APPENDIX A:

Phase 1 Stream Geomorphic Assessment Data

Hoosic	: Tri	ibs										Pha	ase	1 -	Rea	ach	Sum	mary	Repor	t
Basin:		ŀ	loosid	, Wal	looms	ac, Ba	atten l	Kill				Reach	n ID:			M01	Г 1.0 1			
Stream Nan	ne:	٦	lubbs	Broo	k							SGAT	Versi	on:		4.56				
Topo Maps:		1	ORTH	H POV	VNAL							Date L	_ast E	dited:		Febr	uary, 23	2017		
Watershed:		ŀ	loosid	Rive	r							QA St	atus:			Step	7 done			
Sub-waters	hed:	H	loosid	: Rive	r La	dd Br	ook to	Wall	ooms	ac Riv	er	ls Rea	ach An	Impo	undme	ent?:	No			
Step 1. Rea	ich Loc	cation		This	reach	exten	ds fro	m the	first	reach	break	betw	een S	kipare	e and	Tubb	s Rd and	d flows do	wnstream to	o the
1.1 Reach D	Descrip	otion:		confl	uence	e with	the m	ain st	em of	the H	oosic	River	•							
1.2 Towns:	Po	wnal										5	Step 4.	Land	Cove	r - Rea	ch Hydro	<u>ology</u>		
1.3 Downstr	ream L	atitud	e:		42.803	8197						4	l.1 Wa	tershe	d					
1.3 Downstr	ream L	ongiti	ude:		-73.27	3327							Histo	oric La	nd Co	ver:			Crop	
Step 2. Stre	am Ty	<u>pe</u>											Curr	ent Do	minar	nt Land	d Cover:		Forest	64.0 %
2.1 Elevatio	n Upst	tream	:			5	30						Curr	ent Su	b-Dor	ninant	Land Co	ver:	Field	
2.1 Elevatio	n Dow	nstrea	am:			49	93					4	.2 Coi	rridor						
2.1 Is Gradi	ent Ge	entle?				ח 	10						Histo	oric La	nd Co	ver::			Forest	
2.2 Valley L	ength:				1,	973.0	n.		0.37	Mile	S		Curr	ent Do	minar	nt Land	d Cover:			%
2.3 Valley S	lope:				•	1	.9						Curr	ent Su	b-Dor	ninant	Land Co	ver:		
2.4 Channe	I Lengi	th:			3,	347.4	ft.		0.63	Mile	S	4.3	Ripari	an Bu	ffer			<u>Left Bank</u>	<u>Right</u>	<u>Bank</u>
2.5 Channe	I Slope	9:				1.	12%					0	Domina	ant:				26-50	26-	50
2.6 Sinuosit	y: od Ar					1.	(U 0 Sau	ioro M	liloo			S	Sub-do	minar	t:			0-25	>1	00
2.7 Waters		za.				ມ 20	.0 Syl		mes			L	ength	w / les	ss tha	n 25 ft	.:	999.0 ft.	60	8.0 ft.
2.6 Channe		1.				1 0 2 6	. 4 lee	L				4.4	Groun	d Wate	er Inpu	uts:	Min	imal		
2.9 Valley V	viuiri.	Datia				1,020	.9 lee	L				Ste	<u>p 5. In</u>	strean	n Cha	nnel M	odificatio	ons		
2.10 Contine	ement	Ratio	:	,		30	.1					5.1	Flow I	Regula	ation -	(old):				
2.10 Conine		Type	Turna i		very c	broad						Т	ype:				Noi	ne		
Z. I I Releie Rodfor	nce Si	ream	Type:			Pool						ι	Jse:							
		000.			Rime-	P001						5.2	Bridge	es and	Culve	erts:		3	1.4 %	, D
Bod M	ass of	ope.			Gravo							5.3	Bank	Armor	ing:			413.3	12.3 %	, D
Stop 3 Basi	alenai. n Char	ratorio	ticte		Glave	•							Left:			294.	6 ft. Ri	ght:	118.7 ft	
3 1 Alluvial	Fan:	atone	1013		None							5.4	Chanı	nel Str	aighte	ning:	693	.0	20.7 %	, D
3 2 Grade (Control				None							5.5	Dredg	jing Hi	story:		Noi	ne		
3 3 Domina	nt Geo	Jogica	al Mat		None					%		<u>Ste</u>	<u>p 6. Fl</u>	oodpla	ain Mc	dificat	ions			
3 3 Sub-dor	n Geo		al Mat							/0		6.1	Berms	s & Ro	ads -	old:		540.2 ft.	16. 1	l
3.4 Valley S	lone I	eft [.]	ai iviat.		Hilly												<u>O</u>	ne Side	Both Sides	<u> </u>
3 4 Valley S	Slope R	liaht.			Hilly								Road	d:				330.3 ft.	209.9 ft	
3.5 Soils	nopo n	ugin.											Railr	oad:				0.0 ft.	0.0 ft	•
Hydrologi	ic Grou	.aı								%			Bern	n:				0.0 ft.	0.0 ft	
Floodina:		~p.								%			Impr	oved I	Path:			0.0 ft.	0.0 ft	
Water Ta	ble De	ep:								%		6.2	Devel	opmer	nt:			195.8 ft.	702.3 ft	
Water Ta	ble Sh	allow								%		6.3	Chan	nel Ba	rs:		Mu	tiple		
Erodibility	/:			:	slight					%		6.4	Mean	der Mi	gratio	n:	Mu	tiple		
7.4 Comr	nents:				J							6.5	Mean	der W	dth:			62 ft. R	ato: 2.2	
This reach	his reach is reference C in a very broad valley. It has been h											6.6	Wave	length	:			356 ft. R	atio: 12.5	
straightene	reach is reference C in a very broad valley. It has been highly ghtened and encroached through decades of agricultural land us loopmont in the corridor likely resulting in a departure to E type.												<u>p 7. W</u>	/indshi	eld Su	urvey				
channel ge	ometr	y in t	he pha	ase 2	asses	sment	t. Sint	losity	was a	utom	aticall	y 7	'.1 Bar	nk Ero	sion:		495	.162		ft
calculated	at 1.7	but is	likely	lowe	r.			-				7	7.2 Bar	nk Hei	ght:		3			ft
												7	.3 Ice/	/Debris	s Jam	Poten	tial: Noi	ne		
1	41	42	43	51	52	53	54	55	61	62	63	64	65	66	71	73	Total	٦		
	 				0.2			0.0	<u> </u>	0.2	0.0		0.0	0.0		,		4		
		0	2				2			2	2	1	2		1		15			
	LOW	IN.S.	rign	N.S.	IN.S.	LOW	rign	N.S.		rign	riigh	LOW	rign	IN.S.	LOW	IN.S.				

Hoosic	: Tr	ibs										Pha	ase	1 -	Rea	ach	Sum	mary	Repor	t
Basin:		F	loosid	. Wall	ooms	ac. Ba	atten I	Kill				Reach	n ID:			M011	1.01S1.0	1		
Stream Nan	ne:	F	irst U	nnam	ed Tri	butary	v to Ti	ubbs I	Brook			SGAT	Versi	on:		4.56				
Topo Maps:		N	IORT	I POV	/NAL							Data I	act Er	- hatik		lanu	ary 16 20	117		
Watershed		F	loosic	Rive	r							OA St	asi Li	ineu.		Sten	7 done	,,,		
Sub waterel	hod.	ŀ	loosid	Rive	r La	dd Br	ook to	Wall	oomsa	ac Riv	er			Impo	Indmo	010p	No			
Step 1 Rea	ch I or	cation		This	reach	is boi	und by	, the s	southe	ern me	ost rea	ach br	eaks f	hat st	raddl	e Skin	aree Rd.			
