Supplementary information
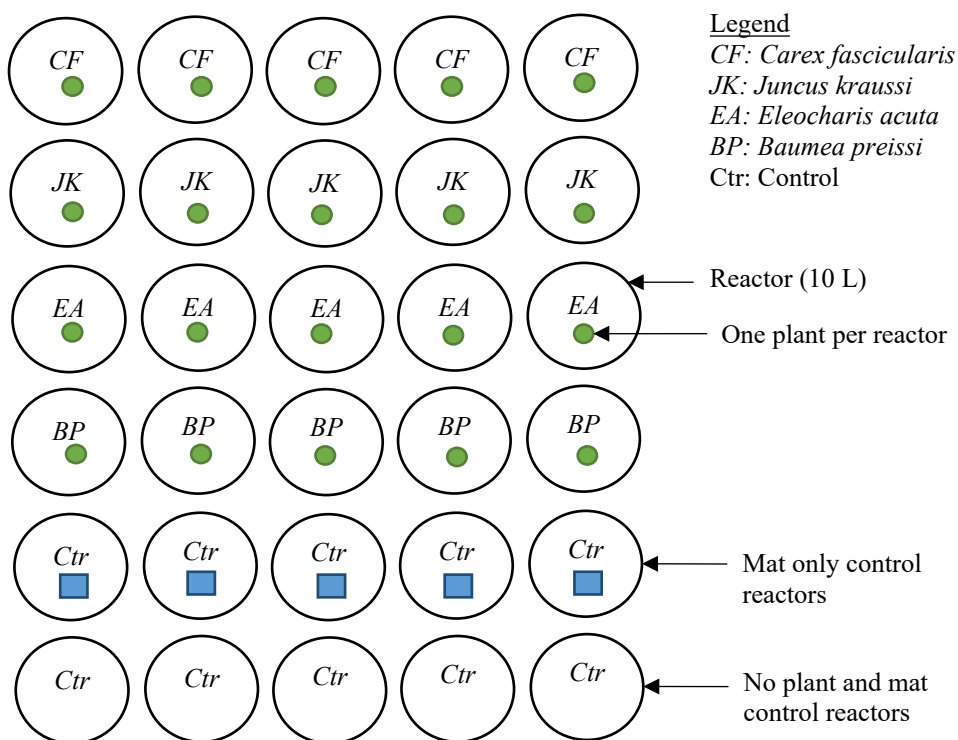

Figure S1: Schematic of experimental setup of Experiment 1
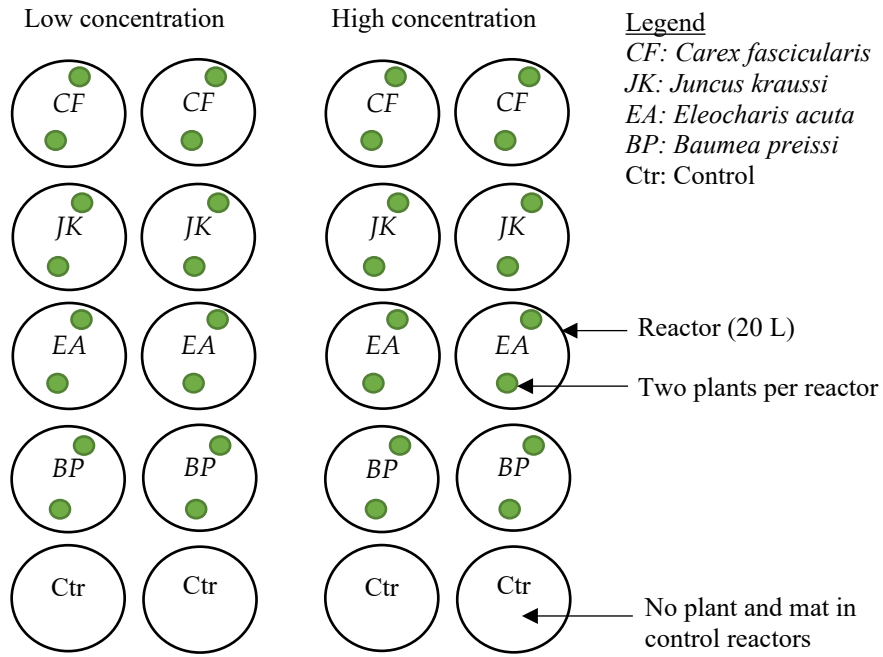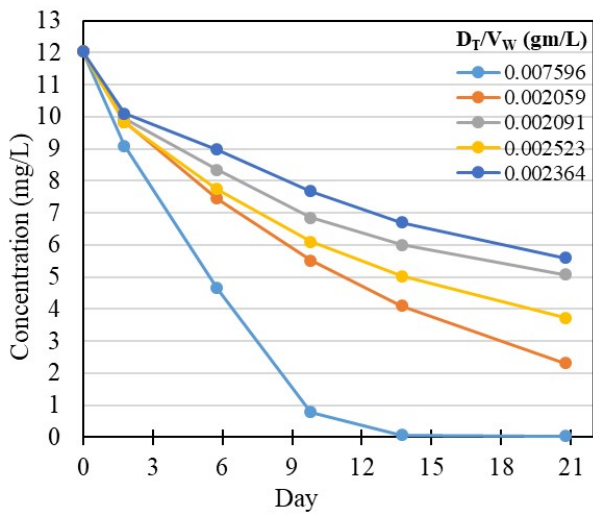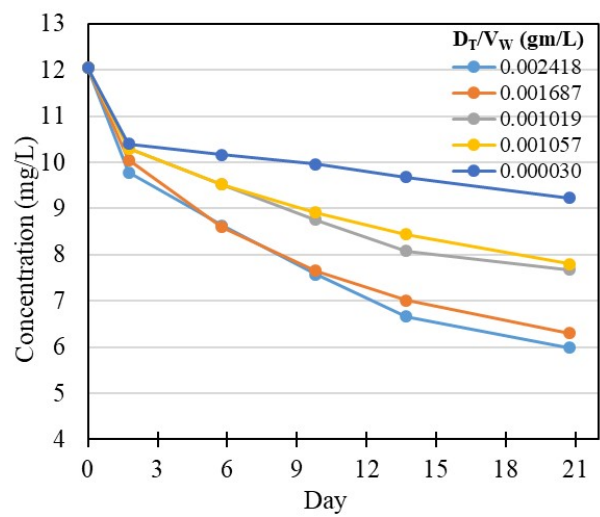
