DRAFT TECHNICAL REPORT:

The following text is a working technical document. This draft technical report an be referred to when making out the matrix for Management Issues within the Pocono Watershed.

Please concentrate on TEXT, and the delivery of information. Tables, Maps, Graphs are not yet numbered. The Final Draft will contain all sequential numbering labels. Also, due to the limitations of the WORD program, random page breaks occur, splits in text, etc. These will be corrected in the final copy.

Streambank and Channel Erosion and Sedimentation:

Goal: The Public stated that their goals regarding this issue included:

- Preservation of stream corridors and floodplains;
- Reduction of stream bank erosion and sedimentation; and
- Preservation of open space.

Target: Maintain naturally stable channels and achieve stability in problem-causing areas. Our challenge is to maintain high water quality by reducing channel instability, sedimentation, and associated pollution.

Introduction: Unstable and eroding streambanks in the Pocono area result from land use practices that reflect traditional solutions to individual water management issues. In the Pocono Creek Watershed the primary land use issue impacting stream stability and water quality is the increasing amount of impervious surfaces and associated runoff (see Existing Conditions; Impervious Surface). Directly observed causes of channel instability included: roads, bridges, and culverts; floodplain development; channelization; and riparian vegetation clearing and mowing.

Unstable streams affect not only water quality issues but infrastructure, private property, and flood mitigation spending as well as economic vitality of tourism. By protecting stream channel stability, property values and economic growth are also protected. Any area relying on the natural environment as a base for tourism must preserve the area's natural function and aesthetic value to maintain its attraction as a premiere recreational and destination choice.

Rosgen Level I Analysis of Stream Channel Stability – Introduction

The overall purpose of the stream channel analysis is to clearly understand the functions of a river and the physical variables that affect it, in order to reliably predict the response of a river to any changes. Water resource managers can then determine the effects of 'improvements' or imposed management strategies. It enables intelligent decision making about what management strategies will and won't work.

For our analysis of existing channel stability in the Pocono Creek watershed, the first level of a four-level natural channel design and restoration methodology was used. Level I analysis classifies streams based upon visual observation. Rosgen (1994, 1996) uses measurable properties of naturally stable stream channels to characterize streams of similar morphology and function (see Figure 1). These properties include geometry, patterns, longitudinal profiles, bed materials, and

erosional and depositional processes to determine the extent of instability of impacted streams and, if necessary, restore a stream channel to its natural state of equilibrium. Visual Level I geomorphic characterization of streams, which are labeled as "A," "B" and so on to "G", was found by Savery et. al (2001) to be 92.5% accurate. In the Level I process, inaccuracies result from confusion of similar stream types, such as A/B, C/E, and F/G. We avoided such confusion by combining A/B types into a "high gradient stable" category; C/E into a "low gradient stable" category; and D/F/G into an "unstable" category.

Eight major variables influence stream stability, including streamflow, width, velocity, depth, slope, roughness of channel materials, sediment volumes, and sediment sizes. A stable stream maintains a minimum energy expenditure balance dictated by these inter-related variables, known as its most probable state (Leopold, 1994). In its most probable state, a stream can carry the sediment load supplied by the watershed without changing its dimension (cross sectional area, width, depth, shape), pattern (sinuosity, meander pattern), or profile (longitudinal pattern and slope), and without aggrading (building up of bottom materials) or degrading (cutting down into the landscape and abandoning the natural floodplain). This state is also referred to as equilibrium (see Figure 2, from Rosgen, 1996: Lane, E.W., 1955).

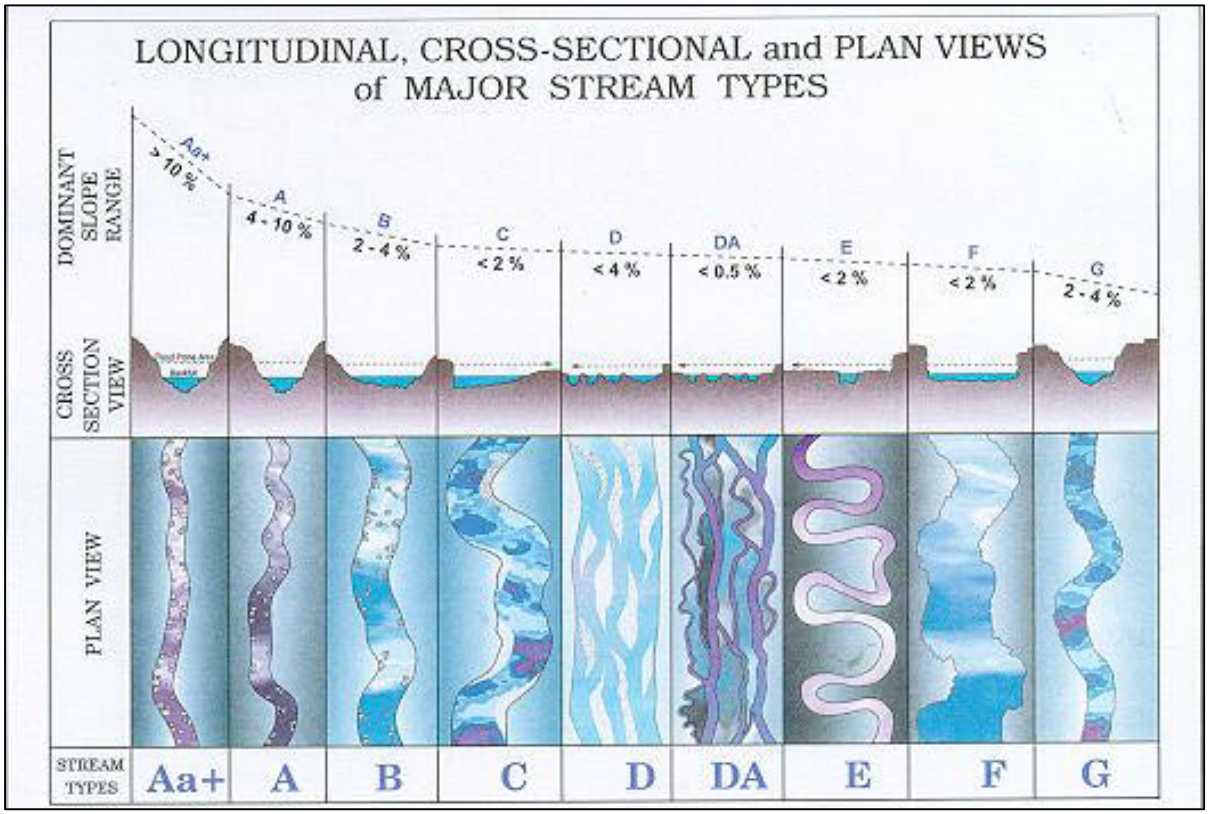

Figure 1: Stream Classification System by Rosgen (1994). All Pocono Watershed streams were classified visually (Level I) in December 2000.

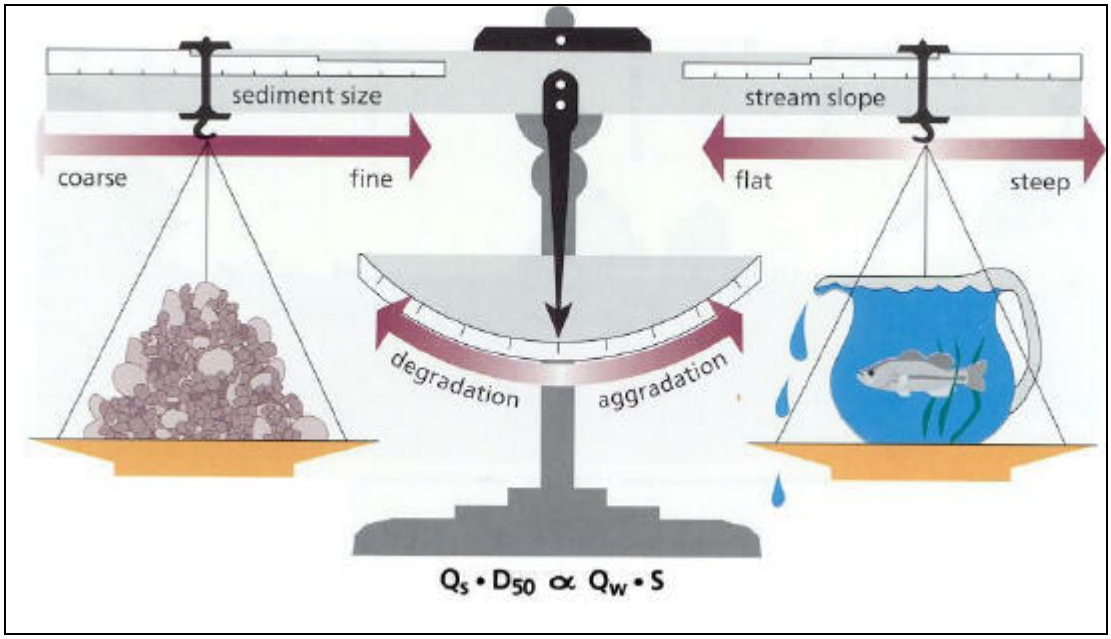

Figure 2. Factors affecting channel degradation and aggradation.
Size and total quantity of sediment particles moved by the stream are balanced by the stream's energy, slope, and water flow. These together determine the size of a stream channel. If one variable is changed, or natural dimensions are changed, the stream must adjust to reach equilibrium. Source: Rosgen (1996) from Lane (1955).

Most of the work done by a stream in creating and maintaining its natural channel occurs during storms at a frequency of approximately every 1.5 years (Wolman and Miller 1960). These are "bankfull" floods, where water levels reach the incipient point of spilling over onto the floodplain. Wolman and Miller determined that the majority of a stream's sediment load is carried by the bankfull storm event. All dimensions measured to determine the state of channel stability are thus related to the bankfull stage.

A radical change to any of the above variables can cause a stream channel to become unstable, adjusting its dimensions and patterns until a state of equilibrium is again achieved. While a stream is adjusting to disturbance, instream habitat is lost and ecological function is reduced, as measured by decreased diversity, richness, balance, and pollution intolerance of aquatic life. (Waters 1995) Unstable stream channels produce excess sediment, and cause localized problems downstream in the form of sediment deposition (aggradation, which smothers habitat) or scouring and incision (degradation, where rocks move that normally would not). Both aggradation and degradation are processes that interrupt the stream bed's substrate stability necessary for completion of aquatic life cycles. Unstable streams will heal, or re-achieve equilibrium over time. When that stream does heal, however, it is unlikely that the pre-existing aquatic biological communities will return to the pre-disturbance state.

Any activity by man on a natural stream channel can change one of the eight variables dictating channel stability. In the Pocono watershed, we directly observed stream channel aggradation and degradation resulting from a number of causes, such as (in no particular order): stream crossings (bridges and culverts); dams; straightened meanders (channelization); bank and channel stabilization projects; storm water pipes; road gullies; debris; draining of wetlands; flood control measures; impervious surfaces; mowing of streamside vegetation; introduction of invasive/exotic plants; and encroachment into flood plains.

The first option in stream restoration is to leave the stream alone, and let it nature take its course. Yet, while a channel adjusts over time to a stable state, many direct economic effects can take place. These include property loss due to the increased magnitude, frequency and duration of floods and droughts as well as reduced water quality, fisheries, aesthetics, and property values. A domino effect of instability can occur from a seemingly insignificant act, causing an entire watershed to "unravel." In those cases, the stream may heal in one area while adjustments are transferred in an upstream or downstream direction, and those adjustments may take several lifetimes to complete. In those cases, intervention is certainly required.

An example readily apparent to anyone visiting the Pocono watershed is road and bridge construction. The Pocono watershed is bisected by two major highways, Interstate 80 and PA Route 611. A great quantity of concrete and numerous stream crossings was required to complete those projects. Smooth concrete channels were created, and natural channel meanders were straightened to accommodate the roads. The stream channel had to adjust to increases in velocity and decreases in channel roughness upon removal of streambed, bank substrate, and meanders. Roughness from bed and bank materials, and redirection of flow and reduction of flood energy provided by meanders had kept the power of the stream in check and in equilibrium when floods occurred. We believe that channeling the stream created fairly severe damage downstream, at least for a short period of time. Floodwaters now move faster and straighter, directing flow and additional erosive power downstream to channels naturally formed to accommodate much less velocity and flow. Adjustments downstream were observed during our survey, including: channel widening; formation of multiple channels; bank erosion; down-cutting (incision); abandonment of floodplains; and further transfer of energy and sediment supply downstream. Further downstream, in slower and more gently-sloped reaches, much of the excess sediment produced had dropped out of suspension during floods, raising the bed of the stream and flooding areas of Stroudsburg that had never before flooded.

The Rosgen stream classification system was applied to all streams in the Pocono Creek watershed to:

- Define existing stream channel stability conditions;
- Provide a management framework to prioritize preservation or restoration options; and
- Quantify targets used to meet goals desired by residents of Monroe County, PA.

The Rosgen Level I Assessment Procedure:

Visual Assessment and Prediction of Stream Types (Rosgen Level I Survey): Initially, all streams within the Pocono watershed were characterized as to their individual "stream type" using Geographic Information System (GIS) maps, topographic maps, photographs, and direct observation. (APPENDIX A lists all streams, and classifies all stream segments). DRBC field examined the entire 92-mile stream network within the watershed and delineated the observed stream types on 1:24,000 USGS topographic maps and county road maps. All stream crossings were evaluated visually for signs of channel instability. Additional prediction and visual verification was performed using digital elevation models, aerial photographs, and digital photographs. A database was created of all stream segments (MS EXCEL file) and mapped in Arc Info GIS (ESRI) (see Figure 3)

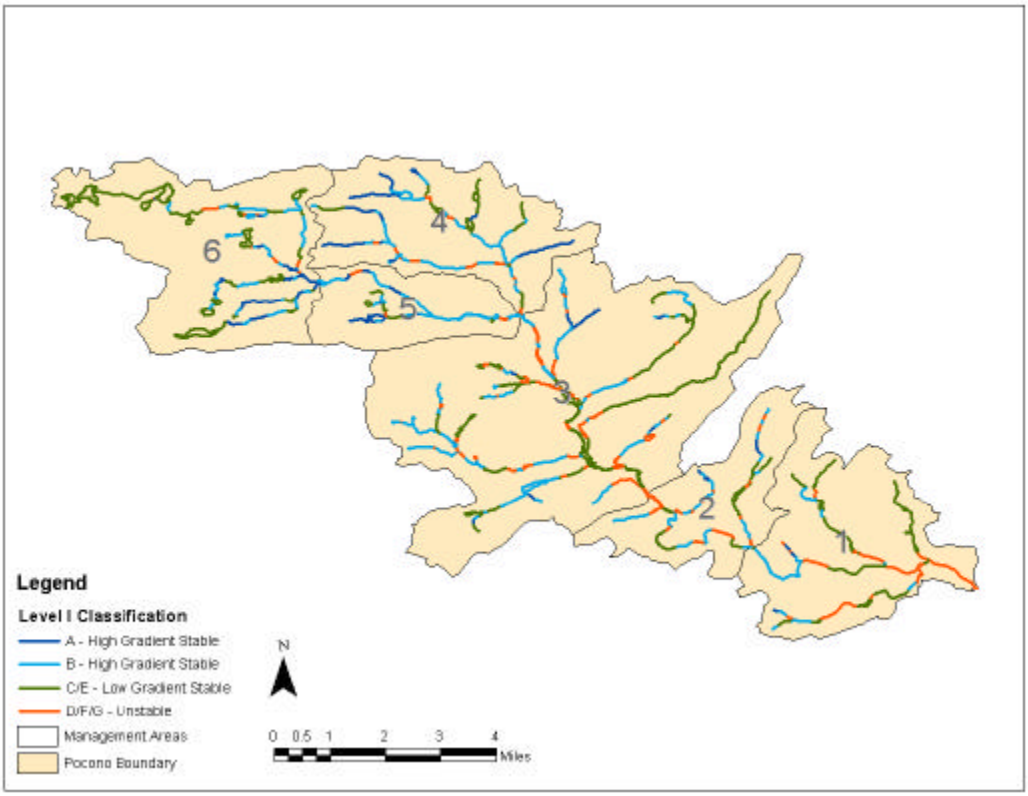

Figure 3. Pocono Watershed Stream Types, by Stream Segment.

Areal Delineation: The relative percentages of stream types in the entire Pocono watershed, and in each management area were calculated. The amount and percentage of unstable channels observed in each management area were also determined (see Figures 4 and 5 for results).

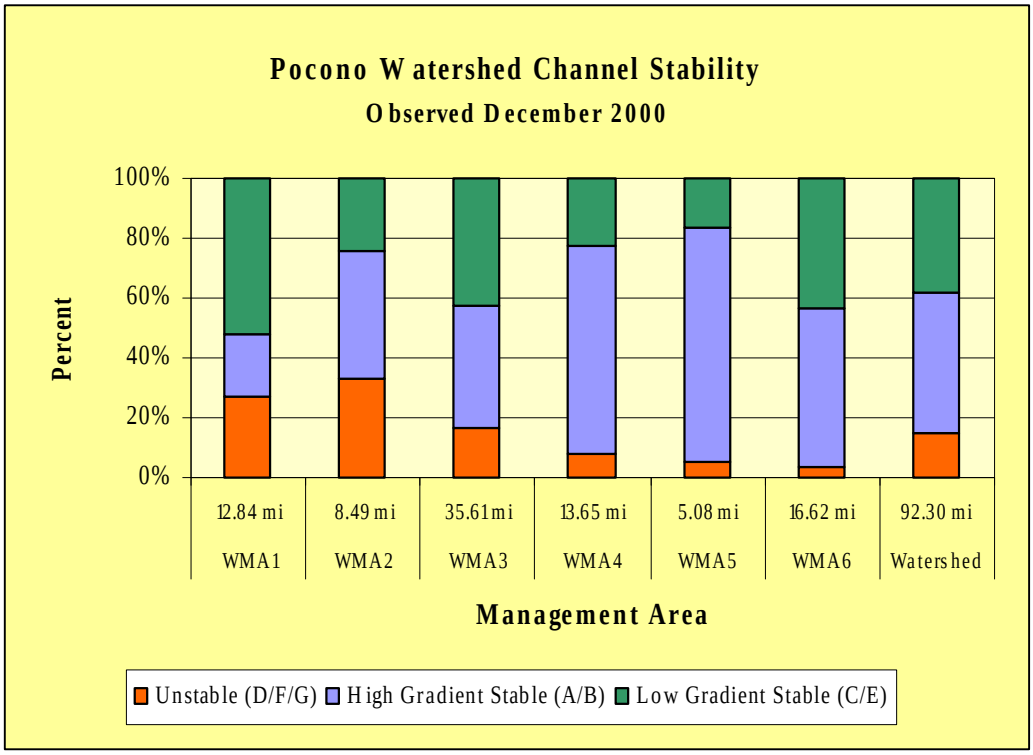

FIGURE 4. Percent Stable vs. Unstable Streams of Pocono Watershed Management Areas.