1.1 Reach [Descrir	otion:			ouon			,	Journe				ouno		addi	o onap				
1.2 Towns:	Po	wnal										ç	Step 4.	land	Cover	- Rea	ch Hvdrol	oav		
1 3 Downstr	e am l	atitud	۵.		12 807	385						<u>-</u> 4	1 Wa	torsho	d d	1100	on nyaroi			
1.3 Downetr	oom l	ongitu	uda:		73 26	1606						-	Histo		u nd Co	vor:			Cron	
Stop 2 Stro			ue.	-	75.20	4000							Curr		minar	vei. Ntland	Cover		Forest	57 0 %
2 1 Elovatio	n Unci	troom				50	06						Curr	ont Su	h Don		Lond Cov	or:	Field	57.0 /0
2.1 Elevatio	n Dow	nstrea	am:			53	33					1		ridor	0-001	lillain	Lanu Cov	сі.	Field	
2.1 Is Gradi	ent Ge	entle?:				N	lo					4	Histo	nuor pric La	nd Co	ver::			Forost	
2.2 Valley L	ength:				1,	181.0	ft.		0.22	Mile	s		Curr		minor		Cover		Forest	0/
2.3 Valley S	lope:					5	.4						Curr		h Don	n Lanc	Lond Cov			70
2.4 Channe	I Leng	th:			1,	195.9	ft.		0.23	Mile	s	10	Dinori		u-Dun Hor	lillanı		et.	Diaht	Donk
2.5 Channe	l Slope	e:				5.2	28 %					4.3 Г	Ripan		lei		<u>L</u>		<u>Right</u>	
2.6 Sinuosit	y:					1.0	01					L		ant.	4.			51-100	51-	100
2.7 Watersh	ned Are	ea:				0	.4 Squ	uare M	iles			2	on ath	minan	t:	- OF #		20-50	>1	00
2.8 Channe	l Width	า:				9	.0 feet	t				L	engtn	w / ies	s that	1 25 π.		υ.υ π.		υ.υ π.
2.9 Valley V	Vidth:					45	.0 feet	t				4.4 (Groun	d vvate	erinpu	Its:	WIININ	nai		
2.10 Confin	ement	Ratio	:			5	.0					<u>Ste</u>	<u>p 5. In</u>	stream	<u>n Char</u>	<u>nnel M</u>	odificatior	<u>15</u>		
2.10 Confin	ement	Туре		I	Narrov	N						5.1	FIOW	Regula	ition -	(010):	New	-		
2.11 Refere	nce St	tream	Type:	I	3							Т	ype:				NON	e		
Bedfor	m:			I	Riffle-	Pool							Jse:		Culur			•	•••	,
Sub-Cl	ass Sl	lope:										5.2	Bridge	es and	Cuive	ens:		0	0.0 %	0
Bed M	aterial	:		(Grave	I						5.3	Bank	Armori	ng:	•	2	4.4	2.0 %	o
Step 3. Basi	n Chai	rateris	ticts									F 4	Left:		- ¹ - 1- 1 -	U.	υ π. Rig	int:	24.4 π	
3.1 Alluvial	Fan:			I	None							5.4	Chanr		aignte	ning:	0.0	-	0.0 %	o
3.2 Grade C	Control	:		I	None							5.5	Dreag	ing Hi	story:		NON	e		
3.3 Domina	nt Geo	ologica	l Mat.	:					C	%		<u>Ste</u>	<u>p 6. Fl</u>	oodpla	ain Mo	dificat	ions			
3.3 Sub-dor	n. Geo	ologica	al Mat.	:								6.1	Berms	s & Ro	ads -	old:		58.7 ft.	4.9	Ð
3.4 Valley S	lope L	eft:		I	Ext. St	teep											<u>On</u>	<u>e Side</u>	Both Sides	<u>5</u>
3.4 Valley S	lope F	Right:		I	Ext. St	teep							Road	d:				0.0 ft.	58.7 ft	
3.5 Soils													Railr	oad:				0.0 ft.	0.0 ft	
Hydrologi	ic Gro	up:							c	%			Bern	า:				0.0 ft.	0.0 ft	
Flooding:									Ģ	%			Impr	oved F	Path:			0.0 ft.	0.0 ft	
Water Ta	ble De	ep:							ç	%		6.2	Devel	opmer	nt:		1	63.2 ft.	240.7 ft	
Water Ta	ble Sh	allow:							C	%		6.3	Chanr	nel Bai	'S:		Non	e		
Erodibility	/:			5	slight				c	%		6.4	Mean	der Mi	gratior	า:	Non	e		
7.4 Comr	nents:											6.5	Mean	der Wi	dth:			N/A Ra	ato: 0.0	
During the	winds	shield	surve	y this	reach	had	a B-ty	pe ch	annel	geom	etry	6.6	Wave	length	:			N/A Ra	atio: 0.0	
with moder	ate flo	oodpla	ain ac	cess. nd 2º⁄	The s	lope n than	neasu	red d	uring	the ad slo	ne of	<u>Ste</u>	<u>p 7. W</u>	indshi	eld Su	<u>irvey</u>				
5%, suppor	rting t	he B t	ype c	hanne	l desi	gnatio	on.		iorati	54 310	PC 01	7	'.1 Bar	nk Eros	sion:		0			ft
												7	.2 Bar	nk Heig	ght:		No E	Data		ft
												7	.3 Ice/	/Debris	s Jam	Poten	tial: Culv	ert		
	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	6.1	6.2	6.3	6.4	6.5	6.6	7.1	7.3	Total			
	1	0	0	0	0	0	0	0	0	2			0	0	0	1	A			
	Low	N.S.	N.S.	N.S.	0 N.S.	N.S.	N.S.	N.S.	N.S.	∠ High	N.S.	N.S.	N/A	N/A	N.S.	Low	4			

Hoosic	: Tri	ibs										Pha	ase	1 -	Rea	ach	Sum	mary	Repo	rt
Basin:		H	loosid	, Wal	looms	ac, Ba	atten l	Kill				Reach	n ID:			M01	Г1.02			
Stream Nam	ne:	Т	ubbs	Brool	k							SGAT	Versi	on:		4.56				
Topo Maps:		N	IORTH	I POV	VNAL							Date L	_ast E	dited:		Janu	ary, 16 2	017		
Watershed:		H	loosid	Rive	r							QA St	atus:			Step	7 done			
Sub-watersh	hed:	H	loosid	Rive	r La	dd Br	ook to	Wall	oomsa	ac Riv	/er	ls Rea	ach An	Impo	undme	ent?:	No			
Step 1. Rea	ich Loo	cation		This	reach	flows	from	the re	ach b	reak s	south	of the	inters	sectio	n of J	ohn L	ee and S	kiparee Ro	d. and exte	ends
1.1 Reach D	Descrip	otion:		down	strea	m to t	he so	utherr	n most	reac	h brea	k betv	ween ⁻	Tubbs	and	Skipar	ee Rd.			
1.2 Towns:	Po	wnal										5	Step 4.	Land	Cove	· - Rea	ach Hydro	logy		
1.3 Downstr	ream L	atitud	e:	4	42.807	693						4	.1 Wa	tershe	d					
1.3 Downstr	ream L	ongitu	ude:	-	-73.26	4462							Histo	oric La	nd Co	ver:			Crop	
Step 2. Stre	am Ty	<u>pe</u>											Curr	ent Do	minar	nt Land	d Cover:		Forest	65.0 %
2.1 Elevatio 2.1 Elevatio	n Upst n Dow	tream	am:			65 53	56 30						Curr	ent Su	b-Dor	ninant	Land Co	ver:	Field	
2.1 Is Gradi	ent Ge	entle?:				N	lo					4	Histo	nuoi pric La	nd Co	ver			Forest	
2.2 Valley L	ength:				4,	486.3	ft.		0.85	Mile	es		C			*1.00			Forest	0/
2.3 Valley S	lope:					2	.8						Curr	ent Do	minar	it Land	d Cover:			%
2.4 Channel	I Leng	th:			4,	776.4	ft.		0.90	Mile	es		Curr	ent Su	ib-Dor	ninant	Land Co	ver:	D . 1	
2.5 Channel	I Slope	e:				2.0	64 %				-	4.3	Ripari	an Bu	ffer			Left Bank	Rigr	nt Bank
2.6 Sinuosit	y: .					1.0	06					L	Domina	ant:				>100	>	-100
2.7 Watersh	ned Are	ea:				5	. 3 Squ	uare N	liles				Sub-do	minan	t:			26-50	2	6-50
2.8 Channel	l Width	ו:				27	.2 fee	t				L	.ength	w / les	ss tha	n 25 ft	.:	75.0 ft.	1	173.0 ft.
2.9 Valley W	Vidth:					125	.0 fee	t				4.4	Groun	d Wate	er Inpi	uts:	Mini	mal		
2.10 Confine	ement	Ratio	:			4	.6					<u>Ste</u>	<u>p 5. In</u>	strean	<u>n Cha</u>	nnel M	lodificatio	<u>ns</u>		
2.10 Confine	ement			I	Narrov	N						5.1	Flow I	Regula	ation -	(old):				
2.11 Refere	nce St	ream	Tvpe:	(с							Т	ype:				Nor	e		
Bedfor	m:		71 -	1	Riffle-	Pool						ι	Jse:							
Sub-Cl	lass Sl	ope:		1	b							5.2	Bridge	es and	Culve	erts:		1	0.6	%
Bed Ma	aterial				Cobble	е						5.3	Bank	Armor	ing:			0.0	0.0	%
Step 3. Basii	n Chai	rateris	ticts										Left:			0.	. 0 ft. Ri	ght:	0.0	ft.
