	
WW6.3 (10-30 cm)	5.878	20	117.56		0.000663	3534.292	2.34316		0.137731		121.18	0.017671	6857.385	944.4741	
WW7.1 (0-2cm)	8.327	2	16.654	8.145933	0.000663	353.4292	0.234316		0.019511	0.286308	121.18	0.017671	6857.385	133.7978	1963.327
WW7.1 (2-10cm)	8.298	8	66.384		0.000663	1413.717	0.937264		0.077774		121.18	0.017671	6857.385	533.3274	
WW7.1 (10-30 cm)	8.067	20	161.34		0.000663	3534.292	2.34316		0.189023		121.18	0.017671	6857.385	1296.202	
WW7.2 (0-2 cm)	9.208	2	18.416	12.11653	0.000663	353.4292	0.234316		0.021576	0.425865	121.18	0.017671	6857.385	147.9537	2920.318
WW7.2 (2-10cm)	13.86	8	110.88		0.000663	1413.717	0.937264		0.129905		121.18	0.017671	6857.385	890.8072	
WW7.2 (10-30 cm)	11.71	20	234.2		0.000663	3534.292	2.34316		0.274384		121.18	0.017671	6857.385	1881.557	
WW7.3 (0-2 cm)	6.82	2	13.64	7.8228	0.000663	353.4292	0.234316		0.01598	0.274951	121.18	0.017671	6857.385	109.5834	1885.445
WW7.3 (2-10 cm)	5.213	8	41.704		0.000663	1413.717	0.937264		0.04886		121.18	0.017671	6857.385	335.0489	
WW7.3 (10-30 cm)	8.967	20	179.34		0.000663	3534.292	2.34316		0.210111		121.18	0.017671	6857.385	1440.813	

Paddocks (Interval Depth)	Ca (%)	Depth Weight	Ca weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (kg)	whole sediment mass core	Actual mass pool (kg)	Sum of mass whole core pool (kg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (kg)	Mass SUM (kg) (whole depth 30 cm)
WW1.1 (0-2 cm)	0.3716	2	0.7432	0.17056	0.000663	353.4292	0.234316	3.51474	0.000871	0.005995	121.18	0.017671	6857.385	5.970851	41.10825
WW1.1 (2-10 cm)	0.1562	8	1.2496		0.000663	1413.717	0.937264		0.001464		121.18	0.017671	6857.385	10.03926	
WW1.1 (10-30cm)	0.1562	20	3.124		0.000663	3534.292	2.34316		0.00366		121.18	0.017671	6857.385	25.09814	
WW1.2 (0-2cm)	0.1947	2	0.3894	0.163673	0.000663	353.4292	0.234316		0.000456	0.005753	121.18	0.017671	6857.385	3.12843	39.44843
WW1.2 (2-10cm)	0.1746	8	1.3968		0.000663	1413.717	0.937264		0.001636		121.18	0.017671	6857.385	11.22186	
WW1.2 (10-30cm)	0.1562	20	3.124		0.000663	3534.292	2.34316		0.00366		121.18	0.017671	6857.385	25.09814	
WW1.3 (0-2 cm)	0.3069	2	0.6138	0.173113	0.000663	353.4292	0.234316		0.000719	0.006084	121.18	0.017671	6857.385	4.931254	41.72365
WW1.3 (2-10cm)	0.1632	8	1.3056		0.000663	1413.717	0.937264		0.00153		121.18	0.017671	6857.385	10.48916	
WW1.3 (10-30 cm)	0.1637	20	3.274		0.000663	3534.292	2.34316		0.003836		121.18	0.017671	6857.385	26.30324	
WW2.1 (0-2 cm)	0.1829	2	0.3658	0.14374	0.000663	353.4292	0.234316		0.000429	0.005052	121.18	0.017671	6857.385	2.938828	34.64411
WW2.1 (2-10cm)	0.1123	8	0.8984		0.000663	1413.717	0.937264		0.001053		121.18	0.017671	6857.385	7.217724	
WW2.1 (10-30 cm)	0.1524	20	3.048		0.000663	3534.292	2.34316		0.003571		121.18	0.017671	6857.385	24.48756	
WW2.2 (0-2 cm)	0.4297	2	0.8594	0.151647	0.000663	353.4292	0.234316		0.001007	0.00533	121.18	0.017671	6857.385	6.904398	36.54977
WW2.2 (2-10 cm)	0.1375	8	1.1		0.000663	1413.717	0.937264		0.001289		121.18	0.017671	6857.385	8.837373	
WW2.2 (10-30 cm)	0.1295	20	2.59		0.000663	3534.292	2.34316		0.003034		121.18	0.017671	6857.385	20.808	
WW2.3 (0-10 cm)	0.1499	2	0.2998	0.1359	0.000663	353.4292	0.234316		0.000351	0.004777	121.18	0.017671	6857.385	2.408586	32.75452
WW2.3 (2-10 cm)	0.1399	8	1.1192		0.000663	1413.717	0.937264		0.001311		121.18	0.017671	6857.385	8.991625	
WW2.3 (10-30 cm)	0.1329	20	2.658		0.000663	3534.292	2.34316		0.003114		121.18	0.017671	6857.385	21.35431	
WW4.1 (0-2 cm)	0.2184	2	0.4368	0.127187	0.000663	353.4292	0.234316		0.000512	0.00447	121.18	0.017671	6857.385	3.50924	30.65444
WW4.1 (2-10 cm)	0.1491	8	1.1928		0.000663	1413.717	0.937264		0.001397		121.18	0.017671	6857.385	9.582926	
WW4.1 (10-30 cm)	0.1093	20	2.186		0.000663	3534.292	2.34316		0.002561		121.18	0.017671	6857.385	17.56227	
WW4.2 (0-2cm)	0.3057	2	0.6114	0.160807	0.000663	353.4292	0.234316		0.000716	0.005652	121.18	0.017671	6857.385	4.911973	38.7575
WW4.2 (2-10 cm)	0.1686	8	1.3488		0.000663	1413.717	0.937264		0.00158		121.18	0.017671	6857.385	10.83623	
WW4.2 (10-30 cm)	0.1432	20	2.864		0.000663	3534.292	2.34316		0.003355		121.18	0.017671	6857.385	23.00931	
WW4.3 (0-2 cm)	0.2474	2	0.4948	0.148653	0.000663	353.4292	0.234316		0.00058	0.005225	121.18	0.017671	6857.385	3.975211	35.82832
WW4.3 (2-10 cm)	0.1576	8	1.2608		0.000663	1413.717	0.937264		0.001477		121.18	0.017671	6857.385	10.12924	
WW4.3 (10-30 cm)	0.1352	20	2.704		0.000663	3534.292	2.34316		0.003168		121.18	0.017671	6857.385	21.72387	
WW6.1 (0-2 cm)	0.1454	2	0.2908	0.16648	0.000663	353.4292	0.234316		0.000341	0.005851	121.18	0.017671	6857.385	2.33628	40.12489
WW6.1 (2-10 cm)	0.1862	8	1.4896		0.000663	1413.717	0.937264		0.001745		121.18	0.017671	6857.385	11.96741	
WW6.1 (10-30 cm)	0.1607	20	3.214		0.000663	3534.292	2.34316		0.003765		121.18	0.017671	6857.385	25.8212	
WW6.2 (0-2 cm)	0.3358	2	0.6716	0.208147	0.000663	353.4292	0.234316		0.000787	0.007316	121.18	0.017671	6857.385	5.395618	50.16736

Paddocks (Interval Depth)	Ca (%)	Depth Weight	Ca weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (kg)	whole sediment mass core	Actual mass pool (kg)	Sum of mass whole core pool (kg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (kg)	Mass SUM (kg) (whole depth 30 cm)
WW6.2 (2-10 cm)	0.2861	8	2.2888		0.000663	1413.717	0.937264		0.002682		121.18	0.017671	6857.385	18.38816	
WW6.2 (10-30 cm)	0.1642	20	3.284		0.000663	3534.292	2.34316		0.003847		121.18	0.017671	6857.385	26.38358	
WW6.3 (0-2 cm)	0.4261	2	0.8522	0.3403	0.000663	353.4292	0.234316		0.000998	0.011961	121.18	0.017671	6857.385	6.846554	82.01885
WW6.3 (2-10 cm)	0.5146	8	4.1168		0.000663	1413.717	0.937264		0.004823		121.18	0.017671	6857.385	33.07427	
WW6.3 (10-30 cm)	0.262	20	5.24		0.000663	3534.292	2.34316		0.006139		121.18	0.017671	6857.385	42.09803	
WW7.1 (0-2cm)	0.3198	2	0.6396	0.185293	0.000663	353.4292	0.234316		0.000749	0.006513	121.18	0.017671	6857.385	5.138531	44.65926
WW7.1 (2-10cm)	0.1534	8	1.2272		0.000663	1413.717	0.937264		0.001438		121.18	0.017671	6857.385	9.859295	
WW7.1 (10-30 cm)	0.1846	20	3.692		0.000663	3534.292	2.34316		0.004325		121.18	0.017671	6857.385	29.66144	
WW7.2 (0-2 cm)	0.3427	2	0.6854	0.185087	0.000663	353.4292	0.234316		0.000803	0.006505	121.18	0.017671	6857.385	5.506487	44.60945
WW7.2 (2-10cm)	0.1844	8	1.4752		0.000663	1413.717	0.937264		0.001728		121.18	0.017671	6857.385	11.85172	
WW7.2 (10-30 cm)	0.1696	20	3.392		0.000663	3534.292	2.34316		0.003974		121.18	0.017671	6857.385	27.25124	
WW7.3 (0-2 cm)	0.2653	2	0.5306	0.17982	0.000663	353.4292	0.234316		0.000622	0.00632	121.18	0.017671	6857.385	4.262827	43.34008
WW7.3 (2-10 cm)	0.171	8	1.368		0.000663	1413.717	0.937264		0.001603		121.18	0.017671	6857.385	10.99048	
WW7.3 (10-30 cm)	0.1748	20	3.496		0.000663	3534.292	2.34316		0.004096		121.18	0.017671	6857.385	28.08678	

Paddocks (Interval Depth)	S (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (mg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (g) (whole depth 30 cm)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW1.1 (0-2 cm)	5.03	2	10.06	1.7904	0.000663	353.4292	0.234316	3.51474	0.011786	0.062928	121.18	0.017671	6857.385	80.82179	431.5209
WW1.1 (2-10 cm)	1.559	8	12.472		0.000663	1413.717	0.937264		0.014612		121.18	0.017671	6857.385	100.1997	
WW1.1 (10-30cm)	1.559	20	31.18		0.000663	3534.292	2.34316		0.03653		121.18	0.017671	6857.385	250.4994	
WW1.2 (0-2cm)	1.963	2	3.926	1.544067	0.000663	353.4292	0.234316		0.0046	0.05427	121.18	0.017671	6857.385	31.54139	372.1498
WW1.2 (2-10cm)	1.402	8	11.216		0.000663	1413.717	0.937264		0.01314		121.18	0.017671	6857.385	90.10907	
WW1.2 (10-30cm)	1.559	20	31.18		0.000663	3534.292	2.34316		0.03653		121.18	0.017671	6857.385	250.4994	
WW1.3 (0-2 cm)	4.282	2	8.564	1.3792	0.000663	353.4292	0.234316		0.010033	0.048475	121.18	0.017671	6857.385	68.80297	332.4138
WW1.3 (2-10cm)	1.039	8	8.312		0.000663	1413.717	0.937264		0.009738		121.18	0.017671	6857.385	66.7784	
WW1.3 (10-30 cm)	1.225	20	24.5		0.000663	3534.292	2.34316		0.028704		121.18	0.017671	6857.385	196.8324	
WW2.1 (0-2 cm)	1.838	2	3.676	1.065387	0.000663	353.4292	0.234316		0.004307	0.037446	121.18	0.017671	6857.385	29.53289	256.7787
WW2.1 (2-10cm)	0.4457	8	3.5656		0.000663	1413.717	0.937264		0.004177		121.18	0.017671	6857.385	28.64594	
WW2.1 (10-30 cm)	1.236	20	24.72		0.000663	3534.292	2.34316		0.028961		121.18	0.017671	6857.385	198.5999	
WW2.2 (0-2 cm)	3.044	2	6.088	1.1616	0.000663	353.4292	0.234316		0.007133	0.040827	121.18	0.017671	6857.385	48.91084	279.968
WW2.2 (2-10 cm)	1.05	8	8.4		0.000663	1413.717	0.937264		0.009841		121.18	0.017671	6857.385	67.48539	
WW2.2 (10-30 cm)	1.018	20	20.36		0.000663	3534.292	2.34316		0.023853		121.18	0.017671	6857.385	163.5717	
WW2.3 (0-10 cm)	1.222	2	2.444	1.183333	0.000663	353.4292	0.234316		0.002863	0.041591	121.18	0.017671	6857.385	19.63504	285.2061
WW2.3 (2-10 cm)	1.067	8	8.536		0.000663	1413.717	0.937264		0.010001		121.18	0.017671	6857.385	68.57801	
WW2.3 (10-30 cm)	1.226	20	24.52		0.000663	3534.292	2.34316		0.028727		121.18	0.017671	6857.385	196.9931	
WW4.1 (0-2 cm)	1.968	2	3.936	0.8318	0.000663	353.4292	0.234316		0.004611	0.029236	121.18	0.017671	6857.385	31.62173	200.4798
WW4.1 (2-10 cm)	1.108	8	8.864		0.000663	1413.717	0.937264		0.010385		121.18	0.017671	6857.385	71.21316	
WW4.1 (10-30 cm)	0.6077	20	12.154		0.000663	3534.292	2.34316		0.014239		121.18	0.017671	6857.385	97.64494	
WW4.2 (0-2cm)	2.775	2	5.55	1.355933	0.000663	353.4292	0.234316		0.006502	0.047658	121.18	0.017671	6857.385	44.58856	326.8061
WW4.2 (2-10 cm)	1.516	8	12.128		0.000663	1413.717	0.937264		0.014209		121.18	0.017671	6857.385	97.43605	
WW4.2 (10-30 cm)	1.15	20	23		0.000663	3534.292	2.34316		0.026946		121.18	0.017671	6857.385	184.7814	
WW4.3 (0-2 cm)	2.069	2	4.138	1.718733	0.000663	353.4292	0.234316		0.004848	0.060409	121.18	0.017671	6857.385	33.24459	414.2478
WW4.3 (2-10 cm)	1.793	8	14.344		0.000663	1413.717	0.937264		0.016805		121.18	0.017671	6857.385	115.2393	
WW4.3 (10-30 cm)	1.654	20	33.08		0.000663	3534.292	2.34316		0.038756		121.18	0.017671	6857.385	265.7639	
WW6.1 (0-2 cm)	2.323	2	4.646	1.9782	0.000663	353.4292	0.234316		0.005443	0.069529	121.18	0.017671	6857.385	37.32585	476.7843
WW6.1 (2-10 cm)	2.085	8	16.68		0.000663	1413.717	0.937264		0.019542		121.18	0.017671	6857.385	134.0067	
WW6.1 (10-30 cm)	1.901	20	38.02		0.000663	3534.292	2.34316		0.044543		121.18	0.017671	6857.385	305.4517	
WW6.2 (0-2 cm)	3.483	2	6.966	2.265533	0.000663	353.4292	0.234316		0.008161	0.079628	121.18	0.017671	6857.385	55.96467	546.0372

