

Appendix E

Water quality trends by station

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Explanation of symbols

The long-term (1970 – 2012) and recent, short-term (1996 – 2012) trends in 24 parameters are presented by station for the 26 West Virginia Ambient Water Quality Monitoring stations. Trends with p-values less than 0.01 are indicated with ▽ (decreasing trend) and ▲ (increasing trend). P-values between 0.01 and 0.05 are considered weaker evidence of a trend, but common practice accepts these as significant. They are indicated in the results tables with ▾ and ▲. P-values between 0.05 and 0.1 are not considered significant in this study, but the overall upward (v) or downward (^) tendencies in the data over time are noted. P-values greater than or equal to 0.1 are considered non-significant (ns). The symbol “-” indicates the available water quality data were insufficient for a particular trend analysis.

Either the data coverage was inadequate for that trend period or an appropriate trend method was not available for a particular data type (see Report **Table 5**).

A linear trend slope in the flow unadjusted data is given when the p-value supports the existence of a trend. Slope units are mg/liter/year for all parameters except pH (standard pH units per year), specific conductivity ($\mu\text{S}/\text{cm}/\text{year}$), fecal coliform (count per 100 milliliters per year), and alkalinity, hardness and hot acidity (mg/liter/year as CaCO_3).

Flow adjusted trends were not attempted if a station had insufficient pairs of water quality and daily flow measurements. The Cheat (MC-00001-3.5), Hughes (LK-00025-1.5) and upper Monongahela (MU-00001-99.4) stations lacked flow data for the entire 43-year period, and six other stations lacked flow data some of the time (see Report **Table 2**). The symbol *f* under the heading “flow adjusted” indicates more than ten paired measurements of the water quality parameter and its associated daily flow were available at a station in the recent trend period (1996-2012) and in the first portion of the long-term trend period (1970-1995). A blank (i.e., the symbol *f* is not shown) indicates the station had insufficient numbers of paired measurements for the indicated trend period. Flow adjustments can be made only on Type a data (few/no censored values), so the symbol “-” follows *f* for all Type b and c data (some/many censored values) and indicates no trend was calculated for that parameter at that station.

Cacapon River (PU-00010-6.1)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ib	▽	-1.17E-05	▽	-6.23E-06	<i>f</i>	-	<i>f</i>	-
Alkalinity	Ia	ns		ns		<i>f</i>	ns	<i>f</i>	ns
Chloride Total	IIa	▲	6.83E-02	ns		<i>f</i>	▲	<i>f</i>	ns
DO	Ia	▲	8.82E-02	▲	2.22E-02	<i>f</i>	▲	<i>f</i>	^
Fe Total	Ia	▽	-3.85E-03	▽	-1.30E-03	<i>f</i>	ns	<i>f</i>	▽
Fecal Coliform	Ib	ns		▲	1.71E-03	<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	2.08E+00	ns		<i>f</i>	▲	<i>f</i>	ns
Hot Acidity	Ic	-		-		<i>f</i>	-	<i>f</i>	-
K Total	IIa	ns		ns		<i>f</i>	ns	<i>f</i>	ns
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	Ib	ns		▽	-4.59E-07	<i>f</i>	-	<i>f</i>	-
Na Total	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
NO2-NO3-N	Ib	ns		v	-8.16E-06	<i>f</i>	-	<i>f</i>	-
P Total	Ib	ns		v	-4.68E-07	<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IVc	-		▽				<i>f</i>	-
PH	Ia	▲	3.33E-02	^	8.03E-03	<i>f</i>	▲	<i>f</i>	^
Se Total	IIc	ns		-		<i>f</i>	-	<i>f</i>	-
Specific Conductance	Ia	▲	1.85E+00	ns		<i>f</i>	▲	<i>f</i>	▲
Sulfate	Ia	ns		▽	-6.00E-02	<i>f</i>	^	<i>f</i>	▽
TDS	IIa	ns		ns		<i>f</i>	ns	<i>f</i>	ns
TSS	Ib	ns		▽	-4.19E-04	<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IVc	-		▽		<i>f</i>	-	<i>f</i>	-

Cheat River (MC-00001-3.5)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted	
		Recent trend	slope	Long-term trend	slope	Recent trend	Long-term trend
Al Total	IIIb	ns		-			
Alkalinity	IIIa	▲	1.84E-01	-			
Chloride Total	IIIa	▲	8.75E-02	-			
DO	IIIa	ns		-			
Fe Total	IIIa	ns		-			
Fecal Coliform	IIIb	ns		-			
Hardness	IIIa	^	5.72E-01	-			
Hot Acidity	IIIc	ns		-			
K Total	IVb	-		-			
Mg Total	IIIa	ns		-			
Mn Total	IIIa	ns		-			
Na Total	IIIa	ns		-			
NO2-NO3-N	IIIa	ns		-			
P Total	IIIb	ns		-			
Pb Dissolved	IIIc	-		-			
Pb Total	IVc	-		-			
PH	IIIa	ns		-			
Se Total	IIIc	-		-			
Specific Conductance	IIIa	ns		-			
Sulfate	IIIa	ns		-			
TDS	IIIa	ns		-			
TSS	IIIc	ns		-			
Zn Dissolved	IIIc	ns		-			
Zn Total	IVb	-		-			