3.1 Alluvial I	Fan:			I	None							5.4	Chanı	nel Str	aighte	ning:	0.0		0.0	%
3.2 Grade C	Control			I	Multip	le						5.5	Dredg	jing Hi	story:		Nor	e		
3.3 Dominai	nt Geo	logica	I Mat.:		•					%		<u>Ste</u>	<u>p 6. Fl</u>	oodpla	ain Mo	dificat	ions			
3.3 Sub-don	n. Geo	ologica	al Mat.									6.1	Berms	s & Ro	ads -	old:	1,	041.6 ft.	2 1	1.8
3.4 Vallev S	Slope L	.eft:			Ext. Si	teep											<u>Or</u>	<u>ie Side</u>	Both Sid	es
3.4 Vallev S	Slope R	Riaht:		,	Verv S	Steep							Road	d:			1,	041.6 ft.	0.0	ft.
3.5 Soils		5				•							Railr	oad:				0.0 ft.	0.0	ft.
Hvdrologi	ic Grou	.ar							c	%			Bern	n:				0.0 ft.	0.0	ft.
Flooding:									c	%			Impr	oved F	Path:			0.0 ft.	0.0	ft.
Water Ta	ble De	ep:								%		6.2	Devel	opmer	nt:			141.3 ft.	0.0	ft.
Water Ta	ble Sh	allow:							(%		6.3	Chan	nel Ba	rs:		Mul	tiple		
Erodibility	/:			9	sliaht				c	%		6.4	Mean	der Mi	gratio	า:	Floo	od Chute		
7.4 Com				,.		6.5	Mean	der Wi	dth:			N/A Ra	ato: 0.0							
The LWD o	bserv	ed du	ring th	ne wir	ndshie	ld su	vey s	ugges	sts the	ere is		6.6	Wave	length	:			N/A R	atio: 0.0	
potential fo	or deb	ris jar	ns fur	ther d	lowns	tream	•					<u>Ste</u>	p 7. W	/indshi	eld Su	<u>irvey</u>				
												7	'.1 Bar	nk Ero	sion:		771	.559		ft
												7	.2 Bar	nk Hei	ght:		4			 ft
												7	.3 Ice/	/Debris	s Jam	Poten	tial: Deb	oris		11
[4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	6.1	6.2	6.3	6.4	6.5	6.6	7.1	7.3	Total	1		
		0		0					-			4			4		-	1		
	Low	N.S.	Low	N.S.	N.S.	N.S.	N.S.	N.S.	∠ High	N.S.	∠ High	Low	N/A	N/A	Low	N.S.	°			

Hoosid	: Tr	ibs										Pha	ase	1 -	Rea	ach	Sum	mary	Rep	ort	
Basin:		H	loosic	, Wall	ooms	ac, Ba	atten l	Kill				Reach	n ID:			M017	[1.02S1.0)1			
Stream Nan	ne:	S	Secon	d Unn	amed	Tribu	tary to	o Tubl	os Bro	ook		SGAT	Versi	on:		4.56					
Topo Maps:		Ν	IORTI	I POV	/NAL							Date L	_ast E	dited:		Janu	ary, 16 2	017			
Watershed:		H	loosid	Rive	r							QA St	atus:			Step	7 done				
Sub-waters	hed:	H	loosid	Rive	r La	dd Br	ook to	Wall	oomsa	ac Riv	er	ls Rea	ach An	Impo	undme	ent?:	No				
Step 1. Rea	ch Lo	cation		This	reach	flows	from	the re	ach b	reak 3	300ft s	outh	of the	town	borde	r betv	veen Ben	nington a	and Pow	nal and	b
1.1 Reach D	Descri	ption:		exten	ds do	wnstr	eam t	o the	reach	break	c sout	h of th	ne inte	rsecti	on of	John	Lee and	Skiparee	Rd.		
1.2 Towns:	Po	wnal										5	Step 4.	Land	Cover	· - Rea	ch Hydro	<u>logy</u>			
1.3 Downstr	eam L	_atitud	e:	4	12.818	335						4	I.1 Wa	tershe	d						
1.3 Downstr	eam l	_ongitu	ude:	-	73.26	1077							Histo	oric La	nd Co	ver:			Forest		
Step 2. Stre	am Ty	<u>/pe</u>											Curr	ent Do	minar	nt Land	d Cover:		Forest	(63.0 %
2.1 Elevatio 2.1 Elevatio	n Ups n Dow	tream: vnstrea	am:			1,00 6	62 56						Curr	ent Su	b-Dor	ninant	Land Cov	/er:	Field		
2.1 Is Gradi	ent Ge	entle?:				N	lo					4	Histo	nuoi pric La	nd Co	ver…			Faras		
2.2 Valley L	ength				7,	240.0	ft.		1.37	Mile	s		0						Fores	ST.	0/
2.3 Valley S	lope:					5	.6						Curr	ent Do	minar	it Land	Cover:				%
2.4 Channe	2.4 Channel Length: 2.5 Channel Slope:					459.2	ft.		1.41	Mile	s		Curr	ent Su	b-Dor "	ninant	Land Cov	/er:	-		
2.5 Channe	5 Channel Slope:					5.4	45 %					4.3	Ripari	an Bu	fer		<u>I</u>	<u>_eft Bank</u>	<u>R</u>	ight Ba	<u>nk</u>
2.6 Sinuosit	6 Sinuosity:					1.0	03					L	Domina	ant:				>100		>100	
2.7 Watersh	6 Sinuosity: 7 Watershed Area:					1	.5 Squ	uare M	iles				Sub-do	minan	t:			51-100		51-100)
2.8 Channe	7 Watershed Area: 8 Channel Width:					15	.5 fee	t				L	ength.	w / les	ss thai	n 25 ft.	.:	0.0 ft		0.0) ft.
2.9 Valley V	8 Channel Width: 9 Valley Width:					70	.0 fee	t				4.4	Groun	d Wate	er Inpu	uts:	Mini	mal			
2.10 Confine	ement	Ratio	:			4	.5					<u>Ste</u> 5.1	<u>p 5. In</u> Flow I	<u>strean</u> Regula	<u>n Chai</u> ation -	<u>nnel M</u> (old):	odificatio	<u>ns</u>			
2.10 Confin	ement	Туре		I	Varro	N						т	vne:	Ū		. ,	Non	е			
2.11 Refere	nce S	tream	Туре:	I	3								ype. Iso								
Bedfor	m:			I	Riffle-	Pool						5.2	Bridae	es and	Culve	erts:		1	().2 %	
Sub-Cl	ass S	lope:										5.3	Bank	Armor	ina [.]			0.0	(0.0%	
Bed M	aterial	:		(Cobbl	е						0.0	L eft		ng.	0	0 ft Ric	nht [.]	, (0.0 ft	
Step 3. Basi	n Cha	rateris	ticts									54	Chan	nel Str	ainhte	nina [.]	0.0	,	, i	0 %	
3.1 Alluvial	Fan:			I	None							5.5	Dredo	ina Hi	story.	inig.	Non	<u>م</u>			
3.2 Grade C	Contro	l:		I	_edge							0.0						•			
3.3 Domina	nt Geo	ologica	l Mat.	:					0	%		Ste	<u>р 6. Fi</u>		ain ivic	dificat	<u>ions</u>			• •	
3.3 Sub-dor	n. Geo	ologica	al Mat.	:								6.1	Berms	S & RO	ads -	010:		194.1 π.		2.6	
3.4 Valley S	lope L	_eft:		I	Ext. S	teep							-				On	<u>e Side</u>	Both S	<u>Sides</u>	
3.4 Valley S	lope F	Right:		I	Ext. St	teep							Road	d:				194.1 ft.	().0 ft.	
3.5 Soils													Railr	oad:				0.0 ft.	().0 ft.	
Hydrologi	ic Gro	up:							0	%			Bern	า:				0.0 ft.	().0 ft.	
