Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	SELENIUM µg/g dw				ALUMINUM µg/g ww				ARSENIC µg/g ww				BARIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Submerged Plants																	
Reach 1	M	2	0.92	0.65	1.30	2	2837.5	2121.0	3796.0	2	1.04	0.65	1.68	2	39.2	35.3	43.4
Reach 2	M	1	0.90			1	4819.5			1	0.93			1	379.1		
Reach 3	M	4	0.86	0.54	1.30	4	4511.3	1849.0	7816.3	4	1.19	0.67	2.22	4	67.6	33.3	108.0
Reach 4	M	2	1.04	0.77	1.40	2	6161.7	4308.6	8811.9	2	1.21	0.87	1.68	2	61.6	58.3	65.1
Reach 5	M	6	0.70	0.32	2.20	6	4919.1	2718.6	10552.4	6	1.36	1.02	1.85	6	51.7	28.2	76.8
Reach 6	M	9	0.82	<0.15	2.90	4	3951.0	2354.7	6230.0	4	1.03	0.62	1.39	4	51.8	23.8	92.2
Reach 6	B	3	0.67	0.50	1.20	3	1552.6	345.4	7869.0	3	0.50	0.18	0.85	3	34.1	18.6	48.2
Reach 7	M	10	0.58	<0.15	4.40	4	4940.8	3201.3	10164.1	4	1.36	0.77	2.40	4	83.1	28.2	254.1
Reach 8	M	12	1.12	0.20	3.20	9	1058.9	26.2	7289.6	11	0.34	0.01	0.95	11	27.1	4.5	68.8
Reach 8	B	9	0.92	0.20	2.40	9	417.2	10.7	7436.0	9	0.11	0.01	0.31	9	20.8	4.0	215.6
Reach 8	P	5	1.12	0.63	2.60	5	26.2	7.0	379.4	5	0.05	0.02	0.27	5	1.5	0.2	11.0
Invertebrates																	
Reach 1	M	2	2.87	2.40	3.43	2	774.6	722.8	830.2	2	0.16	0.08	0.31	2	20.8	14.9	29.2
Reach 2	M	2	3.02	2.85	3.20	2	504.7	398.4	639.3	2	0.12	0.03	0.46	2	17.6	9.8	31.4
Reach 3	M	5	2.58	2.25	3.40	5	620.5	405.9	1020.3	5	0.08	0.03	0.33	5	13.9	5.3	26.9
Reach 3	McE	1	2.00			1	239.1			1	0.43			1	11.1		
Reach 4	M	2	2.49	1.68	3.70	2	650.6	545.5	775.9	2	0.28	0.18	0.44	2	7.5	7.1	7.8
Reach 4	MRC	2	4.63	4.18	5.12	2	881.2	556.0	1396.4	2	0.25	0.21	0.29	2	19.4	14.8	25.4
Reach 5	M	10	2.47	1.47	3.92	6	1032.9	466.2	1639.0	6	0.40	0.22	0.60	6	11.1	3.6	30.4
Reach 6	M	10	3.13	2.00	4.84	5	1208.7	752.2	1701.7	5	0.33	0.28	0.43	5	13.8	8.1	31.8
Reach 6	B	3	4.71	3.90	5.70	3	843.1	712.5	990.6	3	0.56	0.49	0.71	3	8.3	4.9	18.0
Reach 7	M	19	3.88	<0.13	11.05	8	595.4	221.4	1007.9	8	0.24	0.07	0.79	8	13.2	3.4	34.4
Reach 8	M	16	4.82	0.40	18.00	11	424.0	0.0	922.6	12	0.33	<0.16	0.81	11	12.0	3.5	21.9
Reach 8	B	7	2.92	1.80	6.40	7	177.9	98.8	320.0	7	0.16	0.06	0.56	7	3.9	1.9	10.0
Reach 8	P	6	1.21	<0.40	4.00	6	10.8	4.3	27.0	6	0.05	<0.06	0.21	6	0.4	0.2	2.0

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	SELENIUM µg/g dw				ALUMINUM µg/g ww				ARSENIC µg/g ww				BARIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Whole Body Fish (by species)																	
bluehead sucker																	
Reach 2	M	1	3.40			1	536.5			1	0.20			1	24.9		
Reach 3	M	3	2.09	0.77	3.80	3	155.5	121.0	249.3	3	0.05	0.02	0.10	3	2.5	1.9	3.1
Reach 4	M	4	1.78	1.29	3.10	1	239.4			1	0.08			1	19.1		
Reach 4	MRC	1	2.30			1	309.8			1	0.19			1	3.1		
Reach 5	M	19	1.66	1.03	3.25	4	165.5	42.9	392.6	4	0.10	<0.07	0.17	4	4.3	2.3	11.9
Reach 6	M	45	1.51	0.86	2.80	19	353.7	48.8	1345.9	19	0.18	<0.07	0.36	19	5.1	2.0	13.4
Reach 7	M	53	2.15	0.72	4.80	3	247.8	121.5	375.3	3	0.23	0.14	0.32	3	7.2	5.7	10.5
brown trout																	
Reach 6	M	1	3.09			1	20.4			1	0.04			1	0.9		
Reach 7	M	5	6.71	5.61	8.29	2	6.3	2.4	16.7	2	<0.09	<0.10	<0.08	2	0.8	0.5	1.2
Reach 8	M	17	4.68	3.43	9.60	17	15.0	2.6	33.2	17	0.07	<0.07	0.19	11	0.4	0.2	2.1
Reach 8	B	1	3.20			1	2.3			1	0.18						
carp																	
Reach 1	M	1	2.70			1	209.3			1	0.03			1	2.3		
Reach 1	B	3	2.68	2.38	3.11	3	120.6	87.6	156.5	3	0.15	0.02	0.54	3	3.4	3.2	3.6
Reach 3	M	5	3.93	3.20	6.40	5	110.2	56.7	359.4	5	0.05	0.03	0.18	5	2.4	1.3	7.9
Reach 4	M	1	4.50			1	20.6			1	0.07			1	1.1		
Reach 5	M	11	3.85	2.30	6.80	9	40.1	<1.2	207.5	9	0.07	<0.10	0.22	9	2.2	0.9	3.4
Reach 6	M	16	2.54	1.61	4.59	5	7.0	4.9	21.1	5	<0.10	<0.10	<0.08	5	2.0	1.0	3.1
Reach 7	M	19	3.46	2.58	5.50	7	30.2	2.3	89.6	7	0.07	<0.30	0.21	7	2.5	1.2	6.2
Reach 8	M	2	2.50	2.40	2.60												
Reach 8	B	11	1.91	1.30	3.30	11	10.9	5.0	84.8	11	0.04	<0.09	0.18	7	2.6	1.3	3.5
channel catfish																	
Reach 1	M	1	2.67			1	123.7			1	0.03			1	2.1		