Cheat River (MC-00001-30)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted	
		Recent		Long-term		Recent	Long-term
		trend	slope	trend	slope	trend	trend
Al Total	Ia	ns		▽	-1.60E-02	<i>f</i>	ns
Alkalinity	Ia	^	1.45E-01	▲	2.25E-01	<i>f</i>	ns
Chloride Total	IIa	▲	4.47E-02	▽		<i>f</i>	ns
DO	Ia	▲	1.26E-01	▲	2.86E-02	<i>f</i>	ns
Fe Total	Ia	v	-1.30E-02	▽	-2.17E-02	<i>f</i>	ns
Fecal Coliform	Ib	ns		▲	5.20E-03	<i>f</i>	-
Hardness	IIa	^	4.98E-01	▽		<i>f</i>	ns
Hot Acidity	Ic	ns		▽	-2.16E-03	<i>f</i>	-
K Total	IVb	-		▽		<i>f</i>	-
Mg Total	IIIa	ns		-		<i>f</i>	ns
Mn Total	Ia	▽	-1.54E-03	▽	-2.91E-03	<i>f</i>	ns
Na Total	IVa	-		ns		<i>f</i>	-
NO2-NO3-N	Ia	ns		▽	-5.71E-03	<i>f</i>	ns
P Total	Ib	ns		▽	-1.59E-06	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-
Pb Total	IVb	-		▽			
PH	Ia	ns		▲	3.57E-02	<i>f</i>	ns
Se Total	IIc	ns		-		<i>f</i>	-
Specific Conductance	Ia	ns		▽	-5.00E-01	<i>f</i>	ns
Sulfate	Ia	▽	-4.37E-01	▽	-5.00E-01	<i>f</i>	v
TDS	IIa	ns		ns		<i>f</i>	ns
TSS	Ib	ns		▽	-1.42E-03	<i>f</i>	-
Zn Dissolved	IIIc	v	-3.42E-06			<i>f</i>	-
Zn Total	IVb	-		▽			

Coal River (KC-00001-11.6)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ib	ns		▽	-1.93E-05	<i>f</i>	-	<i>f</i>	-
Alkalinity	Ia	ns		▲	1.95E+00	<i>f</i>	▲	<i>f</i>	▲
Chloride Total	IIa	ns		▲		<i>f</i>	▲	<i>f</i>	▲
DO	Ia	▲	1.29E-01	ns		<i>f</i>	▲	<i>f</i>	ns
Fe Total	Ia	ns		▽	-1.09E-02	<i>f</i>	ns	<i>f</i>	▽
Fecal Coliform	Ib	v	-1.35E-02	▽	-1.32E-02	<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	5.76E+00	▲		<i>f</i>	▲	<i>f</i>	▲
Hot Acidity	Ic	-		v	-3.69E-03	<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		▲		<i>f</i>	-	<i>f</i>	▲
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	Ia	ns		▽	-1.47E-03	<i>f</i>	ns	<i>f</i>	▽
Na Total	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
NO2-NO3-N	Ia	▲	4.13E-02	▲	1.73E-02	<i>f</i>	▲	<i>f</i>	▲
P Total	Ib	ns		▽	-2.69E-06	<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	-		-		<i>f</i>	-	<i>f</i>	-
Pb Total	IVc	-		-		<i>f</i>	-	<i>f</i>	-
PH	Ia	^	1.67E-02	▲	2.50E-02	<i>f</i>	▲	<i>f</i>	▲
Se Total	IIb	^	2.12E-07	▲		<i>f</i>	-	<i>f</i>	-
Specific Conductance	Ia	▲	9.20E+00	▲	8.70E+00	<i>f</i>	▲	<i>f</i>	▲
Sulfate	Ia	ns		▲	1.59E+00	<i>f</i>	▲	<i>f</i>	▲
TDS	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
TSS	Ib	ns		▽	-1.36E-03	<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IVb	-		ns		<i>f</i>	-	<i>f</i>	-

Dunkard Creek (ML-00001-20.6)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend		trend	
Al Total	Ila	ns		▽		<i>f</i>	ns	<i>f</i>	▽
Alkalinity	Ila	ns		▲		<i>f</i>	▲	<i>f</i>	▲
Chloride Total	Ila	^	9.66E-01	▲		<i>f</i>	▲	<i>f</i>	▲
DO	Ila	▲	1.67E-01	▲		<i>f</i>	▲	<i>f</i>	▲
Fe Total	Ila	ns		▽		<i>f</i>	ns	<i>f</i>	v
Fecal Coliform	Ilb	ns		▽		<i>f</i>	-	<i>f</i>	-
Hardness	Ila	▲	2.65E+00	▲		<i>f</i>	▲	<i>f</i>	▲
Hot Acidity	IIc	ns		▲		<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		ns		<i>f</i>	-	<i>f</i>	ns
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	Ila	ns		▽		<i>f</i>	ns	<i>f</i>	▽
Na Total	Ila	ns		▲		<i>f</i>	ns	<i>f</i>	▲
NO2-NO3-N	Ilb	ns		ns		<i>f</i>	-	<i>f</i>	-
P Total	Ilb	▲	3.57E-06	▽		<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IVc	-		▽		<i>f</i>	-	<i>f</i>	-
PH	Ila	ns		▲		<i>f</i>	^	<i>f</i>	▲
Se Total	IIc	ns		ns		<i>f</i>	-	<i>f</i>	-
Specific Conductance	Ila	▲	1.76E+01	▲		<i>f</i>	▲	<i>f</i>	▲
Sulfate	Ila	^	2.60E+00	▲		<i>f</i>	▲	<i>f</i>	▲
TDS	Ila	▽	-1.48E+02	▲		<i>f</i>	v	<i>f</i>	▲
TSS	Ilb	ns		▽		<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IVb	-		ns		<i>f</i>	-	<i>f</i>	-

Elk River (KE-00001-4.3)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ib	ns		▽	-1.21E-05	<i>f</i>	-	<i>f</i>	-
Alkalinity	Ia	ns		▲	3.04E-01	<i>f</i>	ns	<i>f</i>	▲
Chloride Total	IIa	^	6.48E-02	▽		<i>f</i>	ns	<i>f</i>	▽
DO	Ia	▲	1.41E-01	ns		<i>f</i>	▲	<i>f</i>	ns
Fe Total	Ia	ns		▽	-5.83E-03	<i>f</i>	ns	<i>f</i>	▽
Fecal Coliform	Ia	▽	-9.33E+00	ns		<i>f</i>	▽	<i>f</i>	v
Hardness	IIa	▲	2.21E+00	▲		<i>f</i>	▲	<i>f</i>	▲
Hot Acidity	Ic	-		ns		<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		ns		<i>f</i>	-	<i>f</i>	ns
Mg Total	IIIa	▲	5.82E-01	-		<i>f</i>	▲		
Mn Total	Ia	ns		v	-3.67E-04	<i>f</i>	ns	<i>f</i>	ns
Na Total	IVa	-		▲		<i>f</i>	-	<i>f</i>	▲
NO2-NO3-N	Ia	ns		ns		<i>f</i>	ns	<i>f</i>	ns
P Total	Ib	ns		▽	-1.41E-06	<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IIc	-		ns		<i>f</i>	-	<i>f</i>	-
PH	Ia	ns		▲	1.53E-02	<i>f</i>	ns	<i>f</i>	▲
Se Total	IIc	ns		ns		<i>f</i>	-	<i>f</i>	-
Specific Conductance	Ia	▲	3.18E+00	▲	2.15E+00	<i>f</i>	▲	<i>f</i>	▲
Sulfate	Ia	▲	1.10E+00	▲	7.33E-01	<i>f</i>	▲	<i>f</i>	▲
TDS	IIa	▲	9.00E+00	▲		<i>f</i>	ns	<i>f</i>	▲
TSS	Ib	▽	-8.07E-04	▽	-5.28E-04	<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IIb	▽	-2.59E-05	ns		<i>f</i>	-	<i>f</i>	-