Flooding:									0	%			Impr	oved F	Path:			0.0 ft.	().0 ft.	
Water Ta	ble De	eep:							0	%		6.2	Devel	opmer	nt:			0.0 ft.	().0 ft.	
Water Ta	ble Sł	nallow:							0	%		6.3	Chan	nel Ba	rs:		Poir	nt			
Erodibility	Water Table Shallow: Erodibility:									%		6.4	Mean	der Mi	gratio	า:	Not	Evaluated	b		
7.4 Comr	7.4 Comments:											6.5	Mean	der Wi	dth:			N/A R	ato: 0.	0	
The slope of	observ	ved du	uring t	he wi	ndshi	eld su	rvey	was re	prese	ntativ	ve of a	6.6	Wave	length	:			N/A R	atio: 0.	0	
B-type geo	metry	, desp	oite the	e DMS f this i	sugg	jestin is par	g A-ty ≁iallv	pe slo respo	pe. A	large	grade	Ste	<u>p 7. W</u>	<u>'indshi</u>	eld Su	<u>irvey</u>					
discrepanc	y. The	e large	e buffe	ers alo	ong m	ost of	the re	each a	nd th	e fore	sted	7	'.1 Bar	nk Ero	sion:		0			ft	t
subwaters	ned su	ugges	t there	e is a ı	educe	ed cha	ance f	or stre	eam ty	/pe		7	.2 Bar	nk Heig	ght:		No [Data		fi	
ueparture C	iue (0	numa	an act	ivity.								7	.3 Ice	/Debris	s Jam	Poten	tial: Non	e		11	•
	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	6.1	6.2	6.3	6.4	6.5	6.6	7.1	7.3	Total				
	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2				
	Low	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	Low	N.S.	N/A	N/A	N.S.	N.S.					

Hoosid	: Tr	ibs										Pha	ase	1 -	Rea	ach	Sum	mary	Repor	t
Basin:		ŀ	loosid	. Wal	looms	ac. Ba	atten l	Kill				Reach	n ID:			M01	Г1.03	<i>.</i>	•	
Stream Nan	ne:	1	ubbs	Broo	k	,						SGAT	Versi	on:		4.56				
Tono Mans		r	ORTH	H POV	VNAL							Date I	ast Fr	-hatik		lanu	arv 16.2	017		
Watershed:	•	ł	loosid	Rive	r							QA St	atus:	incu.		Step	7 done	017		
Sub-waterel	had	ŀ	loosid	Rive	r La	dd Br	ook to	o Wall	ooms	ac Riv	er	le Ros	ach An	Impo	undma	ont?	No			
Step 1. Rea	ncu. ach Lo	cation		This	reach	is bo	und b	v the I	reach	break	s that	strad	dle th	e Hem	lock	Hill Ro	l. crossir	na.		
1.1 Reach D	Descrit	otion:						,										.9.		
1.2 Towns:	Po	wnal										S	Step 4.	Land	Cove	· - Rea	<u>ach Hydro</u>	<u>logy</u>		
1.3 Downstr	ream L	_atitud	e:		42.818	425						4	1.1 Wa	tershe	d					
1.3 Downstr	ream L	_onaiti	ude:		-73.26	0624							Histo	oric La	nd Co	ver:			Forest	
Step 2. Stre	am Tv	/pe											Curr	ent Do	minar	nt Land	d Cover:		Forest	67.0 %
2.1 Elevatio	n Ups n Dow	tream	: am:			73	35 56						Curr	ent Su	b-Dor	ninant	Land Co	ver:	Field	
2.1 Is Gradi	ent Ge	entle?				N	No					4	1.2 Coi	ridor	nd Co					
2.2 Valley L	.ength:				1,	700.5	ft.		0.32	Mile	s		nisit	IC La		ver			Forest	
2.3 Vallev S	Slope:					4	.7				-		Curr	ent Do	minar	nt Land	d Cover:			%
2.4 Channe	l Lena	ith:			1.	703.1	ft.		0.32	Mile			Curr	ent Su	b-Dor	ninant	Land Co	ver:		
2.5 Channe	I Slope	e:			,	4.0	65 %			wine	.5	4.3	Ripari	an Bu	ffer			Left Bank	<u>Right</u>	Bank
2.6 Sinuosit			1.0	00					[Domina	ant:				>100	>1	00			
2.7 Watersh	2.6 Sinuosity. 2.7 Watershed Area:						.9 Squ	uare N	liles			S	Sub-do	minan	t:			0-25	No	ne
2.8 Channe			20	. 9 feet	t				L	ength	w / les	ss tha	n 25 ft	.:	496.0 ft.		0.0 ft.			
2.9 Valley V	Vidth:					100	. 0 fee	t				4.4	Groun	d Wate	er Inpu	uts:	Mini	mal		
2.10 Confine	ement	Ratio	:			4	.8					<u>Ste</u>	p <u>5</u> . In Flow I	strean	n Cha	nnel M	lodificatio	<u>ns</u>		
2.10 Confine	ement	туре	:		Narro	N						5.1		veguiz		(010).	Nor	0		
2.11 Refere	nce S	tream	Type:		С								ype:				NOI	e		
Bedfor	m:				Riffle-	Pool						ل 5 ع	Jse: Bridad	and	Cuby	orte:		0	000	I.
Sub-Cl	lass S	lope:			None							5.2	Driuge		Cuive	115.		0	0.0 7	′0 /
Bed Ma	aterial	:			Cobbl	е						5.3	Loft	Annor	ing.	05	0 # Di	03.U	9.0 % 79.0 %	′o
Step 3. Basi	n Cha	rateris	ticts									E 4	Chony		aiahta	00. nin a.	.U II. KIQ	gni.	10.0 II	
3.1 Alluvial	Fan:			l	None							5.4 5.5	Drada		aignie	ning:	209. Nor	0	15.2 %	0
3.2 Grade C	Control	l:		l	Multip	le						5.5	Diedg	ing пі 	story:		. NON	e		
3.3 Domina	nt Geo	ologica	al Mat.	:						%		<u>Ste</u>	<u>p 6. Fl</u>	oodpla	ain Mo	dificat	<u>ions</u>			
3.3 Sub-dor	n. Geo	ologica	al Mat.	:								6.1	Berms	s & Ro	ads -	old:	_	62.5 ft.	3.	7
3.4 Valley S	Slope L	_eft:		1	Steep								_				<u>Or</u>	<u>e Side</u>	Both Side	<u>s</u>
3.4 Valley S	Slope F	Right:			Ext. S	teep							Road	d:				0.0 ft.	0.0 ft	t.
3.5 Soils													Railr	oad:				0.0 ft.	0.0 fi	t.
Hydrologi	ic Gro	up:								%			Bern	า:				0.0 ft.	62.5 fi	t.
Flooding:										%			Impr	oved F	Path:			0.0 ft.	0.0 ft	t.
Water Ta	ble De	eep:								%		6.2	Devel	opmer	nt:			0.0 ft.	272.3 ft	t.
