Supplementary Results

Table S1: Spatial-temporal distribution of Chemical Oxygen Demand (COD)by years in the three sites.

Multiple Comparisons

Dependent Variable: COD

Tukey HSD

(I) LOCATION	(J) LOCATION	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Kanyamazane	Matsula	15.4185	12.60660	.441	-14.3675	45.2045
	White-river	-56.2836*	12.41114	<.001	-85.6078	-26.9594
Matsula	Kanyamazane	-15.4185	12.60660	.441	-45.2045	14.3675
	White-river	-71.7021*	12.60660	<.001	-101.4881	-41.9161
White-river	Kanyamazane	56.2836*	12.41114	<.001	26.9594	85.6078
	Matsula	71.7021*	12.60660	<.001	41.9161	101.4881

Based on observed means.

The error term is Mean Square(Error) = 5160.216.

*. The mean difference is significant at the 0.05 level.

Table S2: Seasonal variation of the concentration of COD in the three sampled sites in the Crocodile River

Multiple Comparisons

Dependent Variable: COD

Tukey HSD

(I) Season	(J) Season	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Autom	Spring	-16.0658	14.36693	.679	-53.3126	21.1810
	Summer	12.7757	14.59439	.818	-25.0607	50.6122
	Winter	4.5800	14.36693	.989	-32.6668	41.8268
Spring	Autom	16.0658	14.36693	.679	-21.1810	53.3126
	Summer	28.8415	14.59439	.201	-8.9949	66.6780
	Winter	20.6458	14.36693	.478	-16.6010	57.8926
Summer	Autom	-12.7757	14.59439	.818	-50.6122	25.0607
	Spring	-28.8415	14.59439	.201	-66.6780	8.9949
	Winter	-8.1957	14.59439	.943	-46.0322	29.6407
Winter	Autom	-4.5800	14.36693	.989	-41.8268	32.6668
	Spring	-20.6458	14.36693	.478	-57.8926	16.6010

Summer	8.1957	14.59439	.943	-29.6407	46.0322

Based on observed means.

The error term is Mean Square(Error) = 5160.216.

Table S3: Spatio-temporal distribution of *Escherichia coli* levels from the three WWTP sampled in the Crocodile River.

Multiple Comparisons

Dependent Variable: E. coli

Tukey HSD

		Mean Difference			95% Confidence Interv	
(I) LOCATION	(J) LOCATION	(I-J)	Std. Error	Sig.	Lower Bound	Upper B
Kanyamazane	Matsula	-6.2091*	2.14673	.012	-11.2812	-
	White-river	.8269	2.11345	.919	-4.1666	5
Matsula	Kanyamazane	6.2091*	2.14673	.012	1.1369	1
	White-river	7.0360*	2.14673	.004	1.9638	12
White-river	Kanyamazane	-.8269	2.11345	.919	-5.8204	4
	Matsula	-7.0360*	2.14673	.004	-12.1081	-

Based on observed means.

The error term is Mean Square(Error) = 149.633.

*. The mean difference is significant at the 0.05 level.

Table S4: Seasonal variation of *E.coli* levels in the three sampled sites in the Crocodile River

Multiple Comparisons

Dependent Variable: E. coli

Tukey HSD

		Mean Difference			95% Confidence Interval	
(I) Season	(J) Season	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Autom	Spring	-12.0732*	2.44649	<.001	-18.4158	-5.7306
	Summer	-7.5157*	2.48523	.015	-13.9587	-1.0727
	Winter	-5.5720	2.44649	.107	-11.9146	.7706
Spring	Autom	12.0732*	2.44649	<.001	5.7306	18.4158
	Summer	4.5575	2.48523	.261	-1.8855	11.0005
	Winter	6.5012*	2.44649	.042	.1586	12.8438
Summer	Autom	7.5157*	2.48523	.015	1.0727	13.9587
	Spring	-4.5575	2.48523	.261	-11.0005	1.8855
	Winter	1.9437	2.48523	.863	-4.4993	8.3867

Winter	Autom	5.5720	2.44649	.107	-.7706	11.9146
	Spring	-6.5012*	2.44649	.042	-12.8438	-.1586
	Summer	-1.9437	2.48523	.863	-8.3867	4.4993

Based on observed means.

The error term is Mean Square(Error) = 149.633.

*. The mean difference is significant at the 0.05 level.