Paddocks (Interval Depth)	S (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (mg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (g) (whole depth 30 cm)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW6.2 (2-10 cm)	2.985	8	23.88		0.000663	1413.717	0.937264		0.027977		121.18	0.017671	6857.385	191.8513	
WW6.2 (10-30 cm)	1.856	20	37.12		0.000663	3534.292	2.34316		0.043489		121.18	0.017671	6857.385	298.2212	
WW6.3 (0-2 cm)	3.821	2	7.642	3.4782	0.000663	353.4292	0.234316		0.008953	0.12225	121.18	0.017671	6857.385	61.39564	838.3132
WW6.3 (2-10 cm)	5.208	8	41.664		0.000663	1413.717	0.937264		0.048813		121.18	0.017671	6857.385	334.7276	
WW6.3 (10-30 cm)	2.752	20	55.04		0.000663	3534.292	2.34316		0.064484		121.18	0.017671	6857.385	442.19	
WW7.1 (0-2cm)	3.411	2	6.822	1.962733	0.000663	353.4292	0.234316		0.007993	0.068985	121.18	0.017671	6857.385	54.80778	473.0565
WW7.1 (2-10cm)	1.76	8	14.08		0.000663	1413.717	0.937264		0.016496		121.18	0.017671	6857.385	113.1184	
WW7.1 (10-30 cm)	1.899	20	37.98		0.000663	3534.292	2.34316		0.044497		121.18	0.017671	6857.385	305.1304	
WW7.2 (0-2 cm)	2.87	2	5.74	1.879733	0.000663	353.4292	0.234316		0.006725	0.066068	121.18	0.017671	6857.385	46.11502	453.0519
WW7.2 (2-10cm)	1.809	8	14.472		0.000663	1413.717	0.937264		0.016955		121.18	0.017671	6857.385	116.2677	
WW7.2 (10-30 cm)	1.809	20	36.18		0.000663	3534.292	2.34316		0.042388		121.18	0.017671	6857.385	290.6692	
WW7.3 (0-2 cm)	2.272	2	4.544	1.392133	0.000663	353.4292	0.234316		0.005324	0.04893	121.18	0.017671	6857.385	36.50638	335.5309
WW7.3 (2-10 cm)	1.785	8	14.28		0.000663	1413.717	0.937264		0.01673		121.18	0.017671	6857.385	114.7252	
WW7.3 (10-30 cm)	1.147	20	22.94		0.000663	3534.292	2.34316		0.026876		121.18	0.017671	6857.385	184.2994	

Paddocks (Interval Depth)	Cl (mg/kg)	Depth Weight	Cl weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (kg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW1.1 (0-2 cm)	0.85	2	1.7	0.526133	0.000663	353.4292	0.234316	3.51474	0.001992	0.018492	121.18	0.017671	6857.385	13.65776	126.8083
WW1.1 (2-10 cm)	0.503	8	4.024		0.000663	1413.717	0.937264		0.004714		121.18	0.017671	6857.385	32.32872	
WW1.1 (10-30cm)	0.503	20	10.06		0.000663	3534.292	2.34316		0.011786		121.18	0.017671	6857.385	80.82179	
WW1.2 (0-2cm)	0.459	2	0.918	0.4246	0.000663	353.4292	0.234316		0.001076	0.014924	121.18	0.017671	6857.385	7.375189	102.3368
WW1.2 (2-10cm)	0.22	8	1.76		0.000663	1413.717	0.937264		0.002062		121.18	0.017671	6857.385	14.1398	
WW1.2 (10-30cm)	0.503	20	10.06		0.000663	3534.292	2.34316		0.011786		121.18	0.017671	6857.385	80.82179	
WW1.3 (0-2 cm)	1.087	2	2.174	0.274733	0.000663	353.4292	0.234316		0.002547	0.009656	121.18	0.017671	6857.385	17.46586	66.21603
WW1.3 (2-10cm)	0.236	8	1.888		0.000663	1413.717	0.937264		0.002212		121.18	0.017671	6857.385	15.16815	
WW1.3 (10-30 cm)	0.209	20	4.18		0.000663	3534.292	2.34316		0.004897		121.18	0.017671	6857.385	33.58202	
WW2.1 (0-2 cm)	0.442	2	0.884	0.290533	0.000663	353.4292	0.234316		0.001036	0.010211	121.18	0.017671	6857.385	7.102034	70.02413
WW2.1 (2-10cm)	0.154	8	1.232		0.000663	1413.717	0.937264		0.001443		121.18	0.017671	6857.385	9.897858	
WW2.1 (10-30 cm)	0.33	20	6.6		0.000663	3534.292	2.34316		0.007732		121.18	0.017671	6857.385	53.02424	
WW2.2 (0-2 cm)	0.791	2	1.582	0.305267	0.000663	353.4292	0.234316		0.001853	0.010729	121.18	0.017671	6857.385	12.70975	73.57515
WW2.2 (2-10 cm)	0.182	8	1.456		0.000663	1413.717	0.937264		0.001706		121.18	0.017671	6857.385	11.69747	
WW2.2 (10-30 cm)	0.306	20	6.12		0.000663	3534.292	2.34316		0.00717		121.18	0.017671	6857.385	49.16793	
WW2.3 (0-10 cm)	0.406	2	0.812	0.354533	0.000663	353.4292	0.234316		0.000951	0.012461	121.18	0.017671	6857.385	6.523588	85.44936
WW2.3 (2-10 cm)	0.313	8	2.504		0.000663	1413.717	0.937264		0.002934		121.18	0.017671	6857.385	20.11707	
WW2.3 (10-30 cm)	0.366	20	7.32		0.000663	3534.292	2.34316		0.008576		121.18	0.017671	6857.385	58.8087	
WW4.1 (0-2 cm)	0.784	2	1.568	0.373067	0.000663	353.4292	0.234316		0.001837	0.013112	121.18	0.017671	6857.385	12.59727	89.91625
WW4.1 (2-10 cm)	0.478	8	3.824		0.000663	1413.717	0.937264		0.00448		121.18	0.017671	6857.385	30.72192	
WW4.1 (10-30 cm)	0.29	20	5.8		0.000663	3534.292	2.34316		0.006795		121.18	0.017671	6857.385	46.59706	
WW4.2 (0-2cm)	0.644	2	1.288	0.585733	0.000663	353.4292	0.234316		0.001509	0.020587	121.18	0.017671	6857.385	10.34776	141.173
WW4.2 (2-10 cm)	0.643	8	5.144		0.000663	1413.717	0.937264		0.006027		121.18	0.017671	6857.385	41.32677	
WW4.2 (10-30 cm)	0.557	20	11.14		0.000663	3534.292	2.34316		0.013051		121.18	0.017671	6857.385	89.49849	
WW4.3 (0-2 cm)	1.22	2	2.44	0.536267	0.000663	353.4292	0.234316		0.002859	0.018848	121.18	0.017671	6857.385	19.6029	129.2506
WW4.3 (2-10 cm)	0.531	8	4.248		0.000663	1413.717	0.937264		0.004977		121.18	0.017671	6857.385	34.12833	
WW4.3 (10-30 cm)	0.47	20	9.4		0.000663	3534.292	2.34316		0.011013		121.18	0.017671	6857.385	75.51937	
WW6.1 (0-2 cm)	0.911	2	1.822	0.657667	0.000663	353.4292	0.234316		0.002135	0.023115	121.18	0.017671	6857.385	14.6379	158.5103
WW6.1 (2-10 cm)	0.841	8	6.728		0.000663	1413.717	0.937264		0.007882		121.18	0.017671	6857.385	54.05259	
WW6.1 (10-30 cm)	0.559	20	11.18		0.000663	3534.292	2.34316		0.013098		121.18	0.017671	6857.385	89.81985	
WW6.2 (0-2 cm)	0.994	2	1.988	0.5816	0.000663	353.4292	0.234316		0.002329	0.020442	121.18	0.017671	6857.385	15.97154	140.1768

Paddocks (Interval Depth)	Cl (mg/kg)	Depth Weight	Cl weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (kg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW6.2 (2-10 cm)	0.745	8	5.96		0.000663	1413.717	0.937264		0.006983		121.18	0.017671	6857.385	47.88249	
WW6.2 (10-30 cm)	0.475	20	9.5		0.000663	3534.292	2.34316		0.01113		121.18	0.017671	6857.385	76.32277	
WW6.3 (0-2 cm)	1.076	2	2.152	0.7608	0.000663	353.4292	0.234316		0.002521	0.02674	121.18	0.017671	6857.385	17.28912	183.3675
WW6.3 (2-10 cm)	1.039	8	8.312		0.000663	1413.717	0.937264		0.009738		121.18	0.017671	6857.385	66.7784	
WW6.3 (10-30 cm)	0.618	20	12.36		0.000663	3534.292	2.34316		0.014481		121.18	0.017671	6857.385	99.29994	
WW7.1 (0-2cm)	0.984	2	1.968	0.467067	0.000663	353.4292	0.234316		0.002306	0.016416	121.18	0.017671	6857.385	15.81086	112.5721
WW7.1 (2-10cm)	0.493	8	3.944		0.000663	1413.717	0.937264		0.004621		121.18	0.017671	6857.385	31.686	
WW7.1 (10-30 cm)	0.405	20	8.1		0.000663	3534.292	2.34316		0.00949		121.18	0.017671	6857.385	65.0752	
WW7.2 (0-2 cm)	0.509	2	1.018	0.554733	0.000663	353.4292	0.234316		0.001193	0.019497	121.18	0.017671	6857.385	8.178587	133.7014
WW7.2 (2-10cm)	0.533	8	4.264		0.000663	1413.717	0.937264		0.004996		121.18	0.017671	6857.385	34.25687	
WW7.2 (10-30 cm)	0.568	20	11.36		0.000663	3534.292	2.34316		0.013309		121.18	0.017671	6857.385	91.26596	
WW7.3 (0-2 cm)	0.588	2	1.176	0.403467	0.000663	353.4292	0.234316		0.001378	0.014181	121.18	0.017671	6857.385	9.447955	97.24324
WW7.3 (2-10 cm)	0.581	8	4.648		0.000663	1413.717	0.937264		0.005446		121.18	0.017671	6857.385	37.34192	
WW7.3 (10-30 cm)	0.314	20	6.28		0.000663	3534.292	2.34316		0.007358		121.18	0.017671	6857.385	50.45337	