Water Ta	ble Sh	hallow								%		6.3	Chan	nel Ba	rs:		Mul	tiple		
Erodibility	y:			:	slight					%		6.4	Mean	der Mi	gratio	n:	Floo	od Chute		
7.4 Comr	ments:										6.5	Mean	der Wi	dth:			N/A R	ato: 0.0		
The multipl	le larg	je cas	cades	and	bedroo	ck gra	de co	ntrols	in thi	is read	ch	6.6	Wave	length	:			N/A R	atio: 0.0	
allow an ov	/erest chani	imationel slo	on of s	lope a	along imateo	this re d betv	each. veen 2	During 2 and 3	g the v 3% su	winds	hield ina the	<u>Ste</u>	<u>p 7. W</u>	indshi	eld Su	<u>irvey</u>				
B-type cha	nnel d	lesigr	ation.	At th	e bott	om of	the re	each t	here i	s a ro	ad	7	7.1 Bar	nk Ero	sion:		50.0	004		ft
crossing th	nat has d	s mul	tiple c	ulvert	s pos	ing a	minor	risk o	of imp	act alo	ong	7	7.2 Bar	nk Heig	ght:		3			ft
Subaree V	.											7	7.3 Ice/	Debris	s Jam	Poten	tial: Cul	vert		
	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	6.1	6.2	6.3	6.4	6.5	6.6	7.1	7.3	Total]		
	1	0	2	0	0	1	1	0	0	1	1	0	0	0	0	1	8	1		
	Low	N.S.	High	N.S.	N.S.	Low	Low	N.S.	N.S.	Low	Low	N.S.	N/A	N/A	N.S.	Low				

Hoosic	: Tri	ibs										Pha	ase	1 -	Rea	ach	Sum	mary	Repo	t
Basin:	in: Hoosic, Walloomsac, Batten Kill am Name: Third Unnamed Tributary to Tubbs Brook o Maps: NORTH POWNAL, POWNAL															M017	Г1.03S1.0)1		
Stream Nam	ne:	Т	hird U	Jnnan	ned Tr	ibutar	y to '	Tubbs	Broo	k	:	SGAT	Versio	on:		4.56				
Topo Maps:		N	IORTH	I POV	VNAL,	POW	NAL					Date L	ast Ed	dited:		Janu	arv. 16 2	017		
Watershed:		F	loosid	Rive	r						(QA Sta	atus:			Step	7 done			
Sub-watersh	hed:	H	loosid	Rive	r La	dd Bro	ook to	Wall	oomsa	ac Riv	er	ls Rea	ich An	Impo	undme	ent?:	No			
Step 1. Rea	ch Loc	cation		This	reach	flows	from	the so	outher	n mos	st read	h bre	ak bet	ween	Mour	nt Antl	hony and	I Carpente	er Hill Rd a	nd
1.1 Reach D	Descrip	otion:		exter	ds do	wnstr	eam t	o the	reach	break	c east	of the	Heml	ock H	ill Rd	cross	ing.			
1.2 Towns:	Po	wnal										<u>s</u>	step 4.	Land	Cover	· - Rea	ich Hydro	logy		
1.3 Downstr	eam L	atitud	e:		42.820	731						4	.1 Wa	tershe	d		-			
1.3 Downstr	eam L	ongitu	ude:	-	73.25	5885							Histo	oric La	nd Co	ver:			Field	
Step 2. Stre	am Ty	pe											Curre	ent Do	minar	nt Land	d Cover:		Field	46.0 %
2.1 Elevatio 2.1 Elevatio	n Upst n Dow	tream: nstrea	am:			94 73	45 35					4	Curre	ent Su	b-Dor	ninant	Land Co	ver:	Forest	
2.1 Is Gradi	ent Ge	entle?:				N	lo					4	Histo	nuoi oric La	nd Co	ver			Forest	
2.2 Valley L	ength:				3,	090.0	ft.		0.59	Mile	s		Curr	nt Do			1 Cover		Forest	0/
2.3 Valley S	lope:					6	.8						Curre	ent Du	h Dor	ii Lanc				%
2.4 Channel	I Lengt	th:			3,	090.2	ft.		0.59	Mile	s	4.0	Curre	ent Su	D-Dor	ninant	Land Co	ver:	Dist	Deals
2.5 Channel	l Slope	e:				6.8	30 %					4.3	Ripari	an Bui	ner				Rign	<u>t Bank</u>
2.6 Sinuosit	y:					1.0	00					L		ant:	4.			>100	>	100
2.6 Sinuosity:1.002.7 Watershed Area:0.6 Square M												3	oup-du	minan	T:			0-25	51	-100
2.7 Watershed Area:U.6 Square IVIII2.8 Channel Width:10.2 feet												L	engtn	w / ies	ss thai	1 25 π.	.:	326.0 π.		30.0 π.
2.9 Valley W	Vidth:					50	.0 fee	t				4.4 (Found	d vvate	er inpl	Its:	Abu	ndant		
2.10 Confine	ement	Ratio	:			4	.9					<u>Ste</u>	<u>o 5. In</u>	stream	<u>n Chai</u>	<u>nnel M</u>	lodificatio	<u>ns</u>		
2.10 Confine	ement	Type:		I	Narro	N						5.1	FIOW	Regula	ation -	(010):	New	-		
2.11 Refere	nce St	ream	Type:	I	в							Т	ype:				NOR	e		
Bedfor	m:			I	Riffle-	Pool						U	lse: Drider		Culture				1.0	24
Sub-Cl	ass Sl	ope:		i	a							5.2	Bridge	es and	Cuive	ens:		1	1.0	%
Bed Ma	aterial:	:		(Cobbl	е						5.3	Bank	Armor	ing:	•	• " D'	0.0	0.0	%
Step 3. Basii	n Char	rateris	ticts									F 4	Len:		-:	U.	υπ. κι	gnt: 7	0.0	π.
3.1 Alluvial I	Fan:			I	None							5.4	Chanr	iei Stri	aignte	ning:	191. Nor	.7	6.2	70
3.2 Grade C	Control	:		I	Ledge							5.5	Dreag	ing Hi	story:		NOR	e		
3.3 Dominai	nt Geo	logica	l Mat.	:					ç	%		<u>Ste</u>	o 6. Fl	oodpla	ain Mo	dificat	<u>ions</u>			
3.3 Sub-don	n. Geo	ologica	al Mat.	:								6.1	Berms	s & Ro	ads -	old:		701.7 ft.	22	.7
3.4 Valley S	lope L	eft:		I	Ext. St	teep											<u>Or</u>	<u>e Side</u>	Both Side	<u>es</u>
3.4 Valley S	lope R	Right:		;	Steep								Road	1:				701.7 ft.	0.0	ft.
3.5 Soils													Railr	oad:				0.0 ft.	0.0	ft.
Hydrologi	ic Grou	up:							ç	%			Bern	ו:				0.0 ft.	0.0	ft.
Flooding:									ç	%			Impr	oved F	Path:			0.0 ft.	0.0	ft.
Water Ta	ble De	ep:							ç	%		6.2	Devel	opmer	nt:			0.0 ft.	0.0	ft.
Water Ta	ble Sh	allow:							ç	%		6.3	Chanr	nel Bai	rs:		Poir	nt		
Erodibility			ç	%		6.4	Meano	der Mi	gratio	า:	Mig	ration								
7.4 Comn	nents:											6.5	Meano	der Wi	dth:			N/A R	ato: 0.0	
Aerial imag	jery ar	nd the	wind	shield	surv	ey sug	gest	B type	e char	nnel		6.6	Wave	ength	-			N/A R	atio: 0.0	
narrows sli	ahtiv a	alond	the fi	cess eld ec	lae lik	elv du	ie to ł	apiain histori	cal en	cnanr	hmen	t. <u>Ste</u> p	p 7. W	indshi	eld Su	irvey				
		5			5		_					7	.1 Bar	nk Ero	sion:		0			ft
												7	.2 Bar	nk Heig	ght:		No	Data		ft
				_			_					7	.3 Ice/	Debris	s Jam	Poten	tial: Non	e		
	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	6.1	6.2	6.3	6.4	6.5	6.6	7.1	7.3	Total			
	2	0	1	0	0	0	1	0	2	0	1	1	0	0	0	0	8			
	High	N.S.	Low	N.S.	N.S.	N.S.	Low	N.S.	High	N.S.	Low	Low	N/A	N/A	N.S.	N.S.				

Hoosic	: Tr	ibs										Pha	ase	1 -	Rea	ach	Sum	mary	Repo	rt
Basin:		H	loosid	, Wal	ooms	ac, Ba	atten I	Kill				Reach	n ID:			M017	Г1.04			
Stream Nan	ne:	Т	ubbs	Brool	ĸ							SGAT	Versio	on:		4.56				
Topo Maps:		N	IORTI	I POV	VNAL							Date L	_ast Ec	dited:		Marc	h, 01 201	7		
Watershed:		H	loosid	Rive	r							QA St	atus:			Step	7 done			
Sub-waters	hed:	F	loosid	Rive	r La	dd Br	ook to	Wall	oomsa	ac Riv	ver	ls Rea	ach An	Impo	undme	ent?:	No			
Step 1. Rea	ich Lo	cation		This	reach	flows	from	the no	orther	n mos	st reac	h brea	ak alo	ng Mc	unt A	nthor	y Rd and	l extends	downstrea	am to the