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	SELENIUM µg/g dw				ALUMINUM µg/g ww				ARSENIC µg/g ww				BARIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Reach 1	B	3	2.16	1.54	3.11	3	117.4	46.0	207.2	3	0.05	0.03	0.20	3	3.2	1.4	8.2
Reach 2	M	2	4.65	2.10	10.30	2	108.7	57.4	205.8	2	0.25	0.24	0.26	2	3.2	1.0	10.6
Reach 3	M	3	2.27	1.70	2.90	3	104.1	26.8	341.0	3	0.06	0.02	0.12	3	2.0	1.0	4.3
Reach 5	M	15	2.06	1.21	3.50	12	45.6	2.4	230.7	12	0.05	<0.09	0.15	12	1.0	0.2	3.7
Reach 6	M	1	1.86			1	65.2			1	0.03			1	1.3		
fathead minnow																	
Reach 6	B	3	3.39	3.30	3.80	3	382.9	403.8	490.2	3	0.15	0.04	0.24	3	8.3	8.4	8.6
Reach 7	M	3	2.62	2.30	2.90												
Reach 7	P	1	0.60														
Reach 8	M	1	3.40			1	80.4			1	0.29			1	5.3		
Reach 8	B	4	4.36	3.80	4.70	4	65.9	21.0	311.8	4	0.14	0.11	0.21	2	3.7	3.2	4.2
flannelmouth sucker																	
Reach 1	M	3	2.87	2.31	4.00	3	223.6	119.3	308.3	3	0.05	0.02	0.15	3	4.1	1.6	9.2
Reach 2	M	3	0.78	0.08	2.50	3	209.9	179.2	251.6	3	0.05	0.02	0.16	3	6.0	2.1	6.8
Reach 3	M	8	1.53	0.10	3.60	8	167.2	78.0	297.5	8	0.05	0.02	0.15	8	5.9	2.2	14.2
Reach 3	McE	3	3.04	1.96	4.10	3	197.0	153.5	307.8	3	0.07	0.03	0.14	3	3.1	1.8	5.9
Reach 4	M	5	2.57	1.36	3.50	5	210.6	82.1	910.2	5	0.08	<0.07	0.24	5	3.5	2.2	9.6
Reach 5	M	36	1.96	1.27	3.90	12	100.0	8.6	341.3	12	0.07	<0.11	0.28	12	2.7	0.9	8.6
Reach 6	M	58	1.84	0.96	3.70	29	68.2	11.1	640.0	29	0.08	<0.18	0.32	29	2.7	0.7	25.0
Reach 6	B	1	1.80			1	292.2			1	0.31			1	4.6		
Reach 7	M	74	2.57	1.40	5.41	11	54.4	<2.1	174.3	11	0.06	<0.12	0.31	11	2.0	0.5	3.8
Reach 8	M	6	2.04	1.57	2.90	3	55.3	27.6	104.5	3	0.05	<0.07	0.10	3	1.4	0.4	2.9
mosquitofish																	
Reach 6	B	2	5.11	3.30	7.90	2	110.9	41.9	293.8	2	0.18	0.15	0.21	2	2.5	1.4	4.4
Reach 7	P	3	1.02	0.87	1.30												
Reach 8	M	3	3.03	2.40	3.50	3	29.4	6.0	121.7	3	0.08	<0.08	0.15	1	4.1		

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	SELENIUM µg/g dw				ALUMINUM µg/g ww				ARSENIC µg/g ww				BARIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Reach 8	B	1	3.40			1	283.2			1	0.14						
rainbow trout																	
Reach 6	M	1	2.50			1	14.2			1	0.02			1	0.2		
Reach 7	M	14	4.75	0.66	15.10	8	19.7	3.6	123.2	8	0.03	<0.07	<0.04	8	0.5	<0.2	1.4
Reach 8	M	49	3.34	1.10	8.70	31	29.3	7.0	144.8	31	0.12	<0.04	0.61	21	0.9	0.4	1.7
Reach 8	B	5	4.04	3.09	5.01	5	6.1	4.9	7.2	5	0.10	0.05	0.13	2	0.8	0.0	1.1
red shiner																	
Reach 3	McE	2	2.46	2.32	2.60	2	543.6	536.0	551.3	2	0.13	0.10	0.16	2	6.2	6.2	6.2
Reach 6	B	1	6.00			1	117.0			1	0.17			1	3.7		
small fish																	
Reach 1	M	4	3.37	2.25	6.50	4	371.7	208.0	596.1	4	0.06	0.03	0.12	4	7.0	5.4	8.7
Reach 2	M	3	5.67	4.46	6.50	3	232.8	149.9	441.4	3	0.07	0.03	0.16	3	6.4	4.5	11.4
Reach 3	M	6	3.19	1.04	7.50	6	222.4	98.5	406.5	6	0.07	0.03	0.26	6	4.8	2.7	9.0
Reach 3	McE	1	3.80			1	72.8			1	0.10			1	1.7		
Reach 4	M	2	4.28	3.53	5.20	2	190.4	83.0	436.3	2	<0.06	<0.06	<0.05	2	5.2	4.2	6.5
Reach 4	MRC	1	5.74			1	223.4			1	0.07			1	4.3		
Reach 5	M	7	4.26	3.20	8.00	7	320.1	154.9	775.6	7	0.12	<0.06	0.27	7	5.6	3.5	10.2
Reach 6	M	7	4.84	2.29	7.61	5	189.0	117.8	340.6	5	0.08	<0.06	0.18	5	4.3	3.9	5.4
Reach 6	B	1	2.50			1	410.6			1	0.17			1	7.3		
Reach 7	M	8	6.12	0.17	14.30	6	124.8	32.5	424.6	6	0.12	<0.06	0.48	6	4.9	3.1	12.0
Reach 8	M	1	4.02			1	31.7			1	0.19			1	3.3		
speckled dace																	
Reach 3	M	2	6.13	5.60	6.70	2	229.2	171.3	306.7	2	0.17	0.16	0.18	2	8.4	8.1	8.8
Reach 3	McE	1	6.67			1	213.1			1	0.04			1	5.4		
Reach 4	M	2	6.75	6.70	6.80	2	322.3	261.7	397.0	2	0.14	0.14	0.14	2	8.7	7.9	9.7
Reach 6	M	10	5.76	2.06	11.00	3	161.2	125.0	185.4	3	0.12	<0.18	0.22	3	5.2	4.8	5.9
Reach 7	M	5	6.62	4.40	10.84												

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SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	BERYLLIUM µg/g ww				BORON µg/g ww				CADMIUM µg/g ww				CHROMIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Submerged Plants																	
Reach 1	M	2	0.12	0.08	0.17	2	30.06	27.11	33.33	2	0.08	0.06	0.11	2	2.64	2.55	2.73
Reach 2	M	1	0.30			1	36.86			1	0.13			1	5.02		
Reach 3	M	4	0.20	0.07	0.40	4	17.33	13.84	30.78	4	0.10	0.05	0.22	4	3.66	1.99	5.51
Reach 4	M	2	0.27	0.16	0.45	2	15.40	12.92	18.37	2	0.06	0.06	0.07	2	4.86	4.01	5.88
Reach 5	M	6	0.21	0.12	0.60	6	17.43	12.76	30.40	6	0.07	0.04	0.10	6	3.94	2.66	6.54
Reach 6	M	4	0.25	0.09	0.71	4	14.84	10.68	21.29	4	0.11	0.04	0.31	4	3.12	1.30	7.12
Reach 6	B	3	0.05	0.01	0.24	3	1.86	0.17	12.77	3	0.06	0.05	0.06	3	0.81	0.18	3.87
Reach 7	M	4	0.27	0.18	0.64	4	8.64	6.97	10.50	4	0.03	0.03	0.04	4	3.70	2.40	8.68
Reach 8	M	11	0.04	0.00	0.30	11	10.02	1.73	54.71	11	0.05	0.01	0.23	11	0.99	0.07	3.67
Reach 8	B	9	0.01	0.00	0.07	9	5.35	0.50	40.77	9	0.02	0.00	0.07	9	0.30	0.03	1.27
Reach 8	P	5	0.00	<0.01	0.02	5	4.45	1.66	21.33	5	0.02	0.00	0.08	5	0.15	0.05	0.45
Invertebrates																	
Reach 1	M	2	0.02	0.01	0.02	2	0.84	0.36	1.95	2	0.07	0.05	0.10	2	0.93	0.59	1.47
Reach 2	M	2	0.01	0.01	0.01	2	1.16	0.30	1.08	2	0.04	0.03	0.07	2	0.73	0.43	1.23
Reach 3	M	5	0.02	0.01	0.04	5	0.82	0.31	3.64	5	0.03	0.01	0.09	5	0.25	0.07	0.70
Reach 3	McE	1	0.02			1	0.72			1	0.03			1	2.26		
Reach 4	M	2	0.01	<0.03	<0.02	2	0.84	<0.65	2.18	2	0.02	0.01	0.07	2	0.44	0.31	0.64
Reach 4	MRC	2	0.03	<0.03	0.06	2	1.61	1.08	2.40	2	0.04	0.04	0.04	2	1.42	1.30	1.54
Reach 5	M	6	0.03	<0.03	0.09	6	0.91	<0.65	2.95	6	0.02	0.01	0.08	6	0.54	<0.16	1.34
Reach 6	M	5	0.05	<0.03	0.08	5	1.43	0.86	3.35	5	0.07	0.04	0.15	5	0.42	<0.15	1.14
Reach 6	B	3	0.02	0.02	0.03	3	0.46	0.42	0.53	3	0.13	0.10	0.19	3	0.66	0.50	1.01
Reach 7	M	8	0.02	<0.04	0.04	8	0.87	<0.71	3.10	8	0.04	0.01	0.08	8	0.41	<0.18	0.66
Reach 8	M	12	0.02	<0.01	0.04	12	0.46	<1.60	1.02	12	0.07	0.02	0.23	12	0.38	<0.03	2.40
Reach 8	B	7	0.01	0.00	0.01	7	0.29	<0.48	1.48	7	0.06	0.02	0.16	7	0.18	0.08	0.29
Reach 8	P	6	0.00	<0.01	0.01	6	0.27	<0.60	0.58	6	0.03	0.02	0.11	6	0.05	<0.03	0.16