Gauley River (KG-00001-8.25)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ib	v	-9.78E-06	▽	-1.02E-05	f	-	f	-
Alkalinity	Ia	ns		▲	1.67E-01	f	ns	f	▲
Chloride Total	IIa	ns		▽		f	-	f	-
DO	Ia	▲	1.16E-01	ns		f	▲	f	^
Fe Total	Ia	ns		▽	-4.60E-03	f	ns	f	▽
Fecal Coliform	Ib	▽	-1.01E-02	ns		f	-	f	-
Hardness	IIa	▲	6.71E-01	▲		f	▲	f	▲
Hot Acidity	Ic	-		v	-4.89E-04	f	-	f	-
K Total	IVa	-		▽		f	-	f	▽
Mg Total	IIIa	ns		-		f	ns		
Mn Total	Ib	ns		▽	-2.22E-06	f	-	f	-
Na Total	IIa	ns		▲		f	ns	f	▲
NO2-NO3-N	Ia	▽	-1.12E-02	▽	-6.35E-03	f	▽	f	▽
P Total	Ib	ns		▽	-2.42E-06	f	-	f	-
Pb Dissolved	IIIc	ns		-		f	-	f	-
Pb Total	IVc	-		▲		f	-	f	-
PH	Ia	ns		▲	1.18E-02	f	ns	f	▲
Se Total	IIc	-		-		f	-	f	-
Specific Conductance	Ia	ns		▲	5.79E-01	f	^	f	▲
Sulfate	Ia	ns		▲	1.17E-01	f	ns	f	▲
TDS	IIa	ns		▲		f	ns	f	▲
TSS	Ib	ns		▽	-5.51E-04	f	-	f	-
Zn Dissolved	IIIc	▽	-1.59E-05			f	-		
Zn Total	IVb	-		ns		f	-	f	-

Greenbrier River (KNG-00001-1.6)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ib	ns		ns		<i>f</i>	-	<i>f</i>	-
Alkalinity	Ia	ns		▲	1.72E-01	<i>f</i>	ns	<i>f</i>	ns
Chloride Total	IIa	ns		▽		<i>f</i>	ns	<i>f</i>	▽
DO	Ia	▲	1.11E-01	ns		<i>f</i>	▲	<i>f</i>	▲
Fe Total	Ia	ns		▽	-1.79E-03	<i>f</i>	ns	<i>f</i>	▽
Fecal Coliform	Ib	ns		▽	-1.42E-03	<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	8.24E-01	▲		<i>f</i>	ns	<i>f</i>	▲
Hot Acidity	Ic	-		ns		<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		▽		<i>f</i>	-	<i>f</i>	▽
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	Ib	ns		▽	-3.38E-07	<i>f</i>	-	<i>f</i>	-
Na Total	IIa	▲	4.00E-01	ns		<i>f</i>	ns	<i>f</i>	▽
NO2-NO3-N	Ib	▽	-2.86E-05	▽	-1.09E-05	<i>f</i>	-	<i>f</i>	-
P Total	Ib	ns		▽	-2.16E-06	<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-	<i>f</i>	-
Pb Total	IVc	-		▽				<i>f</i>	-
PH	Ia	▲	3.33E-02	▲	2.14E-02	<i>f</i>	^	<i>f</i>	▲
Se Total	IIc	ns		▽		<i>f</i>	-	<i>f</i>	-
Specific Conductance	Ia	ns		ns		<i>f</i>	ns	<i>f</i>	▽
Sulfate	Ia	ns		ns		<i>f</i>	ns	<i>f</i>	▽
TDS	IIa	▲	6.83E+00	▲		<i>f</i>	ns	<i>f</i>	ns
TSS	Ib	ns		▽	-4.44E-04	<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IVc	-		ns		<i>f</i>	-	<i>f</i>	-

Guyandotte River (Lower) (OGL-00001-2.8)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted	
		Recent trend	slope	Long-term trend	slope	Recent trend	Long-term trend
Al Total	Ia	ns		▽	-1.61E-02		
Alkalinity	Ia	ns		▲	7.79E-01		
Chloride Total	IIa	ns		ns			
DO	Ia	▲	8.50E-02	ns			
Fe Total	Ia	ns		▽	-2.29E-02		
Fecal Coliform	Ia	▽	-7.50E+01	▽	-2.00E+01		
Hardness	IIa	▲	3.73E+00	▲			
Hot Acidity	Ic	-		ns			
K Total	IVa	-		ns			
Mg Total	IIIa	▲	7.33E-01	-			
Mn Total	Ia	ns		▽	-2.11E-03		
Na Total	IIa	ns		ns			
NO2-NO3-N	Ia	ns		▲	5.61E-03		
P Total	Ia	ns		▽	-7.45E-04		
Pb Dissolved	IIIc	-		-			
Pb Total	IVb	-		▽			
PH	Ia	▲	2.27E-02	▲	1.61E-02		
Se Total	IIb	▲	2.33E-07	v			
Specific Conductance	Ia	ns		ns			
Sulfate	Ia	ns		ns			
TDS	IIa	ns		▲			
TSS	Ia	ns		▽	-4.29E-01		
Zn Dissolved	IIIc	ns					
Zn Total	IVb	-		ns			