1.1 Reach D	Descrip	otion:		south	nern m	nost re	each b	oreak	betwe	en He	mlock	Hill a	nd Mo	ount A	ntho	ny Rd.				
1.2 Towns:	Be	enning	iton, F	owna	ıl							<u>s</u>	Step 4.	Land	Cover	- Rea	ich Hydrol	ogy		
1.3 Downstr	ream L	atitud	e:	4	42.820	877						4	.1 Wa	tershe	d					
1.3 Downstr	ream L	ongitu	ude:	-	73.25	5912							Histo	oric La	nd Co	ver:			Forest	
Step 2. Stre	am Ty	<u>/pe</u>											Curre	ent Do	minar	nt Land	d Cover:		Forest	76.0 %
2.1 Elevatio 2.1 Elevatio	n Ups n Dow	tream: /nstrea	am:			1,3 ⁻ 7:	18 35					1	Curre	ent Su	b-Dor	ninant	Land Cov	/er:	Field	
2.1 Is Gradi	ent Ge	entle?:				N	lo					-	Histo	ric La	nd Co	ver::			Forest	
2.2 Valley L	ength:				9,	550.0	ft.		1.81	Mile	es		Curr		minor	+ 1 0 0 0	1 Cover		FUIESL	0/
2.3 Valley S	Slope:					6	5.1						Curr		h Dor			ior:		/0
2.4 Channe	l Leng	th:			9,	761.0	ft.		1.85	Mile	es	10	Dipori		tor	lillain		off Bonk	Diab	t Bonk
2.5 Channe	l Slope	e:				5.9	97 %					4.3 Г	Ripana		lei		<u>1</u>		Righ	<u>100</u>
2.6 Sinuosit	y:					1.0	02					L		minen				>100	>	100
2.7 Watersh	ned Ar	ea:				2	. 3 Squ	lare M	liles			с -	on ath	minan w / loc	l.	- OF #		31-100	20	05 0 4
2.8 Channe	l Width	า:				18	.8 feet	t				L	engin Orayaa		s mai	1 25 IL.		741.0 II.	. 1,7	05.0 II.
2.9 Valley V	Vidth:					90	.0 feet	t				4.4 (Ground	u vvale	erinpu	us.	Abur	idant		
2.10 Confine	ement	Ratio	:			4	.8					<u>Ste</u> 5.1	<u>p 5. In</u> Flow F	<u>strean</u> Regula	<u>n Chai</u> ition -	<u>nnel M</u> (old):	lodification	<u>15</u>		
2.10 Confine	ement	Туре		I	Narrov	N						т	vpe:	-			Non	е		
2.11 Refere	nce St	tream	Туре:		В							I	lse [.]							
Bedfor	m:			:	Step-F	ool						5.2	Bridge	es and	Culve	erts:		7	1.8	%
Sub-Cl	lass S	lope:		I	None							5.3	Bank	Armor	ina:		9	24.7	9.5	%
Bed M	aterial	:		(Cobbl	e							Left:		5	334.	7 ft. Ric	aht:	590.0	ft.
Step 3. Basi	n Cha	rateris	ticts									5.4	Chanr	nel Stra	aiahte	nina:	3.03	, 9.2	31.1	%
3.1 Alluvial	Fan:			I	None							5.5	Dreda	ina Hi	story:		Non	e		
3.2 Grade C	Control	•		I	Multip	le						Stor		oodola	vin Mo	dificat	ione			
3.3 Domina	nt Geo	ologica	I Mat.	:					Ċ	%		6 1	Porma			old.	<u>10115</u> 1 1	592 6 #	47	0
3.3 Sub-dor	n. Geo	ologica	al Mat.	:								0.1	Denna		aus -	olu.	4 ,	o Sido	Poth Side	.0
3.4 Valley S	Slope L	.eft:		:	Steep								Deee	J.				<u>e Side</u>		<u>+5</u> 4
3.4 Valley S	Slope F	Right:		;	Steep								Road	J.			4,:	003.0 II.	0.0	IL. 4
3.5 Soils													Rain	oau:				0.0 ft.	0.0	۱۱. 4
Hydrologi	ic Gro	up:							Ċ	%			Dem	1. 	Dette :			0.0 ft.	0.0	۱۱. د
Flooding:									C	%		<u> </u>	Devia		ain:			0.0 ft.	0.0	۱۱. د
Water Ta	ble De	ep:							C	%		6.2	Chann	opmer	1t:		M 14	υ.υ π.	0.0	π.
Water Ta	ble Sh	allow:							Ċ	%		0.3	Chanr		S.		Mult	ipie		
Erodibility	/:			:	slight				C	%		6.4	Meano	der Mi	gratio	า:	Mult	iple		
7.4 Comr	ments:											6.5	Meano	der Wi	dth:			N/A R	ato: 0.0	
Multiple lar	ge ca	scade	s and	bedro	ock gr	ade c	ontrol	s are	visible	e in th	ie na thia	6.6	Wavel	ength	:			N/A R	atio: 0.0	
reach. Wind	(a) imagery and suggest an overestimation of channel slope al ch. Windshield survey estimations of slope ranged between 2 a up artimetic the B three channel designations.											• <u>Ste</u>	<u>p 7. W</u>	indshi	eld Su	irvey				
supporting	the B	-type	chanı	nel de	signat	ion.						7	'.1 Bar	nk Ero	sion:		869.	952		ft
												7	'.2 Bar	nk Heig	ght:		2			ft
												7	'.3 Ice/	Debris	s Jam	Poten	tial: Deb	ris		
	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	6.1	6.2	6.3	6.4	6.5	6.6	7.1	7.3	Total			
	1	0	2	0	0	1	2	0	2	0	2	1	0	0	1	0	12			
	Low	N.S.	High	N.S.	N.S.	Low	High	N.S.	High	N.S.	High	Low	N/A	N/A	Low	N.S.				

Hoosid	: Tr	ibs										Pha	ase	1 -	Rea	ach	Sum	mary	Repor	t
Basin:		ŀ	loosid	. Wall	ooms	ac. Ba	atten l	Kill			I	Reach	n ID:			M011	۲1.04S1.0	01		
Stream Nan	ne:	F	ourth	Unna	med	Tribut	ary to	Tubb	s Broo	ok	:	SGAT	Versi	on:		4.56				
Topo Maps.		1	IORTI	H POV	NAL.	POW	NAL					Date I	ast Fr	dited.		Marc	h 01 201	7		
Watershed:	•	ŀ	loosid	Rive	r						(QA St	atus:	anco.		Step	7 done			
Sub-waters	hed:	ŀ	loosid	Rive	r La	dd Br	ook to	o Wall	oomsa	ac Riv	er	Is Rea	ach An	Impo	undme	nt?	No			
Step 1. Rea	ich Loo	cation		This	reach	flows	from	the no	orther	n mos	t reac	h brea	ak bet	ween	Mour	nt Anth	nony and	Hemlock	Hill Rd. and	dextends
1.1 Reach D	Descrip	otion:		down	strea	m to t	he no	rthern	most	reach	h breal	k betv	veen H	lemlo	ck Hil	I and	Mount Ai	nthony Ro	d.	
1.2 Towns:	Po	wnal										5	Step 4.	Land	Cove	r - Rea	ch Hydro	logy		
1.3 Downstr	ream L	atitud	e:	4	42.824	297						4	I.1 Wa	tershe	ed					
1.3 Downstr	ream L	ongitu	ude:	-	73.25	5368							Histo	oric La	nd Co	ver:			Forest	
Step 2. Stre	am Ty	<u>pe</u>											Curr	ent Do	ominar	nt Land	d Cover:		Forest	83.0 %
2.1 Elevatio 2.1 Elevatio	n Upsi n Dow	tream Instrea	am:			1,14 8	46 56						Curr	ent Su	ıb-Dor	ninant	Land Co	ver:	Field	