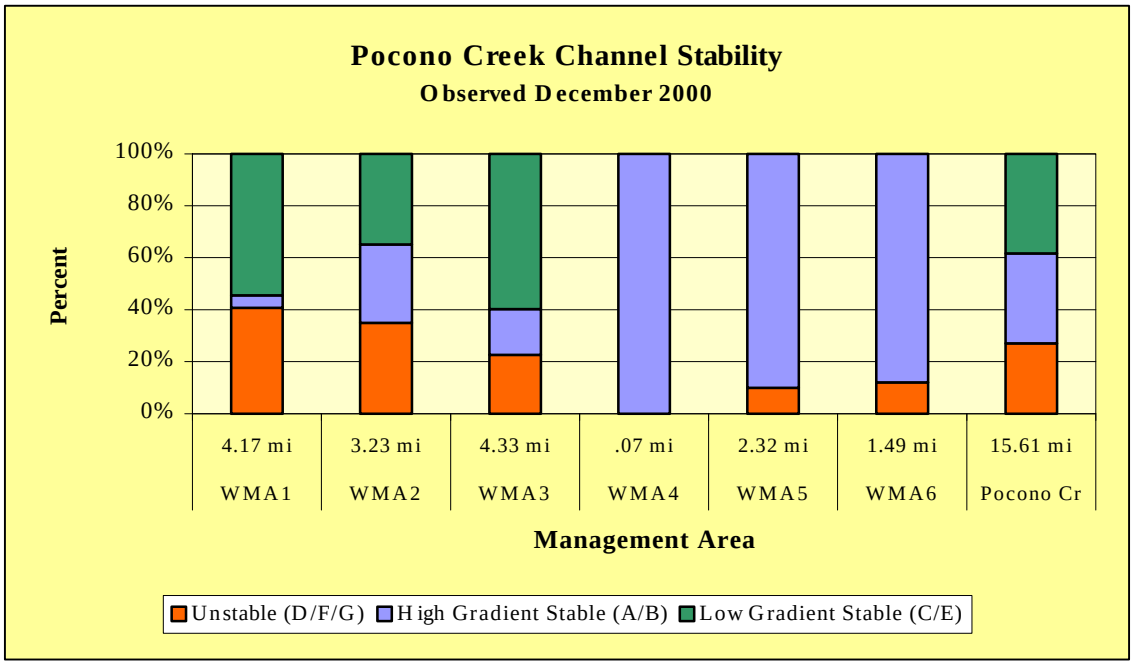

Figure 5. Percent Stable vs. Unstable Segments of Pocono Creek, by Management Area.

Assign Morphological Values: Morphological values were assigned to the stream types, employing Rosgen's (1996) delineative criteria and general stream stability properties as defined in his literature. Morphological criteria represent the physical expression of how a river functions. These quantitative factors controlling the pattern, dimension, and profile, are slope, sinuosity, width/depth ratio, entrenchment ratio, dominant bed material sizes, meander patterns, and beltwidth (degree of confinement of stream). These criteria define the most critical properties that determine the stability of all streams. The literature values, derived from years of Rosgen's field verified empirical data, were applied. The delineative criteria and stream stability properties for each stream type observed in the Pocono watershed was assembled. Literature values should be used with caution, and further study is necessary to verify quantitative ranges of controlling factors, especially before those numerical values are applied to engineering and restoration designs. In successive studies, further analysis should be conducted using Rosgen Levels II, III, and IV protocols. Actual morphological values must be calibrated in the field, but applying literature values are an appropriate initial step.

Nine different stream types were identified in the Pocono watershed out of a possible 41 types. They are briefly described as follows:

"A" - Steep slopes in a confined channel, typically in a V-shaped valley. A channels naturally possess high erosive energy. A2: Predominantly boulder sized substrate with low sediment. A3: Channel materials are composed primarily of cobbles.

"B" - Moderately entrenched, low sinuosity streams with long rapids and small pools flowing at a 2-4% slope and contributing only small quantities of sediment during runoff events. B2 is a boulder channel. B3 has cobble substrate.

"C" - Moderately sinuous streams, recognized by long pools, short riffles, and point bars along inside of curves. Well developed floodplains are present, with less than 2% gradient. C3 streams are cobble-bottom.

"D" - Multiple channels systems (braided) on broad depositional beds D channels indicate instability: they should not be present in the Pocono watershed; the stream has eroded excessively wide; there are mid-channel deposits of sediment; and banks are generally actively eroding.

"E" - Moderate to tortuous sinuosity, gentle to moderate slopes and typically have stable vegetated streambanks. E channels are the most stable low-gradient type of stream. It is unknown what the dominant bed material size is in the Pocono watershed's E channels. Many streams are composed of fine sediments intermixed with cobbles, boulders, and gravels, within and overlain by thickly vegetated peat bogs.

"F" - F channels indicate instability. They are entrenched, excessively wide and shallow, and deeply incised, with no attachment of the stream channel to the floodplain. Banks are actively eroding.

"G" – G channels indicate instability. They are excessively deep and narrow, and indicate active stream degradation. High, raw banks are observed in G channels, and the stream can no longer access the floodplain during floods.

Stream Type	Sensitivity to Disturbance	Critical Morphology for Stability	Recovery Potential	Priority Restore (*)
A2	very low	substrate/slope	excellent	
A3	very high	substrate/slope	very poor (rare in Pocono)	
B2,3	very low/low	substrate/slope	excellent	
C2,3	low/moderate	sinuosity/slope/vegetation/floodplain	very good/good	
D3	very high	unstable-multiple channels	poor	***
E3	high	sinuosity/slope/vegetation/floodplain	good	
F2,3	low/moderate	unstable-over wide incised	poor	***
G2,3	moderate/very high	unstable-over deep incised	fair/poor	***

TABLE 1. Criteria for Determination of Stream Channel Stability and Restoration Priorities of Stream Types Observed in the Pocono Watershed.

Develop Management Alternatives. Rosgen (1996) developed a table of management interpretations of the various stream types that predicts the overall response of a stream type to imposed changes, i.e. management programs. Certain stream types are more susceptible to physical disturbance, recover more easily from disturbance, possess higher sediment supplies, possess more erosive banks, and are controlled more by vegetation. These properties, once identified, can lead to identification of areas requiring more or less protection. Each of these properties might be the single most important determinant of channel stability for that stream type. See Table 1 for relevant Pocono stream types.

Rosgen's system must be used with caution, and stresses data gathering. Verification of stream types by Level II morphometry is necessary to classify streams near the edges of classification boundaries. Many Pocono stream types lie near those edges, such as stable C's forming within previously unstable F's; stable A, B, or E types incising into unstable G types. It is difficult, without field data collection, to identify some of the Pocono's A streams from B streams, or C from E streams, or F from G streams. Until a Level II analysis is completed in difficult-to-identify stream types, we can only safely conclude that a stream is C/E (low gradient stable), A/B (high gradient stable), or D/F/G (entrenched unstable).

Selection of local reference streams, and prioritization of impacted unstable streams for application of Levels II, III, and IV of the Rosgen restoration protocols is considered to be a Phase II activity of this project. Further resources must be sought to complete such an intensive data collection effort. Once the local partners decide which stream reaches must be restored instead of left to heal naturally, then this plan can serve as the basis for logical restoration efforts.

Channel Evolution Scenarios

When the stable stream types "go bad", they follow typical evolutionary scenarios that eventually lead back toward stability, but at a different elevation within the landscape. See Figure 6, showing various stream type evolution scenarios. This is useful in designing appropriate channel configurations in restoration, and assessing whether a stream reach has attained its most probable stable form. For example, when E channels become unstable they typically evolve toward G channels. Referring to the morphological values taken from the literature, field measurements

would show this shift as: 1. an increase in stream slope; 2 a marked decrease in the entrenchment ratio (the floodplain is abandoned as the stream cuts into the landscape), and 3. probably a decrease in sinuosity and in the meander width ratio (belt width/bankfull width). Annual monitoring of representative stream reaches and cross-sections would indicate evolution of a stream channel from a stable form toward instability.

Channel Evolution Scenarios

Adapted from Rosgen (1997)

When a stream becomes unstable, what are its morphological tendencies? If left alone, what forms will the stream tend toward as it "heals", or achieves natural stability and equilibrium? These evolution scenarios may be predicted and used for restoration planning.

B – G - B
C – D - C
C – G – F - C
E – G – F – C - E
E – C – D – C - E
E – C – G – F – C - E

As the stream evolves from one form to the next, the stream channel pattern, dimension, and plan form within the landscape is continually changed. Each change produces excess sediment that is transported downstream, or head cuts that migrate upstream. Some channel evolutions back to a stable state take less time and minimally affect the stream so natural healing may be the preferential restoration decision. Those that cause the most damage for the longest period should be targeted for stabilization and restoration measures.

FIGURE 6. List of Channel Evolution Scenarios Applicable to Pocono Creek.

Interpret Morphology, Present Management Alternatives: Management strategies will be explored thoroughly in Phase II, but within the context of existing conditions it is important to be able to predict how a stream will respond to various management strategies. Common stream types present in the Pocono watershed are discussed.

The C3 stream type is commonly observed in the lower Pocono Creek. A C3 stream is moderately sensitive to disturbance, can recover naturally if the disturbance is removed, provides a moderate sediment supply to the stream system, banks are moderately erodible, and vegetation is very important to stream stability. When a C3 goes unstable, two scenarios can occur: 1. Over-widening, eroding stream banks, creating mid-channel depositional bars - that is - turn into an aggraded D channel, or 2. Cutting down into the landscape (gullying), and abandoning the floodplain (a degraded G channel). A C3 stream is thus moderately sensitive to disturbance by human alteration. To protect a C3 stream, aggradation and degradation must be prevented, and the stream must be allowed to keep its floodplain, slope, and meander pattern so that sediment can be transported. Recommendations to management would include:

- Protect the floodplain, do not build.

- Do not mine point bars.
- Do not straighten the stream - meanders reduce erosive power.
- Bridge culverts should not be too wide or narrow (maintain the stream's width to depth ratio at bankfull flood stage), and should include floodplain openings for overbank flows.
- A vegetated riparian buffer is very important to maintain bank stability and water quality. Removal of the buffer will cause stream instability at the removal site and downstream.

In contrast, a B3 stream is less sensitive to human disturbance. Commonly found in higher slope streams of the Pocono watershed, it takes a lot of change in flow duration and magnitude, and sediment increases, to cause a B3 to move towards instability. If a disturbance is removed, a B3 should recover well on its own. B3 channels inherently possess low sediment supplies, because it is hard to erode the banks, and vegetation is not as important for bank stability as with a C3 channel. As seen often along Pocono Creek, you can build close to the stream without harming stability. B3 channels don't require as much floodplain as C3 channels. B channels are typical of Pennsylvania trout streams, with frequent riffles, and higher slope and velocity than C channels.

The last stable form most typical of the Pocono Creek watershed is the E channel E channels are found in very low gradient areas, like the swamps on top of the Plateau. E channels are narrow, deep, highly meandering, with a wide floodplain, and very well vegetated banks. Any disturbance to these features will turn a stable E channel toward unstable C or G channels. Vegetation is critical to maintenance of bank stability, and once the vegetation is removed, the banks can severely erode. E channels are nature's most efficient way of moving high sediment supplies through low-gradient landscapes, and possess excellent habitat for fish, with narrow channels and overhanging vegetation.

Other channel types observed in the Pocono Creek watershed include A and Aa+ channels (steep slopes), which are naturally erosive but stable channels. The unstable channels observed in the Pocono watershed are the common "problem" channels - D, F, and G. These indicate either over-widening, with associated bank erosion and in-channel deposition (aggradation) or gullying (degradation). Both processes produce a lot of sediment, possess terrible habitat and water quality values, and are unstable, transitional channel forms. These will evolve back to stable B, C, and E channels either naturally (in absence of further disturbance) or through restoration efforts. First priority should be non-intervention, if possible.

References

Cobb, D.G., Galloway, T.D., and Flanagan, J.F. 1992. Effects of discharge and substrate stability on density and species composition of stream insects. Can. J. Fish. Aquat. Sci. 49: 1788-1795.

Death, R.G., and Winterbourn, M.J. 1995. Diversity patterns in stream benthic invertebrate communities: the influence of habitat stability. Ecology 76(5): 1446-1460.

Garie, H.L., and MacIntosh, A. 1986. Distribution of benthic macroinvertebrates in a stream exposed to urban runoff. Water Resources Bulletin 22(3): 447-455.

Harvey, M.D., and Watson, C.C. 1986. Fluvial processes and morphological thresholds in incised channel restoration. Water Resources Bulletin 22(3): 359-368.

Heede, B.H. 1986. Designing for dynamic equilibrium in streams. Water Resources Bulletin 22(3): 351-357.

Lane, E.W., 1955. The importance of fluvial morphology in hydraulic engineering. ASCE Proceedings 81, paper 745: 1-17.

Leopold, L.B. 1994. A View of the River. Harvard University Press, Cambridge, MA. 298 pp.

Rosgen, D.L. 1994. A classification of natural rivers. Catena 22: 169-199.

Rosgen, D.L. 1996. Applied River Morphology. Wildland Hydrology, Pagosa Springs, CO. 363 pp.

Rosgen, D.L. 1997. A geomorphological approach to restoration of incised rivers. In: Proceedings of the Conference on Management of Landscapes Disturbed by Channel Incision, 1997. Wang, S.S.Y, Langendoen, E.J., and Shields, F.D. (Eds.). Pages 12-27.

Rosgen, D.L. 1998. The reference reach – a blueprint for natural channel design. Presented at ASCE Conference, Denver, CO, June 1998.

Savery, T.S., Belt, G.H., and Higgins, D.A. 2001. Evaluation of the Rosgen stream classification system in Chequamegon-Nicolet National Forest, Wisconsin. Journal of the AWRA 37(3): 641-654.

Simon, A. 1989. The discharge of sediment in channelized alluvial streams. Water Resources Bulletin 25(6): 1177-1188.

Simon, A., and Downs, P.W. 1995. An interdisciplinary approach to evaluation of potential instability in alluvial channels. Geomorphology 12: 215-232.

Wolman, M.G., and Miller, J.P. 1960. Magnitude and frequency of forces in geomorphic processes. Journal of Geology 68: 54-74.

Waters, T.F. 1995. Sediment in Streams: Sources, Biological Effects, and Control. American Fisheries Society Monograph 7, Bethesda, MD.

Pocono Creek Watershed
Tributaries in each Sub-Watershed Management Area

Pocono Creek Feature	river mile	side (face ds)
Pocono Mgmt Area 1		
Pocono Creek	0	*
Big Meadow Run	0.92	L
Little Pocono Creek (+ 1 UNT)	1.03	R
Flagler Run	1.66	L
UNT1 from Pond	2.92	L
Pocono Creek	4.16	*
Pocono Mgmt Area 2	4.16	*
Wigwam Run	4.17	L
UNT2 below Bartonsville	6.74	R
UNT3 blw Rimrock Dr	6.93	R
Pocono Mgmt Area 3 (Bartonsville/Tannersville Tribs)		
UNT4 by Golden Slipper Rd	7.41	R
Laurel Lake trib	7.99	L
UNT5	8.23	R
Cranberry Creek	8.43	L
Rocky Run	8.49	R
Reeders Run	8.72	R
Bulgers Run	9.79	L
UNT6	10.31	R
Bisbing Run	10.5	L
Pocono Creek at Rt 715	11.22	*
Pocono below Scot Run Confl	11.79	
Pocono Mgmt Area 4 (Scot Run)		
Pocono at Scot Run	11.8	L
Pocono Mgmt Area 5 (Pocono & Coolmor Cr)		
Pocono above Scot Run	11.81	*
UNT7 from small pond	12.13	L
UNT8 from small pond	12.18	R
Coolmor Creek (+ 4 UNTs)	13.11	R
Pocono at Wilkie Rd	14.12	*
Pocono Mgmt Area 6 (Headwaters)		
Pocono crosses Wilkie Rd	14.72	*
Wolf Swamp Run (+ 1 UNT)	15.19	R
Sand Spring Run (+ 5 tribs)	15.46	R
Pocono passes under I80	15.54	*
Crescent Lake trib	15.61	R
Dry Sawmill Run	15.61	L
Pocono Creek end	15.61	*

Pocono Creek Stream Types - by stream segment

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g
0	0.00	410	enters McMichaels Cr	L	F				1							
2000	0.38	420	cross 209		F	10	2000	0.50%	1						2000	
2429	0.46	420	elev		D	0	429	0.00%	1				429			
4835	0.92	450	Big Meadow Run enters	L	F	30	2406	1.25%	1						2406	
5438	1.03	450	Little Pocono Cr enters	R	C	0	603	0.00%	1			603				
8765	1.66	480	Flagler Run enters	L	F	30	3327	0.90%	1						3327	
9451	1.79	490	elev		C	10	686	1.46%	1			686				
10560	2.00	490	cross I80		C	0	1109	0.00%	1			1109				
13147	2.49	514	elev		C	24	2587	0.93%	1			2587				
13411	2.54	519	elev		C	5	264	1.89%	1			264				
13939	2.64	545	elev		G	26	528	4.92%	1							528
14203	2.69	565	elev		G	20	264	7.58%	1							264
15418	2.92	565	UNT1 from small pond	L	C	0	1215	0.00%	1			1215				
16210	3.07	565	at Camp road		C	0	792	0.00%	1			792				
18163	3.44	565	elev		C	0	1953	0.00%	1			1953				
19061	3.61	565	edge of Saylorsburg Quad		C	0	898	0.00%	1			898				
20064	3.80	580	elev		C	15	1003	1.50%	1			1003				
21120	4.00	600	elev		B	20	1056	1.89%	1		1056					
22018	4.17	610	Wigwam Run enters	L	C	10	898	1.11%	1			898				
			POCONO WMA1 TOTAL			**200**	**22018**	**0.91%**	**1**	**0**	**1056**	**12008**	**429**	**0**	**7733**	**792**
										0%	5%	55%	2%	0%	35%	4%
23074	4.37	630	elev		B	20	1056	1.89%	2		1056					
24605	4.66	640	elev		C	10	1531	0.65%	2			1531				
26242	4.97	660	elev (channelized reach by I80)		F	20	1637	1.22%	2						1637	
27403	5.19	690	elev		B	30	1161	2.58%	2		1161					
28248	5.35	690	crosses 33		F	0	845	0.00%	2						845	
29885	5.66	700	elev		B	10	1637	0.61%	2		1637					
31891	6.04	710	elev		C	10	2006	0.50%	2			2006				
33158	6.28	730	elev		B	20	1267	1.58%	2		1267					
35587	6.74	744	UNT2 below Bartonsville	L	C	14	2429	0.58%	2			2429				
36590	6.93	755	UNT3 at Rimrock Dr	R	F	11	1003	1.10%	2						1003	
39072	7.40	768	cross 611		F	13	2482	0.52%	2						2482	
			POCONO WMA2 TOTAL			**158**	**17054**	**0.93%**	**2**	**0**	**5121**	**5966**	**0**	**0**	**5967**	**0**
										0%	30%	35%	0%	0%	35%	0%
39125	7.41	768	UNT4 near Golden Slipper Rd	R	C	0	53	0.00%	3			53				
40445	7.66	770	elev		C	2	1320	0.15%	3			1320				

