Table 1. Physical Dimension Statistics for 8-digit HUCs

HUC	Total Area (ha)	Riparian Corridor (ha)	Stream Length (km)	Stream Density (m/ha)
3060101	272,812.23	55,585.95	3066.68	11.24
3060102	258,218.91	54,114.18	2994.61	11.60
3060103	483,189.03	88,651.85	4803.99	9.94
3060104	398,298.06	65,842.94	3463.28	8.70
3060105	204,446.97	32,453.26	1636.33	8.00
3060106	488,842.20	83,668.92	1765.63	3.61
3060107	200,987.55	31,324.14	4771.76	23.74
3060108	220,108.41	37,124.59	2044.32	9.29
3060109	248,158.71	47,316.49	2679.38	10.80

Table 2. Forest Cover Types, Percent Cover by HUC

HUC	Evergreen	Mixed	Deciduous	Woody Wetlands
3060101	23.36	10.45	37.92	0.62
3060102	25.66	12.15	45.68	0.27
3060103	28.35	11.07	25.28	0.55
3060104	23.72	9.65	38.66	0.36
3060105	39.95	8.85	28.57	0.69
3060106	33.39	7.22	12.74	11.54
3060107	50.21	9.72	18.69	0.74
3060108	24.17	7.50	15.38	10.86
3060109	25.24	4.63	7.33	31.46

Table 3. Agricultural Land Cover Types, Percent Cover by HUC

HUC	Pasture /Hay	Row Crops	Other Grasses
3060101	10.18	5.05	0.76
3060102	6.76	3.46	0.28
3060103	13.21	9.08	0.48
3060104	15.51	7.59	0.35
3060105	4.01	6.90	0.12
3060106	1.60	14.60	0.46
3060107	3.32	6.59	0.09
3060108	2.76	29.71	0.06
3060109	1.78	14.15	0.38

Table 4. Urban Land Cover Types, Percent Cover by HUC

HUC	Low Intensity Residential	High Intensity Residential	High Intensity Commercial/ Industrial
3060101	3.35	0.29	1.16
3060102	1.03	0.06	0.42
3060103	1.74	0.25	0.60
3060104	0.88	0.06	0.49
3060105	0.60	0.08	0.32
3060106	2.72	1.01	1.60
3060107	0.71	0.10	0.30
3060108	0.49	0.10	0.26
3060109	1.03	0.64	1.18

Table 5. Other Land Cover Types, Percent Cover by HUC

HUC	Water	Emergent Wetlands	Barren: Quarries/ Strip Mines	Barren: Bare Rock/Sand	Barren: Transitional
3060101	6.41	0.04	0.19	<0.01	0.22
3060102	3.61	0.07	0.04	<0.01	0.49
3060103	6.60	0.03	0.14	<0.01	2.63
3060104	0.57	0.02	0.14	<0.01	1.98
3060105	4.87	0.03	0.19	<0.01	4.81
3060106	1.46	0.48	0.60	0.01	10.57
3060107	0.39	0.03	0.07	<0.01	9.04
3060108	0.47	0.24	0.54	<0.01	7.45
3060109	3.10	4.47	0.14	0.05	4.40

Table 6. Riparian Corridor Land Cover Types, Percent by HUC

HUC	Forest	Agriculture	Urban	Wetland	Barren	Water
3060101	71.96	8.16	3.19	1.92	0.44	14.51
3060102	79.06	7.03	1.31	1.09	0.33	11.20
3060103	70.63	10.10	1.38	1.77	1.26	14.86
3060104	83.20	12.16	0.76	1.21	0.64	2.04
3060105	76.83	4.84	0.57	2.23	4.17	11.33
3060106	48.79	6.54	3.51	28.90	6.23	6.06
3060107	86.00	4.63	0.40	1.99	5.51	1.50
3060108	48.53	12.78	0.33	32.43	4.20	1.77
3060109	24.13	6.38	1.34	57.23	2.48	8.44

Table 7. Agriculture on Slopes and Erodible Soils, Percent by HUC

HUC	Pasture/ Hay on Slopes > 3%	Row Crops on Slopes >3%	Pasture/ Hay on Moderately Erodible Soils	Row Crops on Moderately Erodible Soils	Pasture/ Hay on Highly Erodible Soils	Row Crops on Highly Erodible Soils
3060101	2.24	0.98	10.03	4.96	--	--
3060102	1.33	0.67	6.54	3.36	--	--
3060103	1.25	0.75	12.51	8.41	0.61	0.58
3060104	2.25	0.95	15.24	7.45	0.26	0.14
3060105	0.22	0.42	2.22	3.84	1.76	2.71
3060106	0.13	0.72	0.22	1.67	<0.01	0.02
3060107	0.10	0.26	4.20	3.06	--	--
3060108	0.03	0.47	0.48	3.23	--	--
3060109	<0.01	0.02	0.41	2.51	--	--

