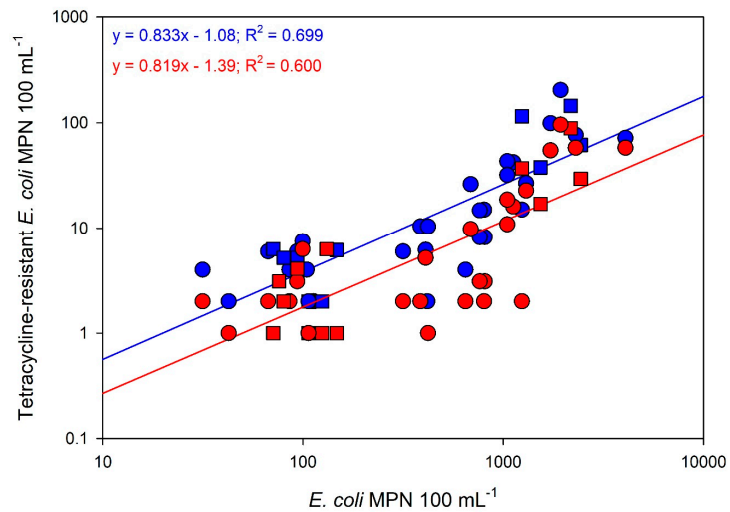
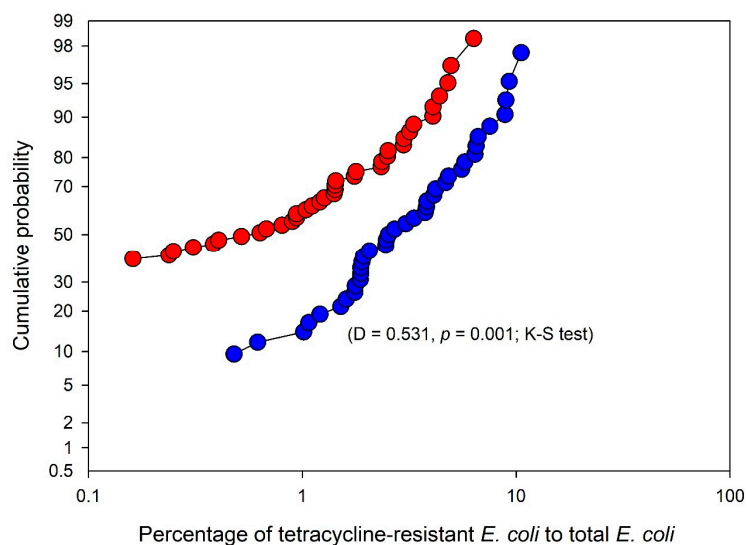


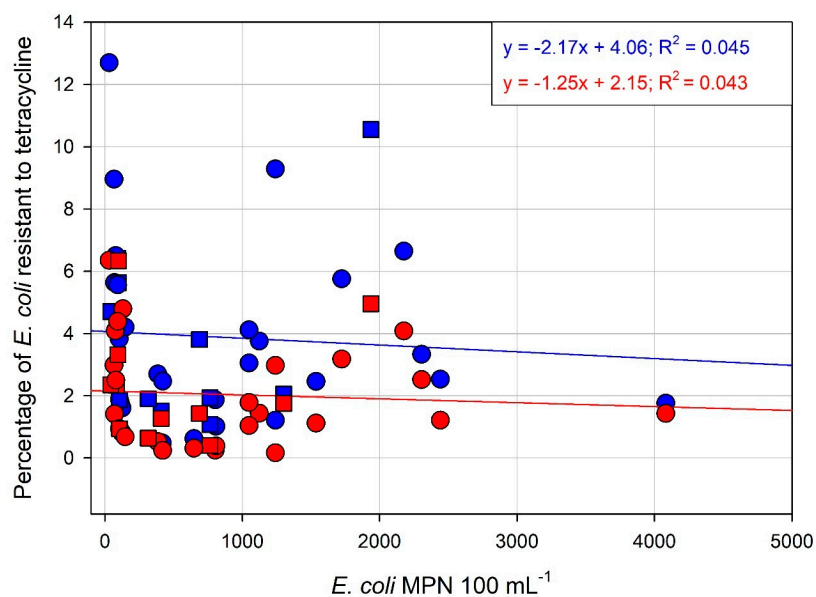
Supplemental Figure S1. Results of the linear regression analysis between concentrations of *E. coli* measured in surface and subsurface samples by date. The black line and bold R^2 value show the result from pooling all dates together.



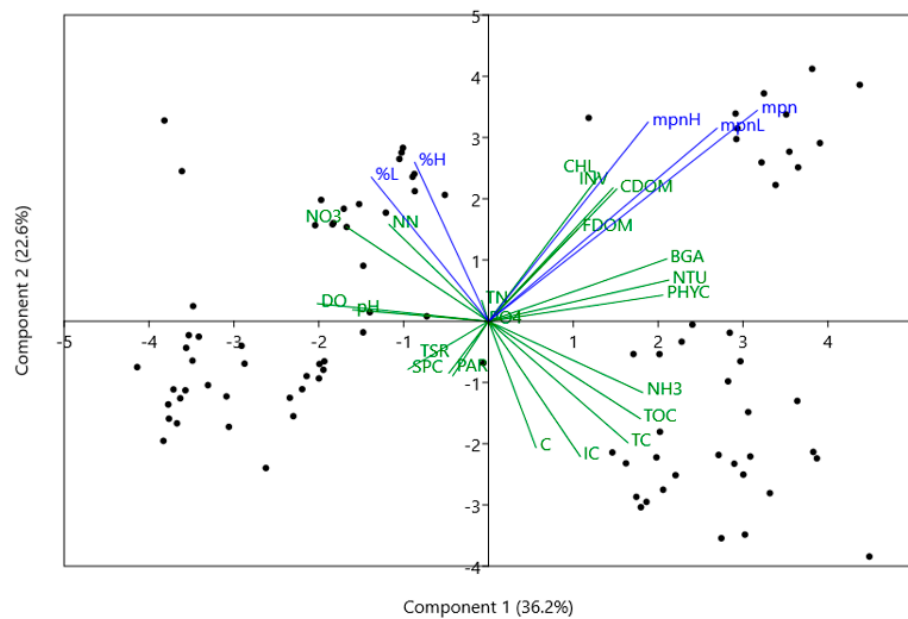
Supplemental Figure S2. Linear regressions between the logarithms of total *E. coli* population and the low (blue) and high (red) tetracycline-resistant *E. coli* populations. Circles and squares indicate samples taken at the water surface and sub-surface, respectively.