42187	7.99	784	Trib from Laurel Lake	L	C	14	1742	0.80%	3			1742				
42926	8.13	785	cross 611		F	1	739	0.14%	3						739	
43454	8.23	796	UNT5 enters	R	B	11	528	2.08%	3		528					
44510	8.43	796	Cranberry Cr enters	L	C	0	1056	0.00%	3			1056				
44827	8.49	801	Rocky Run enters	R	C	5	317	1.58%	3			317				
46042	8.72	801	Reeders Run enters	R	C	0	1215	0.00%	3			1215				
48523	9.19	810	elev		C	9	2481	0.36%	3			2481				
49949	9.46	823	Stadden Rd crosses		F	13	1426	0.91%	3						1426	
51480	9.75	845	nears 611		C	22	1531	1.44%	3			1531				
51691	9.79	845	Bulgers Run enters	L	C	0	211	0.00%	3			211				
53645	10.16	846	Warner Rd crosses		C	1	1954	0.05%	3			1954				
54437	10.31	856	UNT6 enters	R	C	10	792	1.26%	3			792				
55440	10.50	862	Bisbing Run enters	L	C	6	1003	0.60%	3			1003				
56971	10.79	886	Fish Hill Rd & Old Mill Dr		B	24	1531	1.57%	3		1531					
58872	11.15	910	elev		G	24	1901	1.26%	3							1901
59242	11.22	922	715 crosses		B	12	370	3.24%	3		370					
60350	11.43	932	elev		G	10	1108	0.90%	3							1108
61934	11.73	953	elev		B	21	1584	1.33%	3		1584					
			POCONO WMA3 TOTAL			**185**	**22862**	**0.81%**	**3**	**0**	**4013**	**13675**	**0**	**0**	**2165**	**3009**
							4.3299			0%	18%	60%	0%	0%	9%	13%
62304	11.80	964	Scot Run enters	L	B	11	370	2.97%	4		370					
			POCONO WMA4 TOTAL			**11**	**370**	**2.97%**	**4**	**0**	**370**	**0**	**0**	**0**	**0**	**0**
							0.0701			0%	100%	0%	0%	0%	0%	0%
62832	11.90	982	under I80		B	18	528	3.41%	5		528					
64046	12.13	988	UNT7 from small pond	L	F	6	1214	0.49%	5						1214	
64258	12.17	988	Camelback Rd crosses		B	0	212	0.00%	5		212					
64310	12.18	988	UNT8 from small pond	R	B	0	52	0.00%	5		52					
65472	12.40	1004	elev		B	16	1162	1.38%	5		1162					
66106	12.52	1024	elev		B	20	634	3.15%	5		634					
67162	12.72	1047	elev		B	23	1056	2.18%	5		1056					
68165	12.91	1079	elev		B	32	1003	3.19%	5		1003					
68851	13.04	1098	elev		B	19	686	2.77%	5		686					
69221	13.11	1098	Coolmor Cr enters	R	B	0	370	0.00%	5		370					
70382	13.33	1120	Camelback Rd crosses		B	22	1161	1.89%	5		1161					
71069	13.46	1143	elev		B	23	687	3.35%	5		687					
71755	13.59	1168	elev		B	25	686	3.64%	5		686					
72547	13.74	1197	elev		B	29	792	3.66%	5		792					
73234	13.87	1229	elev		A	32	687	4.66%	5	687						
73867	13.99	1240	elev		B	11	633	1.74%	5		633					
74554	14.12	1257	at Wilkie Rd turnoff		B	17	687	2.47%	5		687					

			POCONO WMA5 TOTAL			**293**	**12250**	**2.39%**	**5**	**687**	**10349**	**0**	**0**	**0**	**1214**	**0**
							2.3201			6%	84%	0%	0%	0%	10%	0%
75134	14.23	1272	elev		B	15	580	2.59%	6		580					
76190	14.43	1298	elev		B	26	1056	2.46%	6		1056					
77035	14.59	1331	elev		A	33	845	3.91%	6	845						
77616	14.70	1336	elev		F	5	581	0.86%	6						581	
77722	14.72	1348	Wilkie Rd crosses		A	12	106	11.32%	6	106						
78408	14.85	1368	elev		B	20	686	2.92%	6		686					
79200	15.00	1382	elev		B	14	792	1.77%	6		792					
80203	15.19	1400	Wolf Swamp Run enters	R	B	18	1003	1.79%	6		1003					
80995	15.34	1423	elev		B	23	792	2.90%	6		792					
81418	15.42	1437	elev		B	14	423	3.31%	6		423					
81629	15.46	1453	Sand Spring Run enters	R	A	16	211	7.58%	6	211						
82051	15.54	1487	under I80		A	34	422	8.06%	6	422						
82421	15.61	1495	END - Crescent Lake trib enters	R	G	8	370	2.16%	6							370
82421	15.61	1495	END - Dry Sawmill Run enters	L					6							
			POCONO WMA6 TOTAL			**238**	**7867**	**3.03%**	**6**	**1584**	**5332**	**0**	**0**	**0**	**581**	**370**
							1.49			20%	68%	0%	0%	0%	7%	5%
			POCONO CREEK TOTALS			**1085**	**82421**	**1.32%**		**2271**	**26241**	**31649**	**429**	**0**	**17660**	**4171**
										3%	32%	38%	1%	0%	21%	5%

Summary Table: Stream Types in Pocono Watershed Management Areas

Pocono WMA 1 Stream Types
(12.84 miles of streams in WMA1)

Stream Name	A	B	C	D	E	F	G	tot ft	tot mi
Pocono mi 0.0 - 4.17		0	1,056	12,008	429	0	7,733	792	22,018	4.17
0.92 Big Meadow		0	0	0	0	5,577	0	1,234	6,811	1.29
1.03 Little Pocono (+1 trib)		528	4,807	0	0	6,566	0	5,660	17,561	3.33
1.66 Flagler Run (+1 trib)		0	5,700	1,193	0	10,098	0	1,743	18,734	3.55
2.92 Pocono UNT1 from Pond		1,198	706	0	0	0	0	768	2,672	0.51
		1,726	12,269	13,201	429	22,241	7,733	10,197	67,796	12.84
		3%	18%	19%	1%	33%	11%	15%	100%	
									27.1%	unstable

Pocono WMA 2 Stream Types
(8.49 miles of streams in WMA2)

Stream Name	A	B	C	D	E	F	G	tot ft	tot mi
Pocono mi 4.17 - 7.40		0	5,121	5,966	0	0	5,967	0	17,054	3.23
4.17 Wigwam Run (+1 trib)		739	5,976	0	0	5,148	0	4,934	16,797	3.18
6.74 Pocono UNT2		739	3,544	0	0	0	0	2,739	7,022	1.33
6.93 Pocono UNT3		0	2,946	0	0	0	0	1,032	3,978	0.75
		1,478	17,587	5,966	0	5,148	5,967	8,705	44,851	8.49
		3%	39%	13%	0%	11%	13%	19%	100%	
									32.7%	unstable

Pocono WMA 3 Stream Types
(35.61 miles of streams in WMA3)

Stream Name	A	B	C	D	E	F	G	tot ft	tot mi

Pocono mi 7.40 - 11.79	0	4,013	13,675	0	0	2,165	3,009	22,862	4.33
7.41 Pocono UNT4 (R)	0	2,793	0	0	0	0	1,840	4,633	0.88
7.99 Laurel Lake trib (L)	762	4,030	0	0	634	1,089	1,141	7,656	1.45
8.23 Pocono UNT5 (R)	352	0	0	0	0	242	912	1,506	0.29
8.43 Cranberry Creek (L)	528	2,856	2,449	0	29,346	1,834	4,963	41,976	7.95
8.49 Rocky Run (R) (+2 tribs)	1,088	10,474	0	0	7,750	257	266	19,835	3.76
8.72 Reeders Run (R) (+5 tribs)	0	20,386	0	0	5,022	2,587	3,488	31,483	5.96
9.79 Bulgers Run (L) (+3 tribs)	1,365	13,096	0	0	15,822	87	787	31,157	5.90
10.31 Pocono UNT6 (R) (+2 tribs)	496	3,114	0	0	5,714	587	2,607	12,518	2.37
10.50 Bisbing Run (L) (+1 trib)	4,327	7,258	0	264	0	0	2,563	14,412	2.73
	8,918	68,020	16,124	264	64,288	8,848	21,576	188,038	35.61
	5%	36%	9%	0%	34%	5%	11%	100%	
								16.3%	unstable

Pocono WMA 4 Stream Types
(13.65 miles of streams in WMA4)

Stream Name	A	B	C	D	E	F	G	tot ft	tot mi
Pocono mi 11.79 - 11.81	0	370	0	0	0	0	0	370	0.07
11.80 Scot Run (L)	633	10,325	0	0	6,102	475	1,420	18,955	3.59
11.80 Scot Run (L) 0.79 UNT1 (R)	0	266	0	0	0	0	0	266	0.05
11.80 Scot Run (L) 0.98 Back Channel to Transue Run (R)	0	0	0	504	0	0	0	504	0.10
11.80 Scot Run (L) 0.99 UNT2 (L)	1,257	4,160	0	0	0	0	127	5,544	1.05
11.80 Scot Run (L) 1.05 Transue Run (R) (+3 tribs)	6,886	12,653	0	0	1,748	0	2,867	24,154	4.57
11.80 Scot Run (L) 1.39 UNT3 from Huckleberry Swamp (L)	0	2,853	0	0	1,819	0	0	4,672	0.88
11.80 Scot Run (L) 1.94 Leisure Lake trib (L)	465	0	0	0	6,399	0	0	6,864	1.30
11.80 Scot Run (L) 2.96 UNT4 (R) (+2 tribs)	6,193	4,546	0	0	0	0	0	10,739	2.03
	15,434	35,173	0	504	16,068	475	4,414	72,068	13.65
	21%	49%	0%	1%	22%	1%	6%	100%	
								7.5%	unstable

Pocono WMA 5 Stream Types

(5.08 miles of streams in WMA5)

Stream Name	A	B	C	D	E	F	G	tot ft	tot mi
Pocono mi 11.81 - 14.12		687	10,349	0	0	0	1,214	0	12,250	2.32
12.13 UNT7 (L) from pond		0	383	0	0	0	0	0	383	0.07
12.18 UNT8 (L) from pond		0	312	0	0	149	0	0	461	0.09
13.11 Coolmor Creek (R) (+4 tribs)		5,218	4,015	0	0	4,322	0	158	13,713	2.60
		5,905	15,059	0	0	4,471	1,214	158	26,807	5.08
		22%	56%	0%	0%	17%	5%	1%	100%	
									5.1%	unstable

Pocono WMA 6 Stream Types

(16.62 miles of streams in WMA6)

Stream Name	A	B	C	D	E	F	G	tot ft	tot mi
Pocono mi 14.12 - 15.61		1,584	5,332	0	0	0	581	370	7,867	1.49
15.19 Wolf Swamp Run (R) (+1 trib)		7,860	3,943	0	0	8,789	0	0	20,592	3.90
15.46 Sand Spring Run (R)		2,538	4,372	0	0	4,970	0	0	11,880	2.25
15.61 Dry Sawmill Run (L) (+5 tribs)		480	14,087	0	0	22,788	1,241	806	39,402	7.46
15.61 Crescent Lake trib (R)		1,429	4,369	0	0	1,802	0	426	8,026	1.52
		13,891	32,103	0	0	38,349	1,822	1,602	87,767	16.62
		16%	37%	0%	0%	44%	2%	2%	100%	
									3.9%	unstable

SUMMARY	47,352	180,211	35,291	1,197	150,565	26,059	46,652	487,327	92.30
	10%	37%	7%	0%	31%	5%	10%	100%	
								15.2%	unstable

Table: Detailed Reach File, Delineation of Stream Segments by Stream Type

0.92 Big Meadow Run (L) AVG SLOPE = 0.69% (predicts C/E channel)

Pocono Mile = 0.92

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0	450	Pocono Cr confluence														
317	0.1	458	elev - channelized segment		G	8	317	2.52%	1							317	317
701	0.1	478	Park St(?) rd crossing		G	20	384	5.21%	1							384	384
958	0.2	480	611 crosses		G	2	257	0.78%	1							257	257
1234	0.2	483	pond outlet		G	3	276	1.09%	1							276	276
2510	0.5	490	driveway crossing in dammed segment		E	7	1276	0.55%	1					1276			1276
3106	0.6	490	pond inlet		E	0	596	0.00%	1					596			596
5544	1.1	490	small pond outlet		E	0	2438	0.00%	1					2438			2438
5755	1.1	490	small pond inlet		E	0	211	0.00%	1					211			211
6230	1.2	493	Clearview Drive crosses		E	3	475	0.63%	1					475			475
6811	1.3	497	end		E	4	581	0.69%	1					581			581
			BIG MEADOW TOTAL			**47**	**6811**	**0.69%**	**1**	**0**	**0**	**0**	**0**	**5577**	**0**	**1234**	**6811**
										0.0%	0.0%	0.0%	0.0%	81.9%	0.0%	18.1%	100.0%

1.03 Little Pocono Creek AVG SLOPE = 0.95% (predicts C/E channel)

Pocono Mile = 1.03

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0	446	Pocono Cr confluence														
461	0.1	453	elev		B	7	461	1.52%	1		461						461
1951	0.4	471	Main St crosses		G	18	1490	1.21%	1							1,490	1,490
2326	0.4	481	I80 crosses		B	10	375	2.67%	1		375						375
4448	0.8	501	elev		E	20	2122	0.94%	1					2,122			2,122
6547	1.2	511	Tanite Rd crosses		E	10	2099	0.48%	1					2,099			2,099
7128	1.4	511	at pond outlet		G	0	581	0.00%	1							581	581
7867	1.5	511	at pond inlet		E	0	739	0.00%	1					739			739
8554	1.6	511	209 crosses		E	0	687	0.00%	1					687			687
8870	1.7	511	Sandee Lane crosses		G	0	316	0.00%	1							316	316
10524	2	511	209 crosses		G	0	1654	0.00%	1							1,654	1,654
11774	2.2	516	Bridle Rd crosses, pond outlet		G	5	1250	0.40%	1							1,250	1,250
12091	2.3	518	pond inlet		E	2	317	0.63%	1					317			317
13253	2.5	534	elev at trailer park		B	16	1162	1.38%	1		1,162						1,162
13728	2.6	546	Trib 1 enters	R	B	12	475	2.53%	1		475						475
14045	2.7	546	at int Aspen & Shaefer Schoolhs Rd		B	0	317	0.00%	1		317						317
14414	2.7	554	209 crosses		G	8	369	2.17%	1							369	369

15154	2.9	567	Business 209 crosses	B	13	740	1.76%	1		740					740
15682	3	595	end in trailer park	A	28	528	5.30%	1	528						528
					149	15682	0.95%	1	528	3530	0	0	5964	0	5660	15682
									3%	23%	0%	0%	38%	0%	36%	100%
1.03 Little Pocono 2.60 Trib1																
0	0	546	Little Pocono Cr confluence													
137	0	548	Shaefer Schoolhs Rd crosses	B	2	137	1.46%	1		137					137
739	0.1	553	elev	E	5	602	0.83%	1					602		602
1051	0.2	561	leave hamilton, enter stroud twp	B	8	312	2.56%	1		312					312
1486	0.3	578	elev	B	17	435	3.91%	1		435					435
1879	0.4	591	end near quad edge	B	13	393	3.31%	1		393					393
					45	1879	2.39%	1	0	1277	0	0	602	0	0	1879
									0%	68%	0%	0%	32%	0%	0%	100%
			LITTLE POCONO TOTAL		**194**	**17561**	**1.10%**	**1**	**528**	**4807**	**0**	**0**	**6566**	**0**	**5660**	**17561**
									3%	27%	0%	0%	37%	0%	32%	100%

1.66 Flagler Run AVG SLOPE = 1.66% (predicts B/G channel)

Pocono Mile = 1.66

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0	480	Pocono Cr confluence														
371	0.1	494	elev		B	14	371	3.77%	1		371						371
659	0.1	502	daylights from culvert		B	8	288	2.78%	1		288						288
1000	0.2	509	611 crosses underground crk		G	7	341	2.05%	1							341	341
1148	0.2	516	creek under mall pavement		G	7	148	4.73%	1							148	148
2341	0.4	532	road crosses blw gravel pit		C	16	1193	1.34%	1			1,193					1,193
2895	0.6	554	pond outlet		G	22	554	3.97%	1							554	554
3501	0.7	554	pond inlet		E	0	606	0.00%	1					606			606
5966	1.1	583	elev		E	29	2465	1.18%	1					2,465			2,465
6811	1.3	600	elev		B	17	845	2.01%	1		845						845
7814	1.5	610	pond outlet by Stroudsburg Sch		E	10	1003	1.00%	1					1,003			1,003
8448	1.6	611	Flagler Reservoir inlet		E	1	634	0.16%	1					634			634
9134	1.7	643	elev abv pond		B	32	686	4.66%	1		686						686
9398	1.8	646	Old Mill Run Rd crosses		B	3	264	1.14%	1		264						264
10507	2	678	elev		B	32	1109	2.89%	1		1,109						1,109
11405	2.2	706	Brown Rd crosses		B	28	898	3.12%	1		898						898
12144	2.3	718	elev		B	12	739	1.62%	1		739						739
13834	2.6	729	Cranberry Rd crosses		E	11	1690	0.65%	1					1,690			1,690
15418	2.9	741	pond outlet by Willow Pond Dr		E	12	1584	0.76%	1					1,584			1,584
15734	3	741	pond inlet, end		E	0	316	0.00%	1					316			316
			FLAGLER RUN			**261**	**15734**	**1.66%**	**1**	**0**	**5,200**	**1,193**	**0**	**8,298**	**0**	**1,043**	**15,734**
										0%	33%	8%	0%	53%	0%	7%	100%

1.66 Flagler Run 1.73 UNT1 (L) Avg Slope 3.27% (Predicts B channel)

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	643	enters Flagler Run (L)	L													
500	0.09	678	Old Mill Run Rd crosses		B	35	500	7.00%	1		500						500
700	0.13	690	Rd xing		G	12	200	6.00%	1							200	200
1200	0.23	720	Cranberry Rd Crosses		G	30	500	6.00%	1							500	500
1400	0.27	722	pond outlet		E	2	200	1.00%	1					200			200
1500	0.28	724	pond inlet		E	2	100	2.00%	1					100			100
2000	0.38	732	by small pond		E	8	500	1.60%	1					500			500
2500	0.47	738	road xing		E	6	500	1.20%	1					500			500
3000	0.57	741	end		E	3	500	0.60%	1					500			500
			Flagler Run UNT1 Total			**98**	**3000**	**3.27%**		**0**	**500**	**0**	**0**	**1800**	**0**	**700**	**3000**
										0%	**17%**	**0%**	**0%**	**60%**	**0%**	**23%**	**100%**
			FLAGLER RUN TOTAL			**359**	**18734**	**1.92%**	**1**	**0**	**5700**	**1193**	**0**	**10098**	**0**	**1743**	**18734**
										0%	**30%**	**6%**	**0%**	**54%**	**0%**	**9%**	**100%**

2.92 UNT1 from Pond (L) AVG SLOPE = 1.66% (predicts B/G channel)
Pocono Mile = 2.92

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0	543	Pocono Cr confluence														
706	0.1	571	elev		B	28	706	3.97%	1		706						706
1006	0.2	591	elev		A	20	300	6.67%	1	300							300
1099	0.2	599	White Stone Corner Rd crosses		A	8	93	8.60%	1	93							93
1295	0.3	619	I80 East crosses		G	20	196	10.20%	1							196	196
1453	0.3	633	I80 West crosses		G	14	158	8.86%	1							158	158
1716	0.3	649	elev		A	16	263	6.08%	1	263							263
1979	0.4	672	elev		A	23	263	8.75%	1	263							263
2074	0.4	681	elev		A	9	95	9.47%	1	95							95
2258	0.4	698	end channelized reach		A	17	184	9.24%	1	184							184
2526	0.5	714	channelized reach at pond outlet		G	16	268	5.97%	1							268	268
2672	0.5	723	pond draining headwaters		G	9	146	6.16%	1							146	146
			UNT1 TOTAL			**180**	**2,672**	**6.74%**	**1**	**1,198**	**706**	**0**	**0**	**0**	**0**	**768**	**2,672**
										45%	26%	0%	0%	0%	0%	29%	100%
			WMA1 TOTAL (excl Pocono Cr)			**780**	**45,778**	**1.70%**	**1**	**1,726**	**11,213**	**1,193**	**0**	**22,241**	**0**	**9,405**	**45,778**
										4%	24%	3%	0%	49%	0%	21%	100%

