

Supplemental Table S2. Averages and standard errors of *E. coli* concentrations, percentages of tetracycline resistant *E. coli*, and water quality variables measured across the entire study.

	6/9/2023		6/29/2023		8/24/2023		9/1/2023		9/8/2023		9/29/2023	
	Surface	Depth	Surface	Depth	Surface	Depth	Surface	Depth	Surface	Depth	Surface	Depth
EC	412.60 ± 39.92	353.80 ± 38.35	91.24 ± 22.92	80.60 ± 13.97	50.02 ± 20.63	82.00 ± 21.79	666.35 ± 85.28	N.M.	1557.45 ± 336.21	1849.13 ± 277.73	78.00 ± 11.40	91.81 ± 12.91
MPN <sub>Lt</sub>	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	9.42 ± 1.46	N.M.	62.86 ± 18.03	89.85 ± 24.39	3.35 ± 0.82	3.86 ± 0.81
MPN <sub>Ht</sub>	N.M.	N.M.	N.M.	N.M.	B.D.L	1.16 ± 0.73	2.04 ± 0.49	N.M.	34.73 ± 9.58	43.08 ± 15.78	1.54 ± 0.63	1.51 ± 0.43
Low %	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	1.49 ± 0.24	N.M.	4.01 ± 0.82	5.23 ± 1.67	4.79 ± 1.31	4.16 ± 1.03
High %	N.M.	N.M.	N.M.	N.M.	B.D.L	1.09 ± 0.64	0.35 ± 0.12	N.M.	2.01 ± 0.40	2.34 ± 0.72	2.23 ± 0.80	1.63 ± 0.49
C	25.07 ± 0.14	24.15 ± 0.32	25.63 ± 0.22	25.82 ± 0.15	26.42 ± 0.07	25.53 ± 0.18	25.78 ± 0.05	N.M.	23.64 ± 0.03	22.90 ± 0.57	17.38 ± 0.04	17.14 ± 0.13
DO	8.68 ± 0.08	8.87 ± 0.43	10.17 ± 0.24	9.33 ± 0.10	7.31 ± 0.21	4.95 ± 0.36	6.03 ± 0.21	N.M.	7.09 ± 0.22	5.58 ± 0.51	9.22 ± 0.04	9.17 ± 0.05
SPC	151.74 ± 0.52	149.90 ± 1.52	181.88 ± 0.47	184.29 ± 1.72	175.58 ± 0.39	176.40 ± 0.60	165.00 ± 0.13	N.M.	158.77 ± 0.32	160.68 ± 2.01	178.98 ± 0.18	179.00 ± 0.21
pH	8.72 ± 0.04	8.50 ± 0.16	8.21 ± 0.05	7.76 ± 0.11	7.18 ± 0.09	6.72 ± 0.06	7.53 ± 0.05	N.M.	7.43 ± 0.06	7.09 ± 0.14	7.83 ± 0.04	7.78 ± 0.06
NTU	2.24 ± 0.16	4.47 ± 1.21	6.14 ± 0.46	5.47 ± 0.20	14.68 ± 0.28	15.57 ± 1.45	19.49 ± 0.32	N.M.	19.37 ± 0.58	19.31 ± 2.54	11.05 ± 0.43	11.43 ± 0.76
BGA	0.38 ± 0.02	0.80 ± 0.16	0.66 ± 0.12	0.47 ± 0.03	2.87 ± 0.12	2.88 ± 0.29	3.64 ± 0.03	N.M.	4.17 ± 0.08	4.25 ± 0.36	1.86 ± 0.13	2.62 ± 0.16
CHL	1.70 ± 0.16	4.64 ± 2.05	1.44 ± 0.47	1.07 ± 0.12	4.51 ± 0.13	4.69 ± 0.40	13.13 ± 0.46	N.M.	26.91 ± 0.67	29.00 ± 2.00	10.29 ± 1.23	18.43 ± 1.06
FDOM	33.30 ± 0.32	35.91 ± 1.54	26.50 ± 0.35	27.02 ± 0.37	29.97 ± 0.09	28.96 ± 0.47	28.74 ± 0.14	N.M.	37.14 ± 0.26	35.24 ± 1.13	29.82 ± 0.40	29.67 ± 0.62
PHYC	39.57 ± 2.81	40.82 ± 1.90	49.30 ± 1.47	53.86 ± 3.49	103.99 ± 4.56	93.64 ± 3.59	121.61 ± 1.56	N.M.	110.69 ± 2.36	102.03 ± 12.14	81.99 ± 1.74	80.30 ± 3.96
INV	180.66 ± 9.00	241.92 ± 44.37	101.65 ± 6.20	113.71 ± 10.68	338.07 ± 13.69	387.94 ± 21.09	832.75 ± 88.80	N.M.	1797.50 ± 44.17	1885.00 ± 227.42	740.49 ± 29.40	709.38 ± 20.81
CDOM	57.11 ± 0.60	65.64 ± 2.86	43.58 ± 0.38	47.17 ± 1.46	69.70 ± 0.71	69.36 ± 1.57	103.26 ± 0.68	N.M.	149.40 ± 1.29	134.23 ± 13.05	102.04 ± 2.56	99.01 ± 3.96
NH3	N.M.	N.M.	0.08 ± 0.01	0.07 ± 0.01	0.27 ± 0.03	0.30 ± 0.03	0.18 ± 0.01	N.M.	0.19 ± 0.01	0.24 ± 0.04	0.05 ± 0.01	0.05 ± 0.00
NO3	N.M.	N.M.	0.44 ± 0.02	0.47 ± 0.02	0.14 ± 0.02	0.16 ± 0.02	0.12 ± 0.01	N.M.	0.32 ± 0.03	0.51 ± 0.20	0.43 ± 0.01	0.43 ± 0.01
PO4	N.M.	N.M.	0.02 ± 0.00	0.02 ± 0.00	0.02 ± 0.00	0.02 ± 0.00	0.02 ± 0.00	N.M.	0.02 ± 0.00	0.02 ± 0.00	0.05 ± 0.04	0.01 ± 0.00
TC	N.M.	N.M.	11.47 ± 0.21	11.13 ± 0.11	13.81 ± 0.16	13.89 ± 0.34	13.02 ± 0.27	N.M.	12.07 ± 0.09	11.11 ± 0.33	10.93 ± 0.13	11.04 ± 0.22
IC	N.M.	N.M.	6.25 ± 0.05	6.22 ± 0.08	7.24 ± 0.06	7.27 ± 0.14	6.43 ± 0.16	N.M.	6.20 ± 0.06	5.83 ± 0.16	6.11 ± 0.06	6.17 ± 0.12
TN	N.M.	N.M.	1.27 ± 0.05	1.36 ± 0.03	1.33 ± 0.04	1.52 ± 0.06	1.15 ± 0.03	N.M.	1.35 ± 0.04	1.53 ± 0.16	1.32 ± 0.07	1.31 ± 0.10
NN	N.M.	N.M.	0.47 ± 0.05	0.49 ± 0.05	0.26 ± 0.01	0.32 ± 0.08	0.25 ± 0.01	N.M.	0.44 ± 0.02	0.66 ± 0.22	0.54 ± 0.07	0.57 ± 0.09
TOC	N.M.	N.M.	5.22 ± 0.20	4.91 ± 0.05	6.57 ± 0.13	6.62 ± 0.24	6.59 ± 0.14	N.M.	5.87 ± 0.08	5.28 ± 0.23	4.82 ± 0.08	4.87 ± 0.13
PAR	355.30 ± 71.53	97.22 ± 22.85	700.65 ± 6.41	205.75 ± 9.04	474.48 ± 11.70	77.03 ± 4.73	516.04 ± 10.93	N.M.	333.78 ± 40.21	24.62 ± 5.45	504.78 ± 28.87	75.76 ± 8.68
TSR	N.M.	N.M.	948.11 ± 14.64	195.22 ± 15.98	650.80 ± 19.75	79.89 ± 8.61	705.30 ± 15.79	N.M.	440.20 ± 39.69	37.25 ± 9.90	717.60 ± 26.00	97.63 ± 12.35