Table 8. Agriculture-Related Indicators in Riparian Corridors, Percent Area

HUC	Pasture/ Hay on Slopes > 3%	Row Crops on Slopes >3%	Pasture/ Hay on Moderately Erodible Soils	Row Crops on Moderately Erodible Soils	Pasture/ Hay on Highly Erodible Soils	Row Crops on Highly Erodible Soils
3060101	1.04	0.55	4.66	2.50	--	--
3060102	0.95	0.48	4.08	1.94	--	--
3060103	0.51	0.33	5.68	3.53	0.20	0.21
3060104	1.00	0.47	7.98	3.89	0.08	0.07
3060105	0.11	0.16	0.73	1.46	0.98	1.56
3060106	0.05	0.23	0.21	1.17	<0.01	0.01
3060107	0.03	0.12	1.88	1.78	--	--
3060108	0.01	0.10	0.25	1.35	--	--
3060109	<0.01	<0.01	0.21	1.30	--	--

Table 9. Roads Crossing Streams and Impoundments

HUC	Road Crossings	No. Crossings/ Stream km	Dams	No. Dams/ Stream km
3060101	1235	0.40	117	0.038
3060102	964	0.32	58	0.019
3060103	1487	0.31	98	0.020
3060104	1227	0.35	102	0.029
3060105	362	0.22	35	0.021
3060106	1914	1.08	191	0.108
3060107	637	0.13	60	0.013
3060108	842	0.41	52	0.025
3060109	723	0.27	31	0.012

Table 10. Physical Dimension Statistics for Selected Subbasins

Subbasin	Total Area (ha)	Riparian Corridor (ha)	Stream Length (km)	Stream Density (m/ha)
20	55,797.39	9,089.19	486.79	8.72
26	53,225.73	10,089.00	528.63	9.93
32	17,195.76	4,311.00	255.27	14.84
36	61,462.62	9,704.07	499.79	8.13
53	68,295.33	12,800.34	695.35	10.18

Table 11. Land Cover Types for Selected Subbasins, Percent Area

Land Cover Type	Subbasin				
	20	26	32	36	53
Water	1.30	8.11	20.59	0.57	9.36
Low Intensity Residential	5.60	2.87	3.34	2.10	0.45
High Intensity Residential	0.83	0.57	0.43	0.28	0.03
High Intensity Commercial/Industrial	1.62	1.23	1.04	0.67	0.15
Pasture/ Hay	20.23	16.33	17.54	8.43	5.58
Row Crops	13.84	7.32	14.91	6.73	6.00
Other Grasses	1.53	0.95	0.75	0.36	0.14
Evergreen Forest	16.09	25.32	10.53	37.08	36.70
Mixed Forest	9.55	11.00	5.96	13.12	10.98
Deciduous Forest	28.30	21.12	23.77	24.61	25.98
Woody Wetlands	0.57	0.75	0.82	0.30	0.63
Emergent Wetlands	0.03	0.02	0.11	0.02	0.03
Barren: Quarries/ Strip Mines	0.26	0.14	0.21	0.07	0.09
Barren: Transitional	0.24	4.27	<0.01	5.66	3.88

Table 12. Land Cover Types for Selected Subbasin Riparian Corridors, Percent Area

Land Cover Type	Subbasin				
	20	26	32	36	53
Water	5.89	22.38	25.31	2.25	18.58
Low Intensity Residential	3.97	1.68	1.82	1.36	0.31
High Intensity Residential	0.26	0.19	0.07	0.08	<0.01
High Intensity Commercial/Industrial	0.76	0.47	0.39	0.20	0.08
Pasture/ Hay	8.84	8.68	7.60	3.84	1.94
Row Crops	5.54	3.40	8.32	2.84	2.47
Other Grasses	0.36	0.24	0.21	0.05	0.02
Evergreen Forest	15.78	18.59	14.30	25.59	29.40
Mixed Forest	12.76	12.30	8.49	15.37	10.54
Deciduous Forest	43.15	28.94	30.23	44.56	33.20
Woody Wetlands	2.11	1.69	2.73	0.79	2.27
Emergent Wetlands	0.09	0.05	0.37	0.04	0.10
Barren: Quarries/ Strip Mines	0.34	0.06	0.15	0.03	0.02
Barren: Transitional	0.16	1.32	<0.01	2.99	1.07

Table 13. Agriculture-Related Indicators for Selected Subbasins and Riparian Corridors