4.17 Wigwam Run AVG SLOPE = 1.84% (predicts B/G channel)

Pocono Mile = 4.17

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0	610	Wigwam enters Pocono														
179	0	620	elev beside Shafer Schoolhs Rd		G	10	179	5.59%	2							179	179
559	0.1	631	Beech St crosses		G	11	380	2.89%	2							380	380
743	0.1	639	I80 east crosses		G	8	184	4.35%	2							184	184
899	0.2	639	I80 west crosses		G	0	156	0.00%	2							156	156
1362	0.3	662	elev close to rd		B	23	463	4.97%	2		463						463
1731	0.3	676	elev		B	14	369	3.79%	2		369						369
1891	0.4	680	Shafer Schoolhs Rd crosses		B	4	160	2.50%	2		160						160
2980	0.6	705	Rt 611 crosses		B	25	1089	2.30%	2		1,089						1,089
3326	0.6	705	Wigwam park Rd (?) crosses		G	0	346	0.00%	2							346	346
3756	0.7	708	Mt Pocono/Saylorsburg quad bdy		E	3	430	0.70%	2					430			430
4970	0.9	708	outlet wigwam lake		E	0	1214	0.00%	2					1,214			1,214
6600	1.3	724	inlet wigwam lk, wigwam pk rd crosses		G	16	1630	0.98%	2							1,630	1,630
6970	1.3	728	outlet small pond		G	4	370	1.08%	2							370	370
7234	1.4	728	inlet small pond		E	0	264	0.00%	2					264			264
7339	1.4	728	Wigwam Park Rd crosses		G	0	105	0.00%	2							105	105
8026	1.5	728	UNT1 Wigwam enters	L	E	0	687	0.00%	2					687			687
9240	1.8	743	telephone line xing		E	15	1214	1.24%	2					1,214			1,214
9768	1.9	759	begin intermittent upstr		B	16	528	3.03%	2		528						528
10349	2	770	elev		B	11	581	1.89%	2		581						581
11088	2.1	818	elev		A	48	739	6.50%	2	739							739
11774	2.2	836	Cranberry Rd crosses		B	18	686	2.62%	2		686						686
12989	2.5	849	Penn Estates Rd crosses		G	13	1215	1.07%	2							1,215	1,215
13517	2.6	858	Rd crossing in Penn Est		B	9	528	1.70%	2		528						528
13886	2.6	861	Rd crossing in Penn Est		G	3	369	0.81%	2							369	369
14256	2.7	869	Rd crossing in Penn Est		B	8	370	2.16%	2		370						370
14626	2.8	879	Rd crossing in Penn Est		B	10	370	2.70%	2		370						370
14890	2.8	884	end near Rd		B	5	264	1.89%	2		264						264
						274	14890	1.84%		739	5408	0	0	3809	0	4934	14890

4.17 Wigwam Run 1.52 UNT1

0	0	728	Enters Wigwam Run														
568	0.1	743	Wigwam Park Rd crosses		B	15	568	2.64%	2		568						568
1907	0.4	743	end		E	0	1339	0.00%	2					1,339			1,339
						15	1907	0.79%		0	568	0	0	1339	0	0	1907
			WIGWAM TOTAL			**289**	**16797**	**1.72%**	**2**	**739**	**5976**	**0**	**0**	**5148**	**0**	**4934**	**16797**

6.74 UNT2 to Pocono Below Bartonsville

0	0	744	UNT2 enters Pocono												
190	0	744	I80 crosses	G	0	190	0.00%	2						190	190
664	0.1	749	edge of quad - crk follows edge	G	5	474	1.05%	2						474	474
1298	0.3	761	edge of quad - crk meets edge	B	12	634	1.89%	2		634					634
1422	0.3	762	small pond outlet	G	1	124	0.81%	2						124	124
1559	0.3	763	small pond inlet	G	1	137	0.73%	2						137	137
1738	0.3	764	611 crosses, crk intermittent	G	1	179	0.56%	2						179	179
2080	0.4	773	elev	B	9	342	2.63%	2		342					342
2593	0.5	796	elev	B	23	513	4.48%	2		513					513
2958	0.6	815	Frantz Rd crosses	G	19	365	5.21%	2						365	365
3651	0.7	835	line crossing	B	20	693	2.89%	2		693					693
4478	0.9	848	road crossing	G	13	827	1.57%	2						827	827
4945	0.9	869	elev	B	21	467	4.50%	2		467					467
5154	1	877	road crossing	B	8	209	3.83%	2		209					209
5597	1.1	897	small pond outlet	G	20	443	4.51%	2						443	443
5650	1.1	900	small pond inlet	A	3	53	5.66%	2	53						53
6125	1.2	913	elev	B	13	475	2.74%	2		475					475
6336	1.2	922	Ryan Dr crosses	B	9	211	4.27%	2		211					211
7022	1.3	961	end	A	39	686	5.69%	2	686						686
			UNT2 TOTAL		**217**	**7022**	**3.09%**	**2**	**739**	**3,544**	**0**	**0**	**0**	**0**	**2,739**	**7,022**

6.93 UNT3 to Pocono at Rimrock Dr

0	0	755	UNT3 enters Pocono												
616	0.1	760	Rimrock Dr crosses	G	5	616	0.81%	2						616	616
1032	0.2	765	Kroucher Rd crosses	G	5	416	1.20%	2						416	416
1860	0.4	795	elev - follows rd	B	30	828	3.62%	2		828					828
2282	0.4	813	elev	B	18	422	4.27%	2		422					422
3106	0.6	838	elev	B	25	824	3.03%	2		824					824
3533	0.7	852	elev	B	14	427	3.28%	2		427					427
3978	0.8	866	end	B	14	445	3.15%	2		445					445
			UNT3 TOTAL		**111**	**3978**	**2.79%**	**2**	**0**	**2,946**	**0**	**0**	**0**	**0**	**1,032**	**3,978**
			WMA2 TOTAL		**617**	**27797**	**2.22%**		**1478**	**12466**	**0**	**0**	**5148**	**0**	**8705**	**27797**

7.41 UNT4 by Golden Slipper Rd (R) AVG SLOPE = 4.40% (predicts B/G channel)

Pocono Mile = 7.41

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0	768	UNT4 by Golden Slipper Rd enters Pocono	R													
250	0.047	783	Pocono Lane crosses		G	15	250	6.00%	3							250	250
774	0.147	801	611 crosses		G	18	524	3.44%	3							524	524
1383	0.262	838	elev		G	37	609	6.08%	3							609	609
1731	0.328	855	I80W crosses		G	17	348	4.89%	3							348	348
1840	0.348	863	I80E crosses		G	8	109	7.34%	3							109	109
2189	0.415	880	Golden Slipper Rd crosses		B	17	349	4.87%	3		349						349
3094	0.586	897	elev		B	17	905	1.88%	3		905						905
3719	0.704	921	elev		B	24	625	3.84%	3		625						625
4013	0.76	935	elev		B	14	294	4.76%	3		294						294
4633	0.877	972	END		B	37	620	5.97%	3		620						620
			UNT4 TOTAL			**204**	**4,633**	**4.40%**		**0**	**2,793**	**0**	**0**	**0**	**0**	**1,840**	**4,633**
										0%	60%	0%	0%	0%	0%	40%	100%

7.99 Laurel Lake Trib (L) AVG SLOPE = 2.72% (predicts B/G channel)

Pocono Mile = 7.99

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	784	Laurel Lake trib enters Pocono Cr	L													
649	0.12	786	rd xing		F	2	649	0.31%	3						649		649
895	0.17	792	small pond outlet		G	6	246	2.44%	3							246	246
1041	0.20	799	small pond inlet		G	7	146	4.79%	3							146	146
1481	0.28	808	tiny pond outlet		F	9	440	2.05%	3						440		440
1543	0.29	810	tiny pond inlet		G	2	62	3.23%	3							62	62
1682	0.32	817	rd xing		G	7	139	5.04%	3							139	139
1924	0.36	823	elev		B	6	242	2.48%	3		242						242
2577	0.49	839	elev		B	16	653	2.45%	3		653						653
3108	0.59	861	elev		B	22	531	4.14%	3		531						531
3768	0.71	877	elev		B	16	660	2.42%	3		660						660
4108	0.78	889	rd xing at lake outlet		G	12	340	3.53%	3							340	340
4158	0.79	889	lake outlet		G	0	50	0.00%	3							50	50
4529	0.86	899	lake inlet		B	10	371	2.70%	3		371						371
4676	0.89	905	rd xing		B	6	147	4.08%	3		147						147
5026	0.95	932	rd xing		A	27	350	7.71%	3	350							350
5438	1.03	957	rd xing		A	25	412	6.07%	3	412							412
6178	1.17	981	elev		B	24	740	3.24%	3		740						740

6336	1.20	986	rd xing		G	5	158	3.16%	3						158	158
7022	1.33	991	elev		B	5	686	0.73%	3		686					686
7656	1.45	992	END in wetland		E	1	634	0.16%	3					634		634
			LAUREL LAKE TRIB TOTAL			**208**	**7656**	**2.72%**		**762**	**4030**	**0**	**0**	**634**	**1089**	**1141**	**7656**
										10%	53%	0%	0%	8%	14%	15%	100%

8.23 UNT5 (R) AVG SLOPE = 5.98% (predicts A/G channel)

Pocono Mile = 8.23

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	795	UNT5 enters Pocono Cr (R)	R													
83	0.02	802	elev by roadside park off I-80		G	7	83	8.43%	3							83	83
541	0.10	827	elev		G	25	458	5.46%	3							458	458
634	0.12	830	driveway off I80W crossing		G	3	93	3.23%	3							93	93
755	0.14	830	I80W crosses		F	0	121	0.00%	3						121		121
876	0.17	830	I80E crosses		F	0	121	0.00%	3						121		121
1154	0.22	841	road crossing		G	11	278	3.96%	3							278	278
1506	0.29	885	End by house		A	44	352	12.50%	3	352							352
			UNT5 TOTAL			**90**	**1,506**	**5.98%**		**352**	**0**	**0**	**0**	**0**	**242**	**912**	**1,506**
										23%	0%	0%	0%	0%	16%	61%	100%

8.43 Cranberry Creek (L) AVG SLOPE = 0.87% (predicts E/F channel)

Pocono Mile = 8.43

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	797	Pocono Creek confluence (L)	L													
2449	0.46	807	pond to L by long, flat reach		C	10	2449	0.41%	3			2,449					2,449
3494	0.66	809	wet area parallels Pocono Creek		E	2	1045	0.19%	3					1,045			1,045
3548	0.67	810	pond outlet		G	1	54	1.85%	3							54	54
3754	0.71	814	pond inlet		F	4	206	1.94%	3						206		206
5118	0.97	840	long channelized reach		F	26	1364	1.91%	3						1,364		1,364
5228	0.99	847	611 crosses		B	7	110	6.36%	3		110						110
5438	1.03	851	road xing		G	4	210	1.90%	3							210	210
6072	1.15	866	elev		G	15	634	2.37%	3							634	634
6125	1.16	866	pond outlet		G	0	53	0.00%	3							53	53
6283	1.19	872	pond inlet		F	6	158	3.80%	3						158		158
6758	1.28	885	elev		G	13	475	2.74%	3							475	475
7286	1.38	899	elev		G	14	528	2.65%	3							528	528
8870	1.68	922	elev		G	23	1584	1.45%	3							1,584	1,584
10402	1.97	924	bog outlet		E	2	1532	0.13%	3					1532			1,532
13411	2.54	925	road xing in bog		E	1	3009	0.03%	3					3009			3,009
16632	3.15	925	by small knoll in bog		E	0	3221	0.00%	3					3221			3,221

20803	3.94	925	road xing in bog	E	0	4171	0.00%	3					4171			4,171
26083	4.94	928	pond outlet past building	E	3	5280	0.06%	3					5280			5,280
26400	5.00	936	pond inlet, road by Birchwood Pocono Air Park	G	8	317	2.52%	3							317	317
26558	5.03	938	pond outlet	G	2	158	1.27%	3							158	158
26822	5.08	938	pond inlet	E	0	264	0.00%	3					264			264
27773	5.26	939	pond outlet	E	1	951	0.11%	3					951			951
28142	5.33	939	pond inlet	E	0	369	0.00%	3					369			369
29040	5.50	940	confluence of ponds' channels (circular)	E	1	898	0.11%	3					898			898
29198	5.53	940	pond outlet	E	0	158	0.00%	3					158			158
29304	5.55	940	pond inlet	E	0	106	0.00%	3					106			106
29885	5.66	940	pond outlet	E	0	581	0.00%	3					581			581
30149	5.71	940	pond inlet	E	0	264	0.00%	3					264			264
30835	5.84	940	connect with 5.50 point	E	0	686	0.00%	3					686			686
31310	5.93	940	ponds in series on bog	E	0	475	0.00%	3					475			475
32366	6.13	940	pond end	E	0	1056	0.00%	3					1056			1,056
32472	6.15	940	road xing	F	0	106	0.00%	3						106		106
34637	6.56	951	elev	E	11	2165	0.51%	3					2165			2,165
34795	6.59	957	pond outlet	G	6	158	3.80%	3							158	158
35798	6.78	960	pond inlet	E	3	1003	0.30%	3					1003			1,003
36010	6.82	970	road xing	G	10	212	4.72%	3							212	212
36590	6.93	998	driveway at Cherry Lane Church	G	28	580	4.83%	3							580	580
37382	7.08	1047	elev	B	49	792	6.19%	3		792						792
37541	7.11	1058	elev	B	11	159	6.92%	3		159						159
37646	7.13	1065	by small pond	B	7	105	6.67%	3		105						105
37752	7.15	1073	elev	A	8	106	7.55%	3	106							106
37910	7.18	1094	elev	A	21	158	13.29%	3	158							158
38174	7.23	1113	elev	A	19	264	7.20%	3	264							264
38280	7.25	1119	road xing	B	6	106	5.66%	3		106						106
38861	7.36	1131	elev	B	12	581	2.07%	3		581						581
39706	7.52	1156	road xing, circular drive	B	25	845	2.96%	3		845						845
39864	7.55	1160	road xing, circular drive	B	4	158	2.53%	3		158						158
40550	7.68	1160	elev	E	0	686	0.00%	3					686			686
41184	7.80	1160	pond outlet	E	0	634	0.00%	3					634			634
41606	7.88	1160	pond inlet	E	0	422	0.00%	3					422			422
41870	7.93	1161	pond outlet	E	1	264	0.38%	3					264			264
41976	7.95	1163	pond inlet, END	E	2	106	1.89%	3					106			106
			CRANBERRY CREEK TOTAL		**366**	**41976**	**0.87%**	**3**	**528**	**2856**	**2449**	**0**	**29346**	**1834**	**4963**	**41976**
									1%	7%	6%	0%	70%	4%	12%	100%

8.49 Rocky Run (R) AVG SLOPE = 1.41% (predicts E/B channel)

Pocono Mile = 8.49

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	801	Rocky Run enters Pocono Cr (R)	R													
166	0.03	810	elev		G	9	166	5.42%	3							166	166
266	0.05	816	I-80W crosses		G	6	100	6.00%	3							100	100
391	0.07	817	I-80E crosses		F	1	125	0.80%	3						125		125
1093	0.21	820	beside large pond		E	3	702	0.43%	3					702			702
2116	0.40	820	beside large pond		E	0	1023	0.00%	3					1,023			1,023
2248	0.43	820	road xing		F	0	132	0.00%	3						132		132
2535	0.48	820	elev		E	0	287	0.00%	3					287			287
3572	0.68	830	pond outlet		B	10	1037	0.96%	3		1,037						1,037
5650	1.07	833	pond inlet, spring trib enters		B	3	2078	0.14%	3		2,078						2,078
5861	1.11	840	road xing		B	7	211	3.32%	3		211						211
6917	1.31	859	elev		B	19	1056	1.80%	3		1,056						1,056
7920	1.50	877	by road and gravel pits		B	18	1003	1.79%	3		1003						1,003
8712	1.65	916	elev		B	39	792	4.92%	3		792						792
9293	1.76	916	edge of quad, by Pinemere Camp		E	0	581	0.00%	3					581			581
9451	1.79	920	camp pond trib		B	4	158	2.53%	3		158						158
10032	1.90	926	elev, by road		E	6	581	1.03%	3					581			581
10877	2.06	940	elev		B	14	845	1.66%	3		845						845
11088	2.10	960	elev		A	20	211	9.48%	3	211							211
11405	2.16	980	elev		A	20	317	6.31%	3	317							317
13411	2.54	990	END in wetland		E	10	2006	0.50%	3					2006			2,006
						189	13411	1.41%		528	7180	0	0	5180	257	266	13411
										4%	54%	0%	0%	39%	2%	2%	100%

8.49 Rocky Run 1.07 Spring Trib (R) AVG SLOPE = 5.19% (predicts A/B channel)

Pocono Mile = 8.49 - 1.07

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	833	Spring trib enters Rocky Run (R)	R													
132	0.03	835	pond inlet		B	2	132	1.52%	3		132						132
308	0.06	843	road xing		B	8	176	4.55%	3		176						176
561	0.11	870	elev		A	27	253	10.67%	3	253							253
702	0.13	888	elev		A	18	141	12.77%	3	141							141
868	0.16	903	elev		A	15	166	9.04%	3	166							166
1581	0.30	915	END at spring		B	12	713	1.68%	3		713						713
						82	1,581	5.19%		560	1,021	0	0	0	0	0	1,581
										35%	65%	0%	0%	0%	0%	0%	100%

8.49 Rocky Run 1.79 Camp Pond Trib (L) AVG SLOPE = 1.65% (predicts E/B channel)

Pocono Mile = 8.49 - 1.79

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	906	Camp Pond trib enters Rocky Run (L)	L													
184	0.03	906	road xing		E	0	184	0.00%	3					184			184
427	0.08	906	elev		E	0	243	0.00%	3					243			243
505	0.10	907	pond outlet		E	1	78	1.28%	3					78			78
1344	0.25	924	pond inlet		B	17	839	2.03%	3		839						839
2823	0.53	929	pond outlet		E	5	1479	0.34%	3					1,479			1,479
2969	0.56	930	pond inlet		E	1	146	0.68%	3					146			146
3409	0.65	933	elev		E	3	440	0.68%	3					440			440
4121	0.78	958	elev		B	25	712	3.51%	3		712						712
4370	0.83	976	pond outlet		B	18	249	7.23%	3		249						249
4843	0.92	986	pond inlet, END		B	10	473	2.11%	3		473						473
						80	4843	1.65%		0	2273	0	0	2570	0	0	4843
										0%	47%	0%	0%	53%	0%	0%	100%
			ROCKY RUN TOTAL			**351**	**19,835**	**1.77%**	**3**	**1,088**	**10,474**	**0**	**0**	**7,750**	**257**	**266**	**19,835**