Paddocks (Interval Depth)	Cr (mg/kg)	Depth Weight	Cr weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (mg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW1.1 (0-2 cm)	0.0051	2	0.0102	0.272313	0.000663	353.4292	0.234316	3.51474	1.2E-05	0.009571	121.18	0.017671	6857.385	0.081947	65.63276
WW1.1 (2-10 cm)	0.2914	8	2.3312		0.000663	1413.717	0.937264		0.002731		121.18	0.017671	6857.385	18.7288	
WW1.1 (10-30cm)	0.2914	20	5.828		0.000663	3534.292	2.34316		0.006828		121.18	0.017671	6857.385	46.82201	
WW1.2 (0-2cm)	0.1435	2	0.287	0.254767	0.000663	353.4292	0.234316		0.000336	0.008954	121.18	0.017671	6857.385	2.305751	61.40367
WW1.2 (2-10cm)	0.191	8	1.528		0.000663	1413.717	0.937264		0.00179		121.18	0.017671	6857.385	12.27591	
WW1.2 (10-30cm)	0.2914	20	5.828		0.000663	3534.292	2.34316		0.006828		121.18	0.017671	6857.385	46.82201	
WW1.3 (0-2 cm)	0.1195	2	0.239	0.154593	0.000663	353.4292	0.234316		0.00028	0.005434	121.18	0.017671	6857.385	1.92012	37.25997
WW1.3 (2-10cm)	0.1441	8	1.1528		0.000663	1413.717	0.937264		0.001351		121.18	0.017671	6857.385	9.261567	
WW1.3 (10-30 cm)	0.1623	20	3.246		0.000663	3534.292	2.34316		0.003803		121.18	0.017671	6857.385	26.07828	
WW2.1 (0-2 cm)	0.1106	2	0.2212	0.17896	0.000663	353.4292	0.234316		0.000259	0.00629	121.18	0.017671	6857.385	1.777115	43.13281
WW2.1 (2-10cm)	0.2692	8	2.1536		0.000663	1413.717	0.937264		0.002523		121.18	0.017671	6857.385	17.30197	
WW2.1 (10-30 cm)	0.1497	20	2.994		0.000663	3534.292	2.34316		0.003508		121.18	0.017671	6857.385	24.05372	
WW2.2 (0-2 cm)	0.1098	2	0.2196	0.13612	0.000663	353.4292	0.234316		0.000257	0.004784	121.18	0.017671	6857.385	1.764261	32.80754
WW2.2 (2-10 cm)	0.1355	8	1.084		0.000663	1413.717	0.937264		0.00127		121.18	0.017671	6857.385	8.708829	
WW2.2 (10-30 cm)	0.139	20	2.78		0.000663	3534.292	2.34316		0.003257		121.18	0.017671	6857.385	22.33445	
WW2.3 (0-10 cm)	0.1631	2	0.3262	0.152153	0.000663	353.4292	0.234316		0.000382	0.005348	121.18	0.017671	6857.385	2.620683	36.67188
WW2.3 (2-10 cm)	0.2048	8	1.6384		0.000663	1413.717	0.937264		0.00192		121.18	0.017671	6857.385	13.16287	
WW2.3 (10-30 cm)	0.13	20	2.6		0.000663	3534.292	2.34316		0.003046		121.18	0.017671	6857.385	20.88834	
WW4.1 (0-2 cm)	0.1331	2	0.2662	0.376287	0.000663	353.4292	0.234316		0.000312	0.013225	121.18	0.017671	6857.385	2.138644	90.69233
WW4.1 (2-10 cm)	0.2203	8	1.7624		0.000663	1413.717	0.937264		0.002065		121.18	0.017671	6857.385	14.15908	
WW4.1 (10-30 cm)	0.463	20	9.26		0.000663	3534.292	2.34316		0.010849		121.18	0.017671	6857.385	74.39461	
WW4.2 (0-2cm)	0.2654	2	0.5308	0.21608	0.000663	353.4292	0.234316		0.000622	0.007595	121.18	0.017671	6857.385	4.264434	52.07944
WW4.2 (2-10 cm)	0.2057	8	1.6456		0.000663	1413.717	0.937264		0.001928		121.18	0.017671	6857.385	13.22071	
WW4.2 (10-30 cm)	0.2153	20	4.306		0.000663	3534.292	2.34316		0.005045		121.18	0.017671	6857.385	34.5943	
WW4.3 (0-2 cm)	0.1227	2	0.2454	0.165913	0.000663	353.4292	0.234316		0.000288	0.005831	121.18	0.017671	6857.385	1.971538	39.98831
WW4.3 (2-10 cm)	0.151	8	1.208		0.000663	1413.717	0.937264		0.001415		121.18	0.017671	6857.385	9.705042	
WW4.3 (10-30 cm)	0.1762	20	3.524		0.000663	3534.292	2.34316		0.004129		121.18	0.017671	6857.385	28.31173	
WW6.1 (0-2 cm)	0.2309	2	0.4618	0.323367	0.000663	353.4292	0.234316		0.000541	0.011365	121.18	0.017671	6857.385	3.71009	77.9376
WW6.1 (2-10 cm)	0.1899	8	1.5192		0.000663	1413.717	0.937264		0.00178		121.18	0.017671	6857.385	12.20522	
WW6.1 (10-30 cm)	0.386	20	7.72		0.000663	3534.292	2.34316		0.009045		121.18	0.017671	6857.385	62.02229	

Paddocks (Interval Depth)	Cr (mg/kg)	Depth Weight	Cr weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (mg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW6.2 (0-2 cm)	0.1491	2	0.2982	0.181327	0.000663	353.4292	0.234316		0.000349	0.006373	121.18	0.017671	6857.385	2.395731	43.70322
WW6.2 (2-10 cm)	0.1357	8	1.0856		0.000663	1413.717	0.937264		0.001272		121.18	0.017671	6857.385	8.721684	
WW6.2 (10-30 cm)	0.2028	20	4.056		0.000663	3534.292	2.34316		0.004752		121.18	0.017671	6857.385	32.5858	
WW6.3 (0-2 cm)	0.1454	2	0.2908	0.16768	0.000663	353.4292	0.234316		0.000341	0.005894	121.18	0.017671	6857.385	2.33628	40.41411
WW6.3 (2-10 cm)	0.1327	8	1.0616		0.000663	1413.717	0.937264		0.001244		121.18	0.017671	6857.385	8.528868	
WW6.3 (10-30 cm)	0.1839	20	3.678		0.000663	3534.292	2.34316		0.004309		121.18	0.017671	6857.385	29.54896	
WW7.1 (0-2cm)	0.214	2	0.428	0.245987	0.000663	353.4292	0.234316		0.000501	0.008646	121.18	0.017671	6857.385	3.438541	59.28752
WW7.1 (2-10cm)	0.2327	8	1.8616		0.000663	1413.717	0.937264		0.002181		121.18	0.017671	6857.385	14.95605	
WW7.1 (10-30 cm)	0.2545	20	5.09		0.000663	3534.292	2.34316		0.005963		121.18	0.017671	6857.385	40.89293	
WW7.2 (0-2 cm)	0.2581	2	0.5162	0.275953	0.000663	353.4292	0.234316		0.000605	0.009699	121.18	0.017671	6857.385	4.147138	66.51007
WW7.2 (2-10cm)	0.3363	8	2.6904		0.000663	1413.717	0.937264		0.003152		121.18	0.017671	6857.385	21.61461	
WW7.2 (10-30 cm)	0.2536	20	5.072		0.000663	3534.292	2.34316		0.005942		121.18	0.017671	6857.385	40.74832	
WW7.3 (0-2 cm)	0.277	2	0.554	0.256093	0.000663	353.4292	0.234316		0.000649	0.009001	121.18	0.017671	6857.385	4.450822	61.72343
WW7.3 (2-10 cm)	0.1981	8	1.5848		0.000663	1413.717	0.937264		0.001857		121.18	0.017671	6857.385	12.73224	
WW7.3 (10-30 cm)	0.2772	20	5.544		0.000663	3534.292	2.34316		0.006495		121.18	0.017671	6857.385	44.54036	

Paddocks (Interval Depth)	Cu (mg/kg)	Depth Weight	Cu weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (kg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW1.1 (0-2 cm)	0.0464	2	0.0928	0.047893	0.000663	353.4292	0.234316	3.51474	0.000109	0.001683	121.18	0.017671	6857.385	0.745553	11.54322
WW1.1 (2-10 cm)	0.048	8	0.384		0.000663	1413.717	0.937264		0.00045		121.18	0.017671	6857.385	3.085047	
WW1.1 (10-30cm)	0.048	20	0.96		0.000663	3534.292	2.34316		0.001125		121.18	0.017671	6857.385	7.712616	
WW1.2 (0-2cm)	0.0372	2	0.0744	0.04736	0.000663	353.4292	0.234316		8.72E-05	0.001665	121.18	0.017671	6857.385	0.597728	11.41467
WW1.2 (2-10cm)	0.0483	8	0.3864		0.000663	1413.717	0.937264		0.000453		121.18	0.017671	6857.385	3.104328	
WW1.2 (10-30cm)	0.048	20	0.96		0.000663	3534.292	2.34316		0.001125		121.18	0.017671	6857.385	7.712616	
WW1.3 (0-2 cm)	0.0483	2	0.0966	0.042927	0.000663	353.4292	0.234316		0.000113	0.001509	121.18	0.017671	6857.385	0.776082	10.34615
WW1.3 (2-10cm)	0.0429	8	0.3432		0.000663	1413.717	0.937264		0.000402		121.18	0.017671	6857.385	2.75726	
WW1.3 (10-30 cm)	0.0424	20	0.848		0.000663	3534.292	2.34316		0.000993		121.18	0.017671	6857.385	6.812811	
WW2.1 (0-2 cm)	0.0355	2	0.071	0.040167	0.000663	353.4292	0.234316		8.32E-05	0.001412	121.18	0.017671	6857.385	0.570412	9.68094
WW2.1 (2-10cm)	0.0435	8	0.348		0.000663	1413.717	0.937264		0.000408		121.18	0.017671	6857.385	2.795823	
WW2.1 (10-30 cm)	0.0393	20	0.786		0.000663	3534.292	2.34316		0.000921		121.18	0.017671	6857.385	6.314705	
WW2.2 (0-2 cm)	0.0409	2	0.0818	0.034673	0.000663	353.4292	0.234316		9.58E-05	0.001219	121.18	0.017671	6857.385	0.657179	8.356941
WW2.2 (2-10 cm)	0.0348	8	0.2784		0.000663	1413.717	0.937264		0.000326		121.18	0.017671	6857.385	2.236659	
WW2.2 (10-30 cm)	0.034	20	0.68		0.000663	3534.292	2.34316		0.000797		121.18	0.017671	6857.385	5.463103	
WW2.3 (0-10 cm)	0.0405	2	0.081	0.04062	0.000663	353.4292	0.234316		9.49E-05	0.001428	121.18	0.017671	6857.385	0.650752	9.790202
WW2.3 (2-10 cm)	0.0447	8	0.3576		0.000663	1413.717	0.937264		0.000419		121.18	0.017671	6857.385	2.87295	
WW2.3 (10-30 cm)	0.039	20	0.78		0.000663	3534.292	2.34316		0.000914		121.18	0.017671	6857.385	6.266501	
WW4.1 (0-2 cm)	0.0384	2	0.0768	0.028027	0.000663	353.4292	0.234316		9E-05	0.000985	121.18	0.017671	6857.385	0.617009	6.754967
WW4.1 (2-10 cm)	0.035	8	0.28		0.000663	1413.717	0.937264		0.000328		121.18	0.017671	6857.385	2.249513	
WW4.1 (10-30 cm)	0.0242	20	0.484		0.000663	3534.292	2.34316		0.000567		121.18	0.017671	6857.385	3.888444	
WW4.2 (0-2cm)	0.0423	2	0.0846	0.04098	0.000663	353.4292	0.234316		9.91E-05	0.00144	121.18	0.017671	6857.385	0.679674	9.876969
WW4.2 (2-10 cm)	0.0386	8	0.3088		0.000663	1413.717	0.937264		0.000362		121.18	0.017671	6857.385	2.480892	
WW4.2 (10-30 cm)	0.0418	20	0.836		0.000663	3534.292	2.34316		0.000979		121.18	0.017671	6857.385	6.716403	
WW4.3 (0-2 cm)	0.0354	2	0.0708	0.03916	0.000663	353.4292	0.234316		8.29E-05	0.001376	121.18	0.017671	6857.385	0.568805	9.438314
WW4.3 (2-10 cm)	0.0405	8	0.324		0.000663	1413.717	0.937264		0.00038		121.18	0.017671	6857.385	2.603008	
WW4.3 (10-30 cm)	0.039	20	0.78		0.000663	3534.292	2.34316		0.000914		121.18	0.017671	6857.385	6.266501	
WW6.1 (0-2 cm)	0.0458	2	0.0916	0.04316	0.000663	353.4292	0.234316		0.000107	0.001517	121.18	0.017671	6857.385	0.735912	10.40239
WW6.1 (2-10 cm)	0.0394	8	0.3152		0.000663	1413.717	0.937264		0.000369		121.18	0.017671	6857.385	2.532309	
WW6.1 (10-30 cm)	0.0444	20	0.888		0.000663	3534.292	2.34316		0.00104		121.18	0.017671	6857.385	7.13417	
WW6.2 (0-2 cm)	0.0399	2	0.0798	0.03902	0.000663	353.4292	0.234316		9.35E-05	0.001371	121.18	0.017671	6857.385	0.641111	9.404572

Paddocks (Interval Depth)	Cu (mg/kg)	Depth Weight	Cu weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (kg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW6.2 (2-10 cm)	0.0361	8	0.2888		0.000663	1413.717	0.937264		0.000338		121.18	0.017671	6857.385	2.320212	
WW6.2 (10-30 cm)	0.0401	20	0.802		0.000663	3534.292	2.34316		0.00094		121.18	0.017671	6857.385	6.443248	
WW6.3 (0-2 cm)	0.0412	2	0.0824	0.037333	0.000663	353.4292	0.234316		9.65E-05	0.001312	121.18	0.017671	6857.385	0.662	8.998052
WW6.3 (2-10 cm)	0.0322	8	0.2576		0.000663	1413.717	0.937264		0.000302		121.18	0.017671	6857.385	2.069552	
WW6.3 (10-30 cm)	0.039	20	0.78		0.000663	3534.292	2.34316		0.000914		121.18	0.017671	6857.385	6.266501	
WW7.1 (0-2cm)	0.0519	2	0.1038	0.036993	0.000663	353.4292	0.234316		0.000122	0.0013	121.18	0.017671	6857.385	0.833927	8.916106
WW7.1 (2-10cm)	0.035	8	0.28		0.000663	1413.717	0.937264		0.000328		121.18	0.017671	6857.385	2.249513	
WW7.1 (10-30 cm)	0.0363	20	0.726		0.000663	3534.292	2.34316		0.000851		121.18	0.017671	6857.385	5.832666	
WW7.2 (0-2 cm)	0.0453	2	0.0906	0.04526	0.000663	353.4292	0.234316		0.000106	0.001591	121.18	0.017671	6857.385	0.727878	10.90853
WW7.2 (2-10cm)	0.0494	8	0.3952		0.000663	1413.717	0.937264		0.000463		121.18	0.017671	6857.385	3.175027	
WW7.2 (10-30 cm)	0.0436	20	0.872		0.000663	3534.292	2.34316		0.001022		121.18	0.017671	6857.385	7.005627	
WW7.3 (0-2 cm)	0.0363	2	0.0726	0.037753	0.000663	353.4292	0.234316		8.51E-05	0.001327	121.18	0.017671	6857.385	0.583267	9.099281
WW7.3 (2-10 cm)	0.034	8	0.272		0.000663	1413.717	0.937264		0.000319		121.18	0.017671	6857.385	2.185241	
WW7.3 (10-30 cm)	0.0394	20	0.788		0.000663	3534.292	2.34316		0.000923		121.18	0.017671	6857.385	6.330773	