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SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	BERYLLIUM µg/g ww				BORON µg/g ww				CADMIUM µg/g ww				CHROMIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Whole Body Fish (by species)																	
bluehead sucker																	
Reach 2	M	1	0.01			1	0.29			1	0.02			1	1.05		
Reach 3	M	3	0.06	0.01	0.86	3	0.47	0.27	1.20	3	0.01	0.01	0.01	3	0.93	0.56	2.10
Reach 4	M	1	0.02			1	0.30			1	0.02			1	0.48		
Reach 4	MRC	1	0.01			1	0.22			1	0.02			1	0.89		
Reach 5	M	4	0.02	<0.04	<0.03	4	0.33	<0.73	<0.64	4	0.02	<0.03	0.05	4	0.31	<0.18	0.55
Reach 6	M	19	0.02	<0.04	0.09	19	0.45	<0.72	2.75	19	0.01	<0.03	0.02	19	0.30	<0.18	1.06
Reach 7	M	3	0.02	<0.04	<0.03	3	0.32	<0.72	0.54	3	0.01	<0.03	0.02	3	0.57	0.36	0.76
brown trout																	
Reach 6	M	1	0.01			1	0.07			1	0.02			1	0.16		
Reach 7	M	2	0.02	<0.03	0.04	2	0.07	<0.16	<0.13	2	0.03	<0.04	0.04	2	0.22	0.19	0.25
Reach 8	M	17	0.00	<0.03	0.07	17	0.17	<1.34	4.27	17	0.01	<0.02	0.04	17	0.06	<0.13	0.20
Reach 8	B	1	0.02			1	0.15			1	0.00			1	0.03		
carp																	
Reach 1	M	1	0.16			1	0.78			1	0.04			1	0.48		
Reach 1	B	3	0.01	0.01	0.02	3	0.45	0.23	1.29	3	0.06	0.01	0.15	3	0.65	0.34	1.36
Reach 3	M	5	0.03	<0.03	0.52	5	0.79	0.25	5.26	5	0.10	0.06	0.17	5	0.43	0.18	1.71
Reach 4	M	1	0.01			1	2.82			1	0.06			1	0.14		
Reach 5	M	9	0.02	<0.03	0.52	9	0.19	<0.55	1.04	9	0.06	<0.02	0.17	9	0.30	0.12	1.79
Reach 6	M	4	0.02	<0.03	0.00	5	0.08	<0.17	<0.13	5	0.07	<0.04	0.12	5	0.19	<0.15	0.36
Reach 7	M	7	0.03	<0.10	0.34	7	0.21	<0.58	1.02	7	0.05	<0.03	0.26	7	0.35	0.15	3.57
Reach 8	M																
Reach 8	B	11	0.01	<0.02	0.03	11	0.31	<0.72	1.09	11	0.02	<0.02	0.12	11	0.07	<0.14	0.24
channel catfish																	
Reach 1	M	1	0.02			1	0.31			1	0.09			1	0.30		

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	BERYLLIUM µg/g ww				BORON µg/g ww				CADMIUM µg/g ww				CHROMIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Reach 1	B	3	0.04	0.01	0.30	3	0.40	0.27	0.80	3	0.02	0.01	0.02	3	0.76	0.56	1.36
Reach 2	M	2	0.01	0.01	0.01	2	0.25	0.24	0.26	2	0.02	0.02	0.02	2	1.37	0.89	2.11
Reach 3	M	3	0.06	0.01	0.21	3	0.60	0.29	1.64	3	0.01	0.01	0.02	3	0.51	0.36	0.99
Reach 5	M	12	0.01	<0.03	<0.02	12	0.22	<0.62	1.01	12	0.03	<0.04	0.07	12	0.21	<0.13	0.66
Reach 6	M	1	0.02			1	0.32			1	0.04			1	0.25		
fathead minnow																	
Reach 6	B	3	0.01	<0.02	<0.02	3	0.20	<0.39	<0.37	3	0.07	0.04	0.09	3	0.38	0.31	0.43
Reach 7	M																
Reach 7	P																
Reach 8	M	1	0.00							1	0.02			1	0.17		
Reach 8	B	4	0.00	0.00	0.01	4	0.11	<0.59	0.08	4	0.01	<0.02	0.02	4	0.11	<0.17	0.36
flannelmouth sucker																	
Reach 1	M	3	0.04	0.01	0.25	3	0.76	0.32	1.54	3	0.02	0.01	0.03	3	0.36	0.08	1.26
Reach 2	M	3	0.01	0.01	0.01	3	0.48	0.27	1.59	3	0.01	0.01	0.01	3	0.70	0.44	1.19
Reach 3	M	8	0.01	<0.03	0.02	8	0.83	0.25	4.06	8	0.02	0.01	0.03	8	0.30	<0.15	1.18
Reach 3	McE	3	0.01	0.01	0.01	3	0.43	0.27	1.06	3	0.03	0.01	0.05	3	1.29	0.71	3.32
Reach 4	M	5	0.02	<0.03	<0.03	5	1.65	<0.65	7.23	5	0.03	<0.03	0.12	5	0.24	<0.14	0.45
Reach 5	M	12	0.02	<0.05	0.04	12	0.21	<0.69	<0.16	12	0.02	<0.05	0.06	12	0.24	<0.25	1.74
Reach 6	M	29	0.02	<0.04	0.44	29	0.65	<0.77	11.61	29	0.01	<0.05	0.03	29	0.20	<0.19	1.22
Reach 6	B	1	0.01			1	0.07			1	0.01			1	0.37		
Reach 7	M	11	0.02	<0.04	0.07	11	0.43	<0.70	3.23	10	0.02	<0.05	0.27	11	0.22	<0.21	0.91
Reach 8	M	3	0.02	<0.04	<0.03	3	0.97	<0.80	2.17	3	0.01	0.01	0.01	3	0.17	<0.20	0.61
mosquitofish																	
Reach 6	B	2	0.01	<0.06	<0.00	2	0.17	<0.90	<0.12	2	0.02	0.01	0.05	2	0.18	0.09	0.35
Reach 7	P																
Reach 8	M	3	0.00	0.00	0.01	3	0.13	<0.50	<0.10	3	0.01	0.00	0.01	3	0.04	<0.03	0.13
Reach 8	B	1	0.01			1	0.35			1	0.02			1	0.26		