8.72 Reeders Run (R) AVG SLOPE = 1.56% (predicts E/B channel)

Pocono Mile = 8.72

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	801	Reeders Run enters Pocono Cr (R)	R													
262	0.05	810	elev		B	9	262	3.44%	3		262						262
354	0.07	811	I-80W crosses		G	1	92	1.09%	3							92	92
487	0.09	815	I-80E crosses		G	4	133	3.01%	3							133	133
1069	0.20	815	elev		F	0	582	0.00%	3						582		582
2054	0.39	830	elev		B	15	985	1.52%	3		985						985
3168	0.60	855	elev		B	25	1114	2.24%	3		1,114						1,114
4121	0.78	870	elev		B	15	953	1.57%	3		953						953
4216	0.80	870	pond outlet		G	0	95	0.00%	3							95	95
4569	0.87	870	pond inlet		F	0	353	0.00%	3						353		353
5204	0.99	880	pond outlet		B	10	635	1.57%	3		635						635
5386	1.02	880	pond inlet		G	0	182	0.00%	3							182	182
5861	1.11	885	road xing		G	5	475	1.05%	3							475	475
6917	1.31	889	elev		E	4	1056	0.38%	3					1,056			1,056
8448	1.60	906	UNT1 enters (L) from pond		B	17	1531	1.11%	3		1531						1,531
8818	1.67	912	elev		B	6	370	1.62%	3		370						370
9293	1.76	930	elev		B	18	475	3.79%	3		475						475
9874	1.87	945	road xing		G	15	581	2.58%	3							581	581
10296	1.95	950	UNT2 enters (R)		B	5	422	1.18%	3		422						422
10718	2.03	950	road xing		F	0	422	0.00%	3						422		422
10877	2.06	954	pond outlet		B	4	159	2.52%	3		159						159
11088	2.1	959	UNT3 enters (L) in pond		B	5	211	2.37%	3		211						211
11194	2.12	961	pond inlet		B	2	106	1.89%	3		106						106
11986	2.27	971	elev		B	10	792	1.26%	3		792						792
12408	2.35	978	road xing		G	7	422	1.66%	3							422	422
12830	2.43	984	UNT4 enters (L)		B	6	422	1.42%	3		422						422
13517	2.56	996	elev (end intermittent)		B	12	687	1.75%	3		687						687
15048	2.85	1015	elev		B	19	1531	1.24%	3		1531						1,531
15259	2.89	1024	UNT5 enters (L)		B	9	211	4.27%	3		211						211
15682	2.97	1031	elev		B	7	423	1.65%	3		423						423
16315	3.09	1046	road xing		G	15	633	2.37%	3							633	633
16526	3.13	1052	elev		B	6	211	2.84%	3		211						211
16738	3.17	1061	pond outlet		B	9	212	4.25%	3		212						212
16843	3.19	1063	pond inlet (END)		B	2	105	1.90%	3		105						105
						262	16843	1.56%		0	11817	0	0	1056	1357	2613	16843
										0%	70%	0%	0%	6%	8%	16%	100%

8.72 Reeders Run 1.60 UNT1 (L) from Pond AVG SLOPE = 3.76% (predicts B/G channel)

Pocono Mile = 8.72 - 1.60

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	906	enters Reeders Run (L)	L													
113	0.02	909	elev		B	3	113	2.65%	3		113						113
544	0.10	928	pond outlet		B	19	431	4.41%	3		431						431
771	0.15	935	pond inlet (END)		G	7	227	3.08%	3							227	227
						29	771	3.76%		0	544	0	0	0	0	227	771
										0%	71%	0%	0%	0%	0%	29%	100%

8.72 Reeders Run 1.95 UNT2 (R) AVG SLOPE = 1.95% (predicts B channel)

Pocono Mile = 8.72 - 1.95

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	950	enters Reeders Run (R)	R													
161	0.03	956	road xing		G	6	161	3.73%	3							161	161
492	0.09	967	elev		B	11	331	3.32%	3		331						331
2125	0.40	987	elev		B	20	1633	1.22%	3		1,633						1,633
2318	0.44	989	road xing		G	2	193	1.04%	3							193	193
3669	0.69	1014	elev		B	25	1351	1.85%	3		1,351						1,351
4046	0.77	1028	pond outlet		B	14	377	3.71%	3		377						377
4151	0.79	1031	pond inlet (END)		B	3	105	2.86%	3		105						105
						81	4151	1.95%		0	3797	0	0	0	0	354	4151
										0%	91%	0%	0%	0%	0%	9%	100%

8.72 Reeders Run 2.10 UNT3 (L) from pond AVG SLOPE = 0.52% (predicts E/F channel)

Pocono Mile = 8.72 - 2.10

Ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	959	UNT3 enters Reeders Run (L)	L													
1200	0.23	966	pond outlet		F	7	1200	0.58%	3						1,200		1,200
1470	0.28	967	pond inlet		E	1	270	0.37%	3					270			270
1734	0.33	969	elev		E	2	264	0.76%	3					264			264
2588	0.49	978	pond outlet		E	9	854	1.05%	3					854			854
2840	0.54	978	pond inlet		E	0	252	0.00%	3					252			252
2870	0.54	978	pond outlet		F	0	30	0.00%	3						30		30
3239	0.61	978	pond inlet		E	0	369	0.00%	3					369			369
3653	0.69	978	pond outlet		E	0	414	0.00%	3					414			414
3835	0.73	979	pond inlet (END)		E	1	182	0.55%	3					182			182
						20	3835	0.52%		0	0	0	0	2605	1230	0	3835
										0%	0%	0%	0%	68%	32%	0%	100%

8.72 Reeders Run 2.43 UNT4 (L) - may be Reeders main channel AVG SLOPE = 1.59% (predicts E/B channel)

Pocono Mile = 8.72 - 1.60

Ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	984	UNT4 enters Reeders Run (L) - Reeders main?	L													
1361	0.26	994	elev		E	10	1361	0.73%	3					1,361			1,361
1977	0.37	1006	pond outlet		B	12	616	1.95%	3		616						616
2014	0.38	1006	pond inlet		G	0	37	0.00%	3							37	37
2373	0.45	1019	elev		B	13	359	3.62%	3		359						359
2653	0.50	1024	pond outlet		B	5	280	1.79%	3		280						280
2820	0.53	1024	pond inlet		G	0	167	0.00%	3							167	167
2910	0.55	1024	road xing		G	0	90	0.00%	3							90	90
3732	0.71	1035	elev		B	11	822	1.34%	3		822						822
4355	0.82	1056	elev by power line xing		B	21	623	3.37%	3		623						623
5026	0.95	1064	END near road		B	8	671	1.19%	3		671						671
						80	5026	1.59%	3	0	3371	0	0	1361	0	294	5026
										0%	67%	0%	0%	27%	0%	6%	100%

8.72 Reeders Run 2.89 UNT5 (L) from pond AVG SLOPE = 3.03% (predicts B channel)

Pocono Mile = 8.72 - 2.89

Ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1024	UNT5 enters Reeders Run (L)	L													
261	0.05	1031	elev		B	7	261	2.68%	3		261						261
701	0.13	1045	pond outlet		B	14	440	3.18%	3		440						440
857	0.16	1050	pond inlet (END) by road		B	5	156	3.21%	3		156						156
						26	857	3.03%		0	857	0	0	0	0	0	857
										0%	100%	0%	0%	0%	0%	0%	100%
			REEDERS RUN TOTAL			**498**	**31483**	**1.58%**	**3**	**0**	**20386**	**0**	**0**	**5022**	**2587**	**3488**	**31483**

9.79 Bulgers Run (L) AVG SLOPE = 1.88% (predicts E/B channel)

Pocono Mile = 9.79 field obs: mostly E and B

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	839	enters Pocono Creek (L)	L													
65	0.01	840	611 crosses		G	1	65	1.54%	3							65	65
138	0.03	843	line crossing		B	3	73	4.11%	3		73						73
515	0.10	843	UNT1 (R) from 2 ponds	R	E	0	377	0.00%	3					377			377
602	0.11	844	spur road to Lower Tannersville crosses		F	1	87	1.15%	3						87		87
1738	0.33	853	road xing		E	9	1136	0.79%	3					1,136			1,136
2033	0.39	859	elev		B	6	295	2.03%	3		295						295
2663	0.50	876	elev		B	17	630	2.70%	3		630						630
3826	0.72	899	elev		B	23	1163	1.98%	3		1,163						1,163
4450	0.84	910	UNT2 enters (R)	R	B	11	624	1.76%	3		624						624
4550	0.86	912	pond outlet		B	2	100	2.00%	3		100						100
5009	0.95	922	pond inlet		B	10	459	2.18%	3		459						459
5081	0.96	923	road xing		G	1	72	1.39%	3							72	72
6125	1.16	923	by long shallow pond		E	0	1044	0.00%	3					1,044			1,044
7656	1.45	934	elev		E	11	1531	0.72%	3					1,531			1,531
9979	1.89	958	elev, by pond		E	24	2323	1.03%	3					2,323			2,323
10243	1.94	964	road xing		B	6	264	2.27%	3		264						264
11616	2.20	968	road xing just below wetland area		E	128	1373	9.32%	3					1,373			1,373
12566	2.38	969	UNT3 enters (R) from ponds in wetlands	R	E	1	950	0.11%	3					950			950
14309	2.71	969	elev		E	0	1743	0.00%	3					1,743			1,743
14414	2.73	974	pond outlet		B	5	105	4.76%	3		105						105
14626	2.77	981	pond inlet		B	7	212	3.30%	3		212						212
15048	2.85	992	elev		B	11	422	2.61%	3		422						422

15576	2.95	1002	road xing	B	10	528	1.89%	3		528						528
16051	3.04	1009	elev	B	7	475	1.47%	3		475						475
16421	3.11	1029	pond outlet	G	20	370	5.41%	3							370	370
16579	3.14	1033	pond inlet	B	4	158	2.53%	3		158						158
16685	3.16	1037	road xing	B	4	106	3.77%	3		106						106
17107	3.24	1055	pond outlet	B	18	422	4.27%	3		422						422
17318	3.28	1060	pond inlet	B	5	211	2.37%	3		211						211
18322	3.47	1073	intermittent end in wetland area	E	13	1004	1.29%	3					1004			1,004
19061	3.61	1082	road xing	E	9	739	1.22%	3					739			739
19536	3.7	1082	END in wetland area	E	0	475	0.00%	3					475			475
					367	19536	1.88%		0	6247	0	0	12695	87	507	19536
									0%	32%	0%	0%	65%	0%	3%	100%

9.79 Bulgers Run 0.10 UNT1 (R) from Ponds

Pocono Mile = 9.79 - 0.10

AVG SLOPE = 0.41% (predicts E/F/D channel)

field obs: E in Pocono floodplain

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	843	UNT1 enters Bulgers Run (R) from ponds	R													
824	0.16	843	611 crosses		E	0	824	0.00%	3					824			824
1255	0.24	844	pond outlet		E	1	431	0.23%	3					431			431
1447	0.27	847	pond inlet		G	3	192	1.56%	3							192	192
1535	0.29	849	pond outlet, rd xing		G	2	88	2.27%	3							88	88
1716	0.33	850	pond inlet, END		E	1	181	0.55%	3					181			181
						7	1716	0.41%	3	0	0	0	0	1436	0	280	1716
										0%	0%	0%	0%	84%	0%	16%	100%

9.79 Bulgers Run 0.84 UNT2 (R) intermittent

Pocono Mile = 9.79 - 0.84

AVG SLOPE = 3.15% (predicts B/A channel)

field obs B

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	910	enters Bulgers Run (R)	R													
711	0.13	929	elev		B	19	711	2.67%	3		711						711
988	0.19	951	elev		A	22	277	7.94%	3	277							277
1315	0.25	972	elev		A	21	327	6.42%	3	327							327
1862	0.35	991	elev		B	19	547	3.47%	3		547						547
2606	0.49	1013	elev		B	22	744	2.96%	3		744						744
3344	0.63	1033	elev		B	20	738	2.71%	3		738						738
4708	0.89	1054	elev		B	21	1364	1.54%	3		1,364						1,364
5097	0.97	1072	elev, rd xing		B	18	389	4.63%	3		389						389
5280	1.00	1076	elev		B	4	183	2.19%	3		183						183
5914	1.12	1096	END		B	20	634	3.15%	3		634						634
						186	5914	3.15%	3	604	5310	0	0	0	0	0	5914
										10%	90%	0%	0%	0%	0%	0%	100%

9.79 Bulgers Run 2.38 UNT3 (R) from Ponds, Wetlands

Pocono Mile = 9.79 - 2.38

AVG SLOPE = 2.88% (predicts B channel) field obs E,B

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	969	enters Bulgers Run (R)	R													
320	0.06	969	pond outlet		E	0	320	0.00%	3					320			320
710	0.13	969	pond inlet		E	0	390	0.00%	3					390			390
1008	0.19	974	elev		E	5	298	1.68%	3					298			298
1460	0.28	997	elev		B	23	452	5.09%	3		452						452
1626	0.31	1000	road xing		B	3	166	1.81%	3		166						166
2164	0.41	1005	outlet 3 small ponds		E	5	538	0.93%	3					538			538
2309	0.44	1007	inlet 3 small ponds		E	2	145	1.38%	3					145			145
2671	0.51	1022	elev		B	15	362	4.14%	3		362						362
2880	0.55	1035	elev		A	13	209	6.22%	3	209							209
3156	0.60	1054	elev		A	19	276	6.88%	3	276							276
3432	0.65	1071	elev		A	17	276	6.16%	3	276							276
3991	0.76	1084	END in wetlands		B	13	559	2.33%	3		559						559
						115	3991	2.88%	3	761	1539	0	0	1691	0	0	3991
										19%	39%	0%	0%	42%	0%	0%	100%
			BULGERS RUN TOTAL			**675**	**31157**	**2.17%**	**3**	**1365**	**13096**	**0**	**0**	**15822**	**87**	**787**	**31157**

10.31 UNT6 (R) below INT45 I-80

Pocono Mile = 10.31

AVG SLOPE = 2.00% (predicts B/E channel)

field obs: G,E,B

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	856	enters Pocono Creek (R)	R													
39	0.01	856	pond outlet		G	0	39	0.00%	3							39	39
861	0.16	865	pond inlet		G	9	822	1.09%	3							822	822
1530	0.29	870	road xing		G	5	669	0.75%	3							669	669
1697	0.32	876	pond outlet		G	6	167	3.59%	3							167	167
1825	0.35	891	pond inlet by I80		G	15	128	11.72%	3							128	128
1923	0.36	905	I-80W crosses		G	14	98	14.29%	3							98	98
2033	0.39	912	I-80E crosses		G	7	110	6.36%	3							110	110
2547	0.48	912	UNT1 (L) from large ponds		E	0	514	0.00%	3					514			514
3097	0.59	912	UNT2 (L) from small pond		E	0	550	0.00%	3					550			550
4111	0.78	920	elev		E	8	1014	0.79%	3					1,014			1,014
4703	0.89	935	elev		B	15	592	2.53%	3		592						592
5193	0.98	948	elev		B	13	490	2.65%	3		490						490
5333	1.01	956	road xing		G	8	140	5.71%	3							140	140
5808	1.10	968	elev		B	12	475	2.53%	3		475						475
6230	1.18	984	road xing		B	16	422	3.79%	3		422						422
6494	1.23	986	END by USGS benchmark, near road		E	2	264	0.76%	3					264			264
						130	6494	2.00%		0	1979	0	0	2342	0	2173	6494
										0%	30%	0%	0%	36%	0%	33%	100%

10.31 UNT6 (R) 0.48 UNT1 (L) from Large Ponds

Pocono Mile = 10.31 - 0.48

AVG SLOPE = 2.14% (predicts B channel)

field obs: G,E,B

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	909	enters UNT6 (L)	L													
226	0.04	909	outlet large pond	F		0	226	0.00%	3						226		226
587	0.11	909	inlet large pond	F		0	361	0.00%	3						361		361
1200	0.23	913	outlet small pond	E		4	613	0.65%	3					613			613
1318	0.25	919	inlet small pond	G		6	118	5.08%	3							118	118
1605	0.30	935	elev	A		16	287	5.57%	3	287							287
1814	0.34	955	elev	A		20	209	9.57%	3	209							209
2353	0.45	975	road xing	B		20	539	3.71%	3		539						539
2593	0.49	985	road xing	B		10	240	4.17%	3		240						240
2762	0.52	989	pond outlet	G		4	169	2.37%	3							169	169
3084	0.58	993	pond inlet	E		4	322	1.24%	3					322			322
4059	0.77	996	elev	E		3	975	0.31%	3					975			975
4134	0.78	999	pond outlet	G		3	75	4.00%	3							75	75

4310	0.82	1006	pond inlet	B		7	176	3.98%	3		176						176
4382	0.83	1011	pond outlet, road xing	G		5	72	6.94%	3							72	72
4773	0.90	1011	pond inlet, END	E		0	391	0.00%	3					391			391
						102	4773	2.14%		496	955	0	0	2301	587	434	4773
										10%	20%	0%	0%	48%	12%	9%	100%

10.31 UNT6 (R) 0.59 UNT2 (L) from Small Pond

Pocono Mile = 10.31 - 0.59

AVG SLOPE = 1.28% (predicts E channel)

field obs: G,E,B

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	909	enters UNT6 (L)	L													
1071	0.20	917	elev		E	8	1071	0.75%	3					1,071			1,071
1146	0.22	920	pond outlet		B	3	75	4.00%	3		75						75
1251	0.24	925	pond inlet, END		B	5	105	4.76%	3		105						105
						16	1251	1.28%		0	180	0	0	1071	0	0	1251
										0%	14%	0%	0%	86%	0%	0%	100%
			UNT6 TOTAL			**248**	**12518**	**1.98%**	**3**	**496**	**3114**	**0**	**0**	**5714**	**587**	**2607**	**12518**

10.50 Bisbing Run (L)

Pocono Mile = 10.50

AVG SLOPE = 4.44% (predicts B/A channel)

field obs: G in Tann., A/B in hi slopes, D by 115

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	862	enters Pocono Creek (L)	L													
330	0.06	867	road xing		G	5	330	1.52%	3							330	330
1484	0.28	886	elev		G	19	1154	1.65%	3							1,154	1,154
1713	0.32	890	road xing		G	4	229	1.75%	3							229	229
1897	0.36	896	611 crosses		G	6	184	3.26%	3							184	184
2035	0.39	899	road xing		G	3	138	2.17%	3							138	138
4664	0.88	931	by rt 115		B	32	2629	1.22%	3		2,629						2,629
5173	0.98	947	elev		B	16	509	3.14%	3		509						509
5333	1.01	951	UNT1 enters (L)	L	B	4	160	2.50%	3		160						160
5597	1.06	958	elev		B	7	264	2.65%	3		264						264
5808	1.10	971	elev		A	13	211	6.16%	3	211							211
6019	1.14	989	elev		A	18	211	8.53%	3	211							211
6389	1.21	1019	elev		A	30	370	8.11%	3	370							370
6653	1.26	1040	elev		A	21	264	7.95%	3	264							264
6970	1.32	1063	elev		A	23	317	7.26%	3	317							317
7234	1.37	1072	Rt 115 crosses		D	9	264	3.41%	3				264				264
7498	1.42	1081	elev		B	9	264	3.41%	3		264						264
8448	1.60	1095	elev		B	14	950	1.47%	3		950						950

8976	1.70	1105	Highwood Lake outlet		G	10	528	1.89%	3						528	528
9662	1.83	1115	Highwood Lake inlet		B	10	686	1.46%	3		686					686
10666	2.02	1129	elev		B	14	1004	1.39%	3		1,004					1,004
10771	2.04	1133	road xing		B	4	105	3.81%	3		105					105
11194	2.12	1147	pond outlet		B	14	423	3.31%	3		423					423
11458	2.17	1157	pond inlet, END		B	10	264	3.79%	3		264					264
						295	11458	2.57%		1373	7258	0	264	0	0	2563	11458
										12%	63%	0%	2%	0%	0%	22%	100%