N.M. = not measured, B.D.L. = below detection limit, N.A. = not available. EC = concentration of *E. coli* in unamended samples (MPN 100 mL<sup>-1</sup>), MPN<sub>Lt</sub> = concentrations of *E. coli* in low dose tetracycline amended samples (MPN 100 mL<sup>-1</sup>), MPN<sub>Ht</sub> = concentrations of *E. coli* in high dose tetracycline amended samples (MPN 100 mL<sup>-1</sup>), Low % = percentage of low dose tetracycline concentration to total *E. coli* population (%), High % = percentage of high dose tetracycline concentration to total *E. coli* population (%), C = water temperature (°C), DO = dissolved oxygen (mg L<sup>-1</sup>), SPC = specific conductivity (μS cm<sup>-1</sup>), NTU = turbidity (NTU), BGA = phycocyanin (RFU), CHL = chlorophyll-a (RFU), FDOM = fluorescent dissolved organic matter (μg L<sup>-1</sup>), PHYC = phycocyanin laboratory (?), INV = laboratory chlorophyll (RFU), CDOM = colored dissolved organic matter (μg L<sup>-1</sup>), NH<sub>3</sub> = ammonia (mg L<sup>-1</sup>), NO<sub>3</sub> = nitrate (mg L<sup>-1</sup>), PO<sub>4</sub> = orthophosphate (mg L<sup>-1</sup>), TC = total carbon (mg L<sup>-1</sup>), TIC = inorganic carbon (mg L<sup>-1</sup>), TN = total nitrogen (mg L<sup>-1</sup>), NN = nitrate nitrogen (mg L<sup>-1</sup>), TOC = organic carbon (mg L<sup>-1</sup>), PAR = photosynthetic active radiation (W m<sup>-2</sup>), TSR = total solar radiation (W m<sup>-2</sup>).