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	BERYLLIUM µg/g ww				BORON µg/g ww				CADMIUM µg/g ww				CHROMIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
rainbow trout																	
Reach 6	M	1	0.01			1	0.24			1	0.01			1	0.06		
Reach 7	M	8	0.01	<0.03	<0.02	8	0.48	<0.66	1.64	8	0.01	<0.03	0.03	8	0.20	<0.17	1.24
Reach 8	M	31	0.00	<0.03	0.03	31	0.20	<0.77	3.23	31	0.01	<0.02	0.06	31	0.15	<0.13	0.87
Reach 8	B	5	0.01	0.00	0.02	5	0.13	<0.28	<0.24	5	0.01	0.01	0.01	5	0.04	0.03	0.07
red shiner																	
Reach 3	McE	2	0.16	0.07	0.36	2	2.23	1.73	2.87	2	0.08	0.07	0.09	2	1.54	0.76	3.11
Reach 6	B	1	0.01			1	0.29			1	0.05			1	0.17		
small fish																	
Reach 1	M	4	0.01	0.01	0.02	4	0.70	0.25	2.29	4	0.03	0.01	0.07	4	0.88	0.52	1.18
Reach 2	M	3	0.01	0.01	0.02	3	0.27	0.20	0.33	3	0.03	0.02	0.06	3	1.37	0.64	6.11
Reach 3	M	6	0.01	0.01	0.02	6	0.32	0.23	0.59	6	0.02	0.01	0.04	6	0.94	0.55	1.77
Reach 3	McE	1	0.02			1	0.34			1	0.04			1	4.72		
Reach 4	M	2	0.02	<0.03	0.04	2	0.81	<0.60	2.18	2	0.02	<0.03	0.02	2	0.87	0.87	0.88
Reach 4	MRC	1	0.01			1	0.23			1	0.02			1	0.50		
Reach 5	M	7	0.02	<0.03	0.55	7	0.35	<0.59	1.32	7	0.02	<0.03	0.08	7	1.23	0.39	3.40
Reach 6	M	5	0.02	<0.03	0.08	5	0.62	<0.62	3.69	5	0.03	0.02	0.08	5	0.84	0.42	1.96
Reach 6	B	1	0.02			1	0.26			1	0.02			1	0.28		
Reach 7	M	6	0.01	<0.03	<0.03	6	0.36	<0.60	1.03	6	0.02	<0.03	0.02	6	0.94	0.75	1.32
Reach 8	M	1	0.01			1	0.47			1	0.02			1	0.16		
speckled dace																	
Reach 3	M	2	0.02	<0.04	<0.03	2	4.43	3.70	5.31	2	0.15	0.15	0.16	2	0.09	<0.18	<0.16
Reach 3	McE	1	0.02			1	0.36			1	0.10			1	0.86		
Reach 4	M	2	0.01	<0.03	<0.03	2	5.55	4.57	6.75	2	0.10	0.09	0.11	2	0.11	<0.14	0.17
Reach 6	M	3	0.02	<0.04	<0.03	3	8.68	6.96	12.90	3	0.05	<0.04	0.07	3	0.09	<0.18	<0.17

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	COPPER µg/g ww				IRON µg/g ww				LEAD µg/g ww				MAGNESIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Submerged Plants																	
Reach 1	M	2	3.13	2.65	3.70	2	1763	1446	2149	2	1.30	1.15	1.48	2	967	791.8	1181.0
Reach 2	M	1	8.38			1	5589			1	4.25			1	1337		
Reach 3	M	4	5.03	2.67	6.78	4	3006	1550	4607	4	2.58	1.85	3.07	4	1069	528.9	1651.4
Reach 4	M	2	5.47	4.51	6.63	2	3719	2786	4966	2	3.17	3.04	3.30	2	1213	975.3	1509.8
Reach 5	M	6	4.73	3.33	6.47	6	3149	2160	5731	6	2.81	1.72	4.55	6	950	583.0	1608.2
Reach 6	M	4	3.94	2.04	6.62	4	2330	1301	3596	4	4.30	1.09	12.10	4	699	375.1	1167.7
Reach 6	B	3	2.13	0.97	4.64	3	1169	245	4567	3	1.83	0.86	4.33	3	438	157.3	1308.1
Reach 7	M	4	3.78	2.94	6.00	4	3382	1984	8166	4	2.22	0.97	4.34	4	801	515.1	1684.5
Reach 8	M	11	1.95	0.59	4.35	10	806	19	2597	11	1.25	0.05	9.52	11	497	192.5	1327.4
Reach 8	B	9	1.10	0.73	1.57	9	260	11	959	9	0.47	<0.04	2.43	9	367	167.4	896.4
Reach 8	P	5	1.08	0.06	3.72	5	102	26	970	5	0.07	<0.07	0.99	5	651	299.6	2338.6
Invertebrates																	
Reach 1	M	2	15.63	6.24	39.20	2	438	389	493	2	0.36	0.30	0.45	2	543	540.2	544.9
Reach 2	M	2	11.65	4.55	29.81	2	295	208	419	2	0.26	0.21	0.32	2	458	425.2	493.2
Reach 3	M	5	5.11	3.41	6.70	5	395	240	594	5	0.31	0.22	0.42	5	393	293.8	539.3
Reach 3	McE	1	32.09			1	121			1	0.09			1	908		
Reach 4	M	2	5.28	4.03	6.92	2	405	396	413	2	0.37	0.32	0.42	2	346	273.5	438.3
Reach 4	MRC	2	15.36	5.43	40.49	2	454	256	805	2	0.32	0.21	0.48	2	550	488.7	618.1
Reach 5	M	6	5.68	3.13	7.06	6	600	322	897	6	0.44	0.18	0.79	6	396	286.1	493.9
Reach 6	M	5	6.18	5.54	7.67	5	741	442	1172	5	1.13	0.47	1.87	5	401	279.9	538.5
Reach 6	B	3	4.69	3.52	5.98	3	659	551	767	3	1.27	0.80	2.67	3	284	247.4	314.6
Reach 7	M	8	4.03	1.28	6.43	8	403	148	696	8	0.33	0.24	0.51	8	357	227.4	447.2
Reach 8	M	12	3.04	1.22	10.27	10	330	67	706	12	0.48	0.12	1.26	12	256	113.6	453.8
Reach 8	B	7	4.24	1.45	9.97	7	140	74	251	7	0.12	<0.15	0.56	7	218	149.5	369.2

