

Table 2. Summary of the output of linear models in the Potomac river investigation. A total of six linear models were run, with distance from the Chambersburg Wastewater Treatment Plant as the predictor variable for all of them. EPT index (Figure 7) and the five target chemistry variables (Figure 8) served as the respective response variables. For each model, the estimate value of the predictor and the intercept, 95% confidence interval values and p-values have been included. Total number of observations for all models were 6. R2 and adjusted R2 values for all models are also included, as well as the AIC~C values. The model with EPT Index as the response variable had the lowest AIC~C score. All values have been rounded to three decimal places.

EPT Index				Nitrogen			Phosphorus			Potassium			Dissolved Carbon			pH		
Predictors	Estimates	CI	p	Estimates	CI	p	Estimates	CI	p	Estimates	CI	p	Estimates	CI	p	Estimates	CI	p
Intercept	0.04	-0.02 – 0.09	0.143	1545.39	-334.74 – 3425.51	0.085	64.97	8.23 – 121.72	0.034	2501.24	2073.82 – 2928.66	<0.001	2535.81	1965.66 – 3105.96	<0.001	8.31	8.04 – 8.58	<0.001
Distance	-0.00	-0.00 – 0.00	0.790	3.66	-15.21 – 22.53	0.619	-0.10	-0.67 – 0.47	0.652	2.32	-1.97 – 6.62	0.207	0.68	-5.04 – 6.40	0.758	-0.00	-0.00 – 0.00	0.987
Observations	6			6			6			6			6			6		
R ² / R ² adjusted	0.020 / -0.225			0.068 / -0.165			0.056 / -0.180			0.361 / 0.202			0.027 / -0.217			0.000 / -0.250		
AIC	-3.825			121.559			79.553			103.783			107.241			15.203		