	Subbasin				
	20	26	32	36	53
Percent of Subbasin Total Area					
Agriculture on Slopes >3%	3.54	2.71	4.29	1.17	0.60
Agriculture on Moderately Erodible Soils	34.03	23.53	31.64	15.15	4.39
Agriculture on Highly Erodible Soils	--	--	--	--	7.11
Percent of Subbasin Riparian Corridor					
Agriculture on Slopes >3%	1.31	1.34	1.24	0.39	0.27
Agriculture on Moderately Erodible Soils	14.13	11.99	13.02	6.67	1.43
Agriculture on Highly Erodible Soils	--	--	--	--	2.61

Table 14. Roads Crossing Streams and Impoundments for Selected Subbasins

Subbasin	Road Crossings	No. Crossings/ Stream km	Dams	No. Dams/ Stream km
20	299	0.61	19	0.039
26	227	0.43	15	0.028
32	56	0.22	0	--
36	170	0.24	13	0.026
53	82	0.11	4	0.006

Table 15. Physical Dimension Statistics for Sampling Site Drainages, Percent Area

Site	Total Area (ha)	Riparian Corridor (ha)	Stream Length (km)	Stream Density (m/ha)
S22	973.98	149.85	7.34	7.54
S27	4,950.90	939.78	47.57	9.61
S68	468.09	88.65	4.34	9.28
S80	6,499.71	884.16	44.90	6.91
S81	6,612.21	908.01	45.85	6.93
S95	10,665.18	1,727.73	89.30	8.38
S103	572.76	69.30	3.32	5.80
S113	747.00	83.79	4.51	6.03
S130	1,169.73	163.80	8.68	7.42
S149	776.52	139.50	6.87	8.84
S151	1,076.22	191.88	9.53	8.85
S155	2,556.72	381.06	18.98	7.42
S195	4,279.41	860.94	46.05	10.76
S197	122.58	43.56	2.06	16.78
S200	1,798.47	377.37	19.11	10.62
S216	551.16	116.19	5.69	10.33

Table 16. Aggregated Land Cover Types for Sampling Site Drainages, Percent Area

Site	Water	Urban	Agriculture	Forests	Wetlands	Barren
S22	0.11	<0.01	59.40	40.21	0.24	0.04
S27	0.34	0.34	18.76	80.06	0.37	0.11
S68	<0.01	<0.01	0.27	96.01	<0.01	3.73
S80	0.56	7.75	18.28	72.71	0.45	0.26
S81	0.55	7.62	17.97	73.17	0.44	0.25
S95	0.62	2.84	8.40	81.52	0.87	5.75
S103	<0.01	<0.01	0.04	89.92	0.08	9.96
S113	0.59	2.80	23.70	61.78	4.56	6.55
S130	1.02	<0.01	62.27	36.28	0.40	0.03
S149	0.03	16.02	44.33	39.38	0.10	0.13
S151	0.09	13.01	40.59	46.00	0.19	0.10
S155	0.11	3.21	17.77	73.21	0.56	5.14
S195	0.85	0.44	3.45	94.49	0.04	0.73
S197	<0.01	5.50	42.59	51.62	0.29	<0.01
S200	0.19	6.77	47.64	42.37	0.23	0.11
S216	0.10	0.07	4.90	87.62	0.13	7.18

Table 17. Aggregated Land Cover Types for Sampling Site Riparian Corridors, Percent Area

Site	Water	Urban	Agriculture	Forests	Wetlands	Barren
S22	<0.01	<0.01	29.91	69.37	0.72	<0.01
S27	0.48	0.05	8.19	90.41	0.82	0.06
S68	<0.01	<0.01	0.41	99.19	<0.01	0.41
S80	2.28	6.17	11.81	78.70	0.92	0.11
S81	2.21	6.02	11.63	79.14	0.88	0.11
S95	2.97	2.06	2.83	88.22	1.79	2.14
S103	<0.01	<0.01	<0.01	95.84	0.13	4.03
S113	4.19	<0.01	4.72	60.36	29.53	1.18
S130	6.21	<0.01	25.60	66.60	1.59	<0.01
S149	<0.01	11.35	20.70	67.93	<0.01	<0.01
S151	<0.01	9.52	17.82	72.47	0.19	<0.01
S155	0.07	1.49	6.55	89.14	0.64	2.13
S195	4.21	0.08	7.07	87.39	0.09	1.15
S197	<0.01	9.09	10.75	80.17	<0.01	<0.01
S200	0.45	6.13	26.18	66.71	0.45	0.07
S216	0.08	0.15	2.47	92.56	0.23	4.49

Table 18. Agriculture-Related Indicators for Sampling Site Drainages and Riparian Corridors, Percent Area