Paddocks (Interval Depth)	Zn (mg/kg)	Depth Weight	Cu weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (mg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW1.1 (0-2 cm)	0.642	2	1.284	0.449827	0.000663	353.4292	0.234316	3.51474	0.001504	0.01581	121.18	0.017671	6857.385	10.31562	108.4169
WW1.1 (2-10 cm)	0.4361	8	3.4888		0.000663	1413.717	0.937264		0.004087		121.18	0.017671	6857.385	28.02893	
WW1.1 (10-30cm)	0.4361	20	8.722		0.000663	3534.292	2.34316		0.010219		121.18	0.017671	6857.385	70.07233	
WW1.2 (0-2cm)	0.4341	2	0.8682	0.422633	0.000663	353.4292	0.234316		0.001017	0.014854	121.18	0.017671	6857.385	6.975097	101.8628
WW1.2 (2-10cm)	0.3861	8	3.0888		0.000663	1413.717	0.937264		0.003619		121.18	0.017671	6857.385	24.81534	
WW1.2 (10-30cm)	0.4361	20	8.722		0.000663	3534.292	2.34316		0.010219		121.18	0.017671	6857.385	70.07233	
WW1.3 (0-2 cm)	0.617	2	1.234	0.341	0.000663	353.4292	0.234316		0.001446	0.011985	121.18	0.017671	6857.385	9.913926	82.18757
WW1.3 (2-10cm)	0.3285	8	2.628		0.000663	1413.717	0.937264		0.003079		121.18	0.017671	6857.385	21.11329	
WW1.3 (10-30 cm)	0.3184	20	6.368		0.000663	3534.292	2.34316		0.007461		121.18	0.017671	6857.385	51.16036	
WW2.1 (0-2 cm)	0.3909	2	0.7818	0.2981	0.000663	353.4292	0.234316		0.000916	0.010477	121.18	0.017671	6857.385	6.280962	71.84784
WW2.1 (2-10cm)	0.2914	8	2.3312		0.000663	1413.717	0.937264		0.002731		121.18	0.017671	6857.385	18.7288	
WW2.1 (10-30 cm)	0.2915	20	5.83		0.000663	3534.292	2.34316		0.00683		121.18	0.017671	6857.385	46.83808	
WW2.2 (0-2 cm)	0.95	2	1.9	0.28316	0.000663	353.4292	0.234316		0.002226	0.009952	121.18	0.017671	6857.385	15.26455	68.24701
WW2.2 (2-10 cm)	0.3001	8	2.4008		0.000663	1413.717	0.937264		0.002813		121.18	0.017671	6857.385	19.28797	
WW2.2 (10-30 cm)	0.2097	20	4.194		0.000663	3534.292	2.34316		0.004914		121.18	0.017671	6857.385	33.69449	
WW2.3 (0-10 cm)	0.3575	2	0.715	0.417153	0.000663	353.4292	0.234316		0.000838	0.014662	121.18	0.017671	6857.385	5.744292	100.542
WW2.3 (2-10 cm)	0.4172	8	3.3376		0.000663	1413.717	0.937264		0.00391		121.18	0.017671	6857.385	26.8142	
WW2.3 (10-30 cm)	0.4231	20	8.462		0.000663	3534.292	2.34316		0.009914		121.18	0.017671	6857.385	67.9835	
WW4.1 (0-2 cm)	0.498	2	0.996	0.544667	0.000663	353.4292	0.234316		0.001167	0.019144	121.18	0.017671	6857.385	8.00184	131.2752
WW4.1 (2-10 cm)	0.523	8	4.184		0.000663	1413.717	0.937264		0.004902		121.18	0.017671	6857.385	33.61415	
WW4.1 (10-30 cm)	0.558	20	11.16		0.000663	3534.292	2.34316		0.013075		121.18	0.017671	6857.385	89.65917	
WW4.2 (0-2cm)	0.777	2	1.554	0.530333	0.000663	353.4292	0.234316		0.001821	0.01864	121.18	0.017671	6857.385	12.4848	127.8205
WW4.2 (2-10 cm)	0.537	8	4.296		0.000663	1413.717	0.937264		0.005033		121.18	0.017671	6857.385	34.51396	
WW4.2 (10-30 cm)	0.503	20	10.06		0.000663	3534.292	2.34316		0.011786		121.18	0.017671	6857.385	80.82179	
WW4.3 (0-2 cm)	0.708	2	1.416	0.618	0.000663	353.4292	0.234316		0.001659	0.021721	121.18	0.017671	6857.385	11.37611	148.9499
WW4.3 (2-10 cm)	0.638	8	5.104		0.000663	1413.717	0.937264		0.00598		121.18	0.017671	6857.385	41.00541	
WW4.3 (10-30 cm)	0.601	20	12.02		0.000663	3534.292	2.34316		0.014082		121.18	0.017671	6857.385	96.56838	
WW6.1 (0-2 cm)	0.531	2	1.062	0.5786	0.000663	353.4292	0.234316		0.001244	0.020336	121.18	0.017671	6857.385	8.532082	139.4537
WW6.1 (2-10 cm)	0.532	8	4.256		0.000663	1413.717	0.937264		0.004986		121.18	0.017671	6857.385	34.1926	
WW6.1 (10-30 cm)	0.602	20	12.04		0.000663	3534.292	2.34316		0.014106		121.18	0.017671	6857.385	96.72906	
WW6.2 (0-2 cm)	0.5341	2	1.0682	0.42126	0.000663	353.4292	0.234316		0.001251	0.014806	121.18	0.017671	6857.385	8.581893	101.5318

Paddocks (Interval Depth)	Zn (mg/kg)	Depth Weight	Cu weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (mg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW6.2 (2-10 cm)	0.3437	8	2.7496		0.000663	1413.717	0.937264		0.003221		121.18	0.017671	6857.385	22.09022	
WW6.2 (10-30 cm)	0.441	20	8.82		0.000663	3534.292	2.34316		0.010333		121.18	0.017671	6857.385	70.85966	
WW6.3 (0-2 cm)	0.734	2	1.468	0.5616	0.000663	353.4292	0.234316		0.00172	0.019739	121.18	0.017671	6857.385	11.79388	135.3564
WW6.3 (2-10 cm)	0.601	8	4.808		0.000663	1413.717	0.937264		0.005633		121.18	0.017671	6857.385	38.62735	
WW6.3 (10-30 cm)	0.5286	20	10.572		0.000663	3534.292	2.34316		0.012386		121.18	0.017671	6857.385	84.93519	
WW7.1 (0-2cm)	0.677	2	1.354	0.496733	0.000663	353.4292	0.234316		0.001586	0.017459	121.18	0.017671	6857.385	10.878	119.7223
WW7.1 (2-10cm)	0.481	8	3.848		0.000663	1413.717	0.937264		0.004508		121.18	0.017671	6857.385	30.91474	
WW7.1 (10-30 cm)	0.485	20	9.7		0.000663	3534.292	2.34316		0.011364		121.18	0.017671	6857.385	77.92956	
WW7.2 (0-2 cm)	0.545	2	1.09	0.5558	0.000663	353.4292	0.234316		0.001277	0.019535	121.18	0.017671	6857.385	8.757033	133.9585
WW7.2 (2-10cm)	0.663	8	5.304		0.000663	1413.717	0.937264		0.006214		121.18	0.017671	6857.385	42.61221	
WW7.2 (10-30 cm)	0.514	20	10.28		0.000663	3534.292	2.34316		0.012044		121.18	0.017671	6857.385	82.58927	
WW7.3 (0-2 cm)	0.7	2	1.4	0.55424	0.000663	353.4292	0.234316		0.00164	0.01948	121.18	0.017671	6857.385	11.24757	133.5825
WW7.3 (2-10 cm)	0.5609	8	4.4872		0.000663	1413.717	0.937264		0.005257		121.18	0.017671	6857.385	36.05005	
WW7.3 (10-30 cm)	0.537	20	10.74		0.000663	3534.292	2.34316		0.012583		121.18	0.017671	6857.385	86.2849	

Paddocks (Interval Depth)	U (mg/kg)	Depth Weight	Cu weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (mg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW1.1 (0-2 cm)	0.005	2	0.01	0.001453	0.000663	353.4292	0.234316	3.51474	1.17E-05	5.11E-05	121.18	0.017671	6857.385	0.08034	0.350281
WW1.1 (2-10 cm)	0.0012	8	0.0096		0.000663	1413.717	0.937264		1.12E-05		121.18	0.017671	6857.385	0.077126	
WW1.1 (10-30cm)	0.0012	20	0.024		0.000663	3534.292	2.34316		2.81E-05		121.18	0.017671	6857.385	0.192815	
WW1.2 (0-2cm)	0.0013	2	0.0026	0.001473	0.000663	353.4292	0.234316		3.05E-06	5.18E-05	121.18	0.017671	6857.385	0.020888	0.355102
WW1.2 (2-10cm)	0.0022	8	0.0176		0.000663	1413.717	0.937264		2.06E-05		121.18	0.017671	6857.385	0.141398	
WW1.2 (10-30cm)	0.0012	20	0.024		0.000663	3534.292	2.34316		2.81E-05		121.18	0.017671	6857.385	0.192815	
WW1.3 (0-2 cm)	0.0036	2	0.0072	0.00148	0.000663	353.4292	0.234316		8.44E-06	5.2E-05	121.18	0.017671	6857.385	0.057845	0.356709
WW1.3 (2-10cm)	0.0014	8	0.0112		0.000663	1413.717	0.937264		1.31E-05		121.18	0.017671	6857.385	0.089981	
WW1.3 (10-30 cm)	0.0013	20	0.026		0.000663	3534.292	2.34316		3.05E-05		121.18	0.017671	6857.385	0.208883	
WW2.1 (0-2 cm)	0.0013	2	0.0026	0.0013	0.000663	353.4292	0.234316		3.05E-06	4.57E-05	121.18	0.017671	6857.385	0.020888	0.313325
WW2.1 (2-10cm)	0.0013	8	0.0104		0.000663	1413.717	0.937264		1.22E-05		121.18	0.017671	6857.385	0.083553	
WW2.1 (10-30 cm)	0.0013	20	0.026		0.000663	3534.292	2.34316		3.05E-05		121.18	0.017671	6857.385	0.208883	
WW2.2 (0-2 cm)	0.0038	2	0.0076	0.001467	0.000663	353.4292	0.234316		8.9E-06	5.15E-05	121.18	0.017671	6857.385	0.061058	0.353495
WW2.2 (2-10 cm)	0.0013	8	0.0104		0.000663	1413.717	0.937264		1.22E-05		121.18	0.017671	6857.385	0.083553	
WW2.2 (10-30 cm)	0.0013	20	0.026		0.000663	3534.292	2.34316		3.05E-05		121.18	0.017671	6857.385	0.208883	
WW2.3 (0-10 cm)	0.0019	2	0.0038	0.00146	0.000663	353.4292	0.234316		4.45E-06	5.13E-05	121.18	0.017671	6857.385	0.030529	0.351888
WW2.3 (2-10 cm)	0.0015	8	0.012		0.000663	1413.717	0.937264		1.41E-05		121.18	0.017671	6857.385	0.096408	
WW2.3 (10-30 cm)	0.0014	20	0.028		0.000663	3534.292	2.34316		3.28E-05		121.18	0.017671	6857.385	0.224951	
WW4.1 (0-2 cm)	0.0013	2	0.0026	0.001207	0.000663	353.4292	0.234316		3.05E-06	4.24E-05	121.18	0.017671	6857.385	0.020888	0.29083
WW4.1 (2-10 cm)	0.0012	8	0.0096		0.000663	1413.717	0.937264		1.12E-05		121.18	0.017671	6857.385	0.077126	
WW4.1 (10-30 cm)	0.0012	20	0.024		0.000663	3534.292	2.34316		2.81E-05		121.18	0.017671	6857.385	0.192815	
WW4.2 (0-2cm)	0.0014	2	0.0028	0.001373	0.000663	353.4292	0.234316		3.28E-06	4.83E-05	121.18	0.017671	6857.385	0.022495	0.331
WW4.2 (2-10 cm)	0.0013	8	0.0104		0.000663	1413.717	0.937264		1.22E-05		121.18	0.017671	6857.385	0.083553	
WW4.2 (10-30 cm)	0.0014	20	0.028		0.000663	3534.292	2.34316		3.28E-05		121.18	0.017671	6857.385	0.224951	
WW4.3 (0-2 cm)	0.0018	2	0.0036	0.001427	0.000663	353.4292	0.234316		4.22E-06	5.01E-05	121.18	0.017671	6857.385	0.028922	0.343854
WW4.3 (2-10 cm)	0.0014	8	0.0112		0.000663	1413.717	0.937264		1.31E-05		121.18	0.017671	6857.385	0.089981	
WW4.3 (10-30 cm)	0.0014	20	0.028		0.000663	3534.292	2.34316		3.28E-05		121.18	0.017671	6857.385	0.224951	
WW6.1 (0-2 cm)	0.0018	2	0.0036	0.0014	0.000663	353.4292	0.234316		4.22E-06	4.92E-05	121.18	0.017671	6857.385	0.028922	0.337427
WW6.1 (2-10 cm)	0.0013	8	0.0104		0.000663	1413.717	0.937264		1.22E-05		121.18	0.017671	6857.385	0.083553	
WW6.1 (10-30 cm)	0.0014	20	0.028		0.000663	3534.292	2.34316		3.28E-05		121.18	0.017671	6857.385	0.224951	