Guyandotte River (Lower) (OGL-00001-74.1)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted	
		Recent trend	slope	Long-term trend	slope	Recent trend	Long-term trend
Al Total	IIIa	v	-1.00E-02	-		f	ns
Alkalinity	IIIa	ns		-		f	ns
Chloride Total	IIIa	ns		-		f	ns
DO	IIIa	▲	9.43E-02	-		f	▲
Fe Total	IIIa	v	-1.29E-02	-		f	ns
Fecal Coliform	IIIa	▽	-5.03E+01	-		f	▽
Hardness	IIIa	▲	3.71E+00	-		f	▲
Hot Acidity	IIIc	-		-		f	-
K Total	IVa	-		-		f	-
Mg Total	IIIa	ns		-		f	▲
Mn Total	IIIa	▽	-2.50E-03	-		f	▽
Na Total	IIIa	ns		-		f	ns
NO2-NO3-N	IIIa	^	1.13E-02	-		f	^
P Total	IIIb	ns		-		f	-
Pb Dissolved	IIIc	ns		-		f	-
Pb Total	IVc	-		-			
PH	IIIa	▲	1.73E-02	-		f	▲
Se Total	IIIb	ns		-		f	-
Specific Conductance	IIIa	ns		-		f	ns
Sulfate	IIIa	ns		-		f	ns
TDS	IIIa	ns		-		f	ns
TSS	IIIb	▽	-1.85E-03	-		f	-
Zn Dissolved	IIIc	ns		-		f	-
Zn Total	IVb	-		-		f	-

Hughes River (LK-00025-1.5)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted	
		Recent trend	slope	Long-term trend	slope	Recent trend	Long-term trend
Al Total	IIIb	ns		-			
Alkalinity	IIa	ns		▲			
Chloride Total	IIa	ns		▽			
DO	IIa	▲	8.80E-02	ns			
Fe Total	IIa	ns		▽			
Fecal Coliform	IIb	▼	-1.29E-02	ns			
Hardness	IIa	▲	8.60E-01	ns			
Hot Acidity	IIc	-		-			
K Total	IVa	-		-			
Mg Total	IIIa	ns		-			
Mn Total	IIa	ns		▽			
Na Total	IIIa	ns		-			
NO2-NO3-N	IIb	▼	-2.61E-05	-			
P Total	IIb	ns		▽			
Pb Dissolved	IIIc	ns		-			
Pb Total	IVb	-		ns			
PH	IIa	ns		▲			
Se Total	IIIc	-		-			
Specific Conductance	IIa	ns		ns			
Sulfate	IIa	▽	-5.38E-01	▼			
TDS	IIa	ns		ns			
TSS	IIb	ns		▽			
Zn Dissolved	IIIc	ns					
Zn Total	IVc	-		ns			

Kanawha River (Lower) (KL-00001-31.7)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ia	ns		▽	-5.00E-03	<i>f</i>	ns	<i>f</i>	▽
Alkalinity	Ia	ns		▲	4.14E-01	<i>f</i>	ns	<i>f</i>	▲
Chloride Total	IIa	ns		▽		<i>f</i>	ns	<i>f</i>	▽
DO	Ia	▲	1.83E-01	▲	2.50E-02	<i>f</i>	▲	<i>f</i>	▲
Fe Total	Ia	ns		▽	-6.62E-03	<i>f</i>	ns	<i>f</i>	▽
Fecal Coliform	Ib	▽	-2.25E-02	▽	-6.87E-03	<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	1.89E+00	▲		<i>f</i>	▲	<i>f</i>	▲
Hot Acidity	Ic	-		ns		<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		ns		<i>f</i>	-	<i>f</i>	ns
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	Ia	ns		▽	-9.66E-04	<i>f</i>	▽	<i>f</i>	▽
Na Total	IVa	-		ns		<i>f</i>	-	<i>f</i>	ns
NO2-NO3-N	Ia	▲	1.13E-02	ns		<i>f</i>	^	<i>f</i>	ns
P Total	Ia	ns		▽	-1.00E-03	<i>f</i>	▽	<i>f</i>	▽
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IVc	-		▽		<i>f</i>	-	<i>f</i>	-
PH	Ia	▲	1.71E-02	▲	1.43E-02	<i>f</i>	▲	<i>f</i>	▲
Se Total	IIc	ns		▽		<i>f</i>	-	<i>f</i>	-
Specific Conductance	Ia	ns		▲	8.82E-01	<i>f</i>	ns	<i>f</i>	▲
Sulfate	Ia	ns		ns		<i>f</i>	ns	<i>f</i>	ns
TDS	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
TSS	Ib	ns		▽	-6.49E-04	<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IVb	-		ns		<i>f</i>	-	<i>f</i>	-

Kanawha River (Upper) (KU-00001-74.1)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ib	ns		▽	-1.42E-05	<i>f</i>	-	<i>f</i>	-
Alkalinity	Ia	ns		▲	2.16E-01	<i>f</i>	ns	<i>f</i>	▲
Chloride Total	IIa	▲	2.01E-01	ns		<i>f</i>	▲	<i>f</i>	ns
DO	Ia	▲	7.67E-02	ns		<i>f</i>	ns	<i>f</i>	ns
Fe Total	Ia	ns		▽	-4.49E-03	<i>f</i>	ns	<i>f</i>	▽
Fecal Coliform	Ib	v	-8.58E-03	▽	-1.85E-02	<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	1.76E+00	▲		<i>f</i>	▲	<i>f</i>	▲
Hot Acidity	Ic	-		ns		<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		ns		<i>f</i>	-	<i>f</i>	ns
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	Ia	^	6.43E-04	▽	-6.15E-04	<i>f</i>	▲	<i>f</i>	▽
Na Total	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
NO2-NO3-N	Ia	ns		v	-2.37E-03	<i>f</i>	ns	<i>f</i>	v
P Total	Ib	ns		▽	-2.54E-06	<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-	<i>f</i>	-
Pb Total	IVc	-		▽		<i>f</i>	-	<i>f</i>	-
PH	Ia	▲	2.50E-02	▲	1.63E-02	<i>f</i>	▲	<i>f</i>	▲
Se Total	IIc	ns		▲		<i>f</i>	-	<i>f</i>	-
Specific Conductance	Ia	▲	2.56E+00	▲	1.23E+00	<i>f</i>	▲	<i>f</i>	▲
Sulfate	Ia	▲	4.17E-01	▲	1.74E-01	<i>f</i>	▲	<i>f</i>	▲
TDS	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
TSS	Ib	ns		▽	-7.18E-04	<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	▽	-2.88E-05			<i>f</i>	-		
Zn Total	IVb	-		▲		<i>f</i>	-	<i>f</i>	-