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	COPPER µg/g ww				IRON µg/g ww				LEAD µg/g ww				MAGNESIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Reach 8	P	6	2.91	1.76	5.87	6	31	12	63	6	0.03	<0.12	<0.03	6	231	174.7	274.5
Whole Body Fish (by species)																	
bluehead sucker																	
Reach 2	M	1	0.96			1	365			1	0.31			1	409		
Reach 3	M	3	0.94	0.54	2.40	3	101	78	148	3	0.11	0.07	0.19	3	286	254.4	332.8
Reach 4	M	1	0.70			1	145			1	0.20			1	309		
Reach 4	MRC	1	0.98			1	164			1	0.22			1	376		
Reach 5	M	4	0.63	0.55	0.73	4	112	38	253	4	0.10	<0.18	0.18	4	280	254.8	334.7
Reach 6	M	19	0.86	0.64	1.87	19	222	42	760	19	0.26	<0.18	0.91	19	283	203.6	413.8
Reach 7	M	3	1.19	0.76	2.16	3	216	97	392	3	0.17	<0.18	0.23	3	286	280.8	294.3
brown trout																	
Reach 6	M	1	0.84			1	35			1	0.07			1	252		
Reach 7	M	2	2.28	2.05	2.53	2	29	18	45	2	0.13	0.11	0.14	2	320	303.2	338.1
Reach 8	M	17	1.27	<0.45	2.13	17	23	14	36	17	0.02	<0.13	0.19	17	263	206.5	300.8
Reach 8	B	1	1.43			1	12			1	0.02			1	248		
carp																	
Reach 1	M	1	1.35			1	145			1	0.07			1	212		
Reach 1	B	3	0.85	0.70	1.19	3	86	80	92	3	0.13	0.06	0.21	3	371	308.9	428.8
Reach 3	M	5	1.20	0.88	2.38	5	83	51	214	5	0.30	0.21	0.34	5	317	262.2	370.7
Reach 4	M	1	0.82			1	50			1	0.07			1	463		
Reach 5	M	9	1.39	0.79	2.12	9	65	15	142	9	0.22	0.12	0.39	9	292	233.5	389.9
Reach 6	M	5	1.16	1.19	1.48	5	31	19	52	5	0.13	0.09	1.69	5	315	280.7	364.6
Reach 7	M	7	1.62	1.06	4.42	7	63	23	163	7	0.21	<0.15	1.43	7	346	247.7	976.0
Reach 8	M																
Reach 8	B	11	1.14	0.58	3.43	11	21	14	94	11	0.06	<0.54	1.50	11	304	167.5	535.6
channel catfish																	

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	COPPER µg/g ww				IRON µg/g ww				LEAD µg/g ww				MAGNESIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Reach 1	M	1	1.13			1	84			1	0.18			1	273		
Reach 1	B	3	0.87	0.39	2.56	3	87	49	135	3	0.08	0.07	0.10	3	303	280.1	334.0
Reach 2	M	2	0.78	0.44	1.40	2	95	41	219	2	0.10	0.06	0.17	2	328	327.8	329.2
Reach 3	M	3	0.74	0.43	1.14	3	78	28	201	3	0.10	0.06	0.21	3	263	237.4	297.7
Reach 5	M	12	0.51	0.30	1.03	12	60	15	148	12	0.17	<0.15	0.57	12	246	158.6	474.0
Reach 6	M	1	1.02			1	75			1	0.08			1	235		
fathead minnow																	
Reach 6	B	3	1.83	1.20	2.59	3	263	265	305	3	1.26	1.18	1.33	3	328	310.5	342.3
Reach 7	M																
Reach 7	P																
Reach 8	M	1	0.86			1	67			1	0.04			1	264		
Reach 8	B	4	0.99	0.63	2.02	4	54	24	178	4	0.12	<0.57	0.48	4	292	234.9	421.7
flannelmouth sucker																	
Reach 1	M	3	1.14	0.95	1.60	3	147	70	260	3	0.15	0.08	0.31	3	308	241.1	382.9
Reach 2	M	3	0.81	0.67	0.96	3	174	159	190	3	0.09	0.06	0.19	3	312	292.5	323.4
Reach 3	M	8	0.79	0.69	1.02	8	117	56	195	8	0.21	0.13	0.34	8	325	235.9	507.7
Reach 3	McE	3	0.92	0.75	1.04	3	126	86	191	3	0.09	0.07	0.17	3	402	332.4	469.8
Reach 4	M	5	1.01	0.60	2.17	5	118	51	401	5	0.19	<0.16	0.42	5	328	247.3	611.8
Reach 5	M	12	0.84	0.54	1.43	12	93	23	207	12	0.21	<0.17	0.91	12	270	203.9	431.7
Reach 6	M	29	0.81	0.51	3.02	29	68	15	384	29	0.17	<0.19	0.59	28	281	183.4	679.4
Reach 6	B	1	0.90			1	170			1	0.13			1	334		
Reach 7	M	11	0.76	0.60	1.47	11	61	14	110	11	0.17	<0.18	0.58	11	257	191.2	357.0
Reach 8	M	3	0.72	0.56	0.89	3	51	32	81	3	0.14	<0.20	0.30	3	246	186.5	337.0
mosquitofish																	
Reach 6	B	2	1.48	1.22	1.79	2	107	42	274	2	0.21	0.18	0.24	2	368	355.8	381.0
Reach 8	M	3	0.80	0.72	0.93	3	33	17	69	3	0.05	<0.01	0.26	3	316	278.6	347.5

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	COPPER µg/g ww				IRON µg/g ww				LEAD µg/g ww				MAGNESIUM µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Reach 8	B	1	2.46			1	167			1	0.52			1	524		
rainbow trout																	
Reach 6	M	1	0.93			1	21			1	0.06			1	182		
Reach 7	M	8	2.15	0.69	4.55	8	32	14	84	8	0.08	<0.17	0.58	8	295	247.6	372.7
Reach 8	M	31	1.73	0.68	20.36	31	37	17	137	31	0.03	<0.15	0.94	31	272	236.6	421.8
Reach 8	B	5	1.74	1.04	4.27	5	23	18	36	5	0.01	<0.05	0.01	5	245	204.5	270.5
red shiner																	
Reach 3	McE	2	1.40	1.00	1.97	2	290	284	295	2	0.14	0.13	0.14	2	440	417.4	463.1
Reach 6	B	1	1.21			1	96			1	0.55			1	373		
small fish																	
Reach 1	M	4	1.18	1.06	1.53	4	209	126	284	4	0.20	0.07	0.31	4	416	364.3	485.6
Reach 2	M	3	0.78	0.72	0.82	3	137	89	283	3	0.14	0.07	0.28	3	352	304.0	428.4
Reach 3	M	6	0.79	0.72	0.89	6	136	66	245	6	0.11	0.07	0.18	6	362	341.3	429.7
Reach 3	McE	1	0.82			1	85			1	0.08			1	335		
Reach 4	M	2	0.86	0.79	0.94	2	113	51	247	2	0.17	0.15	0.19	2	350	326.2	376.3
Reach 4	MRC	1	0.73			1	114			1	0.06			1	320		
Reach 5	M	7	1.16	0.77	2.60	7	193	107	485	7	0.19	<0.12	0.39	7	347	311.0	377.0
Reach 6	M	5	0.93	0.78	1.10	5	123	82	207	5	0.24	0.17	0.37	5	332	293.4	392.7
Reach 6	B	1	0.54			1	247			1	0.66			1	332		
Reach 7	M	6	0.77	0.55	1.08	6	102	35	389	6	0.10	<0.15	0.26	6	329	305.0	347.5
Reach 8	M	1	0.70			1	34			1	0.06			1	291		
speckled dace																	
Reach 3	M	2	1.31	1.22	1.41	2	192	166	221	2	0.19	0.18	0.19	2	667	575.2	773.3
Reach 3	McE	1	1.08			1	116			1	0.09			1	482		
Reach 4	M	2	0.99	0.96	1.03	2	200	169	237	2	0.20	0.17	0.23	2	619	576.3	665.4
Reach 6	M	3	1.38	1.11	1.63	3	124	117	135	3	0.13	<0.18	0.26	3	481	417.8	576.2

