Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Smith Creek	**J2230000**	**07/10/07**	**Good-Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°55.143'	W78°32.051'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		9	0.19

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	26.7
Dissolved Oxygen (mg/L)	6.69
Specific Conductance (µS/cm)	134
pH (s.u.)	5.68
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 71% sand, 29% gravel, 2% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/10/07	J2230000	59	11	5.93		Good-Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Neuse River	**J2360000**	**07/09/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°47.993'	W78°32.335'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		300+	

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	29.3
Dissolved Oxygen (mg/L)	6.34
Specific Conductance (µS/cm)	93
pH (s.u.)	7.11
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate boulders on bedrock

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/09/07	J2360000	57	15	6.77		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Crabtree Creek	**J3000000**	**07/10/07**	**Good-Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°50.697'	W78°43.523'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		30	0.42

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	26
Dissolved Oxygen (mg/L)	5.11
Specific Conductance (µS/cm)	442
pH (s.u.)	6.82
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 89% sand, 8% silt/clay, 3% cobble, 2% boulder

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/10/07	J3000000	35	8	6.38		Good-Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Crabtree Creek	**J3210000**	**07/10/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°49.639'	W78°39.009'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		44	1.1

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	27.8
Dissolved Oxygen (mg/L)	6.87
Specific Conductance (µS/cm)	323
pH (s.u.)	7.3
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 55% gravel, 38% sand, 8% cobble, 1% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/10/07	J3210000	48	10	6.93		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Walnut Creek	**J3970000**	**07/12/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°44.968'	W78°32.054'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			28	1.4

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	25.2
Dissolved Oxygen (mg/L)	5.59
Specific Conductance (µS/cm)	163
pH (s.u.)	7.58
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate *Too turbid, not classified

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/12/07	J3970000	44	5	6.91		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Poplar Creek	**J4080000**	**07/12/07**	**Good-Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°43.879'	W78°28.636'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			9	0.25

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	24.2
Dissolved Oxygen (mg/L)	6.96
Specific Conductance (µS/cm)	225
pH (s.u.)	6.89
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 70% sand, 29% gravel, 3% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/12/07	J4080000	62	13	6.26		Good-Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Marks Creek	**J4110000**	**07/12/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°42.367'	W78°25.876'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			13	0.39

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

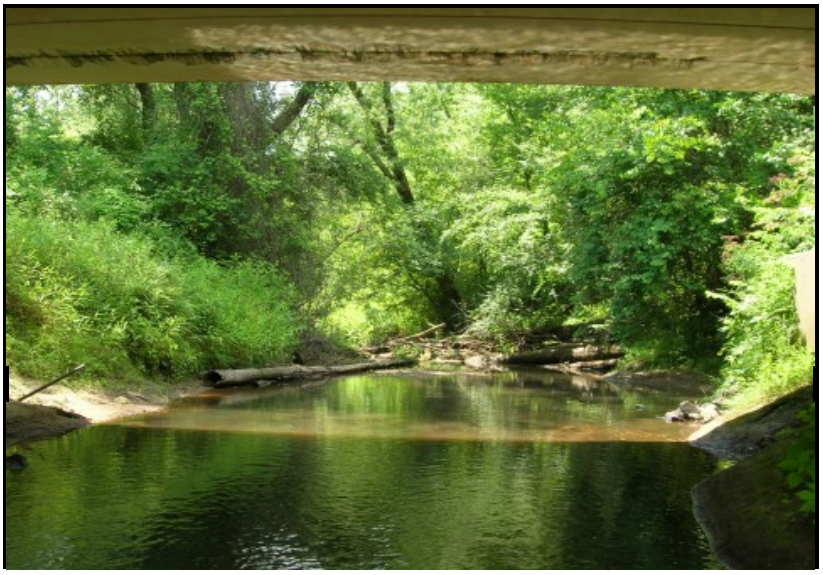
Water Quality Parameters

Temperature (°C)	27.3
Dissolved Oxygen (mg/L)	8.78
Specific Conductance (µS/cm)	92
pH (s.u.)	6.75
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph



Substrate 57% sand, 20% silt/clay, 11% boulder, 5% gravel

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/12/07	J4110000	70	12	6.49		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Neuse River	**J4170000**	**07/12/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°38.845'	W78°24.336'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		225	