Little Kanawha River (LK-00001-28.9)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ia	ns		▽	-7.11E-03	<i>f</i>	ns	<i>f</i>	▽
Alkalinity	Ia	^	3.14E-01	▲	2.73E-01	<i>f</i>	ns	<i>f</i>	▲
Chloride Total	IIa	ns		▽		<i>f</i>	ns	<i>f</i>	▽
DO	Ia	▲	7.40E-02	▲	2.72E-02	<i>f</i>	▲	<i>f</i>	▲
Fe Total	Ia	ns		ns		<i>f</i>	ns	<i>f</i>	ns
Fecal Coliform	Ib	▽	-2.71E-02	ns		<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	9.09E-01	ns		<i>f</i>	▲	<i>f</i>	ns
Hot Acidity	IIIc	ns		-		<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		▽		<i>f</i>	-	<i>f</i>	▽
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	Ia	ns		ns		<i>f</i>	ns	<i>f</i>	ns
Na Total	IIa	ns		ns		<i>f</i>	ns	<i>f</i>	ns
NO2-NO3-N	Ib	ns		▽	-1.29E-05	<i>f</i>	-	<i>f</i>	-
P Total	Ib	ns		v	-9.01E-07	<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IVb	-		▽		<i>f</i>	-	<i>f</i>	-
PH	IIIa	▲	2.25E-02	-		<i>f</i>	▲	<i>f</i>	-
Se Total	IIIc	ns		-		<i>f</i>	-	<i>f</i>	-
Specific Conductance	Ia	ns		ns		<i>f</i>	ns	<i>f</i>	ns
Sulfate	Ia	▽	-3.33E-01	▽	-1.76E-01	<i>f</i>	▽	<i>f</i>	▽
TDS	IIa	ns		ns		<i>f</i>	ns	<i>f</i>	ns
TSS	Ia	v	-4.44E-01	▽	-1.82E-01	<i>f</i>	▽	<i>f</i>	▽
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IVc	-		ns		<i>f</i>	-	<i>f</i>	-

Middle Island Creek (OMN-00006-12.3)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ila	ns		ns		<i>f</i>	ns	<i>f</i>	ns
Alkalinity	Ila	ns		▲		<i>f</i>	ns	<i>f</i>	▲
Chloride Total	Ila	ns		▽		<i>f</i>	ns	<i>f</i>	▽
DO	Ila	^	7.56E-02	ns		<i>f</i>	ns	<i>f</i>	^
Fe Total	Ila	ns		ns		<i>f</i>	ns	<i>f</i>	ns
Fecal Coliform	Iib	ns		▽		<i>f</i>	-	<i>f</i>	-
Hardness	Ila	▲	1.18E+00	ns		<i>f</i>	ns	<i>f</i>	ns
Hot Acidity	Iic	-		-		<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		ns		<i>f</i>	-	<i>f</i>	▽
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	Ila	ns		▽		<i>f</i>	ns	<i>f</i>	▽
Na Total	Ila	ns		ns		<i>f</i>	ns	<i>f</i>	ns
NO2-NO3-N	Iib	v	-2.05E-05	▽		<i>f</i>	-	<i>f</i>	-
P Total	Iib	▲	3.02E-06	▽		<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IVb	-		▽					
PH	Ila	ns		▲		<i>f</i>	ns	<i>f</i>	▲
Se Total	Iic	ns		▲		<i>f</i>	-	<i>f</i>	-
Specific Conductance	Ila	ns		ns		<i>f</i>	ns	<i>f</i>	ns
Sulfate	Ila	▽	-5.00E-01	▽		<i>f</i>	ns	<i>f</i>	▽
TDS	Ila	ns		ns		<i>f</i>	ns	<i>f</i>	ns
TSS	Iib	ns		▽		<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	-				<i>f</i>	-		
Zn Total	IVc	-		ns					

Monongahela River (Upper) (MU-00001-99.4)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted	
		Recent trend	slope	Long-term trend	slope	Recent trend	Long-term trend
Al Total	Ia	ns		▽	-4.77E-03		
Alkalinity	Ia	▲	8.82E-01	▲	7.69E-01		
Chloride Total	IIa	▲	4.00E-01	ns			
DO	Ia	ns		^	1.50E-02		
Fe Total	Ia	ns		▽	-6.30E-03		
Fecal Coliform	Ib	ns		▽	-2.18E-02		
Hardness	IIa	▲	3.51E+00	ns			
Hot Acidity	Ic	-		▽	-2.96E-03		
K Total	IIa	ns		▽			
Mg Total	IIIa	ns		-			
Mn Total	Ia	▽	-1.86E-03	▽	-6.25E-03		
Na Total	IIa	ns		▲			
NO2-NO3-N	Ia	ns		ns			
P Total	Ib	^	3.81E-06	▽	-2.35E-06		
Pb Dissolved	IIIc	ns		-			
Pb Total	IVc	-		▽			
PH	Ia	ns		▲	2.38E-02		
Se Total	IIc	ns		▲			
Specific Conductance	Ia	▲	7.50E+00	▲	1.75E+00		
Sulfate	Ia	^	2.17E+00	▽	-7.04E-01		
TDS	IIa	ns		ns			
TSS	Ib	ns		▽	-8.45E-04		
Zn Dissolved	IIIc	▽	-5.44E-06				
Zn Total	IVb	-		▽			