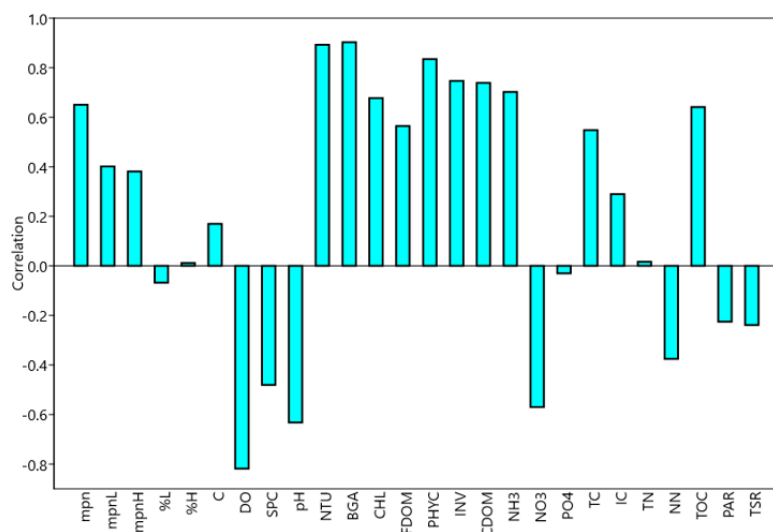
Supplemental Figure S3. Cumulative probability distributions of tetracycline-resistant *E. coli*. Blue and red colors indicate *E. coli* resistant to the low and high doses, respectively.



Supplemental Figure S4. Linear regressions of the concentration of *E. coli* in water samples plotted against the ratio of tetracycline-resistant *E. coli* at the low (blue) and high (red) doses. Circles and squares indicate samples taken at the water surface and subsurface, respectively.



Supplemental Figure S5. Scattergram created from performing a principal component analysis on the tetracycline-resistant *E. coli* dataset. mpn = concentration of *E. coli* in unamended samples (MPN 100 mL⁻¹), mpnL = concentrations of *E. coli* in low dose tetracycline amended samples (MPN 100 mL⁻¹), mpnH = concentrations of *E. coli* in high dose tetracycline amended samples (MPN 100 mL⁻¹), %L = percentage of low dose tetracycline concentration to total *E. coli* population (%), %H = percentage of high dose tetracycline concentration to total *E. coli* population (%), C = water temperature (°C), DO = dissolved oxygen (mg L⁻¹), SPC = specific conductivity (μS cm⁻¹), NTU = turbidity (NTU), BGA = phycocyanin (RFU), CHL = chlorophyll-a (RFU), FDOM = fluorescent dissolved organic matter (μg L⁻¹), PHYC = phycocyanin laboratory (μg L⁻¹), INV = laboratory chlorophyll (RFU), CDOM = colored dissolved organic matter (μg L⁻¹), NH3 = ammonia (mg L⁻¹), NO3 = nitrate (mg L⁻¹), PO4 = orthophosphate (mg L⁻¹), TC = total carbon (mg L⁻¹), TIC = inorganic carbon (mg L⁻¹), TN = total nitrogen (mg L⁻¹), NN = nitrate nitrogen (mg L⁻¹), TOC = organic carbon (mg L⁻¹), PAR = photosynthetic active radiation (W m⁻²), TSR = total solar radiation (W m⁻²).



Supplemental Figure S6. Loadings plot of PC1 from the principal component analysis. mpn = concentration of *E. coli* in unamended samples (MPN 100 mL⁻¹), mpnL = concentrations of *E. coli* in low dose tetracycline amended samples (MPN 100 mL⁻¹), mpnH = concentrations of *E. coli* in high dose tetracycline amended samples (MPN 100 mL⁻¹), %L = percentage of low dose tetracycline concentration to total *E. coli* population (%), %H = percentage of high dose tetracycline concentration to total *E. coli* population (%), C = water temperature (°C), DO = dissolved oxygen (mg L⁻¹), SPC = specific conductivity (μS cm⁻¹), NTU = turbidity (NTU), BGA = phycocyanin (RFU), CHL = chlorophyll-a (RFU), FDOM = fluorescent dissolved organic matter (μg L⁻¹), PHYC = phycocyanin laboratory (μg L⁻¹), INV = laboratory chlorophyll (RFU), CDOM = colored dissolved organic matter (μg L⁻¹), NH₃ = ammonia (mg L⁻¹), NO₃ = nitrate (mg L⁻¹), PO₄ = orthophosphate (mg L⁻¹), TC = total carbon (mg L⁻¹), TIC = inorganic carbon (mg L⁻¹), TN = total nitrogen (mg L⁻¹), NN = nitrate nitrogen (mg L⁻¹), TOC = organic carbon (mg L⁻¹), PAR = photosynthetic active radiation (W m⁻²), TSR = total solar radiation (W m⁻²).