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	27.9
Dissolved Oxygen (mg/L)	4.66
Specific Conductance (µS/cm)	129
pH (s.u.)	7.68
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate *Water too turbid, not classified

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/12/07	J4170000	62	14	6.67		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Swift Creek	**J4414000**	**07/09/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°43.134'	W78°45.129'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		3	0.11

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	23.7
Dissolved Oxygen (mg/L)	4.14
Specific Conductance (µS/cm)	142
pH (s.u.)	5.98
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 74% gravel, 20% sand, 6% boulder, 3% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/09/07	J4414000	53	8	6.77		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Swift Creek	**J4500000**	**07/11/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°38.860'	W78°36.250'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		45	3-Jan

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	25.1
Dissolved Oxygen (mg/L)	3.25
Specific Conductance (µS/cm)	103
pH (s.u.)	4.37
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 78% sand, 20% silt/clay, 2% very fine gravel

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/11/07	J4500000	51	6	6.98		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Swift Creek	**J4510000**	**07/11/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Johnston				N35°36.817'	W78°32.943'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		40	2.0-6.0

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	27.1
Dissolved Oxygen (mg/L)	5.39
Specific Conductance (µS/cm)	119
pH (s.u.)	7.16
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 87% sand, 6% gravel, 6% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/11/07	J4510000	55	8	6.55		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
White Oak Creek	**J4511000**	**07/11/07**	**Poor**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Johnston				N35°37.059'	W78°31.691'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		15	0.78

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	30
Dissolved Oxygen (mg/L)	3.15
Specific Conductance (µS/cm)	92
pH (s.u.)	7.83
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 60% sand, 21% gravel, 15% silt/clay, 5% boulder

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/11/07	J4511000	50	2	7.29		Poor

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Swift Creek	**J4520000**	**07/11/07**	**Good-Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Johnston				N35°33.093'	W78°27.600'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		30	0.72

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	27.6
Dissolved Oxygen (mg/L)	6.84
Specific Conductance (µS/cm)	102
pH (s.u.)	7.12
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 57% sand, 13% bedrock, 12% cobble, 9% gravel

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/11/07	J4520000	42	12	5.31		Good-Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Swift Creek	**J4590000**	**07/11/07**	**Good-Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Johnston				N35°31.115'	W78°22.920'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		20	0.71

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	29.8
Dissolved Oxygen (mg/L)	6.55
Specific Conductance (µS/cm)	97
pH (s.u.)	7.44
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 95% sand, 5% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/11/07	J4590000	44	15	6.28		Good-Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Middle Creek	**J5002000**	**07/11/07**	**Poor**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Johnston				N35°33.384'	W78°33.931'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		40	1.0-5.0

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	25.6
Dissolved Oxygen (mg/L)	5.72
Specific Conductance (µS/cm)	268
pH (s.u.)	6.9
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate *Not classified

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/11/07	J5002000	56	9	7.03		Poor

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Middle Creek	**J5010000**	**07/11/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Johnston				N35°30.461'	W78°24.091'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		53	1.5-3

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	27.8
Dissolved Oxygen (mg/L)	6.78
Specific Conductance (µS/cm)	225
pH (s.u.)	7.78
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 21% cobble, 21% sand, 20% gravel, 18% boulder, 12% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/11/07	J5010000	48	7	6.71		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Little River	**J5620000**	**07/12/07**	**Poor**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°51.661'	W78°21.985'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	WS-II HQW, NSW		150	>6

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	26.9
Dissolved Oxygen (mg/L)	0.49
Specific Conductance (µS/cm)	122
pH (s.u.)	6.3
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate Not classified

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/12/07	J5620000	57	5	7.51		Poor

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Buffalo Creek	**J5790000**	**07/12/07**	**Poor**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°46.183'	W78°22.616'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
	C NSW		3	0.17

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	25.4
Dissolved Oxygen (mg/L)	3.82
Specific Conductance (µS/cm)	98
pH (s.u.)	6.54
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 53% sand, 17% silt/clay, 11% gravel, 9% cobble

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/12/07	J5790000	66	10	7.26		Poor

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Walnut Creek	**MI-4**		**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°46.065'	W78°41.509'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			3	0.13