New River (Lower) (KNL-00001-1.2)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ib	ns		▽	-7.64E-06	<i>f</i>	-	<i>f</i>	-
Alkalinity	Ia	ns		▲	1.50E-01	<i>f</i>	ns	<i>f</i>	▲
Chloride Total	IIa	ns		▲		<i>f</i>	^	<i>f</i>	ns
DO	Ia	▲	1.19E-01	▲	1.76E-02	<i>f</i>	▲	<i>f</i>	▲
Fe Total	Ia	ns		▽	-3.24E-03	<i>f</i>	ns	<i>f</i>	ns
Fecal Coliform	Ib	▽	-9.02E-03	▽	-4.15E-03	<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	9.02E-01	▲		<i>f</i>	▲	<i>f</i>	▲
Hot Acidity	Ic	-		-		<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		ns		<i>f</i>	-		
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	Ia	ns		▽	-4.62E-04	<i>f</i>	ns	<i>f</i>	ns
Na Total	IIa	ns		▲		<i>f</i>	ns		
NO2-NO3-N	Ia	ns		ns		<i>f</i>	ns	<i>f</i>	ns
P Total	Ib	ns		▽	-2.97E-06	<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IVb	-		▽		<i>f</i>	-	<i>f</i>	-
PH	Ia	▲	2.00E-02	▲	1.43E-02	<i>f</i>	▲	<i>f</i>	▲
Se Total	IIc	▽	-6.76E-22	▲		<i>f</i>	-		
Specific Conductance	Ia	ns		▲	4.60E-01	<i>f</i>	ns	<i>f</i>	▲
Sulfate	Ia	ns		▽	-6.45E-02	<i>f</i>	▽	<i>f</i>	▽
TDS	IIa	^	5.00E+00	▲		<i>f</i>	ns	<i>f</i>	▲
TSS	Ib	ns		▽	-5.79E-04	<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	▽	-2.54E-05			<i>f</i>	-		
Zn Total	IVc	-		ns		<i>f</i>	-	<i>f</i>	-

New River (Upper) (KNU-00001-67.4)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend		trend	
Al Total	IIb	ns		▽		<i>f</i>	-	<i>f</i>	-
Alkalinity	IIa	ns		▲		<i>f</i>	v	<i>f</i>	ns
Chloride Total	IIa	▲	7.90E-02	▲		<i>f</i>	^	<i>f</i>	ns
DO	IIa	▲	8.78E-02	ns		<i>f</i>	▲	<i>f</i>	ns
Fe Total	IIa	ns		▽		<i>f</i>	v	<i>f</i>	▽
Fecal Coliform	IIb	▽	-2.90E-03	ns		<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	1.42E+00	▲		<i>f</i>	^	<i>f</i>	ns
Hot Acidity	IIc	-		-		<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		ns					
Mg Total	IIIa	ns		-					
Mn Total	IIa	ns		▽		<i>f</i>	ns	<i>f</i>	▽
Na Total	IIa	ns		▲					
NO2-NO3-N	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	ns
P Total	IIb	^	3.14E-06	-		<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IVb	-		▽		<i>f</i>	-	<i>f</i>	-
PH	IIa	^	1.92E-02	▲		<i>f</i>	ns	<i>f</i>	▲
Se Total	IIc	ns		▲					
Specific Conductance	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
Sulfate	IIa	ns		ns		<i>f</i>	ns	<i>f</i>	ns
TDS	IIa	ns		▲					
TSS	IIb	ns		▽		<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IVb	-		▲		<i>f</i>	-	<i>f</i>	-

New River (Upper) (KNU-00001-96.2)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	IIb	ns		▽		<i>f</i>	-	<i>f</i>	-
Alkalinity	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
Chloride Total	IIa	▲	1.29E-01	▲		<i>f</i>	▲	<i>f</i>	▲
DO	IIa	▲	1.03E-01	ns		<i>f</i>	^	<i>f</i>	ns
Fe Total	IIa	ns		▽		<i>f</i>	ns	<i>f</i>	▽
Fecal Coliform	IIb	v	-1.00E+00	▽		<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	1.19E+00	▲		<i>f</i>	▲	<i>f</i>	▲
Hot Acidity	IIc	-		-		<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		ns		<i>f</i>	-	<i>f</i>	ns
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	IIb	ns		▽		<i>f</i>	-	<i>f</i>	-
Na Total	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
NO2-NO3-N	IIa	ns		^		<i>f</i>	ns	<i>f</i>	▲
P Total	IIa	^	1.07E-03	▽		<i>f</i>	ns	<i>f</i>	▽
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IVc	-		▽		<i>f</i>	-	<i>f</i>	-
PH	IIa	▲	3.14E-02	▲		<i>f</i>	▲	<i>f</i>	▲
Se Total	IIc	ns		▲		<i>f</i>	-	<i>f</i>	-
Specific Conductance	IIa	▲	1.38E+00	▲		<i>f</i>	^	<i>f</i>	▲
Sulfate	IIa	ns		ns		<i>f</i>	ns	<i>f</i>	ns
TDS	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
TSS	IIb	ns		▽		<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IVb	-		ns		<i>f</i>	-	<i>f</i>	-

Opequon Creek (PL-00014-2.2)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	IIb	▽	-1.97E-05	ns		<i>f</i>	-	<i>f</i>	-
Alkalinity	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
Chloride Total	IIa	▲	1.08E+00	▲		<i>f</i>	▲	<i>f</i>	▲
DO	IIa	▲	8.58E-02	ns		<i>f</i>	▲	<i>f</i>	ns
Fe Total	IIa	▽	-9.43E-03	ns		<i>f</i>	v	<i>f</i>	ns
Fecal Coliform	IIb	ns		▲		<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	4.60E+00	▲		<i>f</i>	▲	<i>f</i>	▲
Hot Acidity	IIc	-		-		<i>f</i>	-	<i>f</i>	-
K Total	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	IIb	▽	-1.22E-06	▽		<i>f</i>	-	<i>f</i>	-
Na Total	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
NO2-NO3-N	IIa	ns		▽		<i>f</i>	ns	<i>f</i>	▽
P Total	IIb	ns		▽		<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IVc	-		▽				<i>f</i>	-
PH	IIa	▲	1.59E-02	ns		<i>f</i>	▲	<i>f</i>	ns
Se Total	IIc	ns		ns		<i>f</i>	-	<i>f</i>	-
Specific Conductance	IIa	▲	6.33E+00	▲		<i>f</i>	▲	<i>f</i>	▲
Sulfate	IIa	▲	8.69E-01	▲		<i>f</i>	▲	<i>f</i>	▲
TDS	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
TSS	IIb	▽	-9.46E-04	▽		<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IVb	-		ns		<i>f</i>	-	<i>f</i>	-