	Total Area			Riparian Corridor		
Site	Agriculture on Slopes > 3%	Agriculture on Moderately Erodible Soil	Agriculture on Highly Erodible Soils	Agriculture on Slopes >3%	Agriculture on Moderately Erodible Soils	Agriculture on Highly Erodible Soils
S22	3.91	59.40	--	2.22	29.91	--
S27	0.26	18.69	--	0.03	8.19	--
S68	0.19	0.27	--	0.30	0.41	--
S80	1.57	17.72	--	0.66	11.64	--
S81	1.54	17.42	--	0.65	11.43	--
S95	0.28	5.87	--	0.02	2.30	--
S103	--	0.04	0.04	--	--	--
S113	2.14	--	--	2.04	--	--
S130	9.59	62.27	--	1.70	25.60	--
S149	1.85	41.40	--	0.32	18.83	--
S151	2.35	38.36	--	0.28	16.46	--
S155	1.07	17.33	17.33	0.02	6.38	6.38
S195	0.64	3.37	--	0.96	7.07	--
S197	9.92	42.59	--	0.21	10.75	--
S200	4.25	45.51	--	2.43	25.42	--

Table 19. Roads Crossing Streams and Impoundments for Sampling Site Drainages

Site	Road Crossings	No. Crossings/ Stream km	Dams	No. Dams/ Stream km
S22	3	0.41	0	--
S27	21	0.44	1	0.021
S68	2	0.46	0	--
S80	30	0.67	6	0.134
S81	30	0.65	6	0.131
S95	37	0.41	4	0.045
S103	1	0.30	0	--
S113	1	0.22	0	--
S130	4	0.46	1	0.115
S149	5	0.73	0	--
S151	8	0.84	0	--
S155	4	0.21	0	--
S195	27	0.59	4	0.087
S197	1	0.49	0	--
S200	19	0.99	0	--
S216	1	0.18	0	--

Table 20. Correlation of Aquatic and Landscape Indicators for Sample Site Drainages and Riparian Corridors

Aquatic Indicator	Landscape Indicator	Correlation	Significance Level (α =)
AGPT	%Forest Landcover	negative	0.005/0.01R
	forest edge	negative	0.005/0.025R
	U-index	positive	0.005*
	ag_edge	positive	0.025/0.05R
	avg ag patch	positive	0.025
	avg forest patch	negative	0.025/0.01R
EPT	avg forest patch	positive	0.005/0.025R
	%forest cover	positive	0.01
	U-index	negative	0.01
	avg ag patch	negative	0.01
	forest edge	positive	0.025
	ag edge	negative	0.025
	ag on slopes > 3%	negative	0.05
Richness	%forest cover	positive	0.025
	forest edge	positive	0.025
	U-index	negative	0.025*
	avg ag patch	negative	0.05
	avg forest patch	positive	0.05
	ag edge	negative	0.05
	ag on slopes > 3%	negative	0.05
Fish_ibi	avg forest patch	positive	0.025*
	forest edge	positive	0.05*
	%forest cover	positive	0.05
	U-index	negative	0.05
pH	roads/streams	positive	0.025
	%forest cover	positive	0.05
	forest edge	positive	0.05
	U-index	negative	0.05
	ag on slopes >3%	negative	0.05
Dissolved Oxygen	U-index	negative	--/0.05R
Habitat	avg forest patch	positive	0.025*
	ag edge	negative	0.025
	%forest cover	positive	0.05
	forest edge	positive	0.05
	U-index	negative	0.05/0.01R
Conductivity	%forest cover	negative	0.005
	ag on slopes >3%	positive	0.05

R = riparian corridor
* = significant at the same level for both the full drainage and riparian corridor correlations.

Table 21. Landscape Change for Selected Subbasins

Subbasin	Percent NDVI Change	Percent NDVI Change, Negative numbers removed
20	-9.803	-9.670
26	-9.993	-6.838
32	0.661	-6.384
36	-2.695	-2.826
52	-0.366	-1.873

Table 22. Landscape Change for Sampling Site Drainages

Site	Percent NDVI Change	Percent NDVI Change, Negative numbers removed
Class “Good”		
S155	-0.873	-0.859
S68	-0.613	-0.613
S195	-0.976	-1.245
S113	-4.193	-4.000
Class “Bad”		
S80	-2.975	-2.748
S197	-8.235	-8.235
S149	-8.994	-7.325
S22	-18.404	-17.591
Class “Fair”		
S81	-2.930	-2.707
S216	-1.235	-1.235
S103	-0.626	-1.627
S27	-4.717	-4.674
Class “Other”		
S151	-6.992	-5.721
S200	-4.528	-4.328
S130	-13.372	-11.149
S95	-2.932	-2.871