Figure S2: Schematic of experimental setup of Experiment 2
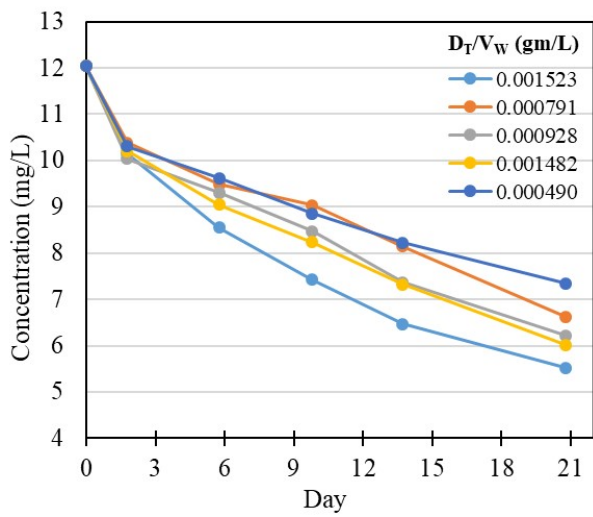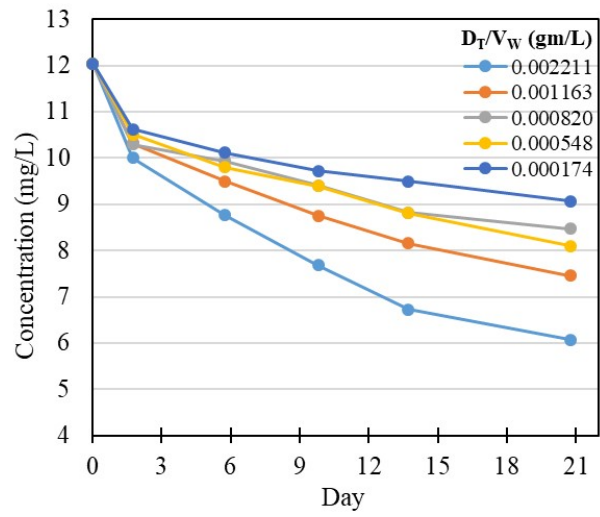
Figure S3: Changes in TN concentration over time in Experiment 1. (a) *Carex