Shenandoah River (PS-00001-0.9)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ib	v	-9.05E-06	▽	-7.67E-06	f	-	f	-
Alkalinity	Ia	ns		ns		f	ns	f	▽
Chloride Total	IIa	▲	4.08E-01	▽		f	▲	f	▽
DO	Ia	ns		ns		f	▲	f	ns
Fe Total	Ia	ns		▽	-2.31E-03	f	ns	f	▽
Fecal Coliform	Ib	ns		ns		f	-	f	-
Hardness	IIa	▲	3.78E+00	ns		f	▲	f	▽
Hot Acidity	Ic	-		-		f	-	f	-
K Total	IIa	ns		ns		f	ns	f	ns
Mg Total	IIIa	▲	9.50E-01	-		f	ns		
Mn Total	Ib	ns		▽	-1.43E-06	f	-	f	-
Na Total	IIa	ns		▽		f	ns	f	▽
NO2-NO3-N	Ia	ns		ns		f	▲	f	^
P Total	Ib	▽	-9.88E-06	▽	-7.83E-06	f	-	f	-
Pb Dissolved	IIIc	ns		-		f	-		
Pb Total	IVc	-		▽				f	-
PH	Ia	▲	2.64E-02	ns		f	ns	f	ns
Se Total	IIc	ns		ns		f	-	f	-
Specific Conductance	Ia	▲	4.92E+00	▽	-1.50E+00	f	▲	f	▽
Sulfate	Ia	▲	3.33E-01	▽	-7.82E-01	f	▲	f	▽
TDS	IIa	ns		▽		f	ns	f	▽
TSS	Ib	ns		▽	-1.30E-03	f	-	f	-
Zn Dissolved	IIIc	ns				f	-		
Zn Total	IVc	-		ns		f	-	f	-

South Branch Potomac River (PSB-00001-13.4)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ib	▽	-1.23E-05	▽	-9.06E-06	<i>f</i>	-	<i>f</i>	-
Alkalinity	Ia	ns		ns		<i>f</i>	ns	<i>f</i>	ns
Chloride Total	IIa	▲	1.25E-01	▽		<i>f</i>	▲	<i>f</i>	▽
DO	Ia	▲	2.04E-01	▲	2.55E-02	<i>f</i>	▲	<i>f</i>	▲
Fe Total	Ia	▽	-6.62E-03	▽	-2.50E-03	<i>f</i>	▽	<i>f</i>	▽
Fecal Coliform	Ib	ns		ns		<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	2.73E+00	^		<i>f</i>	▲	<i>f</i>	▲
Hot Acidity	Ic	ns		ns		<i>f</i>	-	<i>f</i>	-
K Total	IIa	▲	1.00E-01	ns		<i>f</i>	ns	<i>f</i>	ns
Mg Total	IIIa	ns		-		<i>f</i>	ns		
Mn Total	Ib	▽	-1.35E-06	▽	-1.35E-06	<i>f</i>	-	<i>f</i>	-
Na Total	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
NO2-NO3-N	Ib	▽	-7.46E-05	ns		<i>f</i>	-	<i>f</i>	-
P Total	Ib	▲	1.14E-05	ns		<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IVc	-		▽		<i>f</i>	-	<i>f</i>	-
PH	Ia	▲	6.00E-02	▲	1.45E-02	<i>f</i>	▲	<i>f</i>	▲
Se Total	IIc	-		-		<i>f</i>	-	<i>f</i>	-
Specific Conductance	Ia	^	1.82E+00	▲	1.00E+00	<i>f</i>	ns	<i>f</i>	▲
Sulfate	Ia	ns		▽	-1.14E-01	<i>f</i>	ns	<i>f</i>	▽
TDS	IIa	ns		▲		<i>f</i>	ns	<i>f</i>	▲
TSS	Ib	▽	-7.53E-04	▽	-6.64E-04	<i>f</i>	-	<i>f</i>	-
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IVc	-		ns		<i>f</i>	-	<i>f</i>	-

Tug Fork (BST-00001-0.15)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ia	ns		▽	-1.00E-02	<i>f</i>	▽	<i>f</i>	▽
Alkalinity	Ia	ns		▲	1.31E+00	<i>f</i>	▲	<i>f</i>	▲
Chloride Total	IIa	ns		ns		<i>f</i>	▲		
DO	Ia	ns		▲	1.39E-02	<i>f</i>	ns	<i>f</i>	▲
Fe Total	Ia	ns		▽	-1.11E-02	<i>f</i>	▽	<i>f</i>	▽
Fecal Coliform	Ib	▽	-4.59E-02	▽	-3.87E-02	<i>f</i>	-	<i>f</i>	-
Hardness	IIa	▲	5.69E+00	▲		<i>f</i>	▲		
Hot Acidity	Ic	-		▽	-9.91E-03	<i>f</i>	-	<i>f</i>	-
K Total	IVa	-		▲		<i>f</i>	-		
Mg Total	IIIa	ns		-		<i>f</i>	^		
Mn Total	Ia	ns		▽	-1.37E-03	<i>f</i>	ns	<i>f</i>	▽
Na Total	IIa	ns		▲		<i>f</i>	ns		
NO2-NO3-N	Ib	ns		▲	8.73E-06	<i>f</i>	-	<i>f</i>	-
P Total	Ib	▽	-3.39E-06	▽	-3.48E-06	<i>f</i>	-	<i>f</i>	-
Pb Dissolved	IIIc	ns		-		<i>f</i>	-		
Pb Total	IVb	-		▽					
PH	Ia	ns		▲	1.80E-02	<i>f</i>	^	<i>f</i>	▲
Se Total	IIb	ns		ns		<i>f</i>	-		
Specific Conductance	Ia	ns		▲	5.56E+00	<i>f</i>	▲	<i>f</i>	▲
Sulfate	Ia	▲	2.35E+00	▲	1.68E+00	<i>f</i>	▲	<i>f</i>	▲
TDS	IIa	ns		▲		<i>f</i>	ns		
TSS	Ia	▽	-8.20E-01	▽	-7.00E-01	<i>f</i>	▽	<i>f</i>	▽
Zn Dissolved	IIIc	ns				<i>f</i>	-		
Zn Total	IIb	ns		ns		<i>f</i>	-		