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	MANGANESE µg/g ww				MERCURY µg/g ww				MOLYBDENUM µg/g ww				NICKEL µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Submerged Plants																	
Reach 1	M	2	89.7	83.0	97.0	2	0.006	0.003	0.010	2	0.35	0.20	0.61	2	1.64	1.58	1.71
Reach 2	M	1	119.9			1	0.016			1	0.81			1	3.20		
Reach 3	M	4	111.9	52.3	187.2	4	0.013	0.009	0.017	4	0.26	0.22	0.32	4	2.31	1.10	3.76
Reach 4	M	2	197.7	156.6	249.4	2	0.020	<0.030	0.020	0				2	3.83	2.34	6.29
Reach 5	M	6	200.5	131.3	273.8	6	0.013	<0.340	0.020	0				6	2.35	1.59	3.98
Reach 6	M	4	452.9	163.2	1189.0	4	0.013	<0.040	0.020	0				4	1.78	1.14	3.42
Reach 6	B	3	246.2	45.9	2173.5	3	0.003	0.000	0.010	3	0.05	<0.27	<0.06	3	0.70	0.25	2.14
Reach 7	M	4	275.4	165.9	711.4	4	0.012	<0.020	0.010	0				4	2.48	1.73	5.36
Reach 8	M	11	100.6	21.8	455.7	11	0.004	<0.004	0.008	11	0.09	<0.27	0.24	11	0.78	0.03	2.69
Reach 8	B	9	111.2	27.5	340.6	9	0.002	<0.004	0.007	9	0.06	<0.20	0.12	9	0.37	0.05	0.97
Reach 8	P	5	12.6	3.6	78.1	5	0.002	<0.005	0.002	5	0.26	<0.26	0.51	5	0.15	0.07	0.57
Invertebrates																	
Reach 1	M	2	29.4	17.2	50.0	2	0.023	0.017	0.030	2	0.32	0.28	0.36	2	0.66	0.56	0.77
Reach 2	M	2	15.5	10.6	22.6	2	0.019	0.017	0.022	2	0.28	0.27	0.30	2	0.30	0.19	0.47
Reach 3	M	5	16.9	11.9	28.8	5	0.021	0.012	0.035	5	0.33	0.29	0.36	5	0.37	0.22	0.62
Reach 3	McE	1	14.4			1	0.043			1	0.36			1	0.69		
Reach 4	M	2	21.2	17.2	26.1	2	0.010	<0.020	0.010					2	0.39	0.37	0.42
Reach 4	MRC	2	49.7	44.1	56.2	2	0.005	0.000	0.010					2	0.68	0.49	0.96
Reach 5	M	6	37.2	19.8	63.9	6	0.010	<0.100	0.030					6	0.69	0.39	0.95
Reach 6	M	5	108.9	58.4	257.5	5	0.018	<0.030	0.040					5	0.54	0.39	0.87
Reach 6	B	3	90.7	54.9	233.2	3	0.012	0.010	0.020	3	0.05	<0.18	<0.06	3	0.41	0.31	0.64
Reach 7	M	8	105.8	7.5	285.5	8	0.026	<0.040	0.035					8	0.47	0.33	0.71
Reach 8	M	11	35.8	15.4	242.7	12	0.011	0.000	0.050	12	0.07	<0.25	0.15	12	0.45	0.16	0.73
Reach 8	B	7	18.3	6.6	61.8	7	0.019	0.010	0.700	7	0.09	<0.37	0.15	7	0.15	0.06	0.23
Reach 8	P	5	1.5	0.3	8.4	6	0.010	<0.010	0.020	6	0.09	<0.30	0.16	6	0.03	<0.08	0.06
Whole Body Fish (by species)																	
bluehead sucker																	
Reach 2	M	1	13.6			1	0.058			1	0.29			1	0.27		

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	MANGANESE µg/g ww				MERCURY µg/g ww				MOLYBDENUM µg/g ww				NICKEL µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Reach 3	M	3	5.1	3.6	7.2	3	0.072	0.053	0.096	3	0.27	0.24	0.31	3	0.56	0.25	1.94
Reach 4	M	1	8.5			1	0.058							1	0.21		
Reach 4	MRC	1	6.8			1	0.031							1	0.28		
Reach 5	M	4	8.1	4.4	13.8	4	0.033	<0.040	0.060					4	0.25	<0.16	0.42
Reach 6	M	19	15.1	5.8	61.3	19	0.031	<0.030	0.070					19	0.37	<0.18	3.66
Reach 7	M	3	15.8	15.0	16.6	3	0.061	0.050	0.080					3	0.33	0.22	0.65
brown trout																	
Reach 6	M	1	3.5			1	0.008			1	0.11			1	0.11		
Reach 7	M	2	3.8	2.2	6.5	2	0.126	0.100	0.160	2	0.12	<0.26	<0.21	2	0.12	<0.26	<0.21
Reach 8	M	17	1.4	0.6	5.7	17	0.038	0.020	0.080	14	0.05	<0.67	0.04	17	0.04	<0.13	0.16
Reach 8	B	1	0.4			1	0.030			1	0.08			1	0.06		
carp																	
Reach 1	M	1	3.4			1	0.026			1	0.26			1	0.62		
Reach 1	B	3	4.8	3.6	6.0	3	0.083	0.022	0.177	3	0.28	0.23	0.32	3	0.47	0.40	0.54
Reach 3	M	5	3.1	2.4	4.3	5	0.073	0.031	0.216	5	0.28	<0.59	0.28	5	0.60	0.32	1.36
Reach 4	M	1	1.4			1	0.087			1	0.28			1	0.40		
Reach 5	M	9	2.9	1.1	5.4	9	0.062	0.040	0.130	4	0.11	<0.26	<0.19	9	0.19	<0.26	1.22
Reach 6	M	5	3.1	2.3	4.8	5	0.074	0.060	0.100	5	0.12	<0.28	<0.22	5	0.12	<0.28	<0.22
Reach 7	M	7	3.6	2.3	10.9	7	0.155	0.080	0.650	4	0.15	<0.80	<0.23	7	0.23	<0.23	0.99
Reach 8	M																
Reach 8	B	11	1.6	0.7	4.4	11	0.064	0.032	0.151	11	0.13	<0.50	<0.04	11	0.11	<0.12	.0.53
channel catfish																	
Reach 1	M	1	3.1			1	0.026			1	0.31			1	0.24		
Reach 1	B	3	4.6	3.2	6.9	3	0.109	0.083	0.156	3	0.25	0.20	0.29	3	0.43	0.24	0.64
Reach 2	M	2	4.9	4.1	6.0	2	0.059	0.051	0.068	2	0.25	0.24	0.26	2	0.86	0.72	1.02
Reach 3	M	3	4.4	3.2	7.5	3	0.098	0.058	0.134	3	0.28	0.23	0.33	3	0.43	0.29	0.58
Reach 5	M	12	3.8	1.1	14.8	12	0.072	0.040	0.180	6	0.11	<0.24	<0.18	12	0.17	<0.24	0.53
Reach 6	M	1	2.6			1	0.073							1	0.54		
fathead minnow																	