fascicularis* (b) *Juncus kraussii* (c) *Eleocharis acuta* (d) *Baumea preissii*.
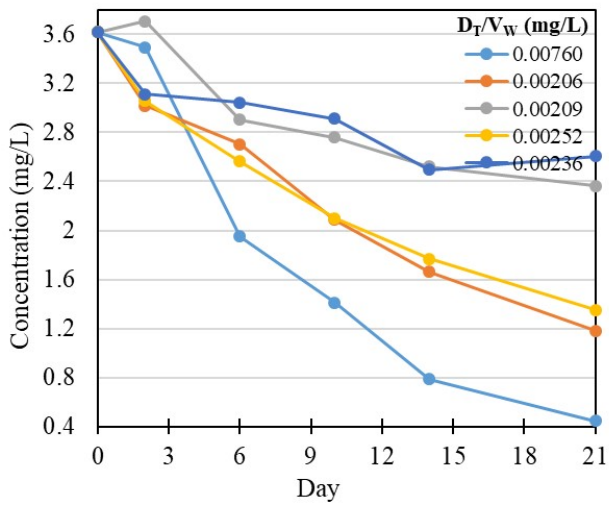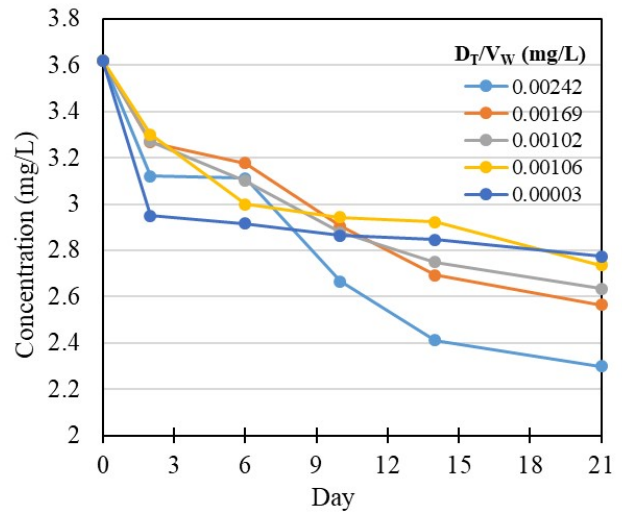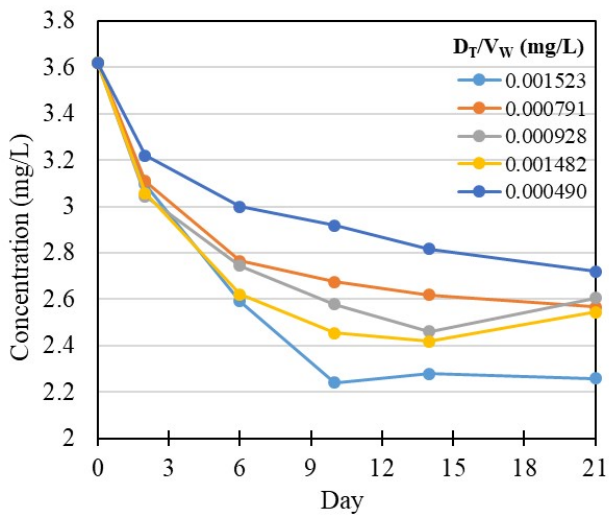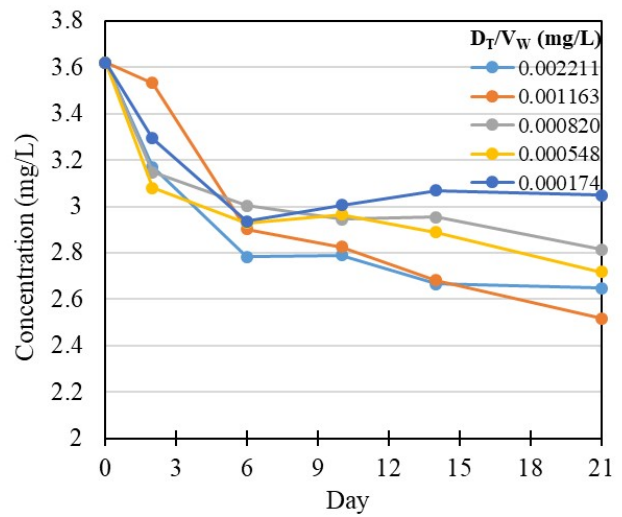