2.1 Is Gradi	ent Ge	entle?				N	lo					4	LZ COI Histo	riaor vria La	nd Co	vor			F	
2.2 Valley L	.ength:				3,	390.0	ft.		0.64	Mile	s		Curr				Cover		Forest	0/
2.3 Valley S	Slope:					8	5.5						Curr	ent Du	n Dor	n Land		(OT:		70
2.4 Channe	l Leng	th:			3,	438.8	ft.		0.65	Mile	s	12	Dipori		id-Doi ffor	IIIIani		ver.	Diabt	Popk
2.5 Channe	l Slope	e:				8.4	42 %					4.3 Г	Nipan	an Du	liei		<u>.</u>		<u>Rigiit</u>	00
2.6 Sinuosity: 1.01														an. minor	.+-			>100 51_100	26	50
2.7 Watershed Area:0.7 Square Miles												1	enath	w / lo	n. se tha	n 25 ft		136.0 ft	- 10	50
2.8 Channel Width: 11.0 feet												440	Group	d Wat	or Inni	ite:	 Δbu	ndant		3.0 II.
2.9 Valley V	9 Valley Width: 60.0 feet												5 5 Jn	atroop						
2.10 Confine	ement	Ratio	:			5	5.5					<u>5 1</u>	<u>p 5. m</u> Flow I	<u>strean</u> Regula	ation -	(old).	ouncatio	<u>ns</u>		
2.10 Confine	ement	Туре	:	I	Narro	N						т.		toguit		(010).	Non	e		
2.11 Refere	nce St	tream	Туре:	I	В								ype.							
Bedfor	m:			I	Riffle-	Pool						5.2	Bridae	es and	Culve	erts:		1	0.9 %	6
Sub-Cl	lass Sl	ope:										5.3	Bank	Armor	ina:			0.0	0.0 %	6 6
Bed Ma	aterial			(Cobbl	е							Left:			0.	0 ft. Rio	aht:	0.0 ft	-
Step 3. Basi	n Chai	rateris	<u>ticts</u>									5.4	Chan	nel Str	aiahte	nina:	0.0		0.0 %	/ 6
3.1 Alluvial	Fan:			I	None							5.5	Dredg	ing Hi	story:	5	Non	e		
3.2 Grade C	Control	:		I	None							Ste	n 6. Fl	oodola	ain Mc	dificat	ions			
3.3 Dominal	nt Geo	ologica	I Mat.							%		6.1	Berms	3 & Ro	ads -	old:		252.1 ft.	7.3	3
3.3 Sub-dor	n. Geo	ologica	al Mat.	:								0	20111			0.01	On	e Side	Both Side	3
3.4 Valley S	Slope L	.eft:		l	Ext. S	teep							Road	d:			<u></u>	252.1 ft.	0.0 ft	<u>-</u>
3.4 Valley S	Slope F	Right:		:	Steep								Railr	oad:				0.0 ft.	0.0 ft	
3.5 Soils										.,			Bern	n:				0.0 ft.	0.0 ft	
Hydrolog	ic Grou	up:								%			Impr	oved I	Path:			0.0 ft.	0.0 ft	
Flooding:										% 		6.2	Devel	opmer	nt:			0.0 ft.	197.9 ft	
vvater Ta		ep:								% 		6.3	Chan	nel Ba	rs:		Mul	tiple		
Vvater Ta	Water Table Shallow: %											6.4	Mean	der Mi	aratio	n:	Mul	tiple		
	Erodibility: slight %											6.5	Mean	der Wi	idth:			N/A R	lato: 0.0	
The access	7.4 Comments: ne access along Mount Anthony Road suggested B-type geometry w											a 6.6	Wave	length	:			N/A R	Ratio: 0.0	
slope betw	be access along mount Anthony Road suggested B-type geometry w spe between 2 and 3%. This is greatly lower slope than calculated by											s Ste	p 7. W	/indshi	eld Su	urvey				
DMS, thoug	IS, though is likely explained by locally higher slope up and wnstream, bedrock grade controls, and more sinuosity than is capi											1 7	7.1 Bar	nk Ero	sion:		429.	.71		ft
by the VHD).		5		, -				,			7	.2 Bar	nk Hei	aht:		3			11 ft
												7	.3 Ice	Debri	- s Jam	Poten	tial: Deh	ris		п
1	41	42	43	51	52	53	54	55	61	62	63	64	6.5	66	7 1	73	Total	1		
		7.2		0.1	0.2	0.0		0.0			0.0	<u>.</u>	0.0	0.0	,.,	,		4		
		0	1						1	1	2 ⊔i~⊾	0 N C			1		6			
	IN.Ə.	IN.Ə.	LOW	14.3.	11.3.	14.3.	14.3.	14.3.	LOW	LOW	пıgri	11.3.	IN/A	IN/A	LOW	14.3.				

Hoosic Tribs									Pha	ase	1 -	Rea	ach	Sun	nmary	Report	
Basin: Hoo	osic, Wallo	oomsa	c, Ba	atten l	Kill				Reach	n ID:			M05S	61.01	5	•	
Stream Name: Lad	d Brook		-, -						SGAT	Versi	on:		4.56				
Topo Maps: PO	WNAL								Date I	ast Fo	dited:		Marc	h. 01 2)17		
Watershed: Hoc	sic River								QA St	atus:	anoai		Step	7 done			
Sub-watershed: Hoo	sic River	Lad	d Bro	ook to	Wall	ooms	ac Riv	/er	ls Rea	ach An	Impoi	Indme	ent?:	No			
Step 1. Reach Location	This re	each fl	lows	from	the re	each b	reak	90ft w	est of	the Ro	oute-7	cros	sing a	nd con	inues dowi	nstream to t	he
1.1 Reach Description:	conflu	ience v	with 1	the m	ain st	em of	the H	oosic	River								
1.2 Towns: Pownal									S	Step 4.	Land	Cover	- Rea	<u>ch Hydı</u>	ology		
1.3 Downstream Latitude:	4	2.7629	66						4	.1 Wa	tershe	d					
1.3 Downstream Longitude	: -7	73.239	507							Histo	oric La	nd Co	ver:			Field	
Step 2. Stream Type										Curr	ent Do	minar	t Land	Cover:		Forest	68.0 %
2.1 Elevation Upstream:2.1 Elevation Downstream			61 52	6 28						Curr	ent Su	b-Dor	ninant	Land C	over:	Field	
2.1 Is Gradient Gentle?:			Ν	lo					4	Histo	nic I a	nd Co	ver		~	Commoraial	
2.2 Valley Length:		2,0	55.0 i	ft.		0.39	Mile	es		Curr	ont Do			Cover	, c	Jonnierciai	0/
2.3 Valley Slope:			4	.3						Curr	ent Du	minar h Dor	ni Lano		over		70
2.4 Channel Length:		2,4	29.9 i	ft.		0.46	Mile	es	10	Dipori		u-Dui for	manı	Lanu C	Loft Ponk	Diaht I	Ponk
2.5 Channel Slope:			3.6	64 %					4.3 Г	Ripan	an bu	lei					
2.6 Sinuosity:			1.1	8					L C		anı. minon	+ -			20-30 51-100	20-	5
2.7 Watershed Area:		1.	. 8 Squ	uare N	liles			1	onath		i. Se thai	0 25 ft		628.0.ft	1 16	5 2 A #	
2.8 Channel Width:				4.4	Group	d W/ate	os inai	1 20 II.	Mir	020.0 n.	1,10	 .					
2.9 Valley Width:			740	.3 feet	t					In				اللغا نام مانان م			
2.10 Confinement Ratio:			43	.5					<u>5 1</u>	<u>p 5. in</u> Flow I	<u>strean</u> Regula	<u>i Chai</u> ition -	<u>inei ivi</u> (old):	odificati	<u>ons</u>		
2.10 Confinement Type:	v	ery Br	oad						י.י	-	reguie		(010).	No	ne		
2.11 Reference Stream Ty	pe: C	;							י ו	ype:							
Bedform:	R	iffle-P	ool						52	Bridae	es and	Culve	erts:		4	93%	
Sub-Class Slope:	b								5.3	Bank	Armor	ina:			548.0	22.6 %	
Bed Material:	G	iravel							0.0	Left:			104.	0 ft. F	light:	444.0 ft.	
Step 3. Basin Charateristic	<u>S</u>								5.4	Chan	nel Stra	aiahte	nina:	1.1	32.2	46.6 %	
3.1 Alluvial Fan:	N	one							5.5	Dredo	ina Hi	storv:		No	ne		
3.2 Grade Control:	D	am							Ste	n 6 Fl	, o oodnla	ain Mo	dificati	ons			
3.3 Dominant Geological M	lat.:						%		61	Berma	s & Ro	ads -	old.	0110	481 6 ft	19.8	
3.3 Sub-dom. Geological N	lat.:								0.1	Donna	5 0 1 10	uuo	oiu.	C	ne Side	Both Sides	
3.4 Valley Slope Left:	v	ery St	еер							Road	٩٠			<u> </u>	481.6 ft	0.0 ft	
3.4 Valley Slope Right:	н	illy								Railr	oad:				274.4 ft.	0.0 ft.	
3.5 Soils										Bern	n:				95.5 ft.	0.0 ft.	
Hydrologic Group:						•	%			Impr	oved F	Path:			0.0 ft.	0.0 ft.	