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	23.9
Dissolved Oxygen (mg/L)	5.13
Specific Conductance (µS/cm)	98
pH (s.u.)	6.45
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 44% gravel, 30% sand, 21% silt/clay, 7% boulder

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
	MI-4	50	7	6.93		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
House Creek	**MI-8**	**07/10/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°50.036'	W78°40.659'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			3	0.13

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	25.8
Dissolved Oxygen (mg/L)	5.86
Specific Conductance (µS/cm)	124
pH (s.u.)	7.03
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 62% gravel, 20% sand, 10% cobble, 8% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/10/07	MI-8	40	7	6.91		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Marsh Creek	**MI-10**	**07/09/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°49.008'	W78°35.574'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			2.67	0.25

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	25.6
Dissolved Oxygen (mg/L)	4.71
Specific Conductance (µS/cm)	139
pH (s.u.)	6.8
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 65% sand, 30% gravel, 5% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/09/07	MI-10	39	4	6.88		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Pigeon House Branch	**MI-11**	**07/09/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°48.261'	W78°36.639'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			4	0.52

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	25.8
Dissolved Oxygen (mg/L)	6.49
Specific Conductance (µS/cm)	271
pH (s.u.)	7.38
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 65% sand, 22% gravel, 15% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/09/07	MI-11	37	4	6.83		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Mine Creek	**MI-12**	**07/10/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°51.313'	W78°39.709'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			6	0.65

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	28.5
Dissolved Oxygen (mg/L)	2.65
Specific Conductance (µS/cm)	150
pH (s.u.)	6.89
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 65% gravel, 27% cobble, 7% boulder, 2% sand

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/10/07	MI-12	28	2	7.02		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Perry Creek	**MI-14**	**07/10/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°52.793'	W78°32.888'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			6	0.52

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	27.2
Dissolved Oxygen (mg/L)	7.1
Specific Conductance (µS/cm)	150
pH (s.u.)	7.28
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 75% sand, 20% gravel, 3% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/10/07	MI-14	44	9	6.5		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Rocky Branch	**MI-18**	**07/09/07**	**Poor**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°46.614'	W78°39.738'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			4	0.58

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	24
Dissolved Oxygen (mg/L)	6.76
Specific Conductance (µS/cm)	234
pH (s.u.)	7.05
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 34% gravel, 31% cobble, 22% sand, 11% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/09/07	MI-18	53	5	7.25		Poor

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Trib to Turkey Creek	**MI-21**	**07/10/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°52.189'	W78°43.377'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			1.33	0.08

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	24.6
Dissolved Oxygen (mg/L)	3.41
Specific Conductance (µS/cm)	304
pH (s.u.)	7.08
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 35% gravel, 27% sand, 15% cobble, 13% silt/clay

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/10/07	MI-21	33	6	6.56		Fair

Taxonomic Analysis

Data Analysis

Benthic Macroinvertebrate Sample

Waterbody	Location	Date	Bioclassification
Walnut Creek	**MI-22**	**07/09/07**	**Fair**

County	Subbasin	8 digit HUC	Index Number	Latitude	Longitude
Wake				N35°45.504'	W78°34.942'

Level IV Ecoregion	Stream Classification	Drainage Area (mi2)	Stream Width (ft)	Stream Depth (ft)
			17	0.44

	Forested/Wetland	Urban	Agriculture	Other (describe)
Visible Landuse (%)				

Upstream NPDES Dischargers (>1MGD or <1MGD and within 1 mile)	NPDES Number	Volume (MGD)

Water Quality Parameters

Temperature (°C)	26.2
Dissolved Oxygen (mg/L)	6.27
Specific Conductance (µS/cm)	248
pH (s.u.)	7.17
Water Clarity	

Habitat Assessment Scores (max)

Channel Modification (5)	
Instream Habitat (20)	
Bottom Substrate (15)	
Pool Variety (10)	
Riffle Habitat (16)	
Left Bank Stability (7)	
Right Bank Stability (7)	
Light Penetration (10)	
Left Riparian Score (5)	
Right Riparian Score (5)	
Total Habitat Score (100)	

Site Photograph

Substrate 70% sand, 11% boulder, 6% cobble, 6% bedrock

Sample Date	Sample ID	ST	EPT	BI	EPT BI	Bioclassification
07/09/07	MI-22	41	8	6.6		Fair

Taxonomic Analysis

Data Analysis