Paddocks (Interval Depth)	U (mg/kg)	Depth Weight	Cu weighted (mg/kg)	Weighted mean concentration (mg/kg)	Bulk Density (kg/cm^3)	Interval volume (cm^3)	Sediment mass (mg)	whole sediment mass core	Actual mass pool (mg)	Sum of mass whole core pool (mg)	Paddock Area (m^2)	Cores Area (cm^3)	Paddock Over Core (estimated core numbers within a paddock)	Mass in paddock (mg)	Mass SUM (mg) (whole depth 30 cm)
WW6.2 (0-2 cm)	0.0013	2	0.0026	0.0013	0.000663	353.4292	0.234316		3.05E-06	4.57E-05	121.18	0.017671	6857.385	0.020888	0.313325
WW6.2 (2-10 cm)	0.0013	8	0.0104		0.000663	1413.717	0.937264		1.22E-05		121.18	0.017671	6857.385	0.083553	
WW6.2 (10-30 cm)	0.0013	20	0.026		0.000663	3534.292	2.34316		3.05E-05		121.18	0.017671	6857.385	0.208883	
WW6.3 (0-2 cm)	0.0051	2	0.0102	0.001527	0.000663	353.4292	0.234316		1.2E-05	5.37E-05	121.18	0.017671	6857.385	0.081947	0.367956
WW6.3 (2-10 cm)	0.0012	8	0.0096		0.000663	1413.717	0.937264		1.12E-05		121.18	0.017671	6857.385	0.077126	
WW6.3 (10-30 cm)	0.0013	20	0.026		0.000663	3534.292	2.34316		3.05E-05		121.18	0.017671	6857.385	0.208883	
WW7.1 (0-2cm)	0.0089	2	0.0178	0.001807	0.000663	353.4292	0.234316		2.09E-05	6.35E-05	121.18	0.017671	6857.385	0.143005	0.435441
WW7.1 (2-10cm)	0.0013	8	0.0104		0.000663	1413.717	0.937264		1.22E-05		121.18	0.017671	6857.385	0.083553	
WW7.1 (10-30 cm)	0.0013	20	0.026		0.000663	3534.292	2.34316		3.05E-05		121.18	0.017671	6857.385	0.208883	
WW7.2 (0-2 cm)	0.0029	2	0.0058	0.0015	0.000663	353.4292	0.234316		6.8E-06	5.27E-05	121.18	0.017671	6857.385	0.046597	0.361529
WW7.2 (2-10cm)	0.0014	8	0.0112		0.000663	1413.717	0.937264		1.31E-05		121.18	0.017671	6857.385	0.089981	
WW7.2 (10-30 cm)	0.0014	20	0.028		0.000663	3534.292	2.34316		3.28E-05		121.18	0.017671	6857.385	0.224951	
WW7.3 (0-2 cm)	0.0035	2	0.007	0.002087	0.000663	353.4292	0.234316		8.2E-06	7.33E-05	121.18	0.017671	6857.385	0.056238	0.502927
WW7.3 (2-10 cm)	0.0037	8	0.0296		0.000663	1413.717	0.937264		3.47E-05		121.18	0.017671	6857.385	0.237806	
WW7.3 (10-30 cm)	0.0013	20	0.026		0.000663	3534.292	2.34316		3.05E-05		121.18	0.017671	6857.385	0.208883	

Appendix D 1: The ICP-OES water samples analysis data

Paddocks	Aluminum	Calcium	Iron	Magnesium	Sodium	Nickel	Phosphorus	Sulphur
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Al	Ca	Fe	Mg	Na	Ni	P	S
Paddock1 WW1	Nd	166.3	0.015	190.7	186.2	nd	nd	686.9
Paddock1 WW2	Nd	131.2	0.042	171.2	183.7	nd	nd	605.6
Paddock1 WW3	Nd	192.5	0.036	182.4	209	nd	nd	823.8
Paddock2 WW1	0.081	174.4	0.027	194.1	214.7	0.013	nd	749.1
Paddock2 WW2	Nd	162.7	0.045	182.9	204.2	nd	nd	703.6
Paddock2 WW3	0.097	138.3	0.039	146.8	168.3	nd	nd	5839
Paddock4 WW1	0.133	286.2	0.015	352.5	325	nd	nd	1316.4
Paddock4 WW2	Nd	142.3	0.026	162.6	195.7	0.004	nd	584.4
Paddock4 WW3	Nd	2.532	nd	326.9	336.5	nd	nd	1248.4
Paddock6 WW1	0.15	284	0.035	369.6	397.2	0.031	nd	1399.4
Paddock6 WW2	Nd	147	0.086	196.8	296	0.017	nd	783.6
Paddock6 WW3	Nd	98.8	0.127	132.4	271.8	0.016	nd	644.2
Paddock7 WW1	0.102	144.9	0.01	198.2	270.4	0.044	nd	736.5
Paddock7 WW2	0.194	245.1	2.23	251.4	322.5	0.282	nd	1100.4
Paddock7 WW3	Nd	160.6	0.037	233	308.1	0.071	nd	919

nd. refer to element concentration not detected

Appendix D2: The ICP-OES water samples analysis data by Omo-Okoro (2015)

Sample	Al	Ca	Fe	Mg	Na	P	S
	Ppm	ppm	ppm	ppm	ppm	ppm	ppm
PO 1.1	0.067	261.7	0.149	254.9	291.6	nd	732
PO 1.2	0.136	272.4	0.068	219.8	294.8	nd	928
PO 1.3	0.147	147	0.028	119	228.8	nd	681.8
PO 4.1	0.093	222.1	0.055	212.8	264.8	nd	918.5
PO 4.2	0.061	176.2	0.029	123.2	241.3	nd	820.5
PO 4.3	0.124	157.1	0.028	95.7	214.7	nd	675
PO 7.1	0.139	304.2	0.241	282.3	357.9	nd	1229.8
PO 7.2	0.076	210	0.036	181.2	290.1	nd	959.4
PO 7.3	0.138	268.4	0.023	200	310.5	nd	1051.9
PO 10.1	0.106	168.2	0.062	145.3	273.7	nd	765.2
PO 10.2	Nd	204.2	0.087	139.2	211.6	nd	705
PO 10.3	Nd	195.4	0.078	101.4	195.4	nd	637.1
PO 13.1	Nd	194	0.019	192.1	175.2	nd	782
PO 13.2	0.104	190.3	0.012	169.8	174	nd	738.3
PO 13.3	0.119	248.5	0.034	264.6	195.2	nd	1024.3
PO 15.1	Nd	309.5	0.038	321.2	213	nd	1325.3
PO 15.2	0.128	226.3	0.076	269.1	192.6	nd	987.8

nd. refer to element concentration not detected

Appendix D 3: The actual stream raw data by Joubert 2013

West Wits	31/05/2013					
Sampling In Situ Data						
Paddock (M.J.)	Co-ordinates		Temp. (^oC)	DO ($mg.L^{-1}$)	EC ($\mu S.cm^{1}$)	pH
-1.1	26.43595	27.36712	15.6	7.92	3612	6.99
-1.3	26.43617	27.36696	19.7	9.53	3993	7.06
-2.1	26.43656	27.36665	20	7.86	4058	7.01
-2.3	26.43665	27.3665	18.7	9.27	4035	7.01
-3.1	26.43675	27.36649	19.1	6.98	4014	6.89
-3.3	26.43684	27.36641	17.3	8.14	3845	6.86
0 (stilling pond)	26.43542	27.36774	18.7	8.33	4095	6.65
1.1(a)	26.4351	27.36796	12.2	9.58	3450	6.24
1.1 (b)	26.43506	27.36787	n/a	n/a	n/a	n/a
1.2	26.43511	27.36782	15	8.64	3905	6.28
1.3	26.43521	27.3678	14	11.28	3642	6.49
2.1	26.43446	27.36837	14.3	4.21	4430	5.66
2.3	26.43499	27.36805	10.7	6.12	4333	4.21
3.1	26.43402	27.36847	12.1	8.54	3708	4.81
3.2	26.43409	27.3684	14.2	6.89	4065	4.51
3.3	26.4341	27.36833	13.2	5.77	4561	4.34
4.1	26.43366	27.3688	17.8	6.81	3816	5.75
4.3	26.43386	27.36864	14.7	7.6	3801	4.99
5.1	26.43331	27.36913	15.1	6.86	3708	5
5.3	26.43348	27.36894	15	7.33	3502	6.01
6.1	26.43303	27036928	17	7.43	4128	4.23
6.2	26.43315	27.36923	14.7	7.44	3967	3.85
6.3	26.43323	27.36919	15.5	8.43	4093	3.77
7.1	26.43274	27.3694	16.8	6.84	3804	6.81
7.3	26.43289	27.36932	17.1	6.93	3726	6.03
8.1	26.43255	27.36989	21.4	6.27	4760	4.43
8.3	26.43263	27.36951	14.2	8.43	3870	5.47
9.1	26.43183	27.37021	15	8.03	3717	4.7
9.2	26.43192	27.37021	18.1	8.22	4139	4.41
9.3	26.43195	27.37015	18.1	8.32	3056	4.35
10.1	26.43157	27.37035	12.8	9.35	3383	4.72
10.3	26.4317	27.37029	18	9.4	3823	4.9
11.1	26.43128	27.37052	17.1	8.21	3620	6.84
11.3	26.43139	27.37048	17.7	8.61	3746	6.46
12.1	26.43093	27.37068	12.8	9.76	3443	7.25
12.2	26.43104	27.37063	22.5	6.54	4083	7.55
12.3	26.43116	27.37059	19.9	6.56	2473	7.15
13.1	26.43069	27.37087	13.9	6.9	3170	7
13.3	26.43083	27.37077	16.3	8.74	3436	7.12
14.1	26.43044	27.37108	16.2	6.91	3227	7.3
14.3	26.43057	27.37098	18.6	6.66	3780	6.95
15.1	26.43024	27.37124	12.8	6.95	2907	7.06

West Wits	31/05/2013					
Sampling In Situ Data						
Paddock (M.J.)	**Co-ordinates**		**Temp. (^{o}C)**	**DO (mg.L^{-1})**	**EC (µS.cm^{1})**	**pH**
15.2	26.43032	27.37118	16.3	6.34	3240	6.76
15.3	26.43035	27.37115	16	7.27	3178	7.17
16.1 (Trench)	26.42869	27.37327	9.7	5.43	2678	6.44

Appendix D 4: The actual sediment raw data

Total number of prepared sediment profile samples for Analysis = 45			
Sediments profile	**Eh(Mv)**	**pH**	**EC(µs/cm)**
(Paddock#) & WW(1=Inflow, 2=Mid& 3= outflow)			
WW 1.1 (Inflow)			
0-2cm	299.20	6.62	823.00
2-10 cm	298.20	6.74	762.00
10-30 cm	245.40	6.78	700.00
WW 1.2 (middle)			
0-2cm	390.20	6.65	862.00
2-10 cm	244.60	6.62	465.00
10-30 cm	301.80	6.85	519.00
WW 1.3 (Outflow)			
0-2cm	252.10	6.64	530.00
2-10 cm	302.80	6.61	379.00
10-30 cm	308.40	6.69	388.00
WW 2.1 (Inflow)			
0-2cm	343.30	6.67	923.00
2-10 cm	379.3	6.68	581
10-30 cm	381.5	6.9	346
WW 2.2 (Middle)			
0-2cm	313.1	7.23	623
2-10 cm	322.5	6.98	436
10-30 cm	355.3	6.92	455
WW 2.3 (Outflow)			
0-2cm	312.4	6.8	1170
2-10 cm	330.2	6.79	627
10-30 cm	352.7	6.6	447
WW 4.1 (Inflow)			
0-2cm	335.3	6.89	707
2-10 cm	305.9	6.87	550
10-30 cm	324.8	6.94	330
WW 4.2 (Middle)			
0-2cm	249.2	6.65	318
2-10 cm	268.9	6.49	908
10-30 cm	227.5	6.56	510
WW 4.3 (Outflow)			
0-2cm	331.6	6.81	595
2-10 cm	363.6	6.3	786
10-30 cm	384.8	6.31	590
WW 6.1 (Inflow)			
0-2cm	373.9	6.32	714
2-10 cm	380	6.55	565
10-30 cm	383.2	6.68	643
WW 6.2 (Middle)			
0-2cm	381.7	6.43	775

Total number of prepared sediment profile samples for Analysis = 45			
Sediments profile	**Eh(Mv)**	**pH**	**EC(µs/cm)**
(Paddock#) & WW(1=Inflow, 2=Mid& 3= outflow)			
WW 1.1 (Inflow)			
2-10 cm	375.7	6.32	648
10-30 cm	375.9	6.6	516
WW 6.3 (Outflow)			
0-2cm	273.4	6.37	787
2-10 cm	232.6	6.13	966
10-30 cm	346.3	6.41	758
WW 7.1 (Inflow)			
0-2cm	337.2	6.35	1071
2-10 cm	343.1	6.27	581
10-30 cm	333.5	6.33	576
WW 7.2 (Middle)			
0-2cm	362.3	6.27	767
2-10 cm	365.9	6.4	745
10-30 cm	379	6.32	808
WW 7.3 (Outflow)			
0-2cm	352.6	6.08	725
2-10 cm	383.5	5.73	597
10-30 cm	398.8	6.72	545