10.50 Bisbing Run (L) 1.01 UNT1 (L) AVG SLOPE = 6.67% (predicts A channel)

Pocono Mile = 10.50 - 1.01 field obs: G in Tann., A/B in hi slopes, D by 115

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	951	enters Bisbing Run (L)	L													
207	0.04	965	elev		A	14	207	6.76%	3	207							207
461	0.09	980	elev		A	15	254	5.91%	3	254							254
832	0.16	1000	elev		A	20	371	5.39%	3	371							371
1209	0.23	1028	elev		A	28	377	7.43%	3	377							377
1384	0.26	1042	elev		A	14	175	8.00%	3	175							175
1572	0.30	1056	elev		A	14	188	7.45%	3	188							188
1828	0.35	1079	elev		A	23	256	8.98%	3	256							256
2077	0.39	1101	elev		A	22	249	8.84%	3	249							249
2378	0.45	1121	elev		A	20	301	6.64%	3	301							301
2689	0.51	1135	elev		A	14	311	4.50%	3	311							311
2954	0.56	1148	END		A	13	265	4.91%	3	265							265
						197	2954	6.67%		2954	0	0	0	0	0	0	2954
										100%	0%	0%	0%	0%	0%	0%	100%
			BISBING RUN TOTAL			**492**	**14412**	**3.41%**	**3**	**4327**	**7258**	**0**	**264**	**0**	**0**	**2563**	**14412**
			WMA3 TOTALS			**3,132**	**165,176**	**1.90%**	**3**	**8,918**	**64,007**	**2,449**	**264**	**64,288**	**6,683**	**18,567**	**165,176**

11.80 Scot Run (L)

AVG SLOPE = 1.73% (predicts B/E channel)

Pocono Mile = 11.80

field obs: main channel B, E some F,G

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	964	Pocono Creek confluence (L)	L													
577	0.11	971	611 crosses		G	7	577	1.21%	4							577	577
2798	0.53	971	elev		E	0	2221	0.00%	4					2,221			2,221
3332	0.63	977	road xing		B	6	534	1.12%	4		534						534
3422	0.65	979	pond outlet		G	2	90	2.22%	4							90	90
3667	0.69	989	pond inlet		B	10	245	4.08%	4		245						245
4057	0.77	990	611 crosses		G	1	390	0.26%	4							390	390
4168	0.79	994	UNT1 (R) from pond	R	B	4	111	3.60%	4		111						111
4541	0.86	1010	pond outlet		B	16	373	4.29%	4		373						373
4811	0.91	1019	pond inlet		B	9	270	3.33%	4		270						270
4858	0.92	1019	pond outlet		G	0	47	0.00%	4							47	47
5045	0.96	1024	pond inlet		B	5	187	2.67%	4		187						187
5201	0.98	1027	Transue Run backchannel (R)	R	B	3	156	1.92%	4		156						156
5237	0.99	1027	UNT2 (L)	L	E	0	36	0.00%	4					36			36
5544	1.05	1027	Transue Run (R)	R	E	0	307	0.00%	4					307			307
6019	1.14	1034	611 crosses		B	7	475	1.47%	4		475						475
6442	1.22	1041	road xing		B	7	423	1.65%	4		423						423
7234	1.37	1052	elev		B	11	792	1.39%	4		792						792
7339	1.39	1053	UNT3 (L) from Huckleberry Swamp	L	F	1	105	0.95%	4						105		105
7973	1.51	1072	611 crosses		B	19	634	3.00%	4		634						634
8659	1.64	1091	elev		B	19	686	2.77%	4		686						686
9398	1.78	1116	elev		B	25	739	3.38%	4		739						739
9662	1.83	1120	road xing		B	4	264	1.52%	4		264						264
10085	1.91	1122	road xing		E	2	423	0.47%	4					423			423
10243	1.94	1123	Leisure Lake tributary enters (L)	L	E	1	158	0.63%	4					158			158
10824	2.05	1129	road xing		E	6	581	1.03%	4					581			581
12091	2.29	1152	elev		B	23	1267	1.82%	4		1267						1,267
12778	2.42	1173	elev		B	21	687	3.06%	4		687						687
12883	2.44	1180	lake outlet		G	7	105	6.67%	4							105	105
13992	2.65	1204	lake inlet		B	24	1109	2.16%	4		1109						1,109
15048	2.85	1207	road xing		E	3	1056	0.28%	4					1056			1,056

15259	2.89	1210	Brookdale Lake outlet		G	3	211	1.42%	4							211	211
15629	2.96	1210	UNT4 enters (R) incl UNT5		F	0	370	0.00%	4						370		370
16949	3.21	1212	Brookdale Lake inlet		E	2	1320	0.15%	4					1320			1,320
17635	3.34	1229	road xing		B	17	686	2.48%	4		686						686
17952	3.40	1242	elev		B	13	317	4.10%	4		317						317
18322	3.47	1256	elev		B	14	370	3.78%	4		370						370
18638	3.53	1273	pond outlet		A	17	316	5.38%	4	316							316
18955	3.59	1292	pond inlet, END		A	19	317	5.99%	4	317							317
						328	**18955**	**1.73%**	**4**	**633**	**10325**	**0**	**0**	**6102**	**475**	**1420**	**18955**
										3%	54%	0%	0%	32%	3%	7%	100%

11.80 Scot Run (L) 0.79 UNT1 (R)

AVG SLOPE = 3.76% (predicts B channel)

Pocono Mile = 11.80 - 0.79

field obs: main channel B, E some F,G

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	994	enters Scot Run (R)	R													
59	0.01	997	road xing		B	3	59	5.08%	4		59						59
134	0.03	1000	pond outlet		B	3	75	4.00%	4		75						75
266	0.05	1004	pond inlet, END		B	4	132	3.03%	4		132						132
						10	**266**	**3.76%**	**4**	**0**	**266**	**0**	**0**	**0**	**0**	**0**	**266**
										0%	100%	0%	0%	0%	0%	0%	100%

11.80 Scot Run (L) 0.98 Back Channel to Transue Run (R)

avg slope = 0.00% (predicts E channel)

Pocono Mile = 11.80 - 0.79

field obs: main channel B, E some F,G

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1027	enters Scot Run (R)	R													
504	0.10	1027	connect with Transue Run at mi 0.04	R	E	0	504	0.00%	4				504				504
						0	**504**	**0.00%**	**4**	**0**	**0**	**0**	**504**	**0**	**0**	**0**	**504**
										0%	0%	0%	####	0%	0%	0%	100%

11.80 Scot Run (L) 0.99 UNT2 (L)

AVG SLOPE = 3.39% (predicts B channel)

Pocono Mile = 11.80 - 0.99

field obs: main channel B, E some F,G

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1027	enters Scot Run (L)	L													
127	0.02	1034	road xing		G	7	127	5.51%	4							127	127
489	0.09	1052	elev		B	18	362	4.97%	4		362						362
780	0.15	1066	elev		B	14	291	4.81%	4		291						291
1089	0.21	1090	elev		A	24	309	7.77%	4	309							309
1322	0.25	1103	road xing		A	13	233	5.58%	4	233							233
1723	0.33	1126	elev		A	23	401	5.74%	4	401							401
2037	0.39	1143	elev, by pond		A	17	314	5.41%	4	314							314
2648	0.50	1164	elev		B	21	611	3.44%	4		611						611
3197	0.61	1183	elev, by loop road		B	19	549	3.46%	4		549						549
4254	0.81	1198	elev		B	15	1057	1.42%	4		1,057						1,057
4890	0.93	1212	road xing		B	14	636	2.20%	4		636						636
5544	1.05	1215	END near gravel pit		B	3	654	0.46%	4		654						654
						188	**5544**	**3.39%**	**4**	**1257**	**4160**	**0**	**0**	**0**	**0**	**127**	**5544**
										23%	75%	0%	0%	0%	0%	2%	100%

11.80 Scot Run (L) 1.05 Transue Run (R)

AVG SLOPE = 3.91% (predicts B channel)

Pocono Mile = 11.80 - 1.05

field obs: main channel B, E some F,G

ft	mi	elev	feature	side	type	rise	length	slope	area	a	b	c	d	e	f	g	TOTAL
0	0.00	1027	enters Scot Run (R)	R													
217	0.04	1027	back channel to Scot Run (R) at mi 0.98	R	E	0	217	0.00%	4					217			217
311	0.06	1028	road xing		G	1	94	1.06%	4							94	94
676	0.13	1041	pond outlet		G	13	365	3.56%	4							365	365
867	0.16	1044	pond inlet		G	3	191	1.57%	4							191	191
1416	0.27	1055	elev		B	11	549	2.00%	4		549						549
1968	0.37	1074	elev		B	19	552	3.44%	4		552						552
2866	0.54	1100	pond outlet		G	26	898	2.90%	4							898	898
3049	0.58	1110	pond inlet		G	10	183	5.46%	4							183	183
3634	0.69	1122	elev		B	12	585	2.05%	4		585						585
4181	0.79	1136	elev		B	14	547	2.56%	4		547						547
4833	0.92	1155	elev		B	19	652	2.91%	4		652						652

5438	1.03	1179	elev - meets rd, runs alongside		B	24	605	3.97%	4		605					605
6072	1.15	1196	elev		B	17	634	2.68%	4		634					634
6706	1.27	1220	elev		B	24	634	3.79%	4		634					634
7128	1.35	1239	elev		B	19	422	4.50%	4		422					422
7339	1.39	1249	road xing		G	10	211	4.74%	4						211	211
7603	1.44	1256	by small pond		B	7	264	2.65%	4		264					264
8131	1.54	1266	small trib UNT6 enters (R)	R	B	10	528	1.89%	4		528					528
8184	1.55	1266	small trib UNT7 enters from pond (R)	R	G	0	53	0.00%	4						53	53
8765	1.66	1272	elev		B	6	581	1.03%	4		581					581
9082	1.72	1290	road xing		G	18	317	5.68%	4						317	317
9293	1.76	1298	elev		B	8	211	3.79%	4		211					211
9715	1.84	1309	UNT8 enters (R)	R	B	11	422	2.61%	4		422					422
9926	1.88	1314	elev		B	5	211	2.37%	4		211					211
10718	2.03	1340	elev		B	26	792	3.28%	4		792					792
11774	2.23	1358	elev		B	18	1056	1.70%	4		1,056					1,056
12355	2.34	1374	elev		B	16	581	2.75%	4		581					581
12936	2.45	1396	elev		B	22	581	3.79%	4		581					581
13411	2.54	1434	elev		A	38	475	8.00%	4	475						475
13622	2.58	1463	elev		A	29	211	13.74%	4	211						211
13834	2.62	1482	elev		A	19	212	8.96%	4	212						212
14045	2.66	1484	elev		B	2	211	0.95%	4		211					211
14256	2.70	1505	elev		A	21	211	9.95%	4	211						211
14467	2.74	1523	elev		A	18	211	8.53%	4	211						211
14626	2.77	1554	elev		A	31	159	19.50%	4	159						159
14731	2.79	1578	elev		A	24	105	22.86%	4	105						105
14837	2.81	1601	elev		A	23	106	21.70%	4	106						106
14942	2.83	1617	elev		A	16	105	15.24%	4	105						105
15101	2.86	1629	elev		A	12	159	7.55%	4	159						159
15470	2.93	1661	elev		A	32	369	8.67%	4	369						369
15893	3.01	1704	elev		A	43	423	10.17%	4	423						423
16315	3.09	1708	elev		E	4	422	0.95%	4				422			422
16738	3.17	1709	elev		E	1	423	0.24%	4				423			423
17424	3.30	1719	elev		E	10	686	1.46%	4				686			686
18058	3.42	1733	END		B	14	634	2.21%	4		634					634
						706	18058	3.91%	4	2746	11252	0	0	1748	0	2312	18,058
										15%	62%	0%	0%	10%	0%	13%	100%

11.80 Scot Run (L) 1.05 Transue Run (R) 1.54 UNT6 (R)

AVG SLOPE = 4.69% (predicts B/A channel)

Pocono Mile = 11.80 - 1.05 - 1.54

field obs: main channel B, E some F,G

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1266	Enters Transue Run (R)	R													
109	0.02	1269	elev		B	3	109	2.75%	4		109						109
581	0.11	1294	elev		A	25	472	5.30%	4	472							472
789	0.15	1303	END in gravel pit		B	9	208	4.33%	4		208						208
						37	789	4.69%	4	472	317	0	0	0	0	0	789
										60%	40%	0%	0%	0%	0%	0%	100%

11.80 Scot Run (L) 1.05 Transue Run (R) 1.55 UNT7 (R)

AVG SLOPE = 1.39% (predicts B channel)

Pocono Mile = 11.80 - 1.05 - 1.55

field obs: main channel B, E some F,G

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1266	Enters Transue Run (R)	R													
83	0.02	1266	pond outlet		G	0	83	0.00%	4							83	83
216	0.04	1269	pond inlet, END		B	3	133	2.26%	4		133						133
						3	216	1.39%	4	0	133	0	0	0	0	83	216
										0%	62%	0%	0%	0%	0%	38%	100%

11.80 Scot Run (L) 1.05 Transue Run (R) 1.84 UNT8 (R)

AVG SLOPE = 6.38% (predicts A channel)

Pocono Mile = 11.80 - 1.05 - 1.84

field obs: main channel B, E some F,G

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1309	enters Transue Run (R)	R													
538	0.10	1333	elev		B	24	538	4.46%	4		538						538
916	0.17	1356	road xing		A	23	378	6.08%	4	378							378
1388	0.26	1378	pond outlet		G	22	472	4.66%	4							472	472
1495	0.28	1381	pond inlet		B	3	107	2.80%	4		107						107
1801	0.34	1392	elev		B	11	306	3.59%	4		306						306
2166	0.41	1420	elev		A	28	365	7.67%	4	365							365
2553	0.48	1443	elev		A	23	387	5.94%	4	387							387
2877	0.54	1460	elev		A	17	324	5.25%	4	324							324
3217	0.61	1482	elev		A	22	340	6.47%	4	340							340

3467	0.66	1502	elev	A	20	250	8.00%	4	250							250
3714	0.70	1521	elev	A	19	247	7.69%	4	247							247
3988	0.76	1535	elev	A	14	274	5.11%	4	274							274
4251	0.81	1555	elev	A	20	263	7.60%	4	263							263
4479	0.85	1581	elev	A	26	228	11.40%	4	228							228
4822	0.91	1618	elev	A	37	343	10.79%	4	343							343
5091	0.96	1634	END	A	16	269	5.95%	4	269							269
					325	5091	6.38%	4	3668	951	0	0	0	0	472	5,091
									72%	19%	0%	0%	0%	0%	9%	100%
			TRANSUE RUN TOTALS		**1071**	**24154**	**4.43%**	**4**	**6886**	**12653**	**0**	**0**	**1748**	**0**	**2867**	**24154**

11.80 Scot Run (L) 1.39 UNT3 from Huckleberry Swamp (L)

AVG SLOPE = 2.38% (predicts B channel)

Pocono Mile = 11.80 - 1.39

field obs: main channel B, E some F,G

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1053	enters Scot Run (R)	R													
361	0.07	1064	road xing		B	11	361	3.05%	4		361						361
765	0.14	1080	elev		B	16	404	3.96%	4		404						404
1079	0.20	1088	road xing		B	8	314	2.55%	4		314						314
1493	0.28	1100	elev		B	12	414	2.90%	4		414						414
2057	0.39	1125	elev		B	25	564	4.43%	4		564						564
2644	0.50	1147	elev		B	22	587	3.75%	4		587						587
3278	0.62	1149	elev		E	2	634	0.32%	4					634			634
3487	0.66	1153	dirt rd xing		B	4	209	1.91%	4		209						209
4672	0.88	1164	END in Huckleberry Swamp		E	11	1185	0.93%	4					1,185			1,185
						111	**4672**	**2.38%**	**4**	**0**	**2853**	**0**	**0**	**1819**	**0**	**0**	**4,672**
										0%	61%	0%	0%	39%	0%	0%	100%

11.80 Scot Run (L) 1.94 Leisure Lake trib (L)

AVG SLOPE = 0.95% (predicts E channel)

Pocono Mile = 11.80 - 1.94

field obs: E, A or B, ponds/lakes

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1123	enters Scot Run (L)	L													
280	0.05	1123	Leisure Lake outlet		E	0	280	0.00%	4					280			280
1051	0.20	1125	Leisure Lake inlet		E	2	771	0.26%	4					771			771
1359	0.26	1144	elev		A	19	308	6.17%	4	308							308
1516	0.29	1152	road xing		A	8	157	5.10%	4	157							157
2298	0.44	1157	elev		E	5	782	0.64%	4					782			782
3109	0.59	1166	lake outlet		E	9	811	1.11%	4					811			811
3934	0.75	1171	lake inlet		E	5	825	0.61%	4					825			825
4257	0.81	1173	elev		E	2	323	0.62%	4					323			323
4995	0.95	1181	road xing		E	8	738	1.08%	4					738			738
5062	0.96	1181	road xing		E	0	67	0.00%	4					67			67
5491	1.04	1181	road xing in swamp		E	0	429	0.00%	4					429			429
6864	1.30	1188	END in swamp		E	7	1373	0.51%	4					1,373			1,373
						65	**6864**	**0.95%**	**4**	**465**	**0**	**0**	**0**	**6399**	**0**	**0**	**6,864**
										7%	0%	0%	0%	93%	0%	0%	100%

11.80 Scot Run (L) 2.96 UNT4 (R)

AVG SLOPE = 6.45% (predicts A channel)

Pocono Mile = 11.80 - 2.96

field obs: A/B

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1210	enters Scot Run (R) in Lk Brookdale	R													
223	0.04	1217	road xing		B	7	223	3.14%	4		223						223
713	0.14	1238	elev		B	21	490	4.29%	4		490						490
1155	0.22	1245	UNT5 enters (L)		B	7	442	1.58%	4		442						442
1667	0.32	1267	road xing		B	22	512	4.30%	4		512						512
1796	0.34	1272	UNT9 enters (R) from pond		B	5	129	3.88%	4		129						129
2200	0.42	1286	elev		B	14	404	3.47%	4		404						404
2610	0.49	1308	road xing		A	22	410	5.37%	4	410							410
3143	0.60	1338	elev		A	30	533	5.63%	4	533							533
3364	0.64	1351	elev		A	13	221	5.88%	4	221							221
3668	0.69	1377	elev		A	26	304	8.55%	4	304							304

3917	0.74	1397	elev	A	20	249	8.03%	4	249							249
4281	0.81	1421	elev	A	24	364	6.59%	4	364							364
4521	0.86	1439	elev	A	18	240	7.50%	4	240							240
4720	0.89	1462	elev	A	23	199	11.56%	4	199							199
5033	0.95	1490	elev	A	28	313	8.95%	4	313							313
5280	1.00	1507	elev	A	17	247	6.88%	4	247							247
5491	1.04	1532	elev	A	25	211	11.85%	4	211							211
5650	1.07	1553	elev	A	21	159	13.21%	4	159							159
5808	1.10	1569	elev	A	16	158	10.13%	4	158							158
5966	1.13	1595	END	A	26	158	16.46%	4	158							158
					385	5966	6.45%	4	3766	2200	0	0	0	0	0	5,966
									63%	37%	0%	0%	0%	0%	0%	100%

11.80 Scot Run (L) 2.96 UNT4 (R) 0.22 UNT5 (L)

AVG SLOPE = 5.21% (predicts A channel)