Flooding:							%		6.2	, Devel	opmer	nt:			483.6 ft.	1,164.7 ft.	
Water Table Deep:							%		6.3	Chan	nel Bai	rs:		Mi	d-channel		
vvater Table Shallow:	-	l'arla é					%		6.4	Mean	der Mi	aratio	ו:	No	ne		
Erodibility:	S	light					%		6.5	Mean	der Wi	dth:			17 ft. R	ato: 1.0	
7.4 Comments: There is notential for a la	rae imnac	t due :	to a r	debrig	s or ic	e iam	The	reach	6.6	Wave	lenath				17 ft. R	atio: 1.0	
takes two 90 degree bend	ds into cu	lverts,	whic	ch pos	ses a	large	threat	to	Ste	p 7. W	/indshi	eld Su	irvev				
damming of the structure	es and the	brook	c jum	ping	its ba	nks.			7	′.1 Bar	nk Ero:	sion:		32	2.978		f+
									- 7	2 Rar	nk Hein	nht.		3	-		н 4
									7	.3 Ice/	/Debris	s Jam	Potent	tial: Be	nd		π
4.1 4.2 4	.3 5.1	5.2	5.3	5.4	5.5	6.1	6.2	6.3	6.4	6.5	6.6	7.1	7.3	Total	7		
															-		
2 0 High N.S. H	∠ U igh N.S.	Low I	2 High	2 High	U N.S.	Low	2 High	1 Low	0 N.S.	2 High	2 High	1 Low	2 High	20			

Hoosic	: Tr	ibs										Pha	ase	1 -	Rea	ach	Sum	mary	Repo	ort	
Basin:		H	loosid	, Wal	looms	ac, Ba	atten	Kill				Reach	n ID:			M058	S1.02	_	_		
Stream Nan	ne:	L	add E	Brook								SGAT	Versio	on:		4.56					
Topo Maps:		F	own	AL								Date L	_ast Ed	dited:		Marc	h, 01 20 [,]	17			
Watershed:		ŀ	loosia	: Rive	r							QA St	atus:			Step	7 done				
Sub-waters	hed:	ŀ	loosia	: Rive	r La	dd Br	ook to	Wall	ooms	ac Riv	/er	ls Rea	ach An	Impou	undme	ent?:	No				
Step 1. Rea	ich Loo	cation		This	reach	flows	from	the re	each b	reak l	betwee	en Lav	/ino ai	nd Hid	lden \	/alley	Rd along	g Ladd Rd	and exte	ends	
1.1 Reach D	Descrip	otion:		dowr	strea	m to t	he rea	ach br	eak 90	Oft we	st of t	he Ro	ute-7 d	crossi	ng.						
1.2 Towns:	Ро	wnal										<u>s</u>	Step 4.	Land	Cove	· - Rea	ich Hydro	logy			
1.3 Downstr	ream L	atitud	e:		42.766	6381						4	.1 Wa	tershe	d						
1.3 Downstr	ream L	ongitu	ude:		-73.23	3858							Histo	oric La	nd Co	ver:			Forest		
Step 2. Stre	am Ty	<u>pe</u>											Curre	ent Do	minar	nt Land	d Cover:		Forest	71.0 %	
2.1 Elevatio	n Upst	tream				1,0	52						Curre	ent Su	b-Dor	ninant	Land Co	ver:	Field		
2.1 Elevatio	n Dow	nstrea	am:			6	16					4	.2 Cor	ridor							
2.1 IS Gradi	ent Ge	enue :			6	יו ר רכי ר	40 44		1 20	Mile			Histo	oric La	nd Co	ver::			Forest		
	engin.				0,	332.2 C	ιι. • ο		1.20	IVIIIE	es		Curre	ent Do	minar	nt Lano	d Cover:			%	
2.3 Valley S	llong	4 6.			6	420.0	.9 4		4 22				Curre	ent Su	b-Dor	ninant	Land Co	ver:			
2.4 Channe	Leng	tn:			6,	420.9	π.		1.22	Mile	es	4.3	Ripari	an But	ffer			<u>Left Bank</u>	Ric	ght Bank	
2.5 Channe	I Slope	9:				6.0	50 %					C	Domina	ant:				>100	:	26-50	
2.6 Sinuosit	y: od Ar	<u></u>				1.0	7 Sau	ioro M	liloc			S	Sub-do	minan	t:			26-50		0-25	
2.7 Walersi						16	.7 Squ		iiies			L	.ength	w / les	ss tha	n 25 ft.	.:	266.0 ft.		739.0 ft.	
2.8 Channel Width: 16.7 feet 3.0 Voltov Width: 50.0 feet												4.4 (Ground	d Wate	er Inpu	uts:	Mini	mal			
2.9 Valley V	viuui.	Datia	_			50	.0 100	L				Ste	<u>p 5. In</u>	stream	n Cha	nnel M	lodificatio	<u>ns</u>			
2.10 Confin	ement	Ralio	•		Comi .	J	.U					5.1	Flow F	Regula	ation -	(old):					
2.10 Comm		room	Tuno		Denni-	comm	leu					Т	ype:				Nor	e			
2.11 Releie Rodfor	me or	lieani	rype.		D Difflo-	Pool						ι	Jse:								
		ono:			kiine-	F001						5.2	Bridge	es and	Culve	erts:		3	3.	7 %	
Bod M	ass Si	ope.			a Cabbi	~						5.3	Bank	Armor	ing:		2	011.3	31.	3 %	
Sten 3 Rasi	n Chai	ratoris	ticts		CODDI	e							Left:			342.	2 ft. Ri	ght:	1,669.	1 ft.	
3 1 Alluvial	Fan:		1013		None							5.4	Chanr	nel Str	aighte	ning:	542	.3	8.	4 %	
3 2 Grade (Control				Multin	مار						5.5	Dredg	ing Hi	story:		Nor	e			
3.3 Domina	nt Geo	Monica	l Mat	. '	manup					%		<u>Ste</u>	p 6. Fl	oodpla	ain Mo	dificat	<u>ions</u>				
3 3 Sub-dor	n Geo		al Mat							/0		6.1	Berms	8 & Ro	ads -	old:		591.3 ft.		9.2	
3 4 Valley S	lone I	eft [.]	a mat.		Ext. S	teen											<u>Or</u>	<u>ne Side</u>	<u>Both Si</u>	<u>des</u>	
3 4 Valley S	Slope F	Right.			Ext. S	teen							Road	1:				591.3 ft.	0.	0 ft.	
3.5 Soils	nopo i	ugin.											Railr	oad:				0.0 ft.	0.	0 ft.	
Hvdrologi	ic Gro	up:								%			Bern	ו:				0.0 ft.	0.	0 ft.	
Floodina:		чр.								%			Impr	oved F	Path:			0.0 ft.	0.	0 ft.	
Water Ta	ble De	ep:								%		6.2	Devel	opmer	nt:			611.9 ft.	0.	0 ft.	
Water Ta	ble Sh	allow								%		6.3	Chanr	nel Ba	rs:		Mul	tiple			
Erodibility					%		6.4	Meano	der Mi	gratio	n:	Flo	od Chute								
7.4 Comr	7.4 Comments:									, -		6.5	Mean	der Wi	dth:			N/A R	Rato: 0.0		
This reach	maint	ained	B-typ	e cha	nnel g	geome	etry wi	ith a n	nodera	ately		6.6	Wave	ength	:			N/A R	Ratio: 0.0		
accessible	essible floodplain throughout, despite having some variable vall ths. The primarily forested stream buffer provides potential for d											<u>Ste</u>	<u>p 7. W</u>	indshi	eld Su	<u>irvey</u>					
jams, thou	gh the	only	risk o	f impa	act wo	ould be	e alon	ig area	as of c	levelo	pmen	t. 7	'.1 Bar	nk Eros	sion:		234	.898		ft	
		-		-								7	.2 Bar	nk Heig	ght:		6			ft	
												7	'.3 Ice/	Debris	s Jam	Poten	tial: Deb	oris		11	
1	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	6.1	6.2	6.3	6.4	6.5	6.6	7.1	7.3	Total	1			
		_	-	-														4			
	۱ Low	U N.S.	Low	N.S.	0 N.S.	2 High	Low	0 N.S.	Low	Low	2 High	U N.S.	U N/A	U N/A	N.S.	U N.S.	9				