Appendix E descriptive statistics for test strip data and YSI data

E1: pH and pH Fix Descriptive Statistics

YSI (pH)	**Paddocks (N=3)**															
	ww1	**ww2**	**ww3**	**ww4**	**ww5**	**ww6**	**ww7**	**ww8**	**ww9**	**ww10**	**ww11**	**ww12**	**ww13**	**ww14**	**ww15**	**ww16**
Mean	6.9	7.4	7.1	7.1	6.9	6.5	6.7	6.9	6.8	6.3	6.3	6.6	6.3	5.9	5.8	6
Median	6.8	7.6	7.1	7.2	6.9	6.3	6.7	6.9	6.8	6.1	6.3	6.6	6.4	5.9	5.8	6
SD	0.2	0.3	0.1	0.2	0.1	0.3	0	0	0	0.3	0.3	0.1	0.3	0	0.2	0.2
MIN	6.8	7	7	6.9	6.8	6.3	6.7	6.9	6.7	6.1	6.1	6.5	6	5.9	5.7	5.8
MAX	7.2	7.7	7.1	7.2	6.9	6.8	6.7	6.9	6.8	6.6	6.7	6.6	6.6	5.9	6	6.2
Test strips (pH-Fix (0-14 PT	**Paddock (N=3)**															
	ww1	**ww2**	**ww3**	**ww4**	**ww5**	**ww6**	**ww7**	**ww8**	**9**	**ww10**	**ww11**	**ww12**	**ww13**	**ww14**	**ww15**	**ww16**
Mean	7	7	7	7	6.7	7	7	6.3	7	6.7	5.7	7	7.3	7	7	6.7
Median	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	8
SD	0	0	0	0	0.6	0	0	1.2	0	0.6	1.5	0	0.6	0	0	2.3
MIN	7	7	7	7	6	7	7	5	7	6	4	7	7	7	7	4
MAX	7	7	7	7	7	7	7	7	7	7	7	7	8	7	7	8

E2: Stream water Electrical Conductivity (EC) and Redox Potential (Eh) Descriptive Statistics

YSI - EC (µS/cm)	**Paddocks (N=3)**															
	ww1	**ww2**	**ww3**	**ww4**	**ww5**	**ww6**	**ww7**	**ww8**	**ww9**	**ww10**	**ww11**	**ww12**	**ww13**	**ww14**	**ww15**	**ww16**
Mean	4553.3	5793.3	4130.0	4883.3	4673.3	520.0	5430.0	5373.3	5546.7	4763.3	4383.3	4383.3	4383.3	4236.7	4216.7	4383.3
Median	4580.0	5600.0	4860.0	4930.0	4710.0	5190.0	5420.0	5830.0	5550.0	4710.0	4440.0	4440.0	4440.0	3940.0	4210.0	4450.0
Mini	4250.0	4570.0	2650.0	4610.0	4500.0	5050.0	5230.0	4320.0	5280.0	4600.0	4140.0	4140.0	4140.0	3880.0	3930.0	4210.0
Maxi	4830.0	7210.0	4880.0	5110.0	4810.0	5720.0	5640.0	5970.0	5810.0	4980.0	4570.0	4570.0	4570.0	4890.0	4510.0	4490.0
YSI - Redox (Eh)	**Paddocks (N=3)**															
	ww1	**ww2**	**ww3**	**ww4**	**ww5**	**ww6**	**ww7**	**ww8**	**ww9**	**ww10**	**ww11**	**ww12**	**ww13**	**ww14**	**ww15**	**ww16**
Mean	109.7	151.7	146.7	123.0	125.6	93.7	93.0	105.5	76.8	97.9	98.4	139.3	158.2	75.2	61.6	75.1
Median	100.4	148.9	145.3	125.5	125.0	84.9	84.6	101.1	78.9	94.5	98.2	138.2	151.9	63.8	54.9	75.5
SD	30.0	16.2	20.9	5.9	1.2	28.2	14.8	19.2	4.1	11.4	13.3	9.0	33.4	22.7	12.0	19.4
MIN	85.5	137.1	126.6	116.2	124.8	70.9	84.2	88.9	72.1	88.6	85.2	130.9	128.3	60.5	54.4	55.5
MAX	143.3	169.1	168.3	127.2	127.0	125.3	110.1	126.5	79.4	110.7	111.8	148.8	194.3	101.3	75.5	94.3

E3: Stream water Dissolved Oxygen (DO) Descriptive Statistics

DO (mg/l)	Paddocks (N=3)															
	ww1	**ww2**	**ww3**	**ww4**	**ww5**	**ww6**	**ww7**	**ww8**	**ww9**	**ww10**	**ww11**	**ww12**	**ww13**	**ww14**	**ww15**	**ww16**
Mean	6.60	5.90	4.60	4.70	4.50	4.90	4.50	6.70	6.10	7.10	6.00	6.90	4.40	4.90	4.20	4.40
Median	6.20	5.20	4.90	4.90	5.00	5.30	3.90	6.60	6.20	6.90	5.90	7.10	4.40	4.40	4.20	4.50
SD	0.80	1.30	0.50	0.40	1.00	0.70	1.00	0.30	0.10	0.60	1.00	0.70	0.20	1.30	0.30	0.20
MIN	6.20	5.20	3.90	4.30	3.40	4.10	3.90	6.40	6.00	6.60	5.10	6.10	4.10	4.00	3.90	4.20
MAX	7.50	7.40	4.90	5.10	5.20	5.40	5.70	7.00	6.20	7.80	7.00	7.30	4.60	6.40	4.50	4.50

E4 : Stream water Test strips Nitrate (NO_3^-) mg/l and Nitrate (NO_2^-) Descriptive Statistics

Nitrate (mg/l)	**Paddocks (N=3)**															
	ww1	**ww2**	**ww3**	**ww4**	**ww5**	**ww6**	**ww7**	**ww8**	**ww9**	**ww10**	**ww11**	**ww12**	**ww13**	**ww14**	**ww15**	**ww16**
Mean	0	6.7	0	0	0	0	15	10	6.7	10	15	6.7	15	25	25	10
Median	0	10	0	0	0	0	10	10	10	10	10	10	10	25	25	10
SD	0	5.8	0	0	0	0	8.7	0	5.8	0	8.7	5.8	8.7	0	0	0
MIN	0	0	0	0	0	0	10	10	0	10	10	0	10	25	25	10
MAX	0	10	0	0	0	0	25	10	10	10	25	10	25	25	25	10
Nitrite 1-80 (mg/l)	**Paddocks (N=3)**															
Mean	0	0	0	0	0	0	1.7	0	0	0	2	0	0	1	0	1
Median	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1
SD	0	0	0	0	0	0	2.9	0	0	0	2.6	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
MAX	0	0	0	0	0	0	5	0	0	0	5	0	0	1	0	1

E5: Stream water Test strips Sulphate (SO42-) and Sulfite (SO32-) Descriptive Statistics

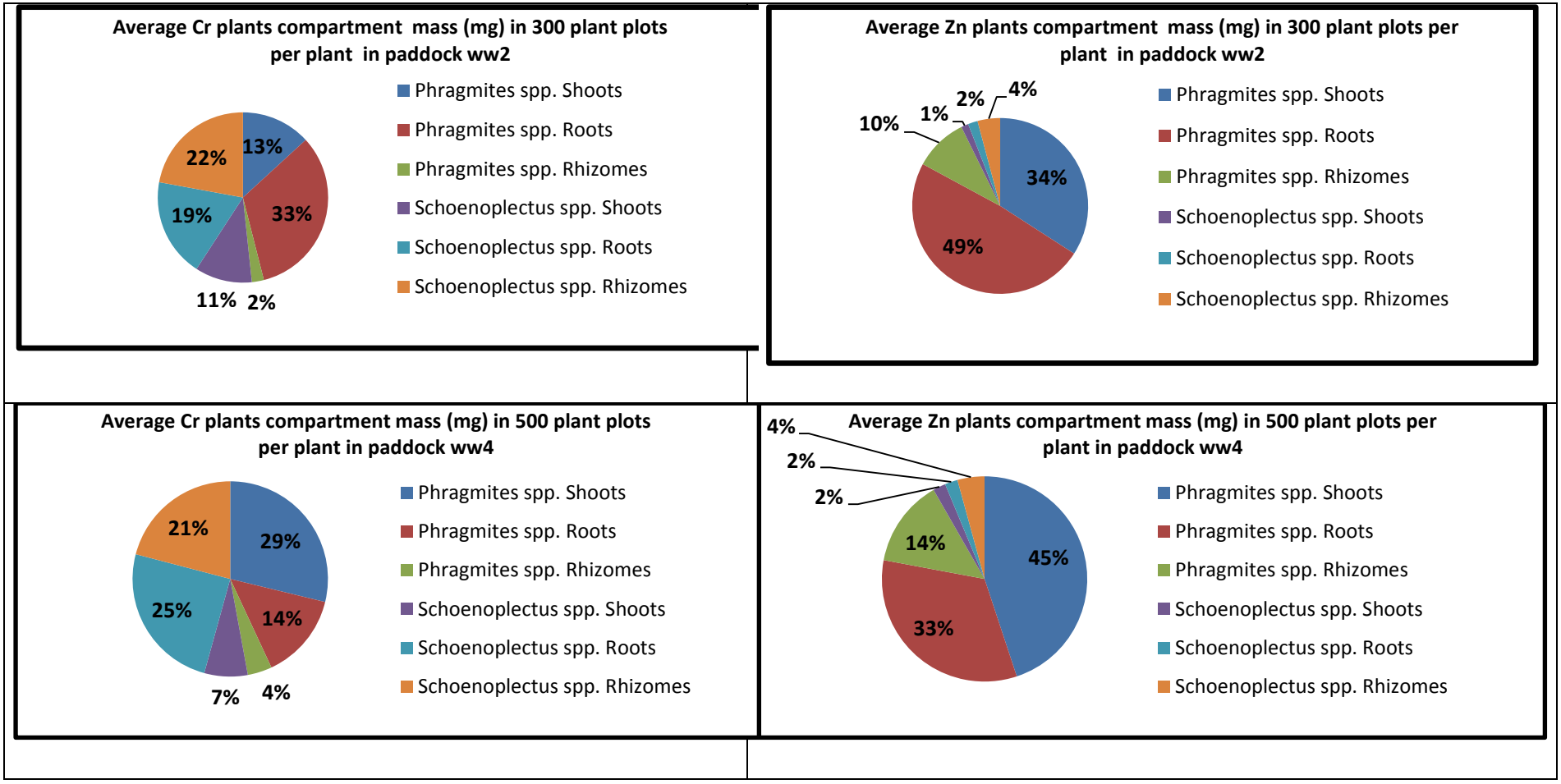
Sulphate 200-1600 (mg/l)	**Paddocks (N=3)**															
	ww1	**ww2**	**ww3**	**ww4**	**ww5**	**ww6**	**ww7**	**ww8**	**ww9**	**ww10**	**ww11**	**ww12**	**ww13**	**ww14**	**ww15**	**ww16**
Mean	1600	1600	1600	1600	1600	1600	1600	1200	1600	1200	1333	1200	1200	1600	1066	1333
Median	1600	1600	1600	1600	1600	1600	1600	1200	1600	1200	1200	1200	1200	1600	1200	1200
SD	0	0	0	0	0	0	0	0	0	0	230.9	0	0	0	230.9	230.9
MIN	1600	1600	1600	1600	1600	1600	1600	1200	1600	1200	1200	1200	1200	1600	800	1200
MAX	1600	1600	1600	1600	1600	1600	1600	1200	1600	1200	1600	1200	1200	1600	1200	1600
Sulfite 10-100 (mg/l)	**Paddocks (N=3)**															
	ww1	**ww2**	**ww3**	**ww4**	**ww5**	**ww6**	**ww7**	**ww8**	**ww9**	**ww10**	**ww11**	**ww12**	**ww13**	**ww14**	**ww15**	**16**
Mean	0	0	0	0	0	0	0	0	0	0	0	0	0	8.3	0	0

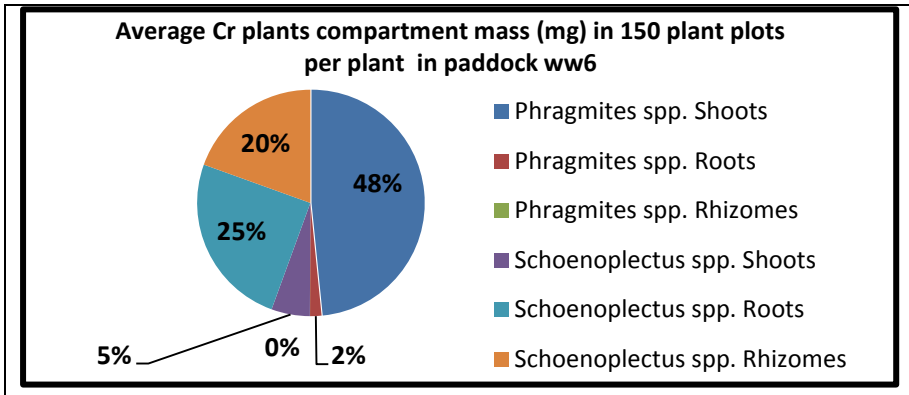
E6: Stream water Hardness Descriptive Statistics

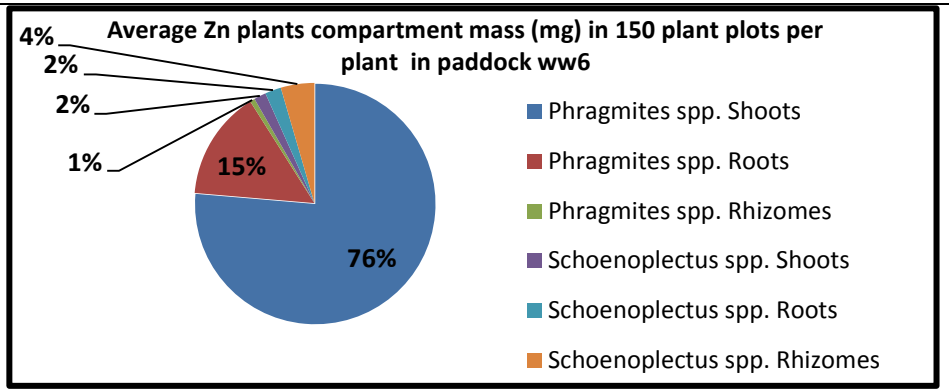
H20 Hardness (0- 25◦d)	**Paddocks (N=3)**															
	ww1	**ww2**	**ww3**	**ww4**	**ww5**	**ww6**	**ww7**	**ww8**	**ww9**	**ww10**	**ww11**	**ww12**	**ww13**	**ww14**	**ww15**	**ww16**
Mean	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Median	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
SD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
MAX	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25

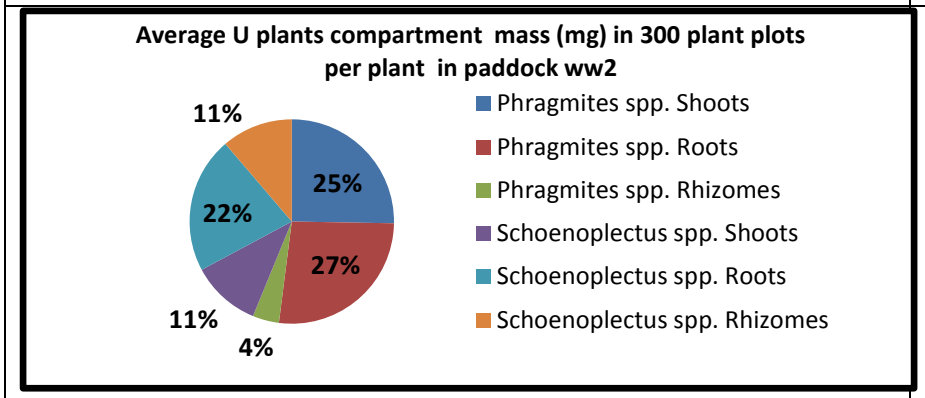
Appendix F: Other elemental average mass (%) in plants compartment within paddocks as per number of plant plots in *P. australis* (N=3) and *S. corymbosus* (N=3).

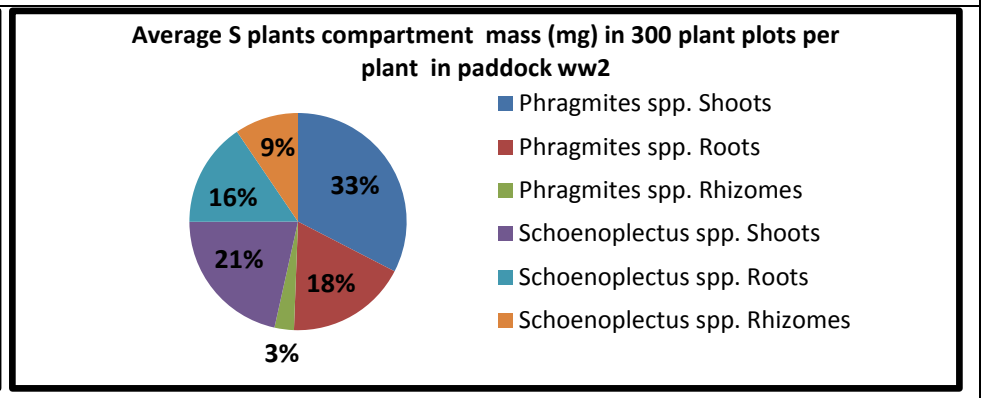
nd: *P. australis* and *S. corymbosus herein is referred to as Phragmites spp and Schoenoplectus spp respectively*

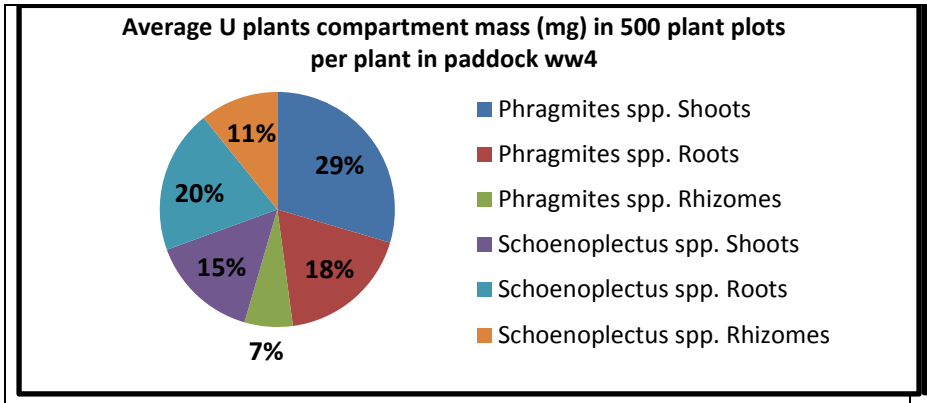


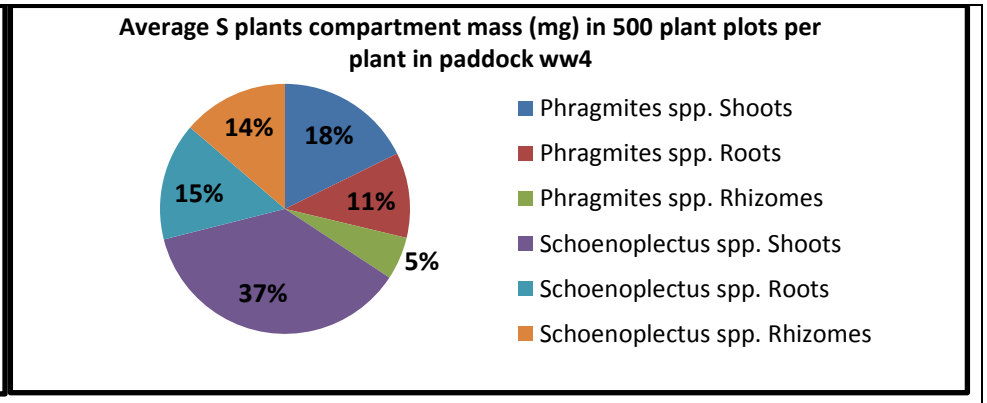

Average Cr plants compartment mass (mg) in 150 plant plots per plant in paddock ww6
48%
2%
0%
5%
25%
20%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

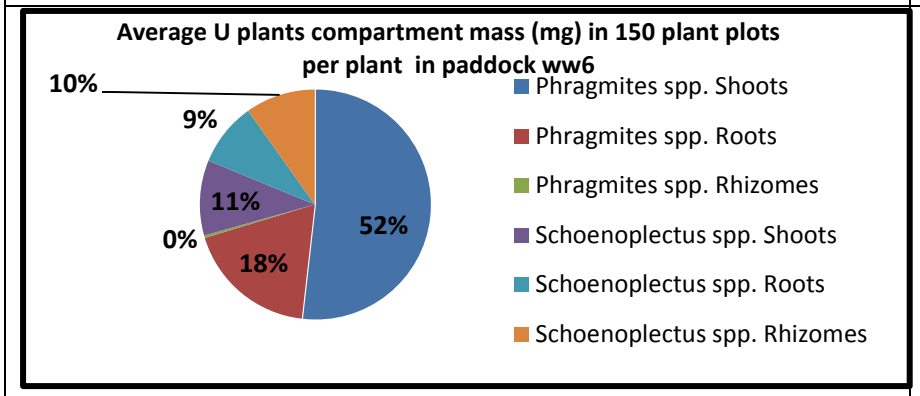

Average Zn plants compartment mass (mg) in 150 plant plots per plant in paddock ww6
76%
15%
1%
2%
2%
4%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

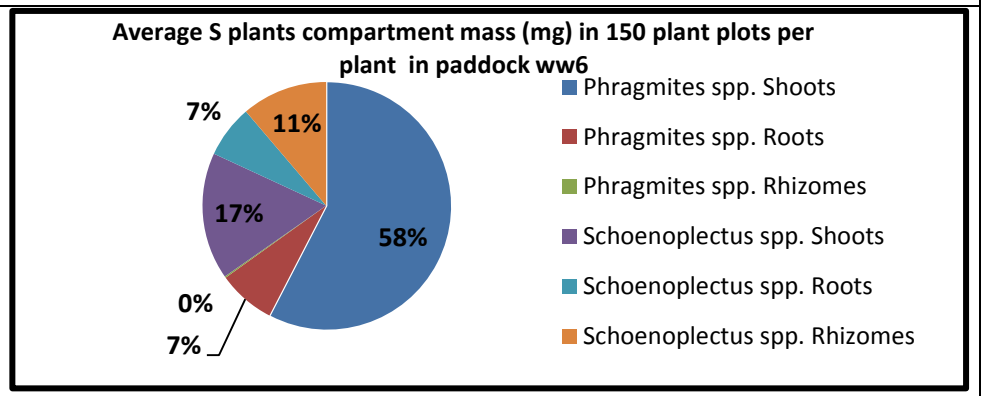

Average U plants compartment mass (mg) in 300 plant plots per plant in paddock ww2
25%
27%
4%
11%
22%
11%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

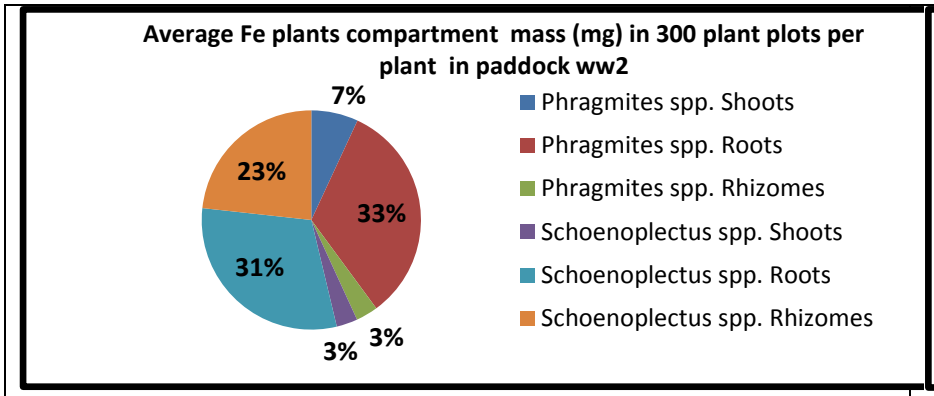

Average S plants compartment mass (mg) in 300 plant plots per plant in paddock ww2
33%
18%
3%
21%
16%
9%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

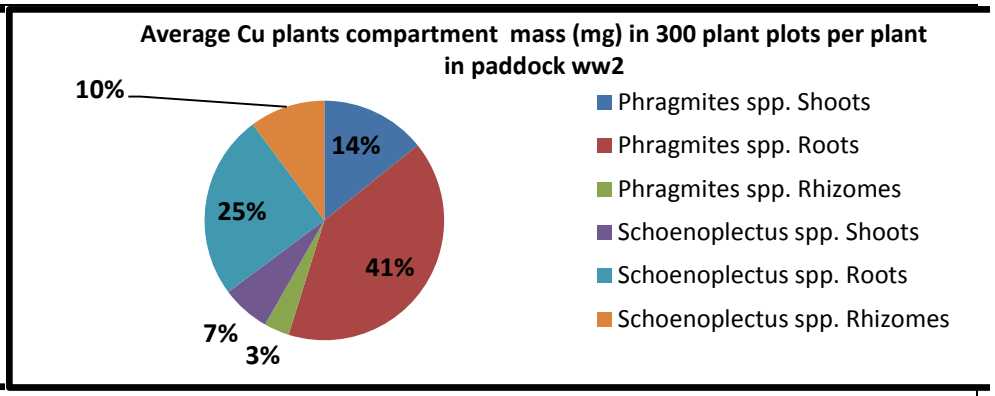

Average U plants compartment mass (mg) in 500 plant plots per plant in paddock ww4
29%
18%
7%
15%
20%
11%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

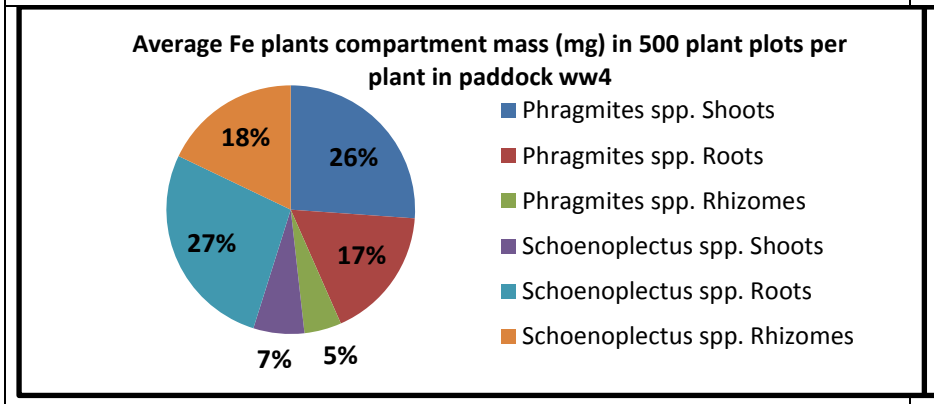

Average S plants compartment mass (mg) in 500 plant plots per plant in paddock ww4
18%
11%
5%
37%
15%
14%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