Figure S4: Changes in TP concentration over time in Experiment 1. (a) *Carex fascicularis* (b) *Juncus kraussii* (c) *Eleocharis acuta* (d) *Baumea preissii*.
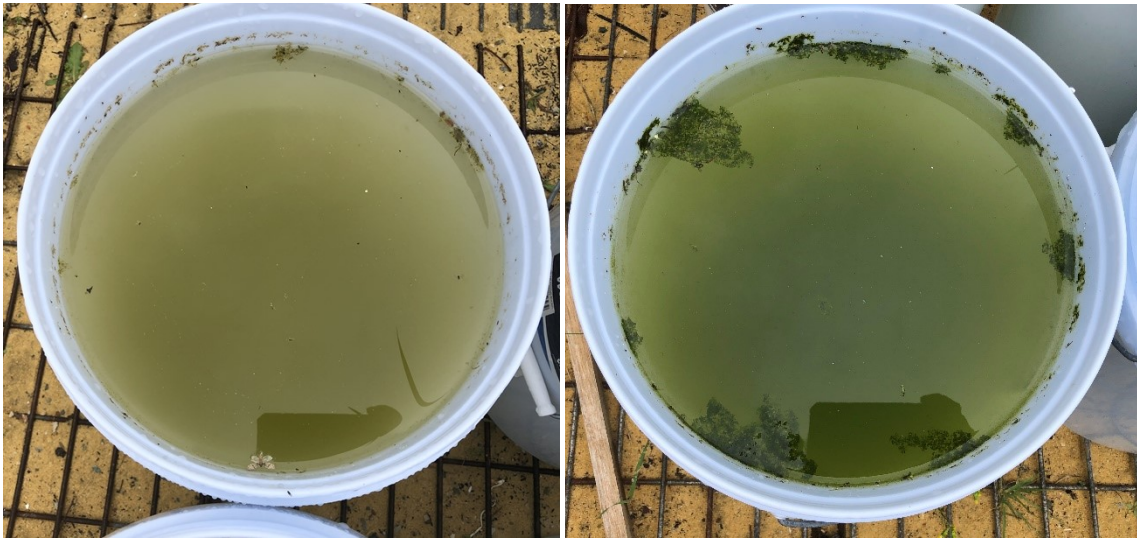
(a)   (b)

