

An aerial photograph of a multi-lane highway interchange, overlaid with a semi-transparent blue filter. The highway curves through the frame, with several vehicles visible on the road. The background shows a mix of greenery and urban development.

Gateway Upgrade Project

A solid white vertical rectangular bar.

Surface Water Quality Data

Appendix I Surface Water Quality Raw Data

Connell Wagner insitu water sampling results for March 2004

Parameter	BC1	BC2	CC1
pH	6.52	6.91	7.33
Temp (°C)	22.7	24.4	26.1
EC (mS/cm)	-	-	-

Connell Wagner insitu water sampling results for April 2004

Parameter	KB1	KB2	KB3
pH	7.58	7.92	7.24
Temp (°C)	27.2	26.5	22.4
EC (S/cm)	274	462	-

ALS Results for March 2004

Parameter	Units	BC1	BC2	BC3
Nitrogen	mg/L	1.4	1.3	0.7
Phosphorous	mg/L	0.05	0.14	0.28
Copper	mg/L	<0.01	<0.01	<0.01
Lead	mg/L	<0.01	<0.01	<0.01
Nickel	mg/L	<0.01	<0.01	<0.01
Zinc	mg/L	<0.01	0.01	<0.01
Suspended Solids	mg/L	<0.1	<0.1	<0.1
C6 - C9 Fraction	µg/L	<20	<20	<20
C10 - C14 Fraction	µg/L	<50	<50	<50
C15 - C28 Fraction	µg/L	<100	<100	<100
C29 - C36 Fraction	µg/L	<50	<50	<50

ALS Results for April 2004

Parameter	Units	KB1	KB2	CC1
Nitrogen	mg/L	0.3	0.4	1.1
Phosphorous	mg/L	0.27	0.29	0.17
Copper	mg/L	0.006	0.007	0.002
Lead	mg/L	<0.001	<0.001	<0.001
Nickel	mg/L	<0.001	0.002	0.002
Zinc	mg/L	0.054	0.012	0.079
Suspended Solids	mg/L	34	52	14

Parameter	Units	KB1	KB2	CC1
C6 - C9 Fraction	µg/L	<20	<20	<20
C10 - C14 Fraction	µg/L	66	<50	210
C15 - C28 Fraction	µg/L	250	100	210
C29 - C36 Fraction	µg/L	130	99	65

ALS Results from May 2004

Parameter	Units	BC1	BC2	BC3	KB1	KB2	CC2
Nitrogen	mg/L	1.4	1.2	0.6	0.2	0.2	0.6
Phosphorous	mg/L	0.07	0.13	0.19	0.52	0.46	0.49
Copper	mg/L	0.002	0.005	0.004	0.008	0.008	0.004
Lead	mg/L	<0.001	0.007	<0.001	0.003	<0.001	0.003
Nickel	mg/L	<0.001	0.002	0.002	0.003	0.003	0.003
Zinc	mg/L	0.002	0.045	0.011	0.028	0.013	0.026
Suspended Solids	mg/L	1	10	18	8	23	21
C6 - C9 Fraction	µg/L	<20	<20	<20	<20	<20	<20
C10 - C14 Fraction	µg/L	<50	<50	<50	<50	<50	<50
C15 - C28 Fraction	µg/L	<100	<100	<100	<100	<100	<100
C29 - C36 Fraction	µg/L	<50	<50	<50	<50	<50	<50

EPA Data (1994 to 2002)

Site Number	Faecal Coliforms (CFU/100ml)	Conductivity at 25 deg C (mS/cm)	Total Nitrogen (mg/L)	Oxygen per cent saturation (%)	pH (Unit)	Phosphorus (total) as P (mg/L)	Solids (suspended) (mg/L)
BC47	158.50	39.49	0.82	87.20	7.62	0.16	23.24
BC48	480.67	4.31	0.84	63.00	7.01	0.15	16.02
BC49	414.83	0.48	0.81	68.80	6.96	0.08	13.14
BC50	777.50	0.44	1.13	84.63	7.06	0.06	18.04
BC51	748.67	0.39	1.37	86.27	7.06	0.06	13.52
BC52	508.33	0.33	2.11	73.33	7.06	0.08	4.18
BR0.0		49.51		93.61	8.17		11.45
BR1.1		50.20	0.46	95.85	8.16	0.11	
BR2.4		50.99		100.46	8.14		
BR6.4	398.36	46.26	0.69	88.18	8.12	0.17	11.44
BR9.7	160.26	44.38	1.68	83.50	8.07	0.08	
BR11.7	172.24	39.90	2.54	76.46	7.97	0.12	42.04
BR12.9	127.58	43.57	0.92	81.83	8.04	0.18	18.63

Site Number	Faecal Coliforms (CFU/100ml)	Conductivity at 25 deg C (mS/cm)	Total Nitrogen (mg/L)	Oxygen per cent saturation (%)	pH (Unit)	Phosphorus (total) as P (mg/L)	Solids (suspended) (mg/L)
BR21.7		36.64	1.47	76.65	7.91	0.31	65.24
BR29.4	253.53	25.68		73.98	7.81		77.10
BR32.6		22.46		72.01	7.78		
KB10	1558.33	0.51	0.33	93.05	7.52	0.04	5.70
KB11	482.50	0.53	0.30	94.02	7.41	0.04	3.70
KB12	733.08	0.51	0.59	84.53	7.24	0.03	3.64
KB13	1007.00	0.44	0.30	70.40	7.04	0.03	5.08
KB14	542.50	0.34	0.33	32.00	6.27	0.05	22.30
KB14b	130.88	0.44	0.16	67.98	6.95	0.02	2.76
WBC	1040.92	0.45	2.07	81.59	7.16	0.04	7.42