Pocono Mile = 11.80 - 2.96 - 0.22

field obs: A or B

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1245	enters UNT4 (L)	L													
101	0.02	1247	elev		B	2	101	1.98%	4		101						101
738	0.14	1267	elev		B	20	637	3.14%	4		637						637
979	0.19	1277	road xing		B	10	241	4.15%	4		241						241
1403	0.27	1288	elev		B	11	424	2.59%	4		424						424
1871	0.35	1305	road xing		B	17	468	3.63%	4		468						468
2346	0.44	1312	elev		B	7	475	1.47%	4		475						475
2637	0.50	1331	elev		A	19	291	6.53%	4	291							291
2962	0.56	1350	elev		A	19	325	5.85%	4	325							325
3192	0.60	1368	elev		A	18	230	7.83%	4	230							230
3335	0.63	1383	elev		A	15	143	10.49%	4	143							143
3520	0.67	1403	elev		A	20	185	10.81%	4	185							185
3776	0.72	1428	elev		A	25	256	9.77%	4	256							256
3977	0.75	1444	elev		A	16	201	7.96%	4	201							201
4263	0.81	1462	elev		A	18	286	6.29%	4	286							286
4394	0.83	1474	END		A	12	131	9.16%	4	131							131
						229	4394	5.21%	4	2048	2346	0	0	0	0	0	4,394
										47%	53%	0%	0%	0%	0%	0%	100%

11.80 Scot Run (L) 2.96 UNT4 (R) 0.34 (R) from pond

AVG SLOPE = 6.45% (predicts A channel)

Pocono Mile = 11.80 - 2.96 - 0.34

field obs: A,B, some E

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1272	enters UNT4 (R)	R													
186	0.04	1282	elev		A	10	186	5.38%	4	186							186
265	0.05	1287	pond outlet		A	5	79	6.33%	4	79							79
379	0.07	1299	pond inlet (END)		A	12	114	10.53%	4	114							114
						27	379	7.12%	4	379	0	0	0	0	0	0	379
										100%	0%	0%	0%	0%	0%	0%	100%
			UNT4 TOTALS			**641**	**10739**	**5.97%**	**4**	**6193**	**4546**	**0**	**0**	**0**	**0**	**0**	**10739**
			WMA4 TOTALS			**2414**	**71698**	**3.37%**	**4**	**15434**	**34803**	**0**	**504**	**16068**	**475**	**4414**	**71698**

12.13 UNT7 (L) from pond

AVG SLOPE = 2.61% (predicts B channel)

Pocono Mile = 12.13

field obs: none

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	988	Pocono Creek confluence (L)	L													
159	0.03	993	road xing		B	5	159	3.14%	5		159						159
231	0.04	994	pond outlet		B	1	72	1.39%	5		72						72
383	0.07	998	pond inlet (END)		B	4	152	2.63%	5		152						152
						10	383	2.61%	5	0	383	0	0	0	0	0	383
										0%	100%	0%	0%	0%	0%	0%	100%

12.18 UNT8 (L) from pond

Pocono Mile = 12.18

AVG SLOPE = 1.30% (predicts E/B channel)

field obs: none

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	988	Pocono Creek confluence (L)	L													
150	0.03	990	elev		B	2	150	1.33%	5		150						150
312	0.06	993	pond outlet		B	3	162	1.85%	5		162						162
461	0.09	994	pond inlet (END)		E	1	149	0.67%	5					149			149
						6	461	1.30%	5	0	312	0	0	149	0	0	461
										0%	68%	0%	0%	32%	0%	0%	100%

13.11 Coolmor Creek (R)

Pocono Mile = 13.11

AVG SLOPE = 3.02% (predicts B channel)

field obs: B, E

ft	mi	elev	feature	side	type	rise	length	slope	area	a	b	c	d	e	f	g	TOTAL
0	0.00	1098	enters Pocono Creek (R)	R													
184	0.03	1103	road xing		B	5	184	2.72%	5		184						184
463	0.09	1115	elev		B	12	279	4.30%	5		279						279
1230	0.23	1140	elev		B	25	767	3.26%	5		767						767
1658	0.31	1171	pond outlet, road xing		A	31	428	7.24%	5	428							428
2107	0.40	1191	pond inlet		B	20	449	4.45%	5		449						449
2531	0.48	1219	elev		A	28	424	6.60%	5	424							424
2834	0.54	1238	elev		A	19	303	6.27%	5	303							303
3242	0.61	1238	elev		E	0	408	0.00%	5					408			408
3577	0.68	1238	Coolmor UNT1 enters (R)		E	0	335	0.00%	5					335			335
3647	0.69	1238	Coolmor UNT2 enters (R)		E	0	70	0.00%	5					70			70
3882	0.74	1240	elev		E	2	235	0.85%	5					235			235
4040	0.77	1246	road xing		G	6	158	3.80%	5							158	158
4138	0.78	1246	Coolmor UNT3 enters (L) from wetland		E	0	98	0.00%	5					98			98
4845	0.92	1253	Coolmor UNT4 enters (R) from lake		E	7	707	0.99%	5					707			707
4948	0.94	1255	road xing		E	2	103	1.94%	5					103			103
5077	0.96	1260	elev		B	5	129	3.88%	5		129						129
6178	1.17	1302	road xing at intersection		B	42	1101	3.81%	5		1101						1,101
7128	1.35	1313	END at road xing		E	11	950	1.16%	5					950			950
						215	7128	3.02%	5	1155	2909	0	0	2906	0	158	7128
										16%	41%	0%	0%	41%	0%	2%	100%

13.11 Coolmor Creek (R) 0.68 UNT1 (R)

Pocono Mile = 13.11 - 0.68

AVG SLOPE = 7.23% (predicts A channel)

field obs: NONE

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1238	enters Coolmor Creek (R)	R													
258	0.05	1259	elev		A	21	258	8.14%	5	258							258
433	0.08	1290	elev		A	31	175	17.71%	5	175							175
758	0.14	1316	elev		A	26	325	8.00%	5	325							325
1091	0.21	1333	elev		A	17	333	5.11%	5	333							333
1394	0.26	1340	elev		B	7	303	2.31%	5		303						303
1610	0.30	1359	pond outlet		A	19	216	8.80%	5	216							216
1872	0.35	1376	pond inlet		A	17	262	6.49%	5	262							262
2271	0.43	1401	elev		A	25	399	6.27%	5	399							399
2556	0.48	1431	elev		A	30	285	10.53%	5	285							285
2799	0.53	1444	elev		A	13	243	5.35%	5	243							243
2988	0.57	1454	END		A	10	189	5.29%	5	189							189
						216	2988	7.23%	5	2685	303	0	0	0	0	0	2988
										90%	10%	0%	0%	0%	0%	0%	100%

13.11 Coolmor Creek (R) 0.69 UNT2 (R)

Pocono Mile = 13.11 - 0.69

AVG SLOPE = 8.99% (predicts A channel)

field obs: NONE

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1238	enters Coolmor Creek (R)	R													
283	0.05	1258	elev		A	20	283	7.07%	5	283							283
485	0.09	1280	elev		A	22	202	10.89%	5	202							202
716	0.14	1305	elev		A	25	231	10.82%	5	231							231
835	0.16	1318	elev		A	13	119	10.92%	5	119							119
950	0.18	1332	elev		A	14	115	12.17%	5	115							115
1053	0.20	1340	pond outlet		A	8	103	7.77%	5	103							103
1246	0.24	1350	pond inlet (END)		A	10	193	5.18%	5	193							193
						112	1246	8.99%	5	1246	0	0	0	0	0	0	1246
										100%	0%	0%	0%	0%	0%	0%	100%

13.11 Coolmor Creek (R) 0.78 UNT3 (L) from swamp

AVG SLOPE = 0.58% (predicts E channel)

Pocono Mile = 13.11 - 0.78

field obs: NONE

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1246	enters Coolmor Creek (L)	L													
860	0.16	1251	END in wetland area		E	5	860	0.58%	5					860			860
						5	860	0.58%	5	0	0	0	0	860	0	0	860
										0%	0%	0%	0%	100%	0%	0%	100%

13.11 Coolmor Creek (R) 0.92 UNT4 (R) from lake

AVG SLOPE = 2.68% (predicts B channel)

Pocono Mile = 13.11 - 0.92

field obs: NONE

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1253	enters Coolmor Creek (R)	R													
132	0.03	1265	elev		A	12	132	9.09%	5	132							132
935	0.18	1293	lake outlet		B	28	803	3.49%	5		803						803
1491	0.28	1293	lake inlet, END by road		E	0	556	0.00%	5					556			556
						40	1491	2.68%	5	132	803	0	0	556	0	0	1491
										9%	54%	0%	0%	37%	0%	0%	100%
			COOLMOR CREEK TOTALS			588	13713	4.29%	5	5218	4015	0	0	4322	0	158	13713
			WMA5 TOTALS			604	14557	4.15%	5	5218	4710	0	0	4471	0	158	14557

15.19 Wolf Swamp Run (R)

AVG SLOPE = 3.05% (predicts B channel)

Pocono Mile = 15.19

field obs: small reach A/B, flat areas E

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1400	enters Pocono Cr (R) near end of Wilkie Rd	R													
309	0.06	1417	elev		A	17	309	5.50%	6	309							309
788	0.15	1455	elev		A	38	479	7.93%	6	479							479
1432	0.27	1459	elev		E	4	644	0.62%	6					644			644
1981	0.38	1483	elev		B	24	549	4.37%	6		549						549
2322	0.44	1510	Wolf Swamp Run UNT1 enters (L) by Jeep trail		A	27	341	7.92%	6	341							341
2790	0.53	1522	elev		B	12	468	2.56%	6		468						468

2967	0.56	1530	elev	B	8	177	4.52%	6		177						177
3167	0.60	1537	elev	B	7	200	3.50%	6		200						200
3742	0.71	1542	elev	E	5	575	0.87%	6					575			575
4382	0.83	1559	elev	B	17	640	2.66%	6		640						640
5199	0.98	1586	elev	B	27	817	3.30%	6		817						817
5491	1.04	1613	elev	A	27	292	9.25%	6	292							292
5966	1.13	1637	by Beehive hill	A	24	475	5.05%	6	475							475
6230	1.18	1659	elev	A	22	264	8.33%	6	264							264
6494	1.23	1685	elev	A	26	264	9.85%	6	264							264
6917	1.31	1699	elev	B	14	423	3.31%	6		423						423
7128	1.35	1709	elev	B	10	211	4.74%	6		211						211
7339	1.39	1736	elev	A	27	211	12.80%	6	211							211
7445	1.41	1753	elev	A	17	106	16.04%	6	106							106
7550	1.43	1771	elev	A	18	105	17.14%	6	105							105
7709	1.46	1790	elev	A	19	159	11.95%	6	159							159
8237	1.56	1822	elev	A	32	528	6.06%	6	528							528
8712	1.65	1823	elev	E	1	475	0.21%	6					475			475
9715	1.84	1834	elev	E	11	1003	1.10%	6					1003			1,003
10507	1.99	1844	lake outlet, road xing	E	10	792	1.26%	6					792			792
13781	2.61	1844	lake inlet	E	0	3274	0.00%	6					3274			3,274
14678	2.78	1847	END in wetlands	E	3	897	0.33%	6					897			897
					447	14678	3.05%	6	3533	3485	0	0	7660	0	0	14678
									24%	24%	0%	0%	52%	0%	0%	100%

15.19 Wolf Swamp Run (R) 0.44 UNT1 (L) by Jeep trail

AVG SLOPE = 5.72% (predicts A channel)

Pocono Mile = 15.19 - 0.44

field obs: NONE

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1510	enters Wolf Swamp Run (L)	L													
865	0.16	1518	elev	E		8	865	0.92%	6					865			865
949	0.18	1521	trail crosses (Jeep trail)	B		3	84	3.57%	6		84						84
1306	0.25	1553	trail crosses (old RR grade)	A		32	357	8.96%	6	357							357
1595	0.30	1567	elev	A		14	289	4.84%	6	289							289
1966	0.37	1589	elev	A		22	371	5.93%	6	371							371
2202	0.42	1613	elev	A		24	236	10.17%	6	236							236
2390	0.45	1629	elev	A		16	188	8.51%	6	188							188

2556	0.48	1643	elev	A		14	166	8.43%	6	166						166
2759	0.52	1667	elev	A		24	203	11.82%	6	203						203
2936	0.56	1682	elev	A		15	177	8.47%	6	177						177
3166	0.60	1700	elev	A		18	230	7.83%	6	230						230
3350	0.63	1714	elev	A		14	184	7.61%	6	184						184
3547	0.67	1731	elev	A		17	197	8.63%	6	197						197
3878	0.73	1753	elev	A		22	331	6.65%	6	331						331
4139	0.78	1772	elev	A		19	261	7.28%	6	261						261
4683	0.89	1798	elev	A		26	544	4.78%	6	544						544
4913	0.93	1811	elev	A		13	230	5.65%	6	230						230
5276	1.00	1832	elev	A		21	363	5.79%	6	363						363
5650	1.07	1844	pond outlet	B		12	374	3.21%	6		374					374
5914	1.12	1848	pond inlet (END)	E		4	264	1.52%	6					264		264
						338	5914	5.72%	6	4327	458	0	0	1129	0	0	5914
										73%	8%	0%	0%	19%	0%	0%	100%
			WOLF SWAMP SUMMARY			785	20592	3.81%	6	7860	3943	0	0	8789	0	0	20592

15.46 Sand Spring Run (R)

AVG SLOPE = 3.32% (predicts B channel)

Pocono Mile = 15.46

field obs: small reach A/B, flat areas E

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1453	enters Pocono Cr (R) just below I-80	R													
79	0.01	1461	elev		A	8	79	10.13%	6	79							79
426	0.08	1493	elev		A	32	347	9.22%	6	347							347
657	0.12	1518	elev		A	25	231	10.82%	6	231							231
1061	0.20	1528	elev		B	10	404	2.48%	6		404						404
1222	0.23	1540	elev		A	12	161	7.45%	6	161							161
1622	0.31	1576	trail crosses (old RR grade)		A	36	400	9.00%	6	400							400
1726	0.33	1576	lake outlet		E	0	104	0.00%	6					104			104
2864	0.54	1576	lake inlet		E	0	1138	0.00%	6					1,138			1,138
3371	0.64	1580	elev		E	4	507	0.79%	6					507			507
4230	0.80	1602	elev		B	22	859	2.56%	6		859						859
4822	0.91	1624	elev		B	22	592	3.72%	6		592						592
5491	1.04	1652	elev		B	28	669	4.19%	6		669						669
6336	1.20	1656	elev		E	4	845	0.47%	6					845			845

6811	1.29	1683	elev		A	27	475	5.68%	6	475							475
7392	1.40	1698	elev		B	15	581	2.58%	6		581						581
8131	1.54	1731	elev		B	33	739	4.47%	6		739						739
8395	1.59	1756	elev		A	25	264	9.47%	6	264							264
8976	1.70	1762	elev		E	6	581	1.03%	6					581			581
9346	1.77	1774	elev		B	12	370	3.24%	6		370						370
9662	1.83	1775	lake outlet (Sand Spring)		E	1	316	0.32%	6					316			316
10296	1.95	1776	lake inlet (Sand Spring)		E	1	634	0.16%	6					634			634
10560	2.00	1801	elev		A	25	264	9.47%	6	264							264
10718	2.03	1822	elev		A	21	158	13.29%	6	158							158
10877	2.06	1839	elev		A	17	159	10.69%	6	159							159
11035	2.09	1845	Deep Lake outlet		B	6	158	3.80%	6		158						158
11880	2.25	1847	Deep Lake inlet		E	2	845	0.24%	6					845			845
						394	11880	3.32%	6	2538	4372	0	0	4970	0	0	11880
										21%	37%	0%	0%	42%	0%	0%	100%

15.61 Dry Sawmill Run (L)

AVG SLOPE = 1.58% (predicts E or B channel)

Pocono Mile = 15.61

field obs: A/B, F/G by roads, flat areas E

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1495	joins Crescent Lk trib (R) forming Pocono Cr abv I-80E	L													
306	0.06	1500	elev		B	5	306	1.63%	6		306						306
404	0.08	1520	emerge from under I-80W		G	20	98	20.41%	6							98	98
800	0.15	1589	enter culvert under I-80W		F	69	396	17.42%	6						396		396
1127	0.21	1589	elev		E	0	327	0.00%	6					327			327
2098	0.40	1590	elev		E	1	971	0.10%	6					971			971
2535	0.48	1601	elev		B	11	437	2.52%	6		437						437
2800	0.53	1614	elev		B	13	265	4.91%	6		265						265
4062	0.77	1640	elev - use outside channel at split		B	26	1262	2.06%	6		1,262						1,262
4799	0.91	1673	elev		B	33	737	4.48%	6		737						737
6019	1.14	1679	elev		E	6	1220	0.49%	6					1,220			1,220
6389	1.21	1684	Dry Sawmill UNT1 (L) from lake	L	E	5	370	1.35%	6					370			370
6494	1.23	1684	driveway crossing		E	0	105	0.00%	6					105			105
6811	1.29	1693	elev		B	9	317	2.84%	6		317						317
7445	1.41	1715	trail crossing (old RR grade) by small pond		B	22	634	3.47%	6		634						634
7814	1.48	1720	road xing		B	5	369	1.36%	6		369						369

8870	1.68	1722	Dry Sawmill UNT2 (R) enters from 2 small lakes	R	E	2	1056	0.19%	6					1056				1,056
8923	1.69	1725	road xing		G	3	53	5.66%	6							53		53
9504	1.80	1737	elev		B	12	581	2.07%	6		581							581
10296	1.95	1760	elev		B	23	792	2.90%	6		792							792
11246	2.13	1771	Dry Sawmill UNT3 (L) enters from small lake	L	B	11	950	1.16%	6		950							950
11563	2.19	1771	elev		E	0	317	0.00%	6					317				317
12672	2.40	1799	emerge from under I-380N culvert		B	28	1109	2.52%	6		1109							1,109
12936	2.45	1811	enter I-380N culvert		F	12	264	4.55%	6						264			264
13358	2.53	1817	emerge from under I-380S culvert		F	6	422	1.42%	6						422			422
13517	2.56	1824	enter I-380S culvert		F	7	159	4.40%	6						159			159
13728	2.60	1824	road xing		G	0	211	0.00%	6							211		211
15101	2.86	1824	Little Deer Pond trib enters (R)	R	E	0	1373	0.00%	6					1373				1,373
17160	3.25	1840	elev		E	16	2059	0.78%	6					2059				2,059
17846	3.38	1854	Pine Tree Lake outlet, road xing		B	14	686	2.04%	6		686							686
18797	3.56	1859	Deer Pond trib (R) enters Pine Tree Lake	R	E	5	951	0.53%	6					951				951
20486	3.88	1859	Pine Tree Lake inlet		E	0	1689	0.00%	6					1689				1,689
20698	3.92	1868	elev		B	9	212	4.25%	6		212							212
20962	3.97	1876	road xing		B	8	264	3.03%	6		264							264
21490	4.07	1887	elev		B	11	528	2.08%	6		528							528
22968	4.35	1917	map shows road xing, lake outlet here, no road		B	30	1478	2.03%	6		1478							1,478
24077	4.56	1926	lake inlet		E	9	1109	0.81%	6					1109				1,109
26189	4.96	1949	Emerald Lakes 1 outlet, road xing		E	23	2112	1.09%	6					2112				2,112
27456	5.20	1955	Emerald Lakes 1 inlet		E	6	1267	0.47%	6					1267				1,267
27562	5.22	1955	Emerald Lakes 2 outlet, road xing		E	0	106	0.00%	6					106				106
29146	5.52	1961	Emerald Lakes 2 inlet		E	6	1584	0.38%	6					1584				1,584
29357	5.56	1968	road xing		B	7	211	3.32%	6		211							211
30730	5.82	1982	END in wetland area		E	14	1373	1.02%	6					1373				1,373
						487	30730	1.58%		0	11138	0	0	17989	1241	362		30730
										0%	36%	0%	0%	59%	4%	1%		100%

15.61 Dry Sawmill Run (L) 1.21 UNT1 (L)

AVG SLOPE = 1.25% (predicts E/B channel)