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	MANGANESE µg/g ww				MERCURY µg/g ww				MOLYBDENUM µg/g ww				NICKEL µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Reach 6	B	3	61.1	39.6	131.4	3	0.011	0.010	0.010	3	0.10	<0.20	<0.19	3	0.21	0.16	0.22
Reach 7	M																
Reach 7	P																
Reach 8	M	1	4.5			1	0.055			1	0.02			1	0.04		
Reach 8	B	4	3.4	1.8	5.4	4	0.028	0.030	0.030	4	0.05	<0.30	<0.04	4	0.04	<0.11	0.20
flannelmouth sucker																	
Reach 1	M	3	4.6	1.9	9.0	3	0.049	0.038	0.057	3	0.38	0.23	0.77	3	0.26	0.08	0.79
Reach 2	M	3	6.1	5.7	6.7	3	0.044	0.041	0.048	3	0.25	0.23	0.27	3	0.72	0.25	3.58
Reach 3	M	8	4.9	2.3	7.9	8	0.066	0.024	0.141	8	0.28	<0.61	0.31	8	0.38	0.15	0.67
Reach 3	McE	3	6.7	5.0	10.0	3	0.049	0.037	0.076	3	0.27	0.26	0.27	3	0.29	0.07	1.50
Reach 4	M	5	5.4	3.5	13.6	5	0.080	0.040	0.150	2	0.30	<0.61	<0.60	5	0.32	<0.16	0.87
Reach 5	M	12	5.4	2.1	10.5	12	0.072	0.040	0.140	4	0.13	<0.40	<0.25	12	0.23	<0.40	0.67
Reach 6	M	29	8.1	2.1	31.5	29	0.076	<0.010	0.270	11	0.21	<0.74	<0.23	29	0.24	<0.27	1.02
Reach 6	B	1	12.1			1	0.025			1	0.04			1	0.08		
Reach 7	M	11	7.0	0.5	13.5	11	0.176	0.110	0.320	3	0.14	<0.33	<0.24	11	0.14	<0.33	0.31
Reach 8	M	3	5.3	2.8	7.3	3	0.222	0.190	0.270					3	0.16	<0.20	0.47
mosquitofish																	
Reach 6	B	2	31.8	30.1	33.5	2	0.024	0.016	0.035	2	0.11	<0.60	<0.07	2	0.07	0.06	0.07
Reach 7	P																
Reach 8	M	3	8.7	3.8	19.2	3	0.054	0.030	0.104	3	0.07	<0.25	<0.05	3	0.02	<0.01	0.06
Reach 8	B	1	8.4			1	0.032			1	0.69			1	0.17		
rainbow trout																	
Reach 6	M	1	2.4			1	0.045							1	0.06		
Reach 7	M	8	3.1	1.2	17.9	8	0.063	<0.050	0.140	5	0.25	<0.50	<0.48	8	0.12	<0.17	0.43
Reach 8	M	31	2.8	1.1	37.6	31	0.039	<0.040	0.090	28	0.06	<0.50	0.03	31	0.07	<0.12	0.38
Reach 8	B	5	2.2	1.6	2.8	5	0.030	0.020	0.050	5	0.07	<0.14	<0.12	5	0.04	0.03	0.07
red shiner																	
Reach 3	McE	2	33.4	12.8	87.1	2	0.027	0.024	0.030	2	0.33	0.22	0.49	2	0.58	0.17	1.95
Reach 6	B	1	43.9			1	0.017			1	0.14			1	0.08		

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	MANGANESE µg/g ww				MERCURY µg/g ww				MOLYBDENUM µg/g ww				NICKEL µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
small fish																	
Reach 1	M	4	8.3	6.6	9.7	4	0.028	0.025	0.036	4	0.27	0.23	0.30	4	0.15	0.07	0.45
Reach 2	M	3	6.2	5.3	7.9	3	0.057	0.045	0.088	3	0.33	0.20	0.65	3	0.32	0.07	3.16
Reach 3	M	6	7.1	4.9	10.1	6	0.048	0.024	0.085	6	0.29	0.23	0.33	6	0.13	0.07	0.73
Reach 3	McE	1	5.4			1	0.088			1	0.34			1	2.58		
Reach 4	M	2	6.7	4.7	9.5	2	0.040	0.030	0.060					2	0.34	0.30	0.39
Reach 4	MRC	1	5.9			1	0.022							1	0.23		
Reach 5	M	7	8.9	4.8	14.1	7	0.039	0.030	0.060					7	0.66	0.25	2.31
Reach 6	M	5	11.6	9.0	19.6	5	0.045	0.030	0.090					5	0.16	<0.17	1.07
Reach 6	B	1	6.2			1	0.015			1	0.17			1	0.17		
Reach 7	M	6	10.6	7.5	15.0	6	0.099	0.090	0.110					6	0.16	<0.15	0.66
Reach 8	M	1	4.7			1	0.021							1	0.06		
speckled dace																	
Reach 3	M	2	8.0	7.0	9.1	2	0.094	0.080	0.120	2	0.34	<0.74	<0.63	2	0.12	<0.18	0.16
Reach 3	McE	1	6.9			1	0.177			1	0.36			1	0.09		
Reach 4	M	2	7.6	6.5	8.8	2	0.082	0.070	0.100	2	0.28	<0.57	<0.56	2	0.12	<0.14	0.20
Reach 6	M	3	10.1	9.3	11.0	3	0.131	0.120	0.140	3	0.36	<0.73	<0.69	3	0.11	<0.18	0.18

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	STRONTIUM µg/g ww				VANADIUM µg/g ww				ZINC µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Submerged Plants													
Reach 1	M	2	59.49	48.00	73.73	2	4.77	4.02	5.66	2	8.45	8.08	8.84
Reach 2	M	1	47.39			1	13.24			1	22.68		
Reach 3	M	4	66.21	52.46	83.68	4	7.35	3.59	11.16	4	16.33	7.53	28.55
Reach 4	M	2	74.46	64.58	85.84	2	9.09	7.35	11.25	2	20.23	14.70	27.84
Reach 5	M	6	63.30	38.26	108.36	6	7.47	4.73	13.28	6	23.76	14.49	35.74
Reach 6	M	4	70.84	24.68	197.58	4	5.53	2.96	8.90	4	31.27	5.50	116.16
Reach 6	B	3	20.82	10.43	31.73	3	2.12	0.57	9.55	3	20.94	14.52	36.72
Reach 7	M	4	20.24	15.65	33.12	4	7.50	4.90	17.76	4	9.70	6.19	21.13
Reach 8	M	11	15.59	9.29	33.73	11	2.19	<0.04	11.26	11	4.66	2.13	7.62
Reach 8	B	9	19.71	5.86	101.92	9	0.60	<0.03	3.16	9	3.07	1.39	5.76
Reach 8	P	5	146.30	33.51	479.15	5	0.10	<0.08	0.89	5	2.61	0.84	6.67
Invertebrates													
Reach 1	M	2	40.78	9.97	166.80	2	1.26	1.12	1.41	2	38.24	24.74	59.09
Reach 2	M	2	33.54	7.26	155.01	2	0.86	0.67	1.11	2	26.89	18.70	38.66
Reach 3	M	5	10.04	5.31	14.87	5	1.05	0.70	1.66	5	44.47	30.08	51.74
Reach 3	McE	1	234.43			1	0.39			1	26.57		
Reach 4	M	2	9.47	9.19	9.75	2	1.20	1.16	1.25	2	36.07	22.26	58.44
Reach 4	MRC	2	52.83	15.29	182.47	2	2.03	1.44	2.88	2	18.51	16.20	21.16
Reach 5	M	6	9.23	7.60	11.78	6	1.62	0.92	2.39	6	43.96	19.07	65.72
Reach 6	M	5	19.13	10.33	46.26	5	1.86	1.00	3.14	5	45.57	36.88	70.76
Reach 6	B	3	5.55	5.15	5.82	3	1.35	1.18	1.51	3	33.74	30.08	37.21
Reach 7	M	8	9.00	4.51	21.12	8	1.19	0.66	1.58	8	25.03	15.57	33.19
Reach 8	M	11	9.38	3.96	94.96	12	0.85	0.15	2.24	12	10.80	3.02	26.21
Reach 8	B	7	6.03	1.80	64.80	7	0.36	0.17	0.66	7	16.18	5.28	37.27
Reach 8	P	5	22.37	6.24	410.32	6	0.03	<0.09	0.08	6	10.89	3.34	23.55