Twelvepole Creek (OT-00001-8.8)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted	
		Recent trend	slope	Long-term trend	slope	Recent trend	Long-term trend
Al Total	IIIb	ns		-			
Alkalinity	IIIa	▲	5.55E-01	-			
Chloride Total	IIIa	▲	1.74E-01	-			
DO	IIIa	▲	1.21E-01	-			
Fe Total	IIIa	ns		-			
Fecal Coliform	IIIa	ns		-			
Hardness	IIIa	▲	2.55E+00	-			
Hot Acidity	IIIc	-		-			
K Total	IVa	-		-			
Mg Total	IIIa	▲	3.50E-01	-			
Mn Total	IIIa	ns		-			
Na Total	IVa	-		-			
NO2-NO3-N	IIIb	ns		-			
P Total	IIIb	ns		-			
Pb Dissolved	IIIc	ns		-			
Pb Total	IVc	-		-			
PH	IIIa	▲	3.43E-02	-			
Se Total	IIIc	ns		-			
Specific Conductance	IIIa	▲	4.00E+00	-			
Sulfate	IIIa	▲	7.00E-01	-			
TDS	IIIa	^		-			
TSS	IIIb	ns		-			
Zn Dissolved	IIIc	ns		-			
Zn Total	IVb	-		-			

Tygart Valley River (MT-00001-6.2)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted	
		Recent trend	slope	Long-term trend	slope	Recent trend	Long-term trend
Al Total	IIIb	ns		-		<i>f</i> -	<i>f</i> -
Alkalinity	Ia	▲	2.09E-01	▲	3.92E-01	<i>f</i> ns	<i>f</i> ▲
Chloride Total	IIa	▲	1.57E-01	v		<i>f</i> ns	<i>f</i> ns
DO	Ia	▲	1.06E-01	▲	2.84E-02	<i>f</i> ns	<i>f</i> ns
Fe Total	Ia	ns		v	-3.51E-03	<i>f</i> ns	<i>f</i> ▽
Fecal Coliform	Ib	ns		ns		<i>f</i> -	<i>f</i> -
Hardness	IIa	▲	1.00E+00	▲		<i>f</i> ns	<i>f</i> ns
Hot Acidity	Ic	ns		▽	-1.10E-03	<i>f</i> -	<i>f</i> -
K Total	IVa	-		▽		<i>f</i> -	<i>f</i> ns
Mg Total	IIIa	ns		-		<i>f</i> ns	
Mn Total	Ia	▽	-2.65E-03	▽	-3.00E-03	<i>f</i> ns	<i>f</i> ns
Na Total	IIIa	ns		-		<i>f</i> ns	<i>f</i> -
NO2-NO3-N	Ia	v	-1.00E-02	▽	-4.68E-03	<i>f</i> ns	<i>f</i> ▽
P Total	Ib	ns		▽	-1.13E-06	<i>f</i> -	<i>f</i> -
Pb Dissolved	IIIc	ns		-		<i>f</i> -	
Pb Total	IVc	-		▽			
PH	Ia	ns		▲	2.79E-02	<i>f</i> ns	<i>f</i> ▲
Se Total	IIIc	ns		-		<i>f</i> -	<i>f</i> -
Specific Conductance	Ia	ns		▲	6.36E-01	<i>f</i> ns	<i>f</i> ▲
Sulfate	Ia	ns		▽	-2.26E-01	<i>f</i> ns	<i>f</i> ns
TDS	IIa	ns		▲		<i>f</i> ns	<i>f</i> ▲
TSS	Ib	ns		▽	-6.25E-04	<i>f</i> -	<i>f</i> -
Zn Dissolved	IIIc	ns				<i>f</i> -	
Zn Total	IVb	-		^			

West Fork River (MW-00001-12)

Parameter	Type	Not Adjusted for Flow				Flow Adjusted			
		Recent		Long-term		Recent		Long-term	
		trend	slope	trend	slope	trend	trend	trend	trend
Al Total	Ia	v	-1.26E-02	▽	-8.18E-03	f	▽	f	▽
Alkalinity	Ia	ns		▲	1.22E+00	f	ns	f	▲
Chloride Total	IIa	▲	3.84E-01	ns		f	▲	f	ns
DO	Ia	ns		▲	2.50E-02	f	ns	f	▲
Fe Total	Ia	▽	-3.00E-02	▽	-4.00E-02	f	▽	f	▽
Fecal Coliform	Ib	ns		▽	-3.91E-02	f	-	f	-
Hardness	IIa	ns		▽		f	ns	f	▽
Hot Acidity	Ic	-		▽	-8.56E-03	f	-	f	-
K Total	IIa	ns		ns		f	ns	f	▽
Mg Total	IIIa	ns		-		f	ns		
Mn Total	Ia	▽	-7.75E-03	▽	-2.01E-02	f	▽	f	▽
Na Total	IIa	ns		ns		f	ns	f	ns
NO2-NO3-N	Ia	ns		ns		f	ns	f	ns
P Total	Ib	▲	3.23E-06	▽	-3.71E-06	f	-	f	-
Pb Dissolved	IIIc	ns		-		f	-		
Pb Total	IVc	-		▽		f	-	f	-
PH	Ia	▲	2.00E-02	▲	3.05E-02	f	▲	f	▲
Se Total	IIc	ns		ns		f	-	f	-
Specific Conductance	Ia	ns		▽	-5.55E+00	f	ns	f	▽
Sulfate	Ia	ns		▽	-4.70E+00	f	v	f	▽
TDS	IIa	ns		▽		f	v	f	▽
TSS	Ia	ns		▽	-6.67E-01	f	ns	f	▽
Zn Dissolved	IIIb	▽	-1.33E-05			f	-		
Zn Total	IVb	-		▽		f	-	f	-