Figure S5: Algal growth in the control reactors of Experiment 2. (a) low concentration (b) high concentration
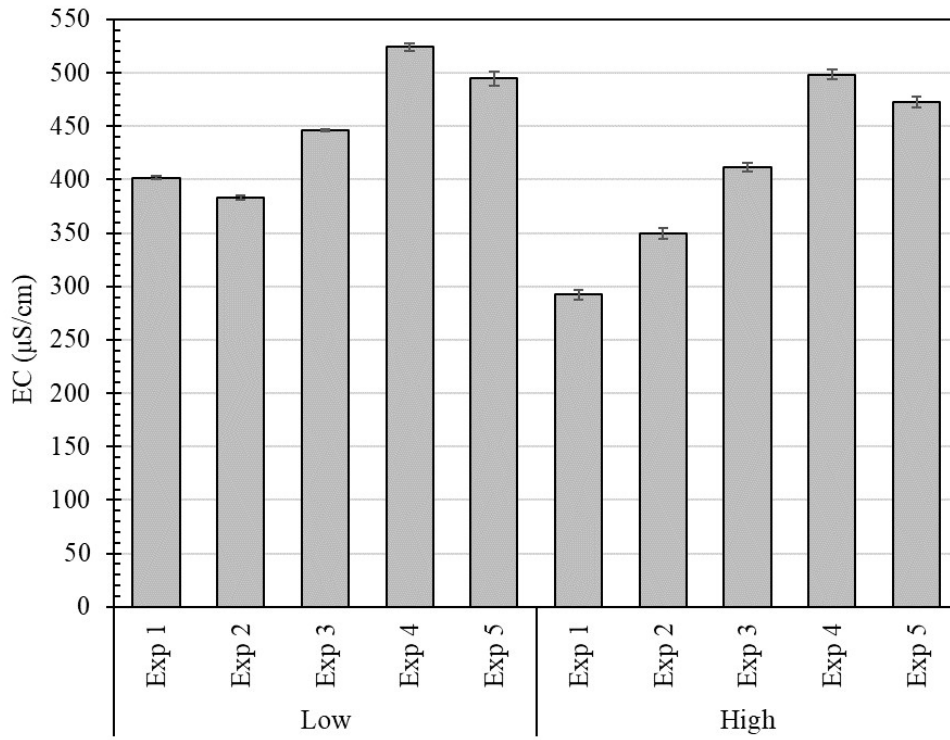
Figure S6: Mean electrical conductivity (EC) during experiments
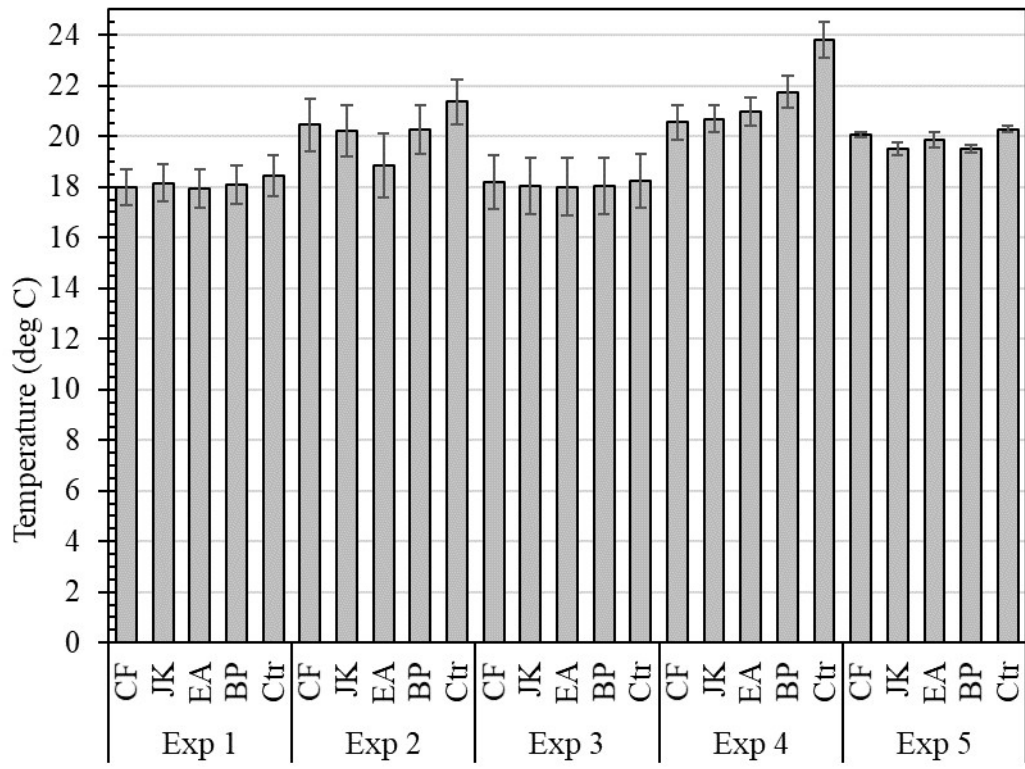
Figure S7: Mean water temperature during Experiment 2