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	STRONTIUM µg/g ww				VANADIUM µg/g ww				ZINC µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Whole Body Fish (by species)													
bluehead sucker													
Reach 2	M	1	35.09			1	1.01			1	19.14		
Reach 3	M	3	22.54	19.39	27.54	3	0.65	0.30	2.06	3	14.63	13.00	15.77
Reach 4	M	1	27.57			1	0.42			1	16.36		
Reach 4	MRC	1	36.70			1	0.84			1	20.66		
Reach 5	M	4	21.43	18.47	25.49	4	0.22	<0.03	1.16	4	15.28	13.87	18.02
Reach 6	M	19	14.41	5.21	56.85	19	0.72	0.19	1.84	19	15.28	11.38	20.51
Reach 7	M	3	19.09	14.04	31.90	3	0.34	<0.18	0.81	3	17.66	14.31	22.41
brown trout													
Reach 6	M	1	9.04			1	0.07			1	21.99		
Reach 7	M	2	11.41	11.04	11.80	2	0.07	<0.16	<0.13	2	26.75	26.60	26.89
Reach 8	M	10	4.48	1.02	8.44	16	0.04	<0.20	0.08	17	23.28	17.29	35.50
Reach 8	B					1	0.02			1	22.44		
carp													
Reach 1	M	1	11.38			1	0.49			1	47.76		
Reach 1	B	3	45.73	36.19	63.42	3	0.37	0.33	0.41	3	68.20	52.25	78.82
Reach 3	M	5	22.41	11.71	35.36	5	0.40	0.24	1.45	5	44.48	33.84	59.15
Reach 4	M	1	15.75			1	0.07			1	22.58		
Reach 5	M	9	25.12	13.13	47.23	9	0.20	<0.16	1.22	9	51.57	15.13	90.30
Reach 6	M	5	29.70	10.75	59.86	5	0.09	<0.17	0.17	5	59.67	40.89	70.37
Reach 7	M	7	30.36	20.70	63.50	7	0.19	<0.50	0.90	7	90.59	57.28	290.00
Reach 8	M												
Reach 8	B	7	19.26	9.60	32.94	11	0.06	<0.12	0.27	11	36.70	19.52	77.42
channel catfish													
Reach 1	M	1	23.00			1	0.31			1	48.20		

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
[Notes: "N," Sample Number; "Geomean," Geometric Mean (unless N=1); "Min," minimum; "Max," Maximum; "M," Mainstem; "B," Backwater; "P," Pond; "McE," McElmo Creek Confluence; "MRC," Mancos River Confluence.]

SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	STRONTIUM µg/g ww				VANADIUM µg/g ww				ZINC µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Reach 1	B	3	31.01	24.25	46.40	3	0.52	0.30	0.83	3	20.49	18.20	23.17
Reach 2	M	2	36.07	32.92	39.52	2	1.11	1.01	1.22	2	21.21	19.44	23.14
Reach 3	M	3	20.59	20.12	21.29	3	0.54	0.28	0.92	3	15.35	14.45	16.28
Reach 5	M	12	16.67	8.04	60.69	12	0.18	<0.15	0.53	12	17.62	10.64	56.32
Reach 6	M	1	18.73			1	0.52			1	48.52		
fathead minnow													
Reach 6	B	3	19.02	17.62	19.06	3	0.63	0.50	0.77	3	23.46	21.95	25.43
Reach 7	M												
Reach 7	P												
Reach 8	M	1	18.17			1	0.16			1	29.28		
Reach 8	B	2	15.21	12.20	18.95	4	0.14	0.06	0.62	4	28.16	19.10	39.20
flannelmouth sucker													
Reach 1	M	3	15.49	7.29	31.87	3	0.35	0.08	1.19	3	16.33	14.43	18.76
Reach 2	M	3	20.14	15.62	26.39	3	0.48	0.37	0.64	3	14.34	14.05	14.74
Reach 3	M	8	17.92	11.74	26.14	8	0.32	0.17	0.66	8	15.94	13.30	19.87
Reach 3	McE	3	47.22	31.92	67.23	3	0.50	0.39	0.64	3	23.73	20.58	28.89
Reach 4	M	5	14.76	8.23	22.89	5	0.41	0.18	0.90	5	17.17	12.75	32.55
Reach 5	M	12	14.07	4.79	48.11	12	0.30	<1.80	0.93	12	14.45	10.11	42.06
Reach 6	M	29	14.13	2.96	48.00	29	0.31	<1.72	0.98	29	16.09	10.50	23.13
Reach 6	B	1	21.07			1	0.39			1	17.90		
Reach 7	M	11	11.39	2.95	34.10	11	0.21	<1.74	0.58	11	16.22	12.92	33.99
Reach 8	M	3	8.93	2.61	22.27	3	0.20	<0.20	0.30	3	15.41	11.61	17.81
mosquitofish													
Reach 6	B	2	23.84	23.03	24.67	2	0.19	<0.15	0.47	2	40.98	35.11	47.84
Reach 7	P												
Reach 8	M	1	18.95			3	0.06	<0.08	0.18	3	29.78	24.31	36.50

Appendix E. Geometric Mean and Range of Selected Element Concentrations (µg/g Wet Weight [ww], except for Selenium, which is µg/g Dry Weight [dw]) Categorized by Sample Type, River Reach, Habitat Type, and Fish Species.
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SAMPLE TYPE/ RIVER REACH	HABITAT TYPE	STRONTIUM µg/g ww				VANADIUM µg/g ww				ZINC µg/g ww			
		N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.	N	GeoMean	Min.	Max.
Reach 8	B					1	0.56			1	54.13		
rainbow trout													
Reach 6	M	1	4.50			1	0.06			1	29.61		
Reach 7	M	8	5.12	3.21	7.02	8	0.08	<0.17	0.13	8	22.28	16.61	34.84
Reach 8	M	17	5.43	1.58	12.71	31	0.07	<0.12	0.31	31	22.93	15.93	37.46
Reach 8	B	2	7.49	6.05	9.27	5	0.02	<0.04	<0.04	5	22.80	18.12	27.54
red shiner													
Reach 3	McE	2	51.25	41.50	63.29	2	1.17	0.84	1.63	2	30.00	26.02	34.58
Reach 6	B	1	29.77			1	0.20			1	42.48		
small fish													
Reach 1	M	4	39.82	32.13	45.32	4	0.83	0.68	1.28	4	29.90	24.67	33.76
Reach 2	M	3	37.97	29.78	54.94	3	0.41	0.24	0.74	3	34.67	28.56	45.13
Reach 3	M	6	42.76	35.30	61.01	6	0.30	0.07	0.60	6	38.68	27.82	62.65
Reach 3	McE	1	61.33			1	0.31			1	42.46		
Reach 4	M	2	42.35	37.36	48.02	2	0.35	0.16	0.76	2	44.03	43.09	45.00
Reach 4	MRC	1	35.64			1	0.65			1	40.64		
Reach 5	M	7	33.63	26.88	44.10	7	0.74	0.41	1.70	7	36.06	26.88	44.95
Reach 6	M	5	37.67	30.65	44.64	5	0.39	0.20	0.52	5	52.09	43.61	59.07
Reach 6	B	1	21.23			1	0.64			1	25.23		
Reach 7	M	6	28.35	22.43	32.92	6	0.24	<0.15	0.81	6	30.86	23.04	38.07
Reach 8	M	1	10.21			1	0.13			1	26.47		
speckled dace													
Reach 3	M	2	87.81	83.62	92.22	2	0.33	0.30	0.38	2	68.97	66.27	71.78
Reach 3	McE	1	65.23			1	0.67			1	54.00		
Reach 4	M	2	68.86	60.16	78.83	2	0.35	0.31	0.40	2	53.18	49.75	56.83
Reach 6	M	3	38.78	32.67	44.71	3	0.24	0.21	0.26	3	48.06	45.49	51.31