Pocono Mile = 15.61 - 1.21

field obs: NONE

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1684	enters Dry Sawmill Run (L)	L													
339	0.06	1690	road xing		B	6	339	1.77%	6		339						339

580	0.11	1697	elev	B	7	241	2.90%	6		241						241
863	0.16	1706	road xing	B	9	283	3.18%	6		283						283
1042	0.20	1709	lake outlet	B	3	179	1.68%	6		179						179
2489	0.47	1720	lake inlet	E	11	1447	0.76%	6					1,447			1,447
3029	0.57	1722	END in wetland area	E	2	540	0.37%	6					540			540
					38	3029	1.25%	6	0	1042	0	0	1987	0	0	3029
									0%	34%	0%	0%	66%	0%	0%	100%

15.61 Dry Sawmill Run (L) 1.68 UNT2 (R) from 2 small lakes

AVG SLOPE = 3.00% (predicts B channel)

Pocono Mile = 15.61 - 1.68

field obs: B, E

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1722	enters Dry Sawmill Run (R)	R													
817	0.15	1744	road xing		B	22	817	2.69%	6		817						817
932	0.18	1753	road xing		A	9	115	7.83%	6	115							115
1151	0.22	1768	lake outlet		G	15	219	6.85%	6							219	219
1901	0.36	1786	lake inlet		B	18	750	2.40%	6		750						750
2051	0.39	1795	lake outlet, road xing		G	9	150	6.00%	6							150	150
2536	0.48	1798	lake inlet, END		E	3	485	0.62%	6					485			485
						76	2536	3.00%	6	115	1567	0	0	485	0	369	2536
										5%	62%	0%	0%	19%	0%	15%	100%

15.61 Dry Sawmill Run (L) 2.13 UNT3 (L) from small lake

AVG SLOPE = 1.20% (predicts E, B channel)

Pocono Mile = 15.61 - 2.13

field obs: B, E

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1771	enters Dry Sawmill Run (L)	L													
244	0.05	1771	lake outlet		E	0	244	0.00%	6					244			244
584	0.11	1778	lake inlet, END		B	7	340	2.06%	6		340						340
						7	584	1.20%	6	0	340	0	0	244	0	0	584
										0%	58%	0%	0%	42%	0%	0%	100%

15.61 Dry Sawmill Run (L) 2.86 Little Deer Pond trib (R)

AVG SLOPE = 0.89% (predicts E channel)

Pocono Mile = 15.61 - 2.86

field obs: B, E

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1824	enters Dry Sawmill Run (R)	R													
458	0.09	1824	Little Deer Pond outlet		E	0	458	0.00%	6					458			458
1008	0.19	1833	Little Deer pond inlet, END		E	9	550	1.64%	6					550			550
						9	1008	0.89%	6	0	0	0	0	1008	0	0	1008
										0%	0%	0%	0%	100%	0%	0%	100%

15.61 Dry Sawmill Run (L) 3.56 Deer Pond trib (R) to Pine Tree Lk

AVG SLOPE = 3.17% (predicts B channel)

Pocono Mile = 15.61 - 3.56

field obs: A/B, E, G by road

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1859	enters Pine Tree Lk (R), impounds Dry Sawmill Run	R													
265	0.05	1887	elev		A	28	265	10.57%	6	265							265
340	0.06	1889	road xing		G	2	75	2.67%	6							75	75
440	0.08	1894	Deer Pond outlet		A	5	100	5.00%	6	100							100
1515	0.29	1907	Deet Pond inlet, END		E	13	1075	1.21%	6					1,075			1,075
						48	1515	3.17%	6	365	0	0	0	1075	0	75	1515
										24%	0%	0%	0%	71%	0%	5%	100%
			DRY SAWMILL RUN SUMMARY			665	39402	1.69%	6	480	14087	0	0	22788	1241	806	39402

15.61 Crescent Lake trib (R)

AVG SLOPE = 3.76% (predicts B channel)

Pocono Mile = 15.61

field obs: A/B, flat areas E

ft	mi	elev	feature	side	stream type	rise	segment length	slope	mgmt area	a	b	c	d	e	f	g	TOTAL
0	0.00	1495	joins Dry Sawmill Run (L) forming Pocono Cr blw I-80W	R													
370	0.07	1523	elev		A	28	370	7.57%	6	370							370
574	0.11	1536	elev		A	13	204	6.37%	6	204							204
902	0.17	1570	elev		A	34	328	10.37%	6	328							328
989	0.19	1591	elev		A	21	87	24.14%	6	87							87
1080	0.20	1612	trail crosses (old RR grade)		A	21	91	23.08%	6	91							91

1817	0.34	1627	emerge from under I-80W culvert	B	15	737	2.04%	6		737						737
2170	0.41	1656	enter culvert under I-80W	G	29	353	8.22%	6							353	353
2522	0.48	1661	elev	B	5	352	1.42%	6		352						352
3367	0.64	1676	elev	B	15	845	1.78%	6		845						845
3974	0.75	1699	elev	B	23	607	3.79%	6		607						607
4323	0.82	1718	elev	A	19	349	5.44%	6	349							349
4619	0.87	1728	road xing	B	10	296	3.38%	6		296						296
4692	0.89	1730	Crescent Lake outlet	G	2	73	2.74%	6							73	73
6494	1.23	1739	Crescent Lake inlet	E	9	1802	0.50%	6					1802			1,802
6811	1.29	1755	road xing	B	16	317	5.05%	6		317						317
7234	1.37	1766	road xing	B	11	423	2.60%	6		423						423
7603	1.44	1787	road xing, pond outlet	B	21	369	5.69%	6		369						369
8026	1.52	1797	pond inlet, END by interchange	B	10	423	2.36%	6		423						423
					302	8026	3.76%	6	1429	4369	0	0	1802	0	426	8026
									18%	54%	0%	0%	22%	0%	5%	100%
			WMA6 TOTALS		2146	79900	2.69%	6	12307	26771	0	0	38349	1241	1232	79900

Appendix ___: **PADEP Bioassessment Results (1998)**

980707-1130

Pocono Creek – Second riffle upstream of confluence with McMichaels Creek
Borders SR 611 corridor into Stroudsburg, area of commercial use, passes under Main Street (209). Narrow riparian strip. pH 7. Land Use 50 Res, 30 Comm, 20 Forest.
Rating: Not Impaired.
Habitat Assessment Score = 181 = 75%. (Optimal/Sub-Optimal)
Macroinvertebrates: EPTs abundant, sample looks good. 15/16 categories scored well.

980707-1400

McMichaels Creek – 100 yds upstream of Rt 80 bridge
Site borders Katz Recycling Center and formerly a junkyard. Labar Village is a seniors community with living quarters, apartments, restaurant. This area was formerly a rhododendron nursery, is landscaped with ponds and lawns. pH was 7.5. Land Use 40 Res, 20 Comm, 10 Indus, 30 Forest.
Rating: Not Impaired.
Habitat Assessment Total Score = 175 = 73%. (Sub-Optimal/Optimal). Some embeddedness.
Among habitat categories, this site received a marginal score for sediment deposition.
Macroinvertebrates: EPTs abundant, many intolerant taxa, 14/16 categories scored well.

980707-1000

McMichaels Creek – First riffle downstream of Pocono Creek confluence
Route 80 along SE shoreline, wooded along other bank. Downstream of Stroudsburg and West Main Street.
pH was 7.0. Land Use: 50 Res, 30 Commercial, 20 Forest.
Rating: Not Impaired.
Habitat Assessment Total Score = 174 = 73%. (Sub-Optimal/Optimal).
Macroinvertebrates: EPTs abundant, intolerant taxa prevalent, 15/16 categories scored well.

980211-0900

Pocono Creek – 10 yards upstream of Flagler Run confluence.
Notes: Downstream of SR611 and Stroud Mall. Strip malls upstream. Receives stormwater from malls, highway, and parking lots.
Land Use: 5 Residential, 85 Commercial, 10 Forest.
Assessment Rating: Impaired Biology.
Habitat Assessment Total Score = 161 = 67% (Sub-Optimal). Problems = Marginal rating received for disruptive pressure to stream, and marginal riparian vegetation.
Macroinvertebrates: Good scores for only 6 of 16 categories.
Problems included: Low abundance, low taxa richness, presence of only pollution-tolerant taxa. Only chironomidae were common.

980211-1015

Flagler Run – Upstream of Old Mill Run Road (Upper creek, above mall)
Notes: none.
Land Use: 40 Residential, 60 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 187 = 78% (Optimal). No habitat problems recorded.
Macroinvertebrates: Scored high in 15/16 categories. EPTs well-represented, pollution intolerant taxa present and abundant, high richness.

980611-1030

Big Meadow Run – at Mazzetti Road.

Notes: Forested residential area, christmas tree farm, wetlands, stream flows through swampy area. Not much gradient, so habitat scores lower w/o riffle areas, and with mucky substrate. Homes no closer than 500 ft at this site, no development downstream for about ½ mile. Stream passes through small impoundment before passing under 611 to mouth. Probably should use score sheet for low gradient streams at this site.
pH 6.5, Land Use: 35 Residential, 60 Forest, 5 Other (wetlands? impoundment?)
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 150 = 63% = Sub-Optimal. Received marginal habitat ratings for instream cover, frequency of riffles, condition of banks, bank vegetation. Low rating could be attributed to use of high-gradient habitat form for a low-gradient stream.
Macroinvertebrates: scored well in 13 of 16 categories. EPTs well-represented, though none were abundant.

980611-1230

Little Pocono Creek – near Pocono Creek confluence.
Notes: Samples taken 50 ft upstream of mouth. Behind Stroudsburg High School football field.
pH 7.5. Land Use: 60 Residential, 40 Commercial.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 181 = 75% (Optimal/Sub-Optimal). No poor scores.
Macroinvertebrates: Good scores for 15 of 16 categories. EPTs well represented in pollution intolerant forms, blackflies very abundant.

980709-1000

Little Pocono Creek – Headwater portion by trailer park (dry above dirt road)

Notes: Site immediately downstream of 2 pipes under dirt road, small impoundment upstream, and dry above that point. Mostly agricultural use at site, upstream is wooded area with private residential use and 6-8 unit trailer park. Streams shown on map are dry above trailer park. Bug community influenced by upstream pond and small stream size (2' wide, 6-8" deep or less), lack of good riffles due to low gradient.
pH 7.5. Land Use: 30 Residential, 20 Crops, 35 Fields, 15 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 157 = 65% (Sub-Optimal). Marginal scores for velocity/depth regime, grazing & disruptive pressure, and riparian vegetation.
Macroinvertebrates: Good scores for 12 of 16 categories. No stoneflies present. EPTs scored poorly. Too few pollution-intolerant taxa. Red chironomids were huge.

980709-1130

Little Pocono Creek – Downstream of Tanite Road bridge.

Notes: Samples taken from 2nd and 3rd riffles downstream of Tanite Road bridge. Residential development upstream has increased in last 5-10 years. Sewer line completed a few years ago.
pH 7.0. Land Use 50 Residential, 50 Forested.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 173 = 72% (Sub-Optimal/Optimal). No marginal or poor scores.
Macroinvertebrates: Good scores for 12/16 categories. No stoneflies, EPTs scored poorly. Too few pollution-intolerant taxa. Hydropsychid caddisflies very abundant.

980709-1445

Wigwam Run – near confluence with Pocono Creek
Notes: Sampled 30 ft above Pocono confluence, below bridge. Stream comes out of ground 20 ft upstream of riffle, and 50 ft from confluence, where old railroad track was built. Another sample taken upstream of old railroad bed. Area forested, Rt 80 passes over creek upstream of railroad bed. Physical impairment due to runoff from 80 entering above Beech St, also along Schaefer Schoolhouse Road (30 ft), following bottom of hill east for about 100 yards, where stream goes underground, emerging other side of ridge about 50 feet above confluence with Pocono Creek. Biological samples taken above and below underground portion.
pH 6.0. Land Use: 30 Residential, 10 Commercial, 60 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 181 = 75% (Optimal/Sub-Optimal). No poor scores.
Macroinvertebrates: Good scores for 13 of 16 categories. EPTs represented in pollution intolerant forms, though not abundant. Only hydropsychid caddisflies listed as abundant.

980721-1030

Pocono Creek – downstream of confluence with Cranberry Creek
Notes: Sampled downstream of mouth of Cranberry Creek.
pH 6.5. Land Use: 25 Residential, 25 Commercial, 10 Fields, 40 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 188 = 78% (Optimal). No poor scores.
Macroinvertebrates: Good scores for 16 of 16 categories. EPTs represented in pollution intolerant forms, though not abundant. Sample dominated by Philopotamid caddisflies (pollution-intolerant).

980624-1000

Rocky Run – forested site – Intersection Reeders Run & Golden Slipper Rd.
Notes: Upstream is forested land, across road downstream is small lake and camp.
pH 5.0. Land Use: 100 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 186 = 78% (Optimal). No poor scores.
Macroinvertebrates: Good scores for 15 of 16 categories. EPTs represented in pollution intolerant forms.

980624-1100

Rocky Run – forested site – Opposite Int. Reeders Run & Golden Slipper Rd., SR 3028 Marker.
Notes: forested land, state gamelands, private camps. First kick in less-rapid riffle with sandy bottom and lots of wood debris. 2nd kick faster but still sandy bottom, lots of moss on rocks, with watercress, tannic water is orange-brown.
pH 5.5. Land Use: 100 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 175 = 73% (Sub-Optimal). No poor scores, substrate not as good as 1000.
Macroinvertebrates: Good scores for 15 of 16 categories. EPTs well-represented, but sample dominated by hydropsychid caddisflies.

980624-1220

Reeders Run – Near Intersection Reeders Run Rd & Gardner Rd.
Notes: Homes on either side, large lots with trees. Buffer strip on right is 20-30 ft wide.
Land Use: 50 Residential, 50 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 191 = 80% (Optimal). No poor scores.
Macroinvertebrates: Good scores for 15 of 16 categories. EPTs well-represented, but extremely pollution-intolerant taxa not well-represented.

980716-1040
Pocono Creek – above Stadden Road, below Bulgers Run.
Notes: Downstream of Tannersville along Learn Road. Downstream of commercial and residential area. Rocks covered with periphyton, some green algae.
pH 6.5. Land Use 30 Residential, 30 Commercial, 5 Crop, 5 Pasture, 30 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 190 = 79%. (Optimal). No poor or marginal scores.
Macroinvertebrates: EPTs abundant. 14/16 categories scored well. Sample dominated by Baetid mayflies, though many extremely pollution-intolerant taxa represented.

980723-0920
Cranberry Creek – at Route 611.
Notes: Sampled at 611 bridge north of Bartonsville PO, behind Pocono Peddlars Village. Small mall parking lot on north bank, commercial use along 611. Upstream watershed is mainly forested with some residential development.
pH 5.5. Land Use 15 Residential, 35 Commercial, 5 Fields, 45 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 179 = 75%. (Optimal/Suboptimal). No poor or marginal scores.
Macroinvertebrates: EPTs abundant. 16/16 categories scored well. Sample dominated by Leuctridae stoneflies (Hilsenhoff is 0).

980723-1120
Cranberry Creek – below Cranberry Bog. (UNIQUE? COMPARE TO OTHER SITES?)
Notes: Upstream is the preserve surrounded by some residential development. Bog conditions present a lack of suitable habitat to sample at this location.
pH 5.0. Land Use 5 Residential, 95 Forest.
Assessment Rating: Impaired for less than ½ mile.
Habitat Assessment Total Score = 155 = 65%. (Suboptimal). Poor or marginal scores in instream cover, epifaunal substrate, flow velocity & depth regime, and frequency of riffles.
Macroinvertebrates: 7/16 categories scored well. Sites scores as impaired, but special condition exists – site is located downstream of southernmost alpine boreal bog in U.S. Sample dominated by Amphipods. No EPTs, no pollution-intolerant taxa.

980721-0920
Bulgers Run – location unknown – placed site just above Learn Rd (GUESS).
Notes: No location listed in DEP notes.
pH 6.0. Land Use 25 Residential, 75 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 164 = 68%. (Sub-Optimal). No poor or marginal scores, though some scores relatively low for riparian vegetation, channel flow, and frequency of riffles.
Macroinvertebrates: 15/16 categories scored well. Sample dominated by Psephenidae beetle larvae (water pennies). Mayflies and caddisflies not abundant, though EPTs represented.

980716-1200

Pocono Creek – at Route 715, Tannersville.
Notes: Site located behind Billy's Diner along 611 upstream of 715 in Tannersville. Small strip mall and parking lot along one bank, The Crossing shopping outlet (96 stores & associated parking lots) beyond other bank. Nominal forested area along stream, composed mostly of weeds.
pH 7.0. Land Use 90 Commercial, 10 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 184 = 77%. (Optimal). No poor or marginal scores, though streamside disruptive pressure and riparian vegetation scored in the low sub-optimal range.
Macroinvertebrates: 14/16 categories scored well. Sample dominated by Baetid mayflies (tolerant), though many extremely pollution-intolerant taxa represented.

980722-0945
Scot Run – Approx. 1000 ft. above mouth, East of Rt 611.
Notes: none
pH 6.5. Land Use 40 Residential, 20 Commercial, 40 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 184 = 77%. (Optimal). No poor or marginal scores.
Macroinvertebrates: 16/16 categories scored well. Sample dominated by Philopotamidae caddisflies (intolerant). EPTs well-represented. Sample rich and diverse.

980716-1320
Pocono Creek – Below Camelback STP, at downstream end of Camelback property.
Notes: Site borders end of Camelback property, condominiums across street. STP effluent upstream.
pH 6.0. Land Use 40 Residential, 30 Commercial, 30 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 178 = 74%. (Sub-Optimal/Optimal). No poor or marginal scores, though disruptive pressure and riparian vegetation scored at low end of suboptimal range.
Macroinvertebrates: 16/16 categories scored well. Sample dominated by Peltoperlidae stoneflies (intolerant). EPTs well-represented..

980625-1200
Pocono Creek – above bridge on dirt road by sharp turn in Camelback Rd.
Notes: Dirt road runs along stream for various distances upstream.
pH 5.5. Land Use 30 Residential, 70 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 189 = 79%. (Optimal). One marginal score (bank vegetation) and condition of banks at low suboptimal range.
Macroinvertebrates: 14/16 categories scored well. Negative score for condition of banks, and EPTs not abundantly represented by intolerant families. Intolerant taxa were found but not abundant.

980625-1030
Wolf Swamp Run – at mouth.
Notes: Site located 10 yards upstream of mouth. Forest of rhododendron, hemlock, oak, birch. Sphagnum moss on rocks, banks. Watershed located in State Game Lands 38.
pH 5.5. Land Use 100 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 215 = 90%. (Optimal+). Only sediment deposition and bank vegetation scored suboptimal.
Macroinvertebrates: 15/16 categories scored well. Negative score for Simuliidae abundant in sample.

980625-1520
Dry Sawmill Run @ Crescent Lake Road.
Notes: Back road leads into residential community with lakes. Yard area mowed on left upstream side. Wood chips piled along bank by bridge. Home up steep bank on right side with dog. Some tree cover keeps stream shaded in afternoon. Water very yellow-brown, rocks have orange cast.

Land Use 50 Residential, 50 Forest.
Assessment Rating: Unimpaired.
Habitat Assessment Total Score = 174 = 73%. (Sub-optimal/Optimal). Bank vegetation scored marginal, bank condition, disruptive pressure, and riparian vegetation scored suboptimal.
Macroinvertebrates: 11/16 categories scored well. Baetidae mayflies (tolerant) abundant in sample. EPTs not well represented by intolerant taxa. Negative score for condition of banks.