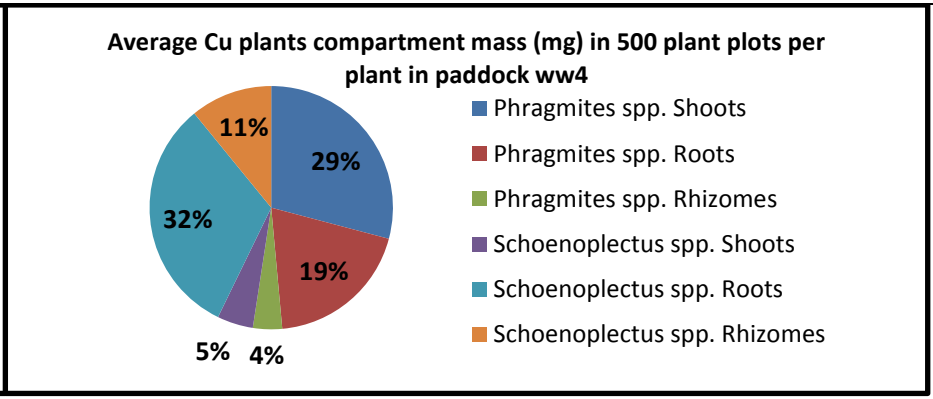

Average U plants compartment mass (mg) in 150 plant plots per plant in paddock ww6
52%
18%
0%
11%
9%
10%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

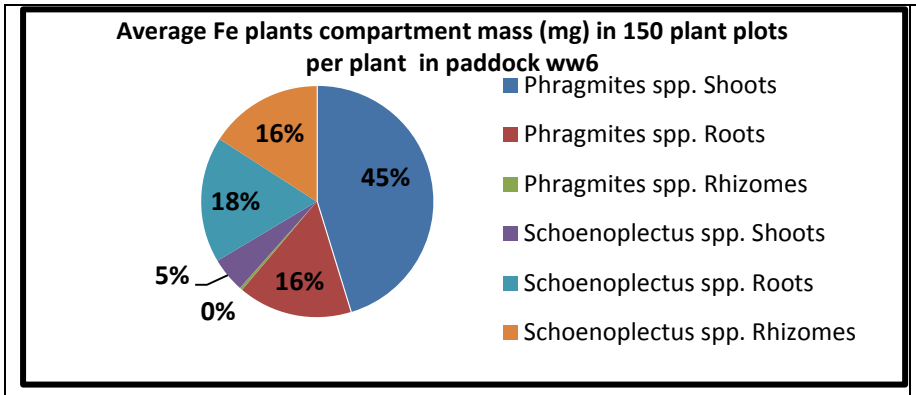

Average S plants compartment mass (mg) in 150 plant plots per plant in paddock ww6
58%
0%
7%
17%
7%
11%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

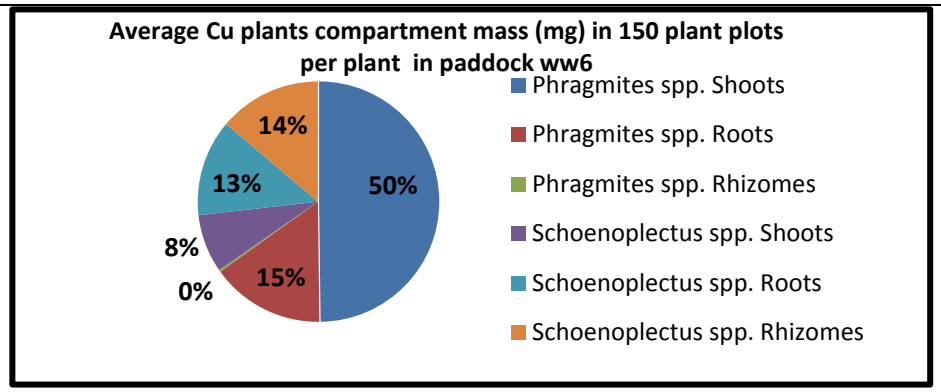

Average Fe plants compartment mass (mg) in 300 plant plots per plant in paddock ww2
7%
33%
3%
3%
31%
23%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

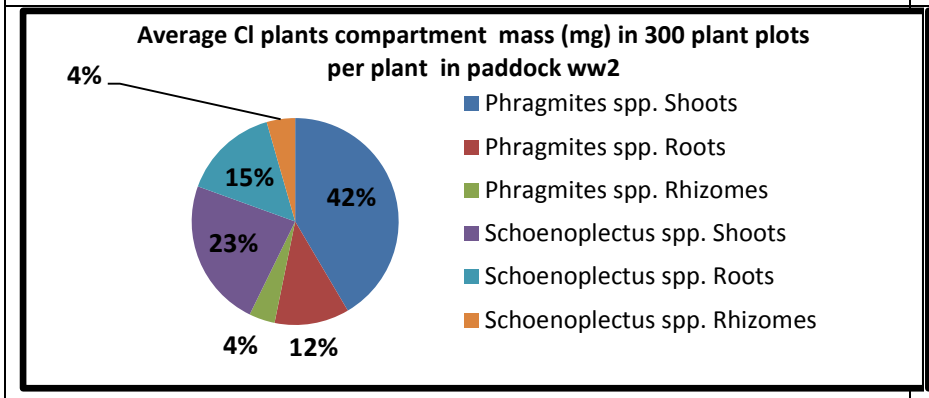

Average Cu plants compartment mass (mg) in 300 plant plots per plant in paddock ww2
10%
14%
41%
3%
7%
25%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

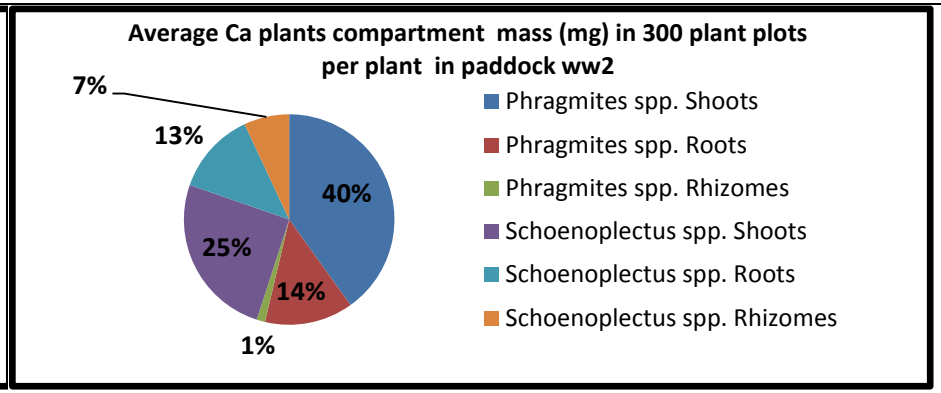

Average Fe plants compartment mass (mg) in 500 plant plots per plant in paddock ww4
26%
17%
5%
7%
27%
18%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

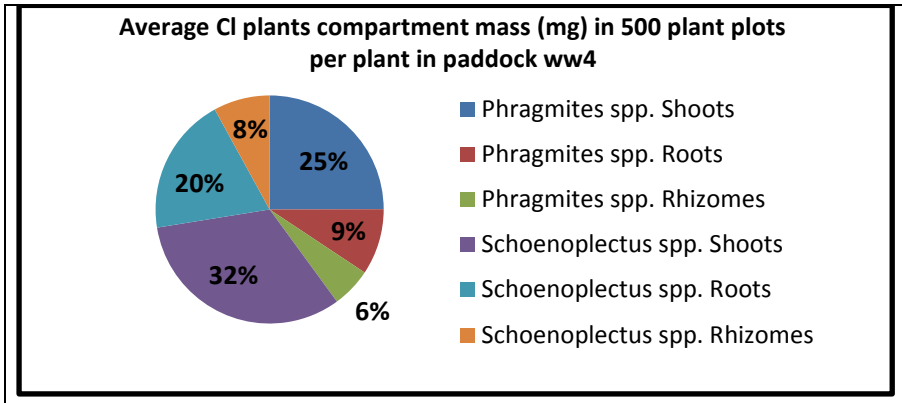

Average Cu plants compartment mass (mg) in 500 plant plots per plant in paddock ww4
29%
19%
4%
5%
32%
11%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

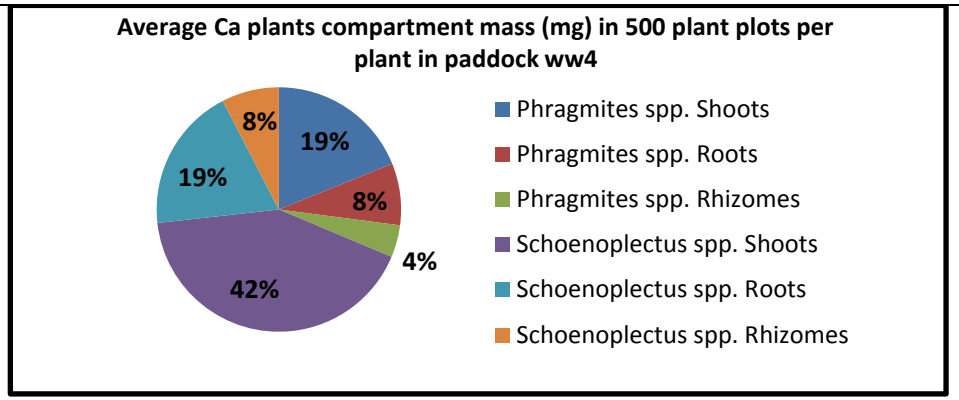

Average Fe plants compartment mass (mg) in 150 plant plots per plant in paddock ww6
45%
16%
16%
18%
5%
0%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

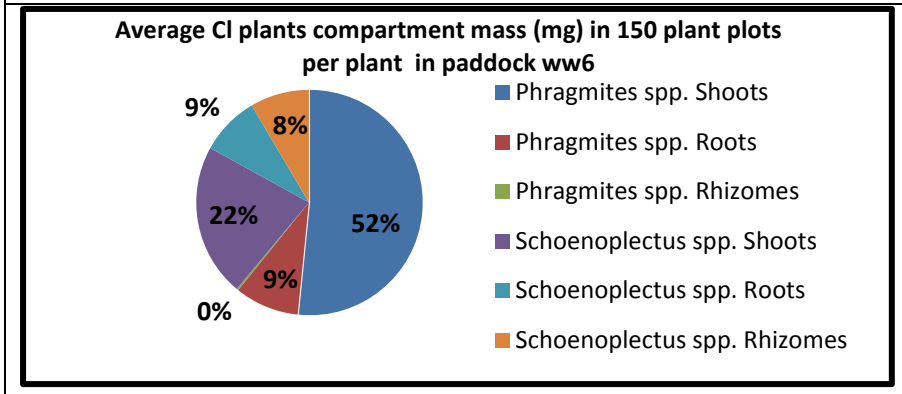

Average Cu plants compartment mass (mg) in 150 plant plots per plant in paddock ww6
50%
15%
0%
8%
13%
14%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes

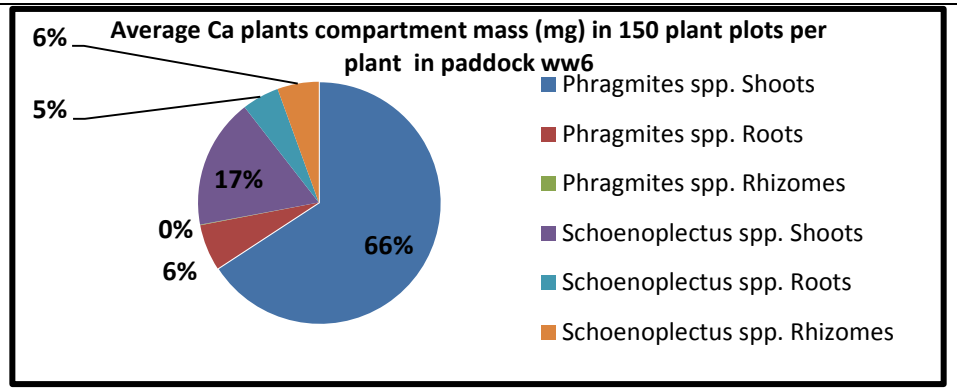

Average Cl plants compartment mass (mg) in 300 plant plots per plant in paddock ww2
42%
12%
4%
23%
15%
4%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes


Average Ca plants compartment mass (mg) in 300 plant plots per plant in paddock ww2
40%
14%
1%
25%
13%
7%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes


Average Cl plants compartment mass (mg) in 500 plant plots per plant in paddock ww4
25%
9%
6%
32%
20%
8%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes


Average Ca plants compartment mass (mg) in 500 plant plots per plant in paddock ww4
19%
8%
4%
42%
19%
8%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes


Average Cl plants compartment mass (mg) in 150 plant plots per plant in paddock ww6
52%
9%
0%
22%
9%
8%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes


Average Ca plants compartment mass (mg) in 150 plant plots per plant in paddock ww6
66%
6%
0%
17%
5%
6%
Phragmites spp. Shoots
Phragmites spp. Roots
Phragmites spp. Rhizomes
Schoenoplectus spp. Shoots
Schoenoplectus spp. Roots
Schoenoplectus spp. Rhizomes