Carex fascicularis　　　*Juncus kraussii*　　　*Eleocharis acuta*　　　*Baumea preissii*

Plants grown at low nutrient concentration
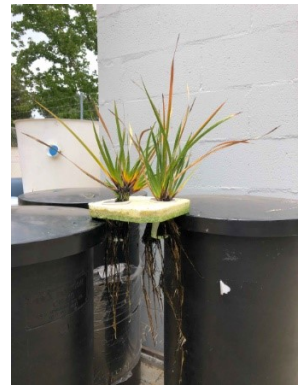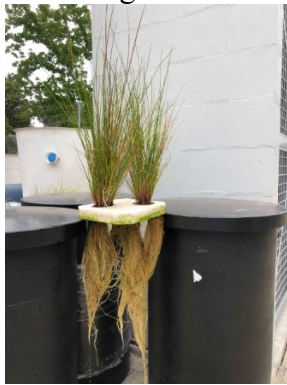
Plants grown at high nutrient concentration

Figure S8: Plant growth at the end of Experiment 2

Table S1: Linear regression results for the developed relationships

Parameter	Plant	Equation	p value	R^2	F value
TN	*C. fascicularis*	$23.42x - 0.005$	0.008	0.93	39.7
	J. kraussiii	$8.451 + 0.005$	0.002	0.97	106.2
	E. acuta	$10.812 + 0.0104$	0.016	0.89	24.0
	B. preissii	$7.42x + 0.005$	0.024	0.87	18.2
TP	*C. fascicularis*	$11.366x - 0.013$	0.059*	0.75	8.8
	J. kraussiii	$4.4988 + 0.0101$	0.017	0.89	23.5
	E. acuta	$10.266x + 0.0117$	0.014	0.90	26.7
	B. preissii	$2.8021x + 0.0132$	0.112*	0.62	5.0

$$x = \frac{D_T}{V_W}$$

* insignificant p values (p > 0.05)

Calculation of expected transpiration related uptake

Volume of transpiration = Volume of evapotranspiration - Volume of evaporation

Expected mass removal through transpiration = Volume of transpiration × Initial concentration

Net observed uptake by plants = Total observed mass removal - Mass removal in control reactors

Table S2: Estimation of transpiration related uptake vs observed net plant uptake

Parameter	TN								TP							
Concentration	High				Low				High				Low			
Plant	*CF*	*JK*	*EA*	*BP*	*CF*	*JK*	*EA*	*BP*	*CF*	*JK*	*EA*	*BP*	*CF*	*JK*	*EA*	*BP*
Volume of water (L)	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Volume of evapotranspiration (L)	2.3	2	1.6	1.7	2.3	2	1.6	1.7	2.3	2	1.6	1.7	2.3	2	1.6	1.7
Volume of evaporation (L)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Volume of transpiration (L)	0.8	0.5	0.1	0.2	0.8	0.5	0.1	0.2	0.8	0.5	0.1	0.2	0.8	0.5	0.1	0.2
Expected mass removal through transpiration (mg)	11.0	6.9	1.4	2.8	1.8	1.1	0.2	0.5	2.8	1.8	0.4	0.7	0.4	0.2	0.0	0.1
Initial Concentration (mg/L)	13.8	13.8	13.8	13.8	2.3	2.3	2.3	2.3	3.5	3.5	3.5	3.5	0.4	0.4	0.4	0.4
Remaining Concentration after 4.6 days (mg/L)	0.57	4.23	6.74	7.94	0.08	0.02	0.06	0.08	1.01	1.28	2.25	1.77	0.01	0.02	0.06	0.05
Total observed mass removal (mg)	238	172	127	106	39	40	40	39	45	40	23	31	8	8	7	7
Concentration in control reactor (mg/L)	11.8	11.8	11.8	11.8	1.07	1.07	1.07	1.07	2.3	2.3	2.3	2.3	0.35	0.35	0.35	0.35
Mass removal in control reactors (mg)	36.1	36.1	36.1	36.1	21.4	21.4	21.4	21.4	21.6	21.6	21.6	21.6	1.6	1.6	1.6	1.6
Net observed uptake by plants (mg)	202	136	91	69	18	19	18	18	23	18	0.90	10	6	6	5	5
Fold change of observed removal vs transpirational (passive) uptake	**18.3**	**19.7**	**66.0**	**25.2**	**9.9**	**16.7**	**80.4**	**39.4**	**8.3**	**10.5**	**2.6**	**13.6**	**17.4**	**27